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Lending to the Agriculture Sector

A TOOLKIT

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ACRONYMS

CCC	corporate credit committee
FI	financial institutions
GPS	global positioning system
IT	information technology
LPM	loan policy manual
LRS	loan rating system
MIS	management information system
NBFI	non-bank financial institution
SME	small and medium enterprise
RAROC	risk-adjusted income/return on capital
SWOT	strengths, weaknesses, opportunities, and threats
VC	value chain
VCF	value chain finance

EXECUTIVE SUMMARY

This agricultural lending toolkit outlines a package of resources to support financial institutions (commercial banks, microfinance institutions and credit unions) in emerging economies, with a focus on sub-Saharan Africa, to increase their comfort with and capacity to extend agricultural lending. Earlier analyses conducted by FS Share for USAID and worldwide experience determined that many financial institutions are confronted with three main problems: 1) unfamiliarity with the agriculture sector; 2) lack of financial expertise tailored to the agriculture sector; and 3) access to medium to long-term resources. In light of the analysis and taking into account the actions already implemented by USAID, including the Development Credit Authority, financial institutions are interested in developing their capacity in this sector through a medium-term training program and use of this toolkit. A supplemental training guide is provided separately, including materials and slides, is an integral part of this agricultural value chain finance toolkit. The training guide is intended for use by instructors with at minimum a basic level of knowledge and experience in agriculture lending, who will provide training and technical assistance to the financial institutions utilizing the toolkit as training material..

Access to credit is a major constraint for actors in the agriculture sector and a complicated challenge. Challenges shared by banks and other financial institutions include 1) the need to open new market niches in the short or medium term, and transition to the “universal bank” principle, 2) the need to expand credit activity to maintain or increase gross margin, and 3) the need to link the future profitably of the bank with growth of lending to the agricultural segment, i.e. making agricultural lending an integral part of each institutions growth strategy. Banks are largely unaware of the potential of the agriculture sector and the problems and realities related to production, products, and the political and economic organization of the value chain. High import activity and the resulting uncompetitive local crops, high urbanization, population growth, and political, legal and institutional deficiencies have collectively relegated agriculture to a no-man’s land even though it represents about 34 percent of gross domestic product and provides jobs for nearly 64 percent of the working population. Development of this sector is vital for development in sub-Saharan Africa.

Entering the agriculture sector requires focus on the capacity of the borrower to repay rather than collateral or asset-based lending and a deeper understanding of how value chain finance can provide additional guaranties and access to supplementary resources and technical competencies (e.g. tripartite agreements with technical service providers and input dealers). For example in the Democratic Republic of Congo (DRC), while banks often participate in pools financing high value “structured” value chains such as cotton, sugar cane, rubber and beer and agricultural inputs, they are not very conversant or involved with other value chains.

Cash flow-based credit methodology should be combined with an understanding of the relationships and opportunities within a wide variety of value chains, carrying out

mapping exercises to clarify specific opportunities to finance clients within each value chain.[1] Credit officers need to better understand the specific agricultural crop, production cycle, yields, crop budgets, crop protocols[2] and other issues unique to agriculture so that loan products and terms can be tailored to a farmer's needs.

The range of products required to meet credit needs includes long- and short-term loans for purchase of land, facilities, breeding improvements; seasonal credit for purchase of seeds and other agricultural inputs; and warehouse receipts lending, leasing, and factoring (loans based on accounts receivable due from sales contracts). Banks generally have a conservative, corporate approach to lending, only slightly adapting their products for small and medium enterprises (SMEs) and maintaining the same risk analysis methodologies relying on a high percentage of collateral coverage and larger clients. Because of this, there is a real need for a toolkit dedicated to the agriculture sector.

The goal of this toolkit is to provide a set of standardized lending approaches for the agriculture sector and a reference guide for mid-level staff of financial institutions currently or prospectively involved in the agricultural lending process. Target staff includes client relationship staff, loan officers, risk management department staff and their managers, as well as producer associations and cooperatives. Ultimately, the toolkit should be easily read, adapted, and applied by bankers targeting agricultural enterprises across several levels of the value chain, including small-scale producers, processors, and distributors, and service companies and SMEs supporting them. These examples, templates, and tools, in combination with the targeted training described in the training action plan, provide methodologies and know-how to FIs to demystify the agriculture sector. The sectoral and methodological approaches outlined in the toolkit will reduce risk by enabling lenders to base decisions on capacity to repay and appropriately structure loans. Loans will be tailored better to specific client needs and avoid lending based on collateral values alone or incomplete information about crop cycles.

- *Introduction to agricultural lending and value chain finance.* An overview of agricultural finance in Africa and an overview of the principles of value chain finance.

- *Overview of the agricultural lending process.*

- *Crop and product template sheets.* Describes characteristics of specific crops and related products to establish underwriting and approval of credit in line with agricultural realities.

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[1] The importance of mapping specific opportunities within value chains and specific examples are covered in section II. Much too often value chain studies are conducted without performing a mapping exercise which is the element of fundamental importance to FIs in identifying financing opportunities and the client's characteristics and requirements for structuring loan products.

[2] Crop budgets provide the actual cost figures to finance different crop packages can vary from one area to another and from one year to the next.

- *Fundamentals of agricultural loan policy.* Provides guidelines for creating a credit policy to define the principal areas of development and eligibility criteria for the commercial bank.

- *Overview of agricultural loan procedures.* Provides an example of a standard credit procedure manual to allow the bank to operationalize the new credit policies and products based on international best practices.

- *Overview of credit methodology for agricultural lending.* A reference guide to lenders for analyzing loan requests.

- *Overview of loan pricing and profitability.* Provides loan pricing strategies based on risk, responding to the agricultural development strategy of banks.

- *Overview of loan portfolio management tools for the control/monitoring, loan tracking, and portfolio reporting within management information systems (MIS).* Highlights key characteristics of information technology (IT)/MIS platform for agricultural lending, an essential tool for developing an efficient and controlled credit activity.

SECTION I. INTRODUCTION

Agricultural development is a fundamental component of overall development in sub-Saharan Africa, serving as the basis for economic growth, poverty reduction, and food security in the region. As the dominant economic sector, agriculture accounts for 34 percent of sub-Saharan Africa's gross domestic product (GDP) and employs 64 percent of its labor force. Despite the importance of agriculture to economic growth and human welfare, however, the agricultural sector has been neglected for decades, as demonstrated by underinvestment in rural development and agricultural research, underutilization of productivity-enhancing technologies and land resources, and anti-agricultural biases in economic policies throughout the region. As a result, the agricultural sector in Africa remains significantly underdeveloped relative to its potential.

Access to credit is a major constraint to modernization of agriculture throughout sub-Saharan Africa. Although the African banking industry has shown remarkable development in the past decade, credit for agriculture remains low. As highlighted in Exhibit 1, commercial bank lending to agriculture represents a small portion of total credit, averaging only 5.8 percent across a sample of ten sub-Saharan African countries. This amount is especially low considering that the agriculture sector accounts for over a third of the region's GDP.

Exhibit 1. Commercial bank lending by sector and country, 2008 (percentage share of total)[3]

	Botswana	Ghana	Kenya	Malawi	Mozambique	Nigeria	Sierra Leone	Uganda	Tanzania	DRC	Average
Agriculture	0.7	4.3	3.6	14.6	8.1	1.4	3	5.9	12.4	3.8	5.8
Manufacturing	2.3	11.9	11	11.7	13.2	12	7.6	12.2	14	5.5	10.1
Trade	8.6	32.7	11.9	13.9	25.6	-	27.7	12.3	16.8	0.3	16.7
Transport, electricity & water (oil & gas)	2.7	6.9	6.9	16.5	11.2	25.5	10.4	7.6	12	9.4	10.9
Construction	1.8	6.8	3.6	2.7	4.2	-	19	9.5	3.3	1.7	5.8
Mining	4.6	2.9	1.3	0.1	-	10.9	1.3	0.3	0.9	4.2	2.9
Other services and personal loans	79.3	34.5	61.8	40.6	37.7	50.4	31.1	52.2	40.6	75.1	50.3

[3] International Monetary Fund, January 2010. Democratic Republic of Congo Statistical Appendix. Page 26. http://www.imf.org/external/pubs/ft/scr/2010/cr1011.pdf and Mhlanga, Nomathemba, "Private Sector Agribusiness Investment in sub-Saharan Africa," Rural Infrastructure and Agro-Industries Division, Food and Agricultural Organization of the United Nations (Rome, 2005), 50.

Why this Toolkit?

The goal of this toolkit is to provide financial institutions with templates and tools to structure their lending process according to their own needs and requirements and to increase the institutions' ability to prudently finance agricultural production and agriculture value chain-related lending. The toolkit promotes a standardization of lending processes and a move toward international best practices for agricultural lending by FIs to stimulate expansion of agribusiness finance in Africa. The best practices in this toolkit are largely drawn from the writers' years of bank management and lending experience and are informed by experience in emerging markets and elsewhere in Africa. Where possible, the authors have included examples directly relevant to the financial sector context in sub-Saharan Africa. The toolkit strategy is to increase agricultural value chain lending expertise within specialized units, or as part of product offerings of corporate and small business banking divisions. The toolkit provides step-by-step information, template forms, and examples, and should be accompanied by tailored classroom and field training in agricultural value chain lending, specifically on crops and value chains selected by the FI as target markets.

This toolkit is structured as a practical guide and collection of product sheets, policies, templates, tools, manuals, and guidelines to assist banks with financing the agricultural sector. The primary audience for the toolkit is FI staff at all levels. It devotes significant attention to illustrating means and procedures by which FIs in sub-Saharan Africa can increase agricultural value chain lending activities as a sustainable business line contribution to their bottom line.

The collection of tools incorporated into the toolkit are not intended to be taken and used as end examples of an FI's documentary library. Except for a number of Excel templates designed for the sole purpose of guiding users of this toolkit, most documents included should be used as references to be adapted to each institution's systems. FIs should also work with local legal counsel to identify legal documentation to accompany the lending process.

Acknowledgements

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A. What is Value Chain Finance?

Agricultural Value Chain Finance (AVCF) refers to the following:

- Short- and medium-term financing for processors and service providers.
- Wholesale lending to smaller financial institutions, including smaller banks and microfinance institutions that, in turn, lend to market vendors and other entities serving the needs of subsistence farmers.

For purposes of this toolkit, AVCF encompasses borrowers, lenders, and lending products, as follows:

Borrowers

- Entities including “emerging smallholder farmers.” Emerging smallholder farmers are those farmers who produce a marketable surplus, adopt new techniques, and who treat agriculture as a business. They may be individual SMEs, organized in groups, associations or cooperatives. They engage in farming and/or production of crops including cereals, vegetables, cash crops, and tree crops, production of livestock including aquaculture, and tree farming.
- Entities engaged in all aspects of agribusiness, including suppliers of inputs (fertilizers, chemicals, etc.), processors (grain milling, dehydrating, freezing, etc.), suppliers of equipment, wholesalers, and service providers (storage, truckers, etc.).
- SMEs (producing on 5-100 hectares) producing staple crops, as well as horticulture vegetable crops.

Lenders

- Financial institutions include commercial banks and non-bank financial institutions[4] (NBFIs).
- Suppliers that often extend credit in the normal course of selling their product or service. Examples include input suppliers, equipment suppliers, and service providers.

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[4] NBFIs include MFIs, savings and loans credit unions and their federations.

Lending products

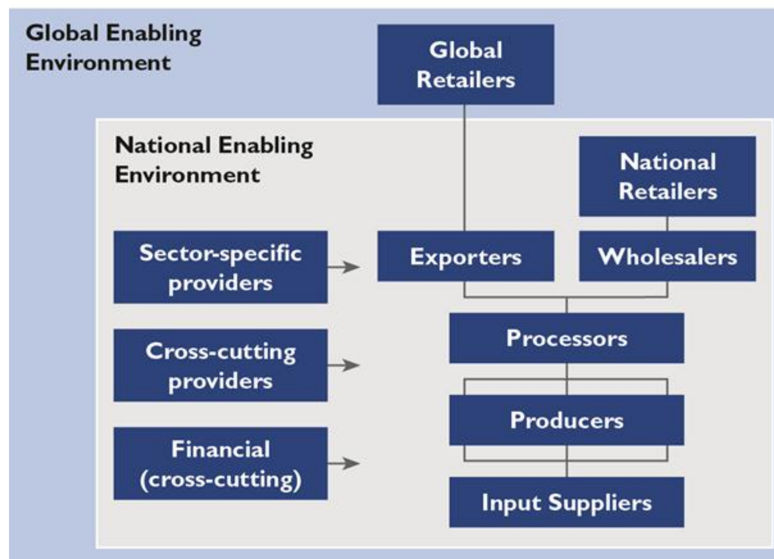
- Short-term credit, defined as credit extended for 12 months or less, including pre- and post-harvest financing, financing of accounts receivable, and inventory financing.

- Medium-term credit, defined as credit extended for 13 months through 60 months, including equipment financing and other term loans.

- Long-term credit, defined as credit extended for more than 60 months, including financing for real property and other types of long-term credit.

- Leasing Products

Exhibit 2. Value Chain Structure



B. Barriers to Increased Lending to Agriculture Value Chains

Impediments to expanding agricultural lending in sub-Saharan Africa include:

- The need for a paradigm shift in the way that financial institutions finance agricultural value chains and SME finance. In the old model, financial institutions staff are generally passive, waiting for the client to come to the branch office. Agricultural value chain and SME finance require credit staff to actively seek out and interact with the clientele and provide a higher level of monitoring through field visits.

- Poor Rural Infrastructure. Lack of paved or well-maintained roads and electricity add to the cost of doing business and the ease of access for VC members and FI personnel.

- Poor credit culture due to government intervention/debt forgiveness and projects, which are providing grants for equipment.

- Limited branch coverage in agricultural areas. With the probable exception of large, vertically-integrated corporate farming operations, successful lending to the agricultural sector depends on "knowing your customer." This is difficult if a branch is located hundreds of miles away.

- Limited knowledge of agricultural value chains and modern agricultural techniques among lending officers.[5]

- High interest rates. This is often a challenge for MFIs where the majority of the clientele is involved in trade based upon high turnover. In certain countries, it can also be a challenge for banks that have a variety of fees which push up the effective cost of credit.

- Potential asset/liability mismatch. Deposits in banks and other FIs and debt funding are generally short to medium term. This hampers the ability of FIs to finance medium- to long-term investment needs.

- Legal constraints. Legal constraints may include banking regulations, which impose loan collateral requirements that are difficult for farmers to meet or which require overly strict provisioning requirements for non-collateralized or non-traditional forms of collateral; complicated or costly collateral registration processes; and extreme difficulties in enforcing contracts.

- Land ownership rights are also a significant problem and particularly detrimental to the agricultural sector. In many African countries, acquiring land and securing land-use rights is a time-consuming process with questionable outcomes. As a result, many rural residents do not have a clear title to the land on which they live or work. Land ownership and title issues create an impediment to lending for purchase of land or making a lien against a plot of land.

- Limited access to technology. While this is changing, the majority of FIs do not have the necessary technology to allow them to effectively work in rural areas. This technology includes but is not limited to ATMs, mobile banking units, hand-held devises with printers linked in real time to FIs' MIS software, and IT

[5] FIs that have well trained personnel have found that it is easier to recruit a credit officer who has a degree in agricultural-related sciences and to train them in banking and credit underwriting and loan monitoring.

platforms allowing FIs to track and integrate smallholders with banks and markets.

C. Agricultural Value Chain Lending in Sub-Saharan Africa

When comparing the degree of access to finance for enterprises in sub-Saharan Africa relative to the rest of the world, the data suggest significant room for deepening commercial lending activities in the region. An increase in lending volume to the agricultural sector, combined with market penetration by commercial banks in the form of checking accounts, deposits, and credit sales, constitutes a reasonable base for expansion of lending. However, large barriers to expansion do exist, including a challenging land ownership and land titling environment that may prevent registration of liens and depress land values in rural areas. As a result, FIs will need to explore alternative sources of collateral and risk mitigation tools.

Potential for agriculture sector growth. With a higher level of investment, including financing, the agricultural sector in sub-Saharan Africa has the potential to grow substantially. In 2009, agriculture value added per worker in sub-Saharan Africa was USD 323 (constant 2000 USD), compared to the world average of USD 1,064. Additionally, cereal yields per hectare were 1,309 kilograms in sub-Saharan Africa, compared to 3,568 kilograms globally. These figures reflect significantly low levels of productivity for a given number of labor and land resources. Low usage of agricultural technology contributes largely to such low productivity levels. For example, in 2009, fertilizer consumption per hectare of arable land was only 11 kilograms, compared with the global average of 120 kilograms.

Current low level use of banking services. As previously indicated, there is significant room for growth in commercial lending in sub-Saharan Africa, as suggested by the substantially lower figures across all enterprise access to finance indicators in sub-Saharan Africa relative to world averages (see Exhibit 3). Because of the importance of agriculture to the regional economy, this potential growth applies at least as much to the agricultural sector as it does to the rest of the economy. Use of commercial banks among sub-Saharan businesses is low compared to the rest of the world. For example, only 22.5 percent of businesses have used a commercial bank for a credit line or bank loan, compared to 36.3 percent globally. Additionally, 45.6 percent of firms in sub-Saharan Africa identify access to finance as a major constraint, compared to 30.6 percent globally.

The data in Exhibit 3 represent only industrial companies, which likely include significant components of the agriculture value chain, such as processors. The data do not capture farming operations. If farming operations were included, it is reasonable to infer that the percentage of bank penetration would be substantially lower, suggesting that the potential for growth in this market is even higher.

High use of bank retail and depository services. One encouraging sign for sub-Saharan Africa is the relatively high usage of checking accounts among its businesses: 86.0 percent (see Exhibit 3). Based on this, it can be assumed that a number of agriculture

value chain participants in the region maintain checking accounts and other bank deposits at banks. Retail and depository activity by micro-, small, and medium enterprises has been a precursor to bank lending activity in other sub-Saharan countries.

Significant level of credit sales sub-Saharan Africa. Exhibit 3 indicates that 26.7 percent of African businesses extend sales on credit, compared to 40.0 percent globally. Although substantially lower than the world average, this figure implies that a significant number of businesses, including agriculture value chain participants, have a credit history by virtue of the fact that they purchase goods and services on credit. Furthermore, credit sales are greatly facilitated by the availability of short-term credit from banks and other financial institutions. Exhibit 3 shows that 20.4 percent of African businesses use banks to finance their working capital needs, compared to 29.5 percent globally. The fact that this figure is lower than the volume of credit sales suggests that many businesses use their own working capital to finance credit sales to others.

Exhibit 3. Use of Banking Services in 2010

Access to Finance for Enterprises	World	Sub-Saharan Africa
Firms with a bank loan or credit line (%)	36.3	22.5
Firms with a checking or savings account (%)	87.6	86.0
Firms using banks to finance investments (%)	25.8	14.0
Proportion of investments financed by banks (%)	16.8	10.0
Firms using banks to finance working capital (%)	29.5	20.4
Proportion of sales sold on credit (%)	40.0	26.7
Value of collateral needed for a loan (% of loan amount)	161.1	151.2
Firms identifying access to finance as a major constraint %)	30.6	45.6

Source: World Bank Enterprise Survey, 2010

D. Reasons for Establishing an Agricultural Value Chain Lending Unit

The previous subsections highlight challenges associated with agricultural lending in sub-Saharan Africa and the low penetration of the market by commercial banks. However, low penetration also points to market opportunity. For example, as shown in Exhibit 3 above, the share of African firms selling on credit (26.7 percent) is higher than those financing through banks (20.4 percent), implying possibilities for banks and other FIs to further tap into this demand. A focused strategy to expand agricultural lending could help the bank achieve the following:

- Higher returns. Agricultural loans may have a higher return than conventional loans of a similar term, on capital and assets employed, primarily due to less competition.

- Additional product for existing banking customers. Agricultural lending, using products designed for agriculture value chain participants, offers an additional financing product for existing customers, as well as a means to attract business from related customers in the value chain who may be providing products and services to existing banking customers.

- Growth. By cross-selling additional services to existing clients and reaching additional market segments, the bank can achieve growth in assets and profit.

As further described in Section II.C, the purpose of developing an agricultural unit incorporated into the overall organizational structure is to ensure that the chain of command is in place for the decision-making process, distribution of authority is understood by all working in the agriculture business line, and functional duties are assigned and covered. The types of structures can vary by institution, but it is important to clearly define the operational structure within the bank to enable it to support sales, lending, and monitoring staff with agriculture-specific knowledge required to meet client needs.

E. Who and what is succeeding in Agricultural Value Chain Finance (AVCF)

FIs are succeeding in AVCF using a variety of different models. A few examples include Banque National de Developpement Agricole (BNDA) in Mali, Co-op Bank and Equity Bank in Kenya, Centenary Bank in Uganda, Réseau des Caisses Populaires du Burkina (RCPB) and large credit union federations in Burkina Faso, and Credit Mutuelle du Senegal (CMS) in Senegal. These examples are taking place primarily in environments where there is no or limited credit bureau access in rural areas or outside the formal banking sector. Successful FIs are often making smallholder loans without traditional forms of collateral or conventional credit assessment systems.

A World Bank survey of 15 financial institutions, of which five were from African and Asian countries, (Nair 2008) identified the following key findings:

- Most of the financial institutions studied, which had large agricultural portfolios, had significant expertise in agriculture at the loan officer and management levels, as well as diversified loan portfolios across sectors, geographies, and within the AVCF portfolio. Total VC portfolio size ranged between 10 and 20 percent.

- While many of the FIs used more traditional credit assessment tools for large clients, those financing smallholders used simplified cash flow analysis. Others used parametric, area-based scales that were standardized to fit certain crops in a given geographical area. In the case of Centenary Bank, smallholder assessments review all revenue streams and household costs.[6] Some FIs required evidence of land ownership, without requiring mortgage or any other form of collateral.

- Some of the FIs that made small loans accepted joint liability by groups of between 5 and 20 individuals, to individual members of the group, or to the group collectively. Others delegated credit risk assessment to third parties – either individuals with local knowledge or field officers of partner organizations, such as a commodity buyer.

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[6] In this way, Centenary Bank assesses their borrowers' repayment capacity based upon total household income loan use, not just crop sales, thereby expanding repayment options.

- The findings suggested that FIs interested in starting or scaling up lending to smallholder farmers and small rural enterprises should consider: (i) the use of innovative means, such as biometrics, to identify clients; (ii) alternatives to traditional financial analysis, cash flows rather than balance sheets; (iii) alternatives to traditional forms of collateral, such as tripartite arrangements and group lending; and (iv) developing agricultural expertise at the credit officer and senior management levels.

While commercial agricultural insurance is available in Kenya, most FIs in Africa make VCF loans without commercially available insurance products due to the weaknesses in the insurance industries and lack of affordable products for smallholder clients. Some such as RCPB and BNDA self-insure by creating their own risk pools to cover specific losses. In the case of RCPB, they create a cotton risk pool. The BNDA create a risk pool to cover potential losses in larger VCF loans. It is common practice for MFIs and credit unions to offer self-insured life insurance and in some cases, loan insurance using client fees.

Furthermore, savings is an important tool for on lending capital (short-and medium-term) and risk mitigation in VCF. While this has traditionally been a comparative advantage of the credit union sector, banks are also realizing the potential. Equity Bank has showed this dramatically with its success in operating in rural areas of Kenya. When Equity Bank started operations in rural areas, they initially focused on mobilizing savings and cash crop value chains. Unlike banks, which have traditionally drained savings from rural areas to finance treasury and credit in urban areas, Equity Bank expanded its VC lending using mobile banking and other technology to reach rural clients (see text box below).

Successes in Agricultural Value Chain Finance: The Equity Bank Example

Commercial banks in Kenya comprise the most significant part of Kenya's financial system. Dominating this market is Equity Bank, a commercial bank with regional presence in Kenya, Uganda, South Sudan, Rwanda, and Tanzania. With 8 million customers, Equity Bank is the largest bank in Africa in terms of customer base and accounts for nearly half of the accounts in the Kenyan banking system. The Bank's business approach focuses on offering inclusive financial services with the aim of meeting the basic needs for borrowers at the bottom of the pyramid. Recognizing that the agriculture sector is the backbone of the Kenyan economy, the Bank focuses on smallholder farmers and other agricultural value chain actors as a key segment of its target market.

The institution is impressive in terms of its successes in microfinance and agricultural lending, which is especially notable considering its rocky beginnings. Established in 1984 as Equity Building Society, a provider of mortgage financing for the low-income population, Equity was declared technically insolvent in 1993. At this point, it started to rebuild, with a focus on developing savings products that were responsive to the needs of the low-income, predominantly rural population. Tailored for this large, untapped market, the savings products were designed to be easily accessible and delivered through extensive use of information technology, thereby enhancing their reach to rural areas. Equity's delivery channels included a "mobile banking unit," which initially began as a mobile unit of staff and equipment to offer road-side banking, but which has expanded to the delivery of branchless banking services via mobile phone. In 2010, Equity Bank and Safaricom formed a strategic partnership for M-Pesa, which allows users to deposit, withdraw, and transfer money via mobile phone.

Having built a solid customer base with its savings products, Equity continued its expansion with its credit products. Amidst significant macroeconomic changes in Kenya, including the withdrawal of mainstream

banks from rural areas and the liberalization of the economy that ended the monopoly of cooperatives in the agriculture sector, Equity recognized a large market opportunity in agricultural lending. The Bank's line of agriculture loans currently includes credit to various actors along the agricultural value chain, including small scale and commercial farmers, agro-input dealers and suppliers, agricultural traders, and value-added enterprises such as agro-processers. Loan products may be used to finance activities such as farm inputs purchases, purchase of livestock and other fixed assets, acquisition of modern farming machinery, tools, and equipment, and expansion of farms.

In addition to these loan products, Equity Bank has forged partnerships to boost lending to agriculture value chain actors. These include "Kilimo Biashara," a partnership with the Alliance for a Green Revolution in Africa (AGRA), the International Fund for Agricultural Development, and the Government of Kenya. Kilimo Biashara, meaning "commercial agriculture" in Swahili, was formed in 2009 to accelerate the commercialization of agriculture by providing a low-interest loan facility for smallholder farms and enterprises in the value chain to purchase agricultural inputs and equipment. Under this partnership, the Bank has reached over 47,000 farmers and agricultural dealers, resulting in over 2.1 billion Kenyan shillings in loans.

The lending activities have supported agricultural development in Kenya by increasing farming productivity, improving product quality, and enhancing market linkages. Furthermore, these activities have enabled Equity Bank to capture a significant portion of the mass market, strengthening its position as one of the leading financial sector players in Africa.

The Co-operative Bank in Kenya has also been very successful in combining corporate, SME and smallholder lending to value chains, along with wholesale lending to "SACCOs," which are credit unions, particularly those in rural areas.

Successes in Agricultural Value Chain Finance: The Co-operative Bank in Kenya Example

Background

The Co-operative Bank in Kenya is a publicly-quoted company with a capital base of USD 200 million and an asset base of about USD 1 billion. It is owned 63 percent by a cooperative movement thru Coop Holdings Ltd. and 27 percent by the public at the Nairobi Securities Exchange. Cooperative Bank has 54 branches with hopes to increase to 86 branches by the end of the year, serves over 7 million members, and indirectly reaches over 28 million Kenyans.

Financial services to both cooperatives and corporates

The Co-operative Bank's products include a working capital loan, overdrafts, farm input loans, dairy sector loans, school fees loan, lending to self-help groups and community-based- services (such as traders and artisans) thru seed capital from the bank and Guarantee mechanisms with ABD, and AFD. A multi-million Kenyan Shilling project, Sacco link, is a Visa branded card that enables SACCO members to access their funds at FOSAs would increase their footprint without opening more branches (brick +mortar). The Bank hopes to be hooked up to 300 SACCOs by the end of its first 12-month period.

In Africa, technology including software platforms that distribute information on markets prices and weather conditions via SMS (such as Esoko), partnerships between cell phone companies and FIs, ATMs, point of sales devices, and loan officers using personal digital assistants (PDAs) is significantly increasing the number of delivery channels available to FIs and reducing costs and risks for both parties.

F. Principles of Value Chain Finance

The Banker's Perspective

Why are VC principals and techniques important to the management and staff of FIs? Value chain techniques allow FIs to address and mitigate a number of issues, particularly those corresponding to smallholders and SMEs such as smaller aggregators, processors, service providers, and transporters. This offers the opportunity to expand their market further down the value chain. Traditionally, banks in Africa finance the top of the value chain, which generally includes large processors (mills, beer production, juice factories, wholesalers, exporters of cash crops and wholesale input suppliers). In cases such as large cash crops cotton, sugar, coffee, cocoa, tea and international input companies, the banks may form a consortium. In past years, banks have generally been successful at doing this, with the notable exception of cotton.

Strategic Partnerships: Key Tools for Cost Reduction and Risk Mitigation

Controlling the revenue flow: Value chains tools and techniques can provide risk mitigation to the FI through tripartite agreements, allowing the FI to control the flow of revenues. Under this model, the processor pays the money due to the farmers or aggregators to the FI from which they received financing. This allows the FI to take out amounts due and pay the farmers and/or aggregators by depositing the remaining funds in their accounts. This is particularly powerful in value chains that are highly structured[7] and where there are limited opportunities to "side sell."[8] Though these agreements, an FI can provide financing to aggregators and even smallholders organized in groups, associations, or cooperatives.

Strategic partnerships: Accessing Third Party Assistance

Working with thousands of smallholder farmers is only viable for FIs, particularly banks, if there are other parties that address key processes and allow the FIs to focus on their core business, which is "giving loans and getting them back." These indispensable third parties include but are not limited to corporate agriculture working with outgrowers, aggregators, input suppliers, equipment sellers, feed mills, poultry operations providing day-old chicks for meat or layers, services such as Esoko and Manobi, business development service (BDS) providers, and NGOs working on value chain strengthening programs.[9] These models are further described below.

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[7] Highly structured VC's are those where the producers do not have a lot of market opportunities. This is the case for commodities such as cotton, rubber and for certain crops like barley and white sorghum which are being sold to a beer processor.

[8] "Side selling" is the term used when farmers sell their produce to another value chain actor other than the one with whom they have an agreement. In the event that they have received advance payment or a loan this can lead to problems for loan reimbursement.

[9] These NGOS are generally providing assistance to farmers groups, associations and cooperatives to organize themselves, understand what client's demand and facilitating access to other value chain partners such as intermediate or end buyers and financial institutions.

- Outgrower model**.** The outgrower model is a structured model that is particularly successful and covers industrial crops such as sugar cane, palm oil, rubber. The corporate producer is usually the processor (sugar cane) or may be the exporter (palm oil, rubber). In this model, the corporate producer/processor or exporter provides technical assistance, inputs, plowing services, and market. This is generally a, "*win-win solution*" for all partners. The large producer/processors get more product to optimize their factories' operations without having to make the investment themselves or finance the outgrowers. Through this structured financial arrangement, the FI is guaranteed that it will receive revenues directly and the smallholder farmers are assured access to market, top quality inputs, services, technical advice, and credit. There are caveats, however, since this is a model where the buyer has a very strong position. *Clear communication* and *transparency* in dealing with smallholders or SME farmers, particularly in fixing prices, is critical to its long term success.[10]

- Aggregator/nucleus farmer model. In the aggregator/nucleus farmer model, the aggregator/nucleus farmer may be dealing with hundreds to thousands of smallholder farmers, as is the case in northern Ghana with USAID's ADVANCE project. Due to their size, they can access financing and purchase tractors. Smallholders are then able to access tractor plowing services and inputs on credit through the aggregators and nucleus farmers.[11]

- Input suppliers. Input suppliers can be a source of 1) technical information and training on products and application techniques for smallholder farmers and 2) logistics support for getting inputs to farmer's groups. They can also provide a "co-branding" opportunity for FIs and their clientele.[12]

- Agricultural equipment sellers. Agricultural equipment sellers, particularly tractors companies, can make excellent strategic partners. They can 1) identify credit worthy clients, 2) provide financial analyses of different crop models, breakeven analyses, and costing information, 3) train clients and drivers in maintenance and tractor driving, as well as provide maintenance check lists to clients and credit staff, 4) accompany and train credit staff on monitoring missions, 5) provide bulk discounts to clients by "co-branding," and 6) collect and resell tractors in the event of default.

- Poultry farms and feed companies. Poultry farms producing day-old chicks (layers and meat birds) and feed mills can also be excellent strategic partners for FIs. They can 1) help credit staff to understand the economics of the operations

[10] In Ghana, the rubber company linked the purchase price to smallholders to world prices in a formula which was discussed with and approved by the outgrowers and which is reviewed each year.
[11] When the final quality or quantity of a particular crop is a core concern, for example, for agricultural traders and processors, contractual arrangements that combine technical assistance and the provision of specified inputs on credit have worked to the advantage of both the farmer and the market intermediary.
[12] If an FI is financing large numbers of smallholder farmers groups, associations, cooperatives or credit unions, it is possible to negotiate bulk discounts, as well as delivery services and pass this on to FI clients.

and key challenges in cash flow management for poultry, 2) provide FIs with cost information and different financial models for operations, 3) provide or help FI clients to access technical training, and 4) help identify creditworthy clients and in some cases, purchase product.

- MFIs and credit unions. In some countries such as Kenya,[13] Mali,[14] and Uganda,[15] banks are providing wholesale finance to MFIs and credit unions for on lending. Due to their closer proximity to clients in rural areas, they can be better placed to provide credits directly to smallholder farmers.

- Esoko and Manobi. Increasingly, companies such as Esoko[16] and Manobi[17] are emerging, which provide SMS information for market prices of different crops in regional and national markets, as well as local weather conditions. These technological platforms can allow FI clients to access critical information, which can help them to manage planting, harvesting, and marketing.

- BDS Suppliers. BDS suppliers may be private sector individuals or companies such as accounting firms, which provide audited financial statements for small businesses to make them more creditworthy to FIs. NGOs and other organizations offer financial literacy classes to smallholder farmers and rural entrepreneurs. Financial literacy and management are useful tools to help VC members better manage their businesses and credits. Providing financing for such services, which may also include financing a radio show on agriculture, can provide FIs with better clients and serve as a useful marketing tool to build client fidelity and satisfaction.

- Value chain strengthening programs. There are a variety of VC strengthening projects covering cash crops and cereal crops in Africa. These projects are working to aggregate smallholder farmers so that they can gain access to markets (local, regional and export), improved production techniques, inputs and services, and finance. They teach smallholders farmers how to run their farming activities as a business. In addition to organizing smallholder famers, these programs also facilitate the creation of multiple linkages in the value chain.[18]

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[13] In Kenya, Co-operative Bank, amongst others, provides finance and other financial services such as ATMs and debit cards to members financing VC members.
[14] In Mali, BNDA uses both direct channels and a credit channel through MFIs and credit union's. This allows it to finance smaller farmers, who would otherwise not be accessible by direct means.
[15] In Uganda, Centenary Bank is one of the pioneering banks in VC finance and also provides financing to credit unions that on lend to members, including farmers.
[16] Esoko (www.esoko.com) is based in Ghana and South Africa but is expanding to a number of different African countries. It provides farmers with SMS access to local, regional, and national weather and market information. For smallholders, this is critical information when it comes to planting season.
[17] Manobi (www.manobi.net) provides a variety of modular services, including market price information, GPS measurement of fields, and a map platform accessible via internet, which informs potential clients that a producer has a product available.
[18] In the case of white sorghum production in northwestern Ghana following Technoserve's intervention, Guinness hired one of Technoserve's staff and is now providing support to the value chain.

SECTION II. RESEARCH AND PLANNING

A. Agriculture Sector Market Mapping to Delineate Value Chain Segments

A1. Purpose

In almost all African countries, there are value chain studies on major commodities which exist at the donor level and within certain projects. While these VC studies are useful for a broad overview, FIs require more specific information on the financing opportunities within these value chains and potential strategic partnerships.[19]. Market segmentation research allows FIs to identify financing opportunities along VCs and to develop financial products which correspond to these needs. These opportunities exist where returns are positive and where they are opportunities to enter into structured financial deals and strategic partnerships. For example, in a maize VC, opportunities might exist for larger scale, business oriented,[20] smallholder farmers in a maize VC to link up to one or more aggregators and input suppliers. Other financing opportunities might exist for private sector plowing services and transportation. Market segmentation research allows FIs to identify any operational, financial or legal bottlenecks, or other variables in VC. The market segmentation research results guide FIs in the development of a new or extended line of business and ensure a properly targeted strategy to a sufficiently scalable and profitable market.

A2. Expected Results

The market research will yield a report that can be used by the client to define its agriculture value chain strategy, map actors and links in the value chain, and design a profitable business model and develop sector-specific financing products. Once the products have been developed, their acceptance by potential clients is important for the success of the business model. Additional market research may be needed later to continually refine and improve upon the product offering to adjust it to market needs.

A3. Guidelines for Market Mapping

Effective market research involves:

- Defining the agricultural business segment, including mapping links within the value chain, understanding relationships, and identifying strategic partnerships for FIs and different VC actors.

- Quantifying the overall size of the market, as well as the size of each distinct link.

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[19] Strategic partnerships are fundamental to FIs success in VCF. This includes ways of 1) ensuring that revenue flows go from a third party directly to the FI (e.g. beer, rubber and cotton value chains to cite a few) and 2) accessing technical assistance in organizing smallholder value chain members to adopt and apply cultural best practices and in accessing inputs. This allows the FI to reduce its risks, lower its costs, and focus on what the FI does best, which is to provide credit.

[20] Farmers who have adopted some modern agricultural techniques and who have marketable surpluses.

- Identifying sub-segments within each link of the value chain, particularly for the bottom end of the chain where there will be more segmentation of size, geography, and product.

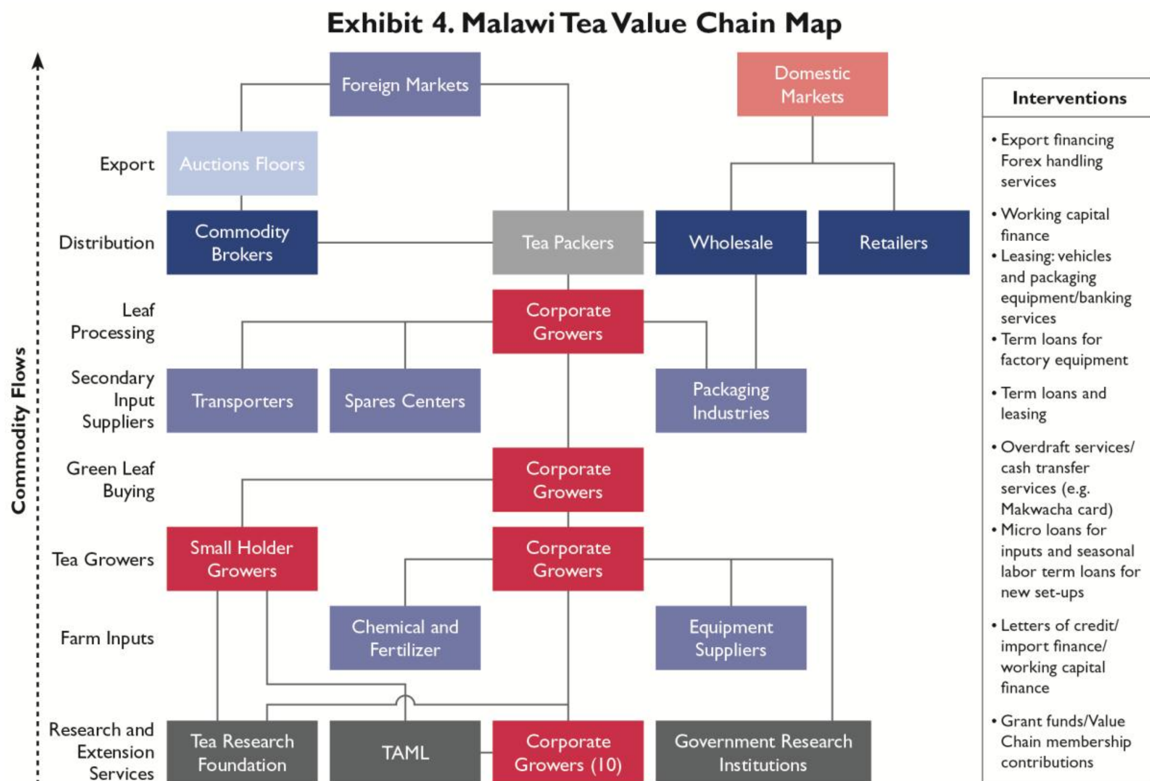
- Identifying financial service needs for each segment and link of the value chain.

- Identifying current financial service gaps in each segment and link of the value chain, to be contrasted and compared to the needs listed above.

- Describing the competitive landscape for agricultural lending within the FI's operating footprint.

- A legal review may also be desired to identify legal and regulatory hurdles for reaching the market segments. Land ownership and registration may prevent direct lending to small-scale farmers, unless alternative collateral mechanisms can be developed.

Value chain selection and mapping.. The example below shows the value chain map for the tea industry in Malawi and the different financial products that an FI can provide along the VC. Other value chain studies and examples of mapping studies are provide in the accompanying training guide and resource materials.



Source: Malawi Deepening the Microfinance Sector project, 2007.

A4. Primary Implementation Steps

FI personnel can conduct operational research a practical solution may include having an FI's credit department link up with a local university so that students, working together with credit officers, can help with the survey work. An FI may subcontract the market research responsibility to local and/or international professionals. The primary implementation steps listed below are a guide to ensure that this procurement process results in the institution's attaining the outcome needed to properly guide development of an agricultural sector and value chain strategy.

Shortlist appropriate marketing research vendors by ensuring that the terms of reference have been drawn in detail and are in line with outputs needed to make strategic decisions.[21] Many institutions make the mistake of "trusting the marketing professionals" as they have developed the terms of reference to be used during vendor procurement. Although researchers know their professions and practices, they may not have banking or agricultural sector experience. .

- Select an appropriate marketing research vendor with a well-planned scoring sheet. Once three to five vendors have been shortlisted, senior management, alongside the head of the agriculture department, should make their selection using a well-planned scoring sheet to compare vendor proposals.

  – One weakness many banks have is to automatically select the cheapest option. Although price is always a consideration, it is often true that you get what you pay for. Also to be considered:

  – Understanding of the financial institution's overall needs
  – Understanding of the local market
  – Experience working in the agricultural sector
  – Expertise of vendors assigned project manager
  – Experience of support team (who will be doing much of the work in the field)
  – Strength of referrals
  – Working relationship and professionalism during the procurement process

- Actively participate in development of research tools**,** questionnaires, sampling groups and objectives. The institution should assign an internal project manager to guide the market research and to ensure that each step of the process is in line with final deliverables. This is possibly the most important stage of ensuring that the research results in a strong outcome. Close attention should be paid by the bank's project manager to ensure that each tool used by the vendor is well designed and leads to usable results. This is particularly true of questionnaires, which the financial institution should review closely.

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[21] Terms of reference should be developed in tandem by a senior manager of the bank, the agricultural head for the bank (or an agronomist), and the lead researcher

- Prepare a report that summarizes the market research analysis and outlines recommendations. Although the market research vendor will prepare an analysis, it is strongly recommended that the bank's project director review all baseline data directly, compare them to the vendor's initial analysis, and prepare his or her own final analysis for board consumption.

- Analyze findings with the board to guide a strategic discussion**.**

> Tools relevant to this subsection can be found in these annexes: Market Research Requirements and Sources, Indicative Scope of Work for Market Assessment.

B. Strategic Development for the Agriculture Value Chain Segment

B1. Purpose

After developing a clear understanding of the overall agriculture market and the key value chain link operating within the FI's operational footprint, the task of strategic development can take place.

A good corporate strategy should address these questions:

- What is the competition doing? What is the bank's current standing in the target market?
- What are the short- and long-term objectives and goals of the institution in the target market?
- What are the resource requirements?
  What business model is needed to achieve the institution's stated goals and objectives?

For a bank to be successful in agricultural finance, the strategy for the sector should become a core piece of the organization's overall business strategy. To achieve this, the organization should have a product manager who is responsible for the agriculture business line. This person will ensure that the plan and strategy for the sector is appropriately reflected in the bank's overall business plan and that the institution implements a suitable organizational structure to support it. This means verifying that specific staff members have been made accountable for moving the business plan forward at each level and department of the organization.

B2. Expected Results

A well-developed strategy will help FI management to guide and track organizational goals and objectives. In developing this strategy, FIs should answer a series of questions:

Where is the bank now? This can best be accomplished by carrying out a Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis covering the FI as a whole, and the specific market opportunity in VCF. It should also include an assessment of the FI's core competencies.

Where is the FI headed?

- *Vision.* This is the image of where the organization is headed in three to five years. It should reflect the vision for the entire bank and for the agriculture value chain finance business line.

- *Customer group.* Identifies and defines the target market.

How will the bank get there?

- *Organizational objectives and goals.* Set short-term (one to three years) and long-term (three to five years) objectives.

- *Business plan (implementation plan).* Translate the plan into actionable steps, with an explicit implementation schedule. Key elements include target VCs and client types, the channels for reaching clients, human resource and training needs, new products, appraisal, monitoring, and risk management systems. Additional information is provided in Section II.C, "Establishing an Agricultural Value Chain Lending Unit".

B3. Guidelines for Strategic Development

An organization's strategy should be discussed, debated, and decided on at board level to truly become part of the organizational DNA. Subjects to be covered during these conversations should center on issues of strategic importance. These issues include:

- Understanding the broader market and whether there is the scale and opportunity to reach profitability (see Market Mapping subsection above).
- Understanding the bank's competitive advantages in the marketplace and ensuring that the new product line strategy builds on these advantages.

- Ensuring that objectives and goals are realistic. Management should be detached and critical when setting objectives, and set worst, expected, and best scenarios during financial modeling.

- Understanding how the agricultural lending product line will affect other areas of business. Will it support these other areas or cannibalize them?

- Determining how long it will take for the agricultural lending product line to reach break-even. Does the bank have the capital available to sustain the product line to this point?

- Establishing whether the organization has personnel capable of delivery on this business plan. If not, what is the plan to achieve the needed level of organizational development?

- Establishing operational platform requirements. Does the bank's branch network reach sufficiently into those areas of market opportunity? Which branches should be prioritized based on the market survey results? What would be the appropriate branch rollout strategy?

- What additional investments are required to reach the new market? Investments would involve hiring or training of existing staff, investments market surveys, marketing and sales campaigns, and, importantly, bank infrastructure and new technologies, such as hand-held devices that could assist in reaching more remote borrowers.

B4. Primary Implementation Steps

Analyze the FI's current position (mission, vision, core competencies, and SWOTs).

- Define what the FI wants to achieve in respect to the agriculture value chain market. Based on analysis of the market study, ensure alignment of organizational strengths and core competencies to the proposed business opportunity.

- Develop a business plan with short-and long-term objectives and goals. Include financial model and proposed investments.

- Present the strategic and/or business plan to management.

Tools relevant to this subsection can be found in these annexes: Marketing Strategies, Steps to Implementing an Effective Strategy, Sample Business Plan Structure.

C1. Purpose

Introducing or retooling VCF within an FI is about "change management" and how to bring this about. There is no one magic bullet or model. Getting buy-in from the board and senior management team and credit staff is critical. The first step is getting each group to understand what is involved in VCF and how it impacts their FI and taking ownership of the process.

VCF, by its nature, is cross cutting in terms of credit size (micro, SME, and corporate) and its impact on different departments in an FI. VCF may vary from credit to smallholders, SMEs[22] such as small or medium size mills and processors, and corporate processors, not to mention equipment and input suppliers, aggregators, wholesalers, and transporters. The level of skills required by an FI depends on the various types of clients an FI will deal with. For example, dealing with a processor that requires detailed specifications for a product or a large outgrower scheme (such as sugar cane or rubber) requires a specific skill set. Many FIs, particularly banks, may be structured by credit size, with micro to small, SME, and corporate credit departments.

Due to its cross-cutting nature, VCF impacts almost all, if not all, departments. For example, the MIS department is impacted due to the need to add additional parameters to adequately track and assess loans given default rates and set specific VC credit exposure limits. Marketing and risk management departments are also impacted, as is the department involved in any self-insurance policies or external insurance products.

The way in which agricultural value chain finance is integrated into an FI's structure depends on a number of factors including 1) the FI's current organizational structure, in particular credit operations, 2) experience in VCF, 3) volume of portfolio in VCF, and 4) the FI's strategy for capacity building, training, and recruitment.

If VCF is a new or relatively new concept for an FI, the next step following the development of a strategic/business plan may be to increase staff capacity in the field, regional offices, and headquarters, without necessarily creating a separate AVCF unit. Experience has shown that adequate regional technical and operational support as a link between headquarters and branch offices is of critical importance but is often overlooked.

While it is important to have VCF champions within an FI, there are pros and cons to creating agricultural value chain unit and the experience to date has been mixed. It may fit some very experienced FIs with large volumes of VCF,[23] but may not fit an FI in start-

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[22] In the case of a large credit union (CU) federation in Burkina, (RCPB), the key need was to develop competencies in VC SME finance from the technical underwriting aspect and accessing financing from regional CUs. RCPB understands VC microfinance. RCPB is currently the country's largest supplier of input credit for the cotton VC. where RCPB's regional CUs needed help was on more complex SME deals. Their answer was to create regional SME hubs owned by their regional CUs. The hub's personnel is responsible for underwriting. If the appraisal is positive, regional member CUs can participate in the financing.

[23] Centenary Bank in Uganda created such a VCF unit after 15 years of prior experience. Prior to the unit's creation, VCF was under the microfinance unit.

up mode. Whether or not an FI has a bonus system is also an important factor. There are potential advantages and disadvantages to having specific credit staff for VCF. Due to the seasonal nature of production agriculture, although VCF credit officers can also lend to other types of business, they may have less work during off-seasons. In FIs with performance bonuses, VCF-specific credit staff may feel that they have more risks involved in attaining their bonuses. Due to the intensive nature of VCF, extensive field work, and travel, credit officers may also prefer to be in urban lending because it is perceived to be easier to build and monitor one's client base, less risky, and closer to the branch office.
A VCF unit is initially reflected in the organizational chart. The purpose of developing an AVCF unit that is incorporated into the organizational structure is to ensure that the chain of command is in place for the decision-making process, distribution of authority is understood by all working in the AVCF business line, and functional duties are assigned.

The organizational chart revision should also be accompanied by a review of the operational platform for delivering agricultural loans. Investments may need to be made in additional technologies, such as hand-held devices, IT, and MIS to enhance electronic lending platforms to reach more distant populations. Sequenced guidance on establishing an AVCF unit is discussed in the section below.

C2. Expected Results

An AVCF unit structure should be created that allows the business line to operate efficiently and effectively. In analyzing the unit's structure, the following questions should be kept in mind:

- Does it give adequate focus to creating sales?
- Does it ensure that credit quality is maintained?
- Does it fit into the overall organizational structure of the FI?
- As addressed in the previous section, is the operational platform sufficient to reach the new value chain segments? Are further investments required to achieve goals?

C3. Guidelines for Establishing an Agricultural Value Chain Lending Unit

Development of an AVC lending unit helps to ensure that there are responsible parties to move the business forward at each level and department of the organization:

- Head of the agriculture business line
- Responsible, accountable staff within each support area, such as marketing, product development, credit, and human resources
- Trained field sales staff.[24]

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[24] In most banks, the sales function is split amongst a business development unit dealing with larger SME and corporate clients, credit officers, and a client service personnel in the banking hall.

It is at this final level of unit development, sales staff in the field, that most organizations misstep. Most will assign a head of the agricultural business line, but from that point, will try to save money and effort by sharing resources from other lines of business. Although this can work, and is probably most logical, because the client base of the agriculture value chain straddles a few business lines, it comes with a few caveats.

Incentives

- The sales force can be made up of current units within the organization. For example, for large multi-national input suppliers, underwriting and sales may be handled by a member of the corporate team. For loans to small farmers, the SME team may be involved in the sales and underwriting process. However, each sales unit supporting the agriculture business line must have incentives to ensure that adequate focus is given to this product. This means including a level of sales in each supporting unit's yearly goals and targets.

- It also means assigning these goals and targets to the managers[25] responsible for each level of the sales team. The best organizational structure involves breaking the organization's delivery channels down into ever smaller and manageable cells. For example, the management of delivery channels can be broken down as:

  – CEO: bank-wide responsibility
  – Regional managers: regional responsibility
  – City managers: city responsibility
  – Branch managers: branch responsibility

Loan officers: direct portfolio responsibilities. Most institutions are structured so that loan officers have direct portfolio responsibilities. However, how incentives are broken down can cause bottlenecks, confusion, and underperformance. Typically, product managers are responsible for the revenue generated by their own product line (i.e. corporate lending, SME lending, retail), but this is often at odds with how the sales side of the business breaks down. Within the delivery channels, these managers have one overall goal: to increase revenue. Often, they have no incentive to push for one type of business segment over another. With that, they typically gravitate to what is easiest: making a few large corporate loans to quickly reach their overall revenue targets.

A better way to do this is to ensure that managers at each level of the organization do not just have an overall revenue goal, but that they have distinct and individual revenue goals for each product line. Building this type of incentive into their yearly goals and objectives makes managers at each level of the organization accountable for a level of growth within each business line and forces them not just to rely on the quickest and easiest wins, but to truly diversify their portfolio under management. It also forces them to ensure that their sales and underwriting teams have the proper training to focus on each individual product line, including the agriculture business line.

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[25] Where this is part of a manager's overall role this should involve modifications to their job description.

Training. The next challenge when leveraging a multi-focused sales team is training; which becomes apparent with regard to credit underwriting. Corporate credit analysts are trained to analyze large corporate loans to the deepest levels. They understand that any loss of a loan totaling millions of dollars can jeopardize the organization. Thus, they spend time analyzing and structuring these loans. In some cases, these loans can take half a year or more to adequately analyze, structure, and disburse, as well as large amounts of time monitoring the performance of these loans. The analysis, and indeed the business model, of SME lending (the smaller-sized companies in the value chain) are different. Typically a much smaller size, these loans are sold as much on speed of transaction as they are on pricing, and as such, need to be analyzed and processed efficiently
The underwriting requirements for corporate and SME lending are relevant. For most banks, a combination of these two sales teams will service the AVC product line. Management must analyze typical needs, request sizes for each link of the value chain, and assign responsibility to the corporate business or the SME business accordingly. For example, financing of input suppliers, typically larger firms that are multinational or regional in scope, probably would require larger, more complex analysis and sales techniques. Thus that link of the value chain probably would be assigned to the corporate team. Farmers, on the other hand, particularly smaller landholders, will require smaller loan amounts for which a more efficient, simpler level of analysis is needed. This link of the chain would be assigned to the SME team. In some cases, smallholders will not qualify for a direct bank loan and may be served by a specialized NBFI. Ideally, these levels of market segments will have been identified and mapped within the appropriate value chain during a market survey.

Additionally, marketing & client service staff and loan officers should receive specialized training on the characteristics of the target market, including information on the market conditions[26] associated with specific value chains that have been selected as priorities by the FI. Having knowledge about the actors and links in the value chain will help the sales staff better target the clients of existing clients, for example, which can reinforce the bank's existing client base and allow loan officers to more easily assess credit risk.

Loan officers will need more in-depth training on specific crops, depending on the country specific context. This information needs to include crop budgets for different technology packages and cultivation protocols (see Annex L for example), which indicate the timing of different cultural activities.[27] Loan officers and branch managers need to know what the yield ranges are for different input and technical packages to allow them to do sensitivity/scenario analysis. While optimal packages can significantly increase yields the more money a farmer spends the greater the risk in the event of a natural calamite (please see the Toolkit training guide and materials).

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[26] Understanding market conditions for each VC is of critical importance to avoid , for example, financing extensive storage facilities or working capital for stock if grain markets are volatile and there is a history of large scale imports of grains for commercial and relief purposes or different planting seasons within a country. In Ghana there is one growing season for rain fed cereal crops in the north while the center and south have two growing seasons. This constrains how long cereals can be stored in the north.
[27] This is important in structuring financing which may be done in tranches and where inputs may be delivered "in kind" rather than in cash to farmers.

Once particular types of clients in the value chain have been allocated to a sales and analysis team, it is imperative that each team understands the lending products being offered to agriculture value chain clients. Having matched the analysis to appropriate clients, this training on products is the last step to ensuring the unit is working well and producing results.

Review operational platform requirements — technology. Increasingly, across Africa banks and larger FIs are investing in technology which can have a significant impact on their rural and VC business lines and financial services including savings. This includes but is not limited to expanding ATM networks[28], mobile banking, "branchless banking" approaches, such as hand-held devices and mini printers, global positioning system (GPS), and mobile phone applications. Opportunity International's agricultural lending operations have used GPS to accurately measure and localize land plots of farmers. The GPS devices[29] helped reveal that farmers frequently have a misunderstanding of the amount of land they are cultivating, leading to over- or under-application of fertilizer, for example.[30] Such technologies therefore benefit the borrower (through improved efficiencies) as well as the bank (better crop yields and higher likelihood of repayment).

C4. Primary Implementation Steps

- Ensure complete understanding of the organizational structure and how departments coordinate their work by studying the strategic plan and organizational chart. Particular attention should be paid to all departments that will offer operational support to the AVC unit.

- Using findings from the above research and understanding of the institution, develop the organizational structure for the AVC unit. Illustrate this with an organizational chart for the new unit and underline how it fits into the organization. The recommended structure should facilitate delivery of high-quality products and services while encouraging effective sales efforts. Loan servicing and monitoring needs should also be examined and the operational platform reviewed to ensure the appropriate team is trained in agricultural products and in place to monitor the portfolio of generated loans. This would also involve identifying IT platform requirements, involving investments in alternative technologies (handheld devices), GPS, motorcycles, vehicles, including mobile banking units, and other equipment and tools to reach borrowers located further from the branch. Creating lower cost satellite offices that are staffed during market days can be another strategic option.

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[28] Management of the Banque Nationale de Credit Agricole (BNDA), in Mali, found that free ATM services relieved the pressure on their cashiers and staff and led to increases in the volume of savings in rural branches.
[29] While GPS devices are useful they are an expensive technology costing around $400 per unit. There are other less costly ways to accurately measure farmer's fields.
[30] "Introduction to Opportunity International Rural Finance Programme", presentation by John Magnay, senior advisor, Opportunity International, Cracking the Nut Conference, Washington, D.C., June 2010.

- Assign each link of the value chain to a sales and underwriting team (i.e. corporate or SME). This will be done to align specific needs of each link of the value chain to the appropriate underwriting and sales criteria.

- Review and adjust goals and objectives of the sales and underwriting teams, to ensure that they are adequately focused on achieving set goals and objectives of the agriculture value chain business line. At ground level, agricultural lending product specialists should be part of each sales team (corporate and SME) with a direct focus and a portfolio goal tied to the agriculture value chain goals. Also, within credit specific analysts should be are tasked with analyzing AVC actor requests.

- Review and develop an appropriate training plan for each marketing client service and underwriting team involved, including specialized training in the highest priority AVCs..

- Present and review organizational structure and operational platform requirements with the senior management team to ensure effectiveness and buy-in.

SECTION III. CREDIT PRODUCT DEVELOPMENT

A. Credit Products for the Agriculture Value Chain

A1. Purpose

. This subsection sets out guidelines for introduction and roll out of new VC products.

A2. Expected Results

As with any new credit product, AVC product development entails risk for which the FI must commit precious capital. National banks often require reporting of new products to ensure that they are aware of the risks the banks are taking.

Policy guidelines are essential for development of AVC products, given the risks and costs associated with such products. Bank policies and procedures should describe in detail the steps required for product development. At a minimum, the steps should include the business case for the products, risk associated with the products, approval criteria, policies germane to the products, product profitability, product costs, and management responsibility and accountability.

There is no correct format or single right approach to an AVC product development proposal. The content will vary based on the type of credit product under consideration, but it should include elements of the following:

- Brief summary of the agricultural products
- Reasons for development and implementation
- Marketing analysis and/or SWOT analysis of the agricultural industry (Example SWOT analysis: Annex II)
- Target market, segment of clients, expected number of clients and volume of transactions for the new agricultural products
- Risks presented by launch and application of the products and mitigation of risks to a level corresponding to the risk appetite of the FI
- Proposal of business conditions and fees
- Analysis of expected risk-reward feature, including return on equity
- Impact on IT development and risk management departments

- Anticipated costs of development of the new product, including the cost of development of IT support solutions

- Expected annual costs (including advertisement and training costs) related to revenues and income generated by the new product. An example of a relevant project supported by USAID was the East Africa Competitiveness and Trade Expansion Program, which held a forum to discuss innovative ways to increase funds flowing to the agriculture sector.[31]

- Expected deadline for launching the product

The FI is advised to have a policy explaining who has approval authority over new products and to whom new products are reported.

Tools relevant to this subsection can be found in Annexes G-Q

A3. Guidelines for New Product Development

The following provides greater detail of the type of information noted in the outline above.

Business Case
Provide a description of the new type of credit product and the reason for proposing the product, how the product will affect the bank, the market, and the customer. Provide the reviewer(s) a business case structure that covers:

- Brief introduction for agricultural products
- Business impact of adding agricultural products
- Methods and/or assumptions made for developing the products
- Risks and contingencies associated with agricultural products
- Conclusion and recommendations

Risk and Approval Criteria
Identify risk factors of associated with agricultural products and approval criteria.

- Borrower capacity analysis
- Borrower stability requirements
- Minimum acceptable credit experience/history
- Other borrower criteria
- Age (minimum/maximum)
- National citizenship or residence requirements
- Maximum unsecured exposure (debt)/total exposure

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[31] Regional Certificate in Agricultural Finance http://www.ksms.or.ke/index.php/caf

- Other exclusions: including less desirable employment or business
- Borrower verification requirements
- Collateral verification/appraisal process
- Selection criteria for appraisers/evaluators
- Key appraisal/valuation standards
- Frequency of collateral re-appraisals/re-valuations
- Maximum portfolio limits
- Process exception limits

Policies and Policy Changes
Describe the policy requirements or policy changes that will be necessary to implement and govern the agricultural products. Describe the processes that will be used to measure, monitor, and control risk associated with the products.

- Minimum/maximum loan amounts
- Collateral requirements
- Other supporting security (promissory notes, guarantees, insurance)
- Maximum loan to value for secured loans
- Minimum/maximum tenor/renewal options
- Pricing
- Loan repayment method
- Credit risk exceptions
- Product pricing exceptions
- Target market exceptions
- Loan application decline process
- Non-accrual and contractual write-off policy
- Asset recovery
- Fraud prevention
- Fraud detection

Product Profitability
Project the profitability impact of agricultural products in the portfolio as well as expenses, loss provisions, capital requirements, and other issues that will affect profitability and return.

- Volume of exposure
- Expected yields (including net interest income and fees and commissions)
- Attributable direct costs
- Expected default rates
- Expected provisioning requirements
- Capital requirements

Product Development Cost
Prepare a projection of the cost of developing agricultural products, as well as the infrastructure to maintain it.

- Infrastructure requirements and costs
- IT requirements
- Human resource requirements
- Marketing requirements

Management Responsibility and Accountability
Identify competent individuals and departments for introduction of the products, special procedures, and work flow issues, and reporting, monitoring, and collection requirements.

- Procedures and process flows
- Approval requirements
- Monitoring
- Collection policy and strategy
- Reporting requirements

The agricultural client base and its financing needs. In the agriculture value chain, many participants are engaged in the process — from raw materials and inputs to the final product for sale and consumption. By this definition, potential borrowers include farmers, cooperatives, and other agricultural producers, input suppliers, processors, and other value chain participants. Following are examples of each of these participants in the value chain:

Exhibit 5. Potential Value Chain Borrowers

Participant	Example
Farmers and other agricultural producers	Small and commercial farming, livestock, dairy and aquaculture operations for local consumption; commodity farmers for export (fruit, coffee, cocoa, etc.)
Input suppliers	Retailers (fertilizers, pesticides, etc.)
Processors	Millers, bakers, factories/plants, etc.
Other value chain participants	Traders, storage facilities, transportation, retailers, market vendors

Types of agricultural loans. Although loans to agriculture value chain participants are similar to other small business loans, agricultural loans often contain special pricing to make them compatible with crop cycles. These can include seasonal payments, allowing a borrower to make minimal payments during periods of planting and growing crops, and/or incremental payment systems with low payments early in the loan term to coincide with the farming process, followed by larger payments after harvest. The pricing of these loan products will be described later. The types of agricultural loans that will be covered include the following:

Short-term loans (less than 12 months). Short-term loans to participants in the agriculture value chain are usually in the form of an advance against a future payment. The advance is usually equal to a percentage of the future payment, not the entire payment. The borrower pays interest on the amount of the advance, plus any fees. Short-term loans can be broken down as follows:

Exhibit 6. Types of Short-Term Loans

Purpose	Description
Production or pre-harvest financing	Covers the cost of seeds, fertilizer, and other inputs necessary to plant and grow crops. These loans are usually paid back from the proceeds of the sale of the crop.
Post-harvest financing	If there is a lag between the time the crop is delivered to a buyer and the time the grower is paid for the crop, the grower might request an advance against the selling price of his or her crop. This could be from a bank, processor, or storage facility. This loan would be liquidated when the grower is paid.
Purchase order financing	Often used by producers supplying milk to a commercial dairy or by a commercial grower of fruit and vegetables selling to a retailer. The buyer, a bank or an NBFI, extends an advance against a commitment to purchase the product, with the advance paid back when the grower or milk supplier (in the case of a dairy) is paid for his or her product.
Inventory financing	A processor might ask a bank or other lender, for a loan or advance to acquire raw materials that he or she will use to make a finished product. The amount of the loan is usually percentage of the cost of the raw materials. Inventory financing might allow the processor to take what is called a “trade discount,” in the form of a lower unit price, in return for purchasing larger quantities, or a discount extended in consideration for prompt payment.
Short-term equipment rentals	It is possible for an agriculture value chain participant to rent equipment for 12 months or less, under short-term rental contracts. Usually the entity renting the equipment is an equipment supplier or other non-bank entity. However, commercial banks may find an opportunity for short-term financing that provides liquidity to rental services operated by equipment suppliers, allowing them to offer this service more efficiently.
Hire-purchase	Hire-purchase of equipment usually involves an entity making a substantial down payment on an asset, perhaps up to 50% of the asset’s cost, and making payments on the balance for 12 months or less. Hire-purchase transactions are popular in many markets, because of high down payments and high effective interest rates charged on the balance, and often include consumer products, such refrigerators or private vehicles, as well as business assets.
Credit sales	Offering to sell a product or service on credit is an important form of short-term financing. Although credit sales do not normally directly involve banks, banks often provide working capital financing that allows their customers to offer credit to their own customers. Credit sales can take one of two forms: sale of a product or service, in return for payment within an agreed-on period (usually 30 days); sale of a finished good to a retailer, where the retailer asks for delayed payment terms (30-60 days).

The following exhibit provides examples of financing needs of value chain participants:

Exhibit 7. Value Chain Financing Needs

Participant	Financing Needs		
	Short-Term	Medium-Term	Long-Term
Farmers and other agricultural producers	Crop financing, post-harvest financing, working capital	Equipment, vehicles	Land purchase
Input suppliers	Credit extension to suppliers, working capital	Equipment, vehicles	Expansion
Processors	Credit extension to suppliers of raw materials, working capital	Equipment, vehicles	Expansion
Other value chain participants	Credit extension to customers and suppliers, working capital	Equipment, vehicles	Expansion

Importance of links. As shown above, financing needs of agriculture value chain participants are often linked, for these reasons:

- It is common for individual agriculture value chain participants to provide financing to other participants.
- Financing between agriculture value chain participants is often, in turn, provided by banks or other financial institutions.
- Banks are in a strong position to supply wholesale lending to other, smaller financial institutions, such as savings and loan cooperatives, credit unions, NBFIs, and microfinance institutions.

Product sheets. Sample product sheets should be documented by financial institutions with key lending parameters such as those below in the following format:

Exhibit 8. Product Sheet Format

Product name	Production/pre-harvest financing, post-harvest finance, purchase order finance, inventory finance, short-term equipment rentals, leases, etc.
Product description	A brief summary of the product, such as target borrowers, loan purpose, and general terms and conditions of the loan.
Target market	The type of business and activity the product is meant to finance. For example, crop farmers for pre-harvest input purchases or equipment suppliers needing inventory financing.
Repayment terms	• Maximum term of the loan in months or days. • Frequency of principal and interest payments, i.e. monthly, quarterly, or at maturity. This could also allow for irregular payment plans tied to agricultural sales.
Interest rate and fees	Normal interest rate allowed Other fees associated with the loan, such as commitment, application, or past due fees
Loan amount	Maximum and minimum loan amounts
Eligible borrowers	This might include: • Minimum amount of experience in activity being financed • Verifiable sales to commercial buyers

	• Checking and/or deposit relationship with the bank for minimum period • Average balance of at least x times the monthly interest payment • Business within x kilometers of branch office
Guarantors	Personal guarantees might be required by all individual owner(s) of borrower.
Other requirements	Other requirements might include: • Crop insurance from an insurer acceptable to the lender (if available) • Additional collateral acceptable to agricultural lending unit • Electronic payment transfer directly from borrower's bank account

A4. Primary Implementation Steps

- Develop a product proposal using the product sheet format above.

- Determine the interest rate and fees that will be charged for each loan product, taking into consideration the costs and risks associated with irregular or delayed repayment plans.

- Design repayment terms that best fit the probable cash flow for each type of financing.

- Test the resulting product pricing, including a profitability analysis, and loan terms against the business plan and revise the plan or products where necessary.
- Where applicable, FIs will be encouraged to develop parametric lending products. One method would be based upon production surface, yield and revenue figures. Thus the FI can set a ceiling or amount for a production loan for corn/ha or based upon historic information on yield revenues and costs. In other models one can add in factors concerning the famer and or the farmers group or associations based upon their production track record, credit track record (if they are working with other VC chain members such as nucleus farmers, aggregators, input dealers plus elements concerning their reputation (testimonial from village authorities,

Exhibit 9. Product Sheets

Product Name	Production/Pre-harvest Financing
Product description	Short-term loan generally extended for purchase of essential farming inputs such as of seed, fertilizer, feed, livestock, and fuel. The product is designed to accommodate start-up, development, and ongoing farm production activities.
Target market	Farmers and farming cooperatives, including landowners, tenant farmers, and sharecroppers
Repayment terms	• According to the harvesting of period for each crop • According to the marketing period of livestock
Interest rate and fees	Discount rate for loans less than 365 days maturity based on the prevailing market rate for the currency standard. Fee: none
Loan amount	Maximum loan amount to an individual or group of connected individuals of 70% of inputs, but no greater than $200,000 or its equivalent in CDF, EUR, and SAR. The loan currency type should match revenue sources. Written invoice or verifiable contract form input supplier serves as proof of input balance.

Product Name	Production/Pre-harvest Financing
Eligible borrowers	Clients need not have a borrowing history.
Guarantors	Personal guarantee of the individual or couple. The joint and several guarantees of cooperative members.
Other requirements	• Operating account held at the bank for a minimum of three months • Collateral in form of land/livestock and/or warehouse receipts • Assignment of crop/livestock insurance

Product Name	Post-harvest Finance and/or Working Capital Financing
Product description	Short-term line of credit or medium-term revolving line of credit intended for financing of inventory, customer credit, and other time-sensitive purchases.
Target market	Farmers and agricultural producers, as well as other value chain participants
Repayment terms	• Short-term post-harvest finance extended for 12 months or less, with principal and interest paid in full at or before expiration. • Medium-term revolving line of credit extends for periods up to 60 months, with interest payments due monthly and full repayment of principal at or before expiration. Depending on the seasonality of the client's cash flow, an annual 'clean-up' period of 30 days may be required. • For select clients, where practical and reasonable, loan advances are supported by valid invoices.
Interest rate and fees	Variable rate based on the prevailing market rates • Short-term post-harvest finance: up-front fee of 1% • Medium-term revolving line of credit: commitment fee of 1% on the unused portion of revolving line of credit
Loan amount	Minimum: $25,000 or equivalent in CDF, EUR, SAR Maximum: $250,000 or the equivalent in CDF, EUR, SAR Loan currency type preferably matches revenue sources
Eligible borrowers	• Farmers • Farming cooperatives • Agri-food and food processing • Agricultural equipment manufacturers • Equipment dealers and retailers • Logistic businesses (storage, packaging, transportation, and food distribution) • Grain handlers, transporters, and processors • Input suppliers (seed, fertilizer, pesticides) • Food and livestock distributors • Importers • Exporters • Timber harvesting
Guarantors	• Personal guarantee of the individual or couple and assignment to the bank of the life insurance policy in the name of the principal(s) • The joint and several guarantees of cooperative members
Other requirements	• Operating account held at the bank for a minimum of three months • Minimum two years of business history • Delivery of personal financial statement, tax returns, accounting statements, accounts receivable and inventory audit, and/or other supporting document deemed sufficient to prove business revenue and

Product Name	Post-harvest Finance and/or Working Capital Financing
	profitability • Positive net profit or break-even over the previous fiscal year • Positive personal and/or business equity • Internal risk rating at or above standard • Confirmation that client has no past-due payables to creditors • Collateral in agreeable form (accounts receivable, inventory, warehouse receipts, equipment and/or land), and sufficient value to support loan amount • Assignment of insurance (property, crop, liability) to the bank

Product Name	Warehouse Receipts
Product description	A warehouse receipt is a document that provides evidence of commodities storage. The receipt certifies the deposit of farm products of a particular quantity, quality, and grade. Warehouse receipts are negotiable documents and can be used as collateral to support loans.
Target market	Farmers and farming cooperatives
Terms	Short-term loan of 75% of the face value of the warehouse receipt for up to 180 days. Repayment of principal plus interest upon release of any or all commodities stored at the warehouse.
Interest rate and fees	Interest rate: fixed at the prevailing market interest rate at the time of loan closing. Fees: none
Amount	Up to a maximum advance of $100,000 or the CDF equivalent
Eligible borrowers	• Farmers • Farming cooperatives
Guarantors	None
Other requirements	Fully negotiable warehouse receipt Borrower bears all responsibility for all warehouse fees

Product Name	Purchase Order Finance
Product description	This is short-term financing that provides capital to businesses that can then pay suppliers upfront for solid purchase orders they are ready to fill. Under purchase order finance, the client does not take direct financing from the bank. Rather, the bank pays the customer's suppliers directly and collects directly from the purchaser on the purchase order. The purchase orders may come from commercial and/or government entities.
Target market	Purchase order financing is primarily for businesses that have little access to working capital and/or poor cash flow. The types of business that qualify include farmers and farming cooperatives, distributors, and wholesalers and resellers of agricultural products.
Terms	Fulfillment of purchase order contract shall not exceed 120 days
Interest rate and fees	It is not a loan to a borrower, but rather a discount of the proceeds on a purchase order. The bank will charge 5% to 10% of the proceeds of the purchase order, based on terms of the contract. Upon full payment of the purchase order to the bank, the bank will remit the balance to the client.
Amount	100% of the supplier invoice up to a maximum advance of $100,000 or the equivalent in CDF, EUR, SAR
Eligible borrowers	• Farmers • Farming cooperatives • Agri-food and food processing • Agricultural equipment manufacturers • Equipment dealers and retailers

Product Name	Purchase Order Finance
	• Input suppliers (seed, fertilizer, pesticides) • Food and livestock distributors
Guarantors	None
Other requirements	• Valid and verifiable purchase order from a commercial or government entity in "good standing" • Valid and verifiable invoices from suppliers • Proof that the transaction will generate a profit for the client • Arrangements for direct payment to the bank from the purchasing entity for which the purchase order was issued • Issuance of a letter of credit or direct payment to the client's suppliers

Product Name	Real Estate Mortgage Financing[32]
Product description	Finance long-term investment in real property
Target market	Farmers and agricultural producers and other value chain participants
Repayment terms	• Maximum of 10 years with fixed monthly or quarterly principal and interest payments, subject to rate adjustments at pre-determined intervals or loan renewal at the end of the term. • Maximum loan shall not exceed 70% of the value of the subject real property as verified by an independent appraiser.
Interest rate and fees	Interest is fixed or variable at the discretion of the borrower, based on prevailing market rates. Variable rates reset at established periods, typically quarterly or yearly. Fee: 2% at the time of closing
Loan amount	Minimum: $50,000 or equivalent in CDF, EUR, SAR Maximum: $1,000,000 or equivalent in CDF, EUR, SAR
Eligible borrowers	• Farmers • Farming cooperatives • Agri-food and food processing • Agricultural equipment manufacturers • Equipment dealers and retailers • Logistic businesses (storage, packaging, transportation, and food distribution) • Grain handlers, transporters, and processors • Input suppliers (seed, fertilizer, pesticides) • Food and livestock distributors • Timber harvesters
Guarantors	None
Other requirements	• Two years of accounting statements or proof of earnings such as tax returns and/or bank statements of the principals • Independent appraisal value of land • Copy of the deed or title to the land • Property and hazard Insurance policy assigned to the bank • Life insurance policy assigned to the bank

[32] In the case of DRC, land purchase is problematic given land title and registration issues. Regulatory environment and market conditions should be researched before embarking on this product.

Product name	Equipment Financing
Product description	Finance medium-term and long-term capital expenditures
Target market	Farmers and agricultural producers as well as other value chain participants
Repayment terms	Maximum of 5 years with fixed monthly or quarterly principal installments plus interest. Maximum loan shall not exceed 80% of the value of the subject asset. The loan tenor shall not exceed half the depreciable life of the fixed asset.
Interest rate and fees	Interest rate option of fixed or adjustable for the tenor of the loan Fee: none
Loan amount	Minimum: $10,000 or equivalent in CDF, EUR, SAR Maximum: $250,000 or equivalent in CDF, EUR, SAR
Eligible borrowers	• Farmers • Farming cooperatives • Agri-food and food processing • Agricultural equipment manufacturers • Equipment dealers and retailers • Logistic businesses (storage, packaging, transportation, and food distribution) • Grain handlers, transporters and processors • Input suppliers (seed, fertilizer, pesticides) • Food and livestock distributors • Importers • Exporters • Timber harvesting
Guarantors	None
Other requirements	• Two years of accounting statements or tax returns • Valid written invoice for new equipment • Independently appraised value for secondhand equipment. • Insurance on assets with pledge of insurance to the bank

Product Name	Equipment Lease
Product description	Rental arrangement for medium-term and long-term use of fixed (movable and non-movable) assets
Target market	Farmers and agricultural producers and other value chain participants
Repayment terms	• Maximum of 10 years, depending on the useful life of the asset and other needs of the lessee. • Rental payments may be fixed monthly or quarterly, seasonal, stepped-up, deferred, or balloon, depending on client needs
Interest rate and fees	Implied interest built into the rental payments.
Lease asset	Not to exceed a value of $250,000 or equivalent in CDF, EUR, SAR
Eligible borrowers	• Farmers • Farming cooperatives • Agri-food and food processing • Agricultural equipment manufacturers • Equipment dealers and retailers • Logistic businesses (storage, packaging, transportation, and food distribution • Grain handlers, transporters, and processors • Input suppliers (seed, fertilizer, pesticides)

Product Name	Equipment Lease
	• Food and livestock distributors • Importers • Exporters • Timber harvesting
Guarantors	None
Other requirements	• Two years of accounting statements or tax returns • Evidence of lease cover ratio acceptable to the bank • Property insurance pledged to the bank • Lessee pledges to maintain the asset in a manner specified by the bank

Tools relevant to this subsection can be found in these annexes: Product Sheets, Product Profitability.

SECTION IV. IMPLEMENTATION

A. Agricultural Loan Policy Manual

A1. Purpose

Success building a strong and profitable agricultural loan portfolio is only possible if the bank's credit policies adequately recognize the borrowing needs of those clients so that a dynamic portfolio may be created. At the same time, policies must also be applied in a way that addresses the bank's need to control risk. This balance is best managed if the bank uses clear, but flexible, loan term requirements that are regularly reviewed and adjusted based on feedback from an active loan rating system and problem loan management process.

A2. Expected Results

The bank's entire management team, marketing staff, and operational group will be fully informed and supportive of the integration of the agricultural business activities into existing bank business. If successfully done, the bank will be capable of marketing and selling to a new group of potential clients well-designed products that are appropriate to their clients' business needs, which are delivered by staff with clear policies, and loan recovery will be enhanced by a loan rating system and problem loan process.

The loan policy manual (LPM) should include:

- Types of credit required for each segment of the value chain
- Pricing strategy
- Loan rating system
- Conflicts of interest policy
- Loan approval levels of authority
- Problem loans management policy

A3. Guidelines for a Loan Policy Manual

In line with the planning and research stage, the bank needs to design policies that govern the target agricultural market. The policy must state clearly what areas within the agricultural industry the bank intends to approve credit exposure. The list may include:

- Farmers
- Farming cooperatives
- Agricultural food and food processing
- Agricultural equipment manufacturers
- Equipment dealers and retailers
- Logistic businesses (storage, packaging, transportation, and food distribution)
- Grain handlers, transporters, and processors

- Input suppliers (seed, fertilizer, pesticides)
- Food and livestock distributors
- Importers
- Exporters
- Timber planning and harvesting

Just as importantly, however, the policy needs to describe the types of businesses for which the bank will not approve credit exposure (excluded sectors or individuals). For example, the bank may choose to exclude businesses and/or individuals such as:

- Entities without legal status, such as social organizations
- Speculators in agricultural commodities, securities, and real estate
- Bars, night clubs, casinos, pawn shops
- Certain types of secondary dealers of agricultural equipment
- Political parties
- Military hardware manufacturers, suppliers, traders

The policy manual must include a section on the types of loan products that the bank will make available to each segment of the agriculture value chain.

Credit Types for Each Segment of the Value Chain

Pre-harvest financing. Pre-harvest loans are made to farmers and cooperatives for purchasing inputs such as seed, fertilizer, feed, livestock, and fuel at the start of the growing season. The farmer receives an advance of funds for the cost of the inputs. These loans are short term and mature soon after harvesting, often less than 180 days from the time of advance. Interest is accrued on the borrower’s account and paid in full at maturity.

Livestock loans. Livestock loans made to farmers to purchase feeding and breeding livestock when the moment is most advantageous for them. The loans are recommended to be short-term (365 days or less). They may be structured as a demand loan, line of credit, or revolving line of credit. The important feature is that they are pre-approved so that farmers may draw on them when the purchase of livestock is most opportune. The loans are structured to require repayment of principal and interest at the time the livestock is sold (bullet repayment). Real property guarantees separate from the livestock would be required.

Post-harvest and working capital loans. Post-harvest and working capital loans are typically either a short-term line of credit or medium-term revolving line of credit intended for financing of inventory, customer credit, and other time-sensitive purchases.

- Post-harvest loans provide farmers and farming cooperatives sufficient liquidity to cover operating costs while holding an inventory of finished products until prices are advantageous for sales. Loans are made to farmers and cooperatives to support on-farm holding of products and to allow farmers to sell their non-

perishable products at times of the year when prices are better. Such loans would pay off pre-harvest loans and allow farmers to avoid having to sell products immediately after harvest to pay their production loans. Product inventory would guarantee loans whose amount should not exceed 80 percent of the value of the product evaluated at harvest season prices.

- Working capital loans provide other members of the agriculture chain with fund to support working capital and operating expenses through the slower selling seasons.

Pre-harvest and working capital loans are structured to require repayment of principal and interest at the peak of the selling season.

- A line of credit is a commitment from the bank to the borrower to allow the borrower draw down and repay the loan throughout the year, with a maturity at the end of one year. Typically, the borrower repays the loan in full before the line of credit expires at the end of year.

- A revolving line of credit is a commitment from the bank to the borrower to allow the borrower to draw down and repay the loan for a period up to three years. Frequently, at the end of the third year, the borrower is entitled to convert the remaining balance into a term loan with a maturity of three to five years. Experience with the line of credit would be required before such a conversion would be considered.

Equipment and real estate loans. Equipment and real estate loans are long-term loans for financing long-term assets.

- Equipment loans are term loans for fixed assets such as tractors, trucks, combines, dairy equipment, harvesters, planters, tillers, fertilizers, hay, and irrigation equipment. They are typically for five to seven years, with principal and interest payments made monthly or quarterly. The bank typically finances 70 percent to 80 percent of the equipment purchase price.

- Real estate loans are term loans for purchase of real property such as land, buildings, and other improvements. They come in many styles and packages, but generally have terms of five to seven years in emerging markets. Loans are often structured with an adjustable rate component and limited maturity (five to seven years) allowing the bank to decide whether to renew the loan with new terms and conditions at the end of the loan term. The bank typically finances up to 70 percent of the real property value as appraised by an independent appraiser. Principal and interest payments are typically monthly or quarterly. Such payments are adjusted in the case of agricultural loans to take into account the cash flow derived from the operation, and the loan payment is scheduled accordingly. As noted, real property ownership and land title are problematic in the DRC. Such

transactions will require thorough knowledge of the regional regulatory environment and legal due diligence on any title presented.

Equipment leasing. Equipment leases are rental arrangements where the user (lessee) makes rental payments to the owner (lessor) for use of equipment, the title of which remains with the lessor. The lessee has the right to use the equipment unencumbered for a specified period, so long as the lessee makes rental payments according to the terms of the lease agreement. Typically, at the end of the lease, the lessee returns the asset to the lessor. Interest rates and principal are implied in the rental payments.

Equipment leases are a specialty area of finance and should be undertaken with caution. Equipment leasing requires special knowledge of the equipment and its residual value at the end of the lease term. That said, equipment leasing can be a profitable area of financing for a bank and can offer an alternative avenue for financing equipment for bank customers. For the customer, they can make expensive equipment available without incurring the cost of purchasing the equipment outright when there are many other demands on enterprise capital.

Pricing Strategy

Loan pricing is largely determined by market forces, which often begins with a reference rate to which a risk margin is added. The common reference rates used by banks are: 1) London Interbank Offered Rate, referred to as LIBOR for U.S. dollar-denominated loans, 2) the Euro Interbank Offered Rate for euro-denominated loans, and 3) the South African Benchmark Overnight Rate for rand-denominated loans. The financial and capital markets areas of the bank are most familiar with the prevailing reference rate and can provide the most accurate, up-to-date information. LIBOR is a relevant reference point for international funders of credit lines in Africa. However, the Banque Central du Congo exercises complete independence in determining interest rates.[33] Banks should refer to inter-bank lending rates as a proxy for cost of funds.

The risk margin is a rate of interest, often stated in basis points, that is added to the reference rate to compensate the bank for the credit risk of a particular borrower or type of credit exposure. To derive the risk margin, the bank must consider such factors as market conditions, competitor pricing, budgetary targets, and risk rating assigned to the borrower. For smaller agricultural loans, the bank may fix rates that are market sensitive, but sufficiently high to compensate the bank for its cost of funding and operating expenses (direct and indirect), which may be higher because of a smaller loan size and the need for increased supervision by bank staff due to the vagaries of weather and the nature of agricultural activities.

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[33] Banque Centrale du Congo
http://www.sadcbankers.org/Lists/News%20and%20Publications/Attachments/20/Fin%20Sys%20DRC2011.pdf

An advanced loan pricing strategy not only will compensate for the cost of funds and operating expenses, but will also incorporate expected loss from loans in the same risk category. A formula to measure income from the loan is as follows:

Risk-adjusted income = [spread + fees - expected loss - operating costs] (1 - statutory tax rate)

Spread = difference between loan rate and bank's cost of funds

Fees = commitment fees, loan origination fees, etc.

Expected loss = expected default frequency x loss given default

- Expected default frequency = % expected default under rating system metric
- Loss given default = % of loss interest and principal resulting from default

Operating costs = % loan officer time originating and monitoring the loan

Rating	Capital at Risk
AAA	7.5%
AA	8.0%
A	8.5%
BBB	10.0%
BB	12.0%

Every loan must have a portion of bank capital assigned to it, which is described as the capital at risk**.** A standard measure of capital at risk is 8 percent of the loan amount. However, the bank may use a graduated scale based on the risk associated with the borrower. The risk associated with the borrower is identified by the risk rating assigned to the borrower. (See below for a discussion of loan rating systems.) The box at right illustrates an example of a graduated capital-at-risk scale based on the risk rating of the borrower.

Once the banker calculates the risk-adjusted income for the loan, the banker calculates the return on capital. The banker then compares the return on capital with the required rate of return (also called the 'hurdle rate') as specified by the bank's policy. The hurdle rate is minimum return on invested capital that the bank will accept for any investment. A return on capital less than the bank's hurdle rate means that the bank is not generating a positive return for its shareholders.

Example of risk-adjusted income/return on capital (RAROC). Assume that a banker is considering a $100,000 loan for a farmer to buy a harvester. For simplicity's sake, assume the loan will amortize over four years, with principal and that interest is paid monthly; in fact, because harvesters rarely operate more than six months a year, actual loan payments would be scheduled to coincide with harvesting income. The banker will charge 6.5 percent interest and a facility fee of $1,000. After reviewing the farmer's credit history, the credit risk department assigns the farmer a risk rating of 'A'.

A few things that the banker needs to know: the cost of bank funds, the expected loss for 'A' rated loans, an overhead operating charge for each loan, the bank's statutory tax rate, and the capital at risk for business loans. These five factors are determined by the bank's strategy and bank policy.

With this information, the banker can calculate an RAROC:

Spread = income generated from the difference between loan rate and bank's cost of funds	4.00%
Fee income = commitment fees, loan origination fees, etc.	$1,000
Expected loss = expected default frequency x loss given default	1.24%
1. Expected default frequency = % expected default under rating system matrix	2.47%
2. Loss given default = % of lost principal and interest resulting from default	50.0%
Operating cost % = % of operating cost of originating and monitoring the loan	2.0%
Overhead = total annual personnel salaries, benefits, and other overhead allocated to the department	$100,000
Statutory tax rate = rate of tax obligation	32%
Capital at risk = % of bank capital to assign to loans with similar ratings	8.5%

Risk-adjusted income = [spread + fees - expected loss - operating costs] (1 - statutory tax rate)

Risk-adjusted income = [4.00% ($100,000) + $1,000 – 1.24% ($100,000) - $2,000] x (1 – 32%)

Risk-adjusted income = ($4,000 + $1,000 - $1,240 - $2,000) x .68

Risk-adjusted income = $1,196

Capital at risk = $100,000 x 8.5% = $8,500

RAROC = $1,196/$8,500 = 14.1%

Having calculated RAROC, the banker can now compare the results with the bank's statutory hurdle rate. If the RAROC exceeds the hurdle rate, the banker can go forward with the loan request. If it does not exceed the hurdle, the banker will need to negotiate further with the farmer to get the pricing up. The banker might pursue a higher loan rate, higher fee income, or more collateral to lower the percentage of expected loss in the event of default.

Loan Rating System

A sound loan rating system (LRS) is the backbone of risk management. The LRS is the primary vehicle for classifying a borrower and identifying the risk of credit loss associated with a borrower. Through the LRS, risk management is able to identify the loan loss exposure of the bank and determine loan provisions. The LRS is also a key tool for managing exposure to any one borrower and managing the ongoing relationship with the borrower to prevent loss.

It is not advisable to have a separate LRS for agricultural lending. A separate LRS for agriculture will only create confusion during the process of industrial classification and may result in diminished data quality. It will serve the bank better to have a single LRS for all industrial categories and perhaps for all types of credit exposure classified as commercial.

However, the LRS must be sufficiently robust to allow for classification of credit exposure into appropriate categories. For example, an LRS with only three categories is too narrow to allow for sufficient classification of borrower types and credit risk. A more appropriate LRS will have at least five categories for classification of borrowers

(obligors). In fact, it may serve the bank well to mimic rating categories of the major rating agencies, Standard and Poor's and Moody's. These agencies provide a broad range of rating categories and a wealth of information supporting their approach. An example of an LRS follows:

Exhibit 10. Sample Loan Rating System

AAA	The obligor's capacity to meet its financial commitments is very strong and the obligor's business activities are internationally diversified.
AA	The obligor's capacity to meet its financial commitments is very strong and the obligor's business activities are diversified within the country.
A	The obligor's capacity to meet its financial commitments is very strong.
BBB	The obligor's capacity to meet its financial obligations is strong, but the obligor is subject to changes in economic conditions and circumstances.
BB	The obligor exhibits capacity to meet financial commitments. However, adverse changes in business, financial, and economic conditions may negatively affect the obligor's ability to meet financial obligations.
B	The obligor is vulnerable to nonpayment and is dependent on favorable business, financial, and economic conditions to meet its commitments. In the event of adverse changes in business, financial, and economic conditions, the obligor is unlikely to meet its commitments.
CCC	The obligor is highly vulnerable to nonpayment and is highly dependent on favorable business, financial, and economic conditions to meet its commitments. In the event of adverse changes in business, financial, and economic conditions, the obligor is unlikely to meet its commitments.
D	Default: The obligor cannot meet its commitments.

A robust LRS assigns a probability of loss to each risk rating category. An accurate measure of probable loss for each creditor allows for a better measure of risk-weighted capital to assign to the creditor exposure and therefore a better measure for loan pricing. When applied to agriculture, the additional factors of weather (for rain fed agricultural operations) and water availability for irrigated systems (which reduce risk, provided water is available at key times during the year), crop prices, import policy (dumping from Europe and elsewhere), and security considerations have to be factored into the system. Senior management is responsible for establishing the LRS and policies governing it. The LRS must be reviewed on a regular basis to determine whether it is fulfilling expectations. In addition, the loan policy manual must communicate who is responsible for assigning risk ratings, the essential criteria for classifying credit exposure, and the methodologies for assigning risk ratings. As a rule, the LRS is under the purview of the credit department, which falls under the broad category of risk management.

Loan or obligor is ratings may change quarterly or semi-annually, depending on the frequency of financial reporting or as stipulated in the loan agreement between the bank and client. In the case of agriculture, where production cycles are measured in months, a more frequent measuring may be required, and adverse conditions from various sources must be factored in at short notice. Without exception, all risk ratings must be reviewed annually to assure the integrity of the rating.

Conflicts of Interest Policy

Conflicts of interest are not uncommon and can arise from multiple sources. Usually, they arise from within the bank, where bankers' family members or close friends seek loans. Conflicts of interest arise when bank supervisory or advisory board members not part of bank management, request loans from the bank. These individuals may be part of the business, academic and political community and be highly influential.

It is wise not to discourage people with conflicts of interest from borrowing from the bank. However, the bank must have written policies that require transparent reporting of such conflicts. The bank policy must ensure that, in such cases, the loan request receives a fair and impartial review, and that the approval authorities are fully aware of the conflict situation. Although this situation exists worldwide, it may require special attention in the DRC based on experience.

Loan Approval Authorities

Generally speaking, credit authority is granted by the supervisory board (board of directors) to the highest level of management authority at the bank, traditionally a credit risk committee of senior bank staff (i.e. president, chief risk officer, head of corporate credit, head of corporate lending, head of capital markets, internal audit). Senior management, through the authority of the credit risk committee, then assigns individuals to represent sub-credit committees (corporate credit committee, SME credit committee, and retail credit committee.) These may be the same individuals who are on the credit risk committee or their subordinates. Representatives on the committees have the authority to review credits and approve credit exposure.

The LPM must state clearly what credit bodies have authority to approve credits, the types and size of credit under their authority, and the voting requirements. For example, the corporate credit committee (CCC) consists of five voting members and two non-voting members. Three voting members are needed for a quorum. A majority of positive votes are needed to approve credit exposure.

The LPM also must clearly state who will have authority to approve agricultural exposure. This probably will depend on the size of credit exposure and type of credit borrower under review, rather than the industrial classification of the borrower. For example, the CCC will review the credit of all borrowers where credit exposure exceeds $250,000, the SME credit committee will review the credit of all borrowers where credit exposure exceeds $50,000 but falls below $25,000, and the retail credit committee will review exposure below $25,000. However, the bank may choose to have a separate authority for activities such as farmers and farming cooperatives, to ensure that they get special attention and treatment. This authority may find it useful to engage either as staff or consultants (from a pre-approved roster) specialists in the type of agricultural lending targeted by the bank.

The LPM must also clearly state the limit of credit approval authority for individuals, should the management board choose to grant individual credit approval authority. Granting credit authority to individuals must be done with special caution. If the bank should chose to do so, it is advisable to have a policy that requires at least two independent people review the credit before the credit is granted. It should also set low credit limits if it chooses to grant individual credit approval authority and allow such approval only for specific types of loans (such as production credit, for example) and, perhaps, only for repeat customers with a good loan repayment history.

Importantly, the authority to approve credit exposure must be based on the total single obligor exposure (that is, the total aggregation of credit exposure to a single borrower). For example, a client may request a loan for $100,000, but have existing credit exposure at the bank or elsewhere totaling $175,000. The total single obligor exposure will exceed $250,000, and thus the loan request will fall under the purview of the CCC.

Finally, the LPM must communicate that authorized credit approval shall be obtained for all activities that affect the credit exposure, regardless of the circumstances. Such circumstances include increasing the exposure; modifying the terms; extending short-term exposure; granting off-balance sheet exposure; changing the maturity dates; changing, waiving, and amending covenants and conditions; and prolonging a conditional offer.

Problem Loans Management Policy

For most banks, the lending officer remains the primary point of contact for clients and bears full responsibility for servicing client accounts. Most commonly, the level of contact with the client is proportional to the level of credit exposure: the larger the credit exposure, the more frequent is the contact with the client.

That frequent contact can substantially mitigate problems. This is especially true when applied to agricultural clients. Thus, even the smallest of borrowers must hear from the bank regularly. The bank should have a policy that addresses the frequency of customer contact above a certain exposure level. For example, the bank could require that all borrowers with exposure greater than $250,000 receive a visit from their assigned loan officer on quarterly or semiannually. For smaller accounts, the bank may have branch managers contact each client in their branch at least once a year (but preferably more frequently). Loan officers will have to visit agricultural clients more frequently, with the frequency dictated by the type and size of the loan and the risks associated with the underlying operation being financed. Unfortunately, problem loans do occur, and no amount of mitigation can prevent it. Thus, banks must have policies to address problem loans (non-performing loans or distressed assets) the moment they occur.

As a first step, the bank must have a robust risk rating system to measure risk exposure properly. The risk rating probably would require a downgrade to reflect the status of the borrower. A loan-loss provision probably will need to be made for potential loss of principal and/or interest. The policy must define non-performing or distressed assets and

who is responsible for addressing such assets. The policy might call for transfer of the asset to a second loan officer for more objective remedial management or transfer of the distressed asset to the workout team. A workout team is typically a separate team or department housed in collections, which is dedicated to collecting problem loans. Transfer to a workout team occurs when all reasonable attempts to negotiate or restructure the problem asset with the loan officer have failed. In the case of agricultural loans where the loan officer deems underlying problems to be beyond the control of the borrower, the supervisor or second loan officer should review the proposed action, including rescheduling when necessary, and in some cases, a second production loan, even though the first has had to be rescheduled. Where such action is justified and appropriately applied, long-term profitable relationships can be established with agricultural clients, which allow long-term relationships to develop while meeting short-term repayment difficulties and minimize risk to the bank. Hence, the policy must address:

- At what point in time the distressed asset will be transferred to the workout team
- Procedures to transfer the asset from one responsible party to another
- Handling of loan documents and proper document storage before and after transfer
- Management of the account during workout, including:
  - Legal issues
  - Call reports
  - Client files
  - Monitoring

A4. Primary Implementation Steps

1. Build awareness among bank managers and key staff about the agricultural lending products, business plan, unit structure, and especially the unique aspects of agricultural lending.

2. Implement changes to the bank's credit policies that will be necessary to support agricultural lending activities.

3. Identify and adopt changes to other bank functions to support the new lending unit, such as risk procedures, new management reporting or authorities, MIS needs, and marketing support.

4. Upgrade or install a loan rating system to include agricultural loans.

5. Expand or implement a problem loan management process for working with clients under distress.

6. Develop policies that address the transfer of distressed assets from one party to another, and to the workout team.

Tools relevant to this subsection can be found in these annexes: Collateral Considerations, Collateral Assessment Deed, Analysis, Credit officers guidelines Loan Memorandum, Risk Rating System - Basic Structure.

B. Agricultural Loan Procedures Manual

B1. Purpose

A clear and concise lending process that is understood by staff and carefully monitored by auditors and management will help the bank maintain control over its agricultural lending business. Not only will lending risks be better managed, but lending operations can be made more efficient.

B2. Expected Results

The resulting loan procedures manual should include:

- Marketing activities by loan staff
- Pre-application screening criteria and process
- Application process and forms
- Agricultural reference sheets for common farming activities
- Loan decision process and approval formats
- Documentation used by staff and clients

B3. Guidelines for a Loan Procedures Manual

- **Marketing Activities by Loan Staff.** First, the bank must identify businesses within the agricultural community that it seeks to target. This is done during the research and planning stage and focused on during the product development stage. Using this information, the bank can develop a marketing strategy and incentives to motivate loan staff to meet the marketing plan.

- Incentivizing loan staff to proactively call on the agricultural community will largely facilitate fulfillment of the marketing plan. Loan staff must appreciate the advantage of targeting a new demographic that it had previously not targeted before. For example, the bank may require loan staff to meet with at least 25 agricultural businesses each month. Evidence of such meetings may come in the form of call sheets that briefly describe participants, the purpose of the meeting, and results or next steps. This information should be retained in a customer contact system (which includes cell phone numbers and e-mail contacts of those contacted, even if initial contact has not resulted in immediate establishment of a bank-client relationship). Sectional bonus criteria may depend on the loan staff's fulfillment of its monthly marketing objectives.

- The procedures for marketing to agricultural businesses will largely depend on the size of the business. It would not be efficient to require senior bank staff to meet with small farmers and agricultural cooperatives; such tasks should be left to lower-level marketing staff trained in marketing agricultural financial products. However, it may be effective for senior management to meet with large agricultural processors, manufacturers, and distributors who might not be willing

to meet with lower-level bank staff. For smaller prospects, one approach would have aggressive marketing teams call on or meet with as many agricultural businesses as possible in a given period. These teams may open accounts for agricultural businesses and refer loan prospects to loan staff.

The bank may already have a wealth of agriculture-related businesses and/or their employees as depositors. Thus, the bank should screen its database, identify these depositors, and approach them with further relationship opportunities. Existing depositors are low-hanging fruit that can be harvested most rapidly to build the agricultural portfolio. In the DRC, many depositors have multiple businesses, including agricultural and farming operations. As soon as the agricultural sector is targeted and this new portfolio is opened, it is important to communicate to existing depositors about the bank's interest in financing targeted agricultural activities and to make them aware of new loan products designed to serve agriculture.

- **Pre-application Screening Criteria and Process.** The pre-screening process may be an objective credit screening tool that could be completed by bank marketing staff or a formal due diligence screening by someone trained in credit review and knowledgeable about agricultural operations of the type being contemplated for financing. Either way, the bank should have a well thought-out set of criteria to screen prospective borrowers. The bank may use a credit screening tool that would objectively screen prospective borrowers based on information entered in the screening tool. Should the screening tool deliver a positive answer, the customer is asked to complete a full loan application. Statistical credit score cards can be developed based on prior repayment data for specific client groups to derive essential predictive indicators for repayment, such as the number of years in business or number of years as a bank client. Statistical score cards are outside the scope of this toolkit and require past repayment data to be effective.

- **Loan Application Process and Agricultural Reference Sheets For Common Farming Activities.** The application process should occur right after the pre-screening process. The application may be in hard copy or electronic, depending on the sophistication of the client and the skills of the IT department to develop an electronic platform. As these are new products, it may make sense to start with an electronic application and provide loan officers with a hand-held device to fill out the application directly, which will facilitate analysis of the loan application and subsequent loan administration. Where the client has Internet access, the forms could be filled in online. An offline version could be kept on loan officers' computers and filled in with the help of the officer.

  The loan application should request the same information that would be required of non-agricultural loans, but will require additional detail germane to the agriculture industry. As an example of a specialized loan application for farmers and farm cooperatives, is the loan application and supporting documents from the

Agriculture Financial Services Corporation of Alberta, Canada (http://www.afsc.ca/home.aspx). This is a useful example of information gathered from farmers and farm cooperatives for credit evaluation.

- **Loan Decision Process and Approval Formats.** The loan decision process is a function of the loan approval authority spelled out in the bank's policy manual. The credit department or loan officer will prepare the credit approval form in accordance with underwriting standards for agricultural loans (see Subsection C, Underwriting Analysis for Agricultural Loans).

  Once complete, the credit approval form will be sent to the appropriate credit approval authority as identified in the policy manual. For smaller credits, this may be two individuals with credit approval authority up to specified limits. For larger credits, this may be a credit body such as corporate or small business credit committees. In any case, it is advisable to have at least two people review all credit approval forms. This will ensure greater objectivity and accountability for credit approval. Loan officers should in any case present their own credit proposals to the credit approval authority. This is to ensure accountability. Because of the time-bound nature of agriculture, the system will assure a rapid loan appraisal and decision to conform to the inflexible dates of the agricultural calendar.

- **Documentation Used by Staff and Clients.** The loan documents can be standardized or customized depending on the size of the exposure. Generally, loan documentation for small exposure is standardized, which allows for speedy turnaround and disbursement of funds. However, larger exposure requires customized loan documents at all times. It is for the bank to decide at what level of exposure standardized or customized documents can be used.

  In all cases, an attorney conversant with the industry and legal issues within the country must be used to prepare the loan documents. A standardized loan agreement might work in most cases, but it is still advisable that an attorney review all loan documents (even standardized loans) before disbursement.

Tools relevant to this subsection can be found in these annexes: Crop Template, Disbursement Strategy, Loan Process Diagram, Step-by-Step Lending Process, Client Screening Form, Agriculture Producers Application Form, Retailers Loan Application Form (SME), Loan Memorandum, Loan File Coversheet/ Closing Checklist, Risk Rating System - Basic Structure, Sample Business Plan Structure, Farm Operating Statement, Financial Ratios, Farm Land Tracking, Farm Operating Statement Instructions, Statement of Assets and Liabilities.

B4. Primary Implementation Steps

1. Map the normal lending process and identify variances for agricultural lending, such as frequency of client visits to monitor agricultural activities.

2. Create agricultural reference sheets for loan officers that provide technical information about the most common local farming activities, such as input materials needed with prices, normal production volumes to expect, crop planting and harvesting calendar cycles, and animal husbandry requirements.

3. Design loan processing steps, mainly for small agricultural credits that allow for pre-screening of potential borrowers.

4. Develop standardized loan documents, including collateral or security contracts, and the policies and procedures for when they should be used.

5. Develop the loan approval process, so an understanding of the agriculture business is represented.
6. Document all of the above in a loan procedure manual that is reviewed by the bank's senior management team and the audit department.

7. Publish and make available to all lending, credit, and audit staff.

8. Train agricultural lending staff and credit analysts on agreed policies and procedures.

C. Underwriting Analysis for Agricultural Loans

C1. Purpose

Sound credit analysis and risk mitigating factors is at the forefront of any financial institution, and it is no different for agricultural loans. The agricultural loan application often requires strong loan analysis skills to capture sufficient information about the business and its market to be able to understand and evaluate the risks of lending to that business. This section of the toolkit provides guidance on what information needs to be collected and how it is to be interpreted.

C2. Expected Results

A thorough underwriting process will provide members of the loan committee with the necessary information on which to base reasonable lending decisions. The following components of the loan underwriting should be expected:

- Financial analysis
- Proposed loan structuring
- Credit enhancement/risk mitigation strategies
- Assessment of business owner's management capacity and experience
- Market analysis for product to establish risks to projections on sales
- Collateral assessment of condition, value, and potential selling price
- Reference checks for credit history and business experience

C3. Guidelines for Underwriting Agriculture Loans

As a rule, loan analysis is a function of the credit department, which depends on the information provided by the loan staff and the proposed borrower. As with all loans, the quality of analysis and recommendations for risk mitigants will largely depend on the information sent to the credit department from the agricultural sector client. Borrower sophistication will vary depending on the size of the customer and/or his or her place in the value chain. Depending on the sophistication of the client, the loan staff may have to take a more active role obtaining and developing the type of information needed by the credit department to properly analyze the agricultural sector credit. The steps below offer general guidance on the types of information the loan staff must gather from the prospective client, regardless of the size of the client or his or her level in the value chain. Process adjustments will be needed depending primarily on the level of sophistication of the client.
The processes outlined below review underwriting practices in accordance with international best practices for commercial lending.

Financial Analysis

Financial analysis begins with a review of the financial statements. These statements include a balance sheet, income statement, and statement of cash flow.

The balance sheet provides a snapshot of the businesses financial position at a moment of time, often the last day of the year. Essential accounts on the right side of the balance sheet include cash, accounts receivable, inventory, and fixed assets. On the left side are liabilities and equity (balance of assets minus liabilities). North American balance sheets place short-term assets and liabilities (those collectable or due within one year) at the top of the balance sheet and long-term assets and liabilities toward the bottom.

Preferably, the equity balance, which is below liabilities, will be positive, reflecting net investment in the business plus earnings retained in the business.

Less sophisticated farmers will not have even the most rudimentary financial statements, in which case the banker probably will have to help the farmer build simple statements to facilitate the application process. Building financial statements for the borrower will require the banker to ask many questions about the financial situation of the business. To build a balance sheet, the banker will need to ask or know:

- How much cash does the business have on hand?
- How much do customers owe the business?
- What does the owner think his or her inventory is worth?
- Does anybody else owe him or her money?
- How much has he or she paid in advance for goods or services (ex. insurance, suppliers)?
- How much are his or her assets worth? Or how much does the owner think he or she has invested in the business?

- How much does the owner owe suppliers?
- How much does the owner owe others (employees, friends, relatives, tax collector)?
- How much does the owner owe the bank and when does it come due?
- How much income did the owner generate from the business last year?
- What is the expected value of the crop(s) to be financed, date(s) of harvest, and proposed date(s) of sale?

With answers for these basic questions, the banker can build a basic balance sheet. The banker will put assets on the left side of the balance sheet and liabilities on the right side. Subtracting the liabilities from assets, the banker will net the equity in the business. A basic balance sheet will look like the following:

Exhibit 11. Sample Balance Sheets

Fiscal Year Ended Dec. 31, 2011

Assets		Liabilities and Equity	
Cash	$12,000	Accounts payable	$6,000
Accounts receivable	13,000	Short-term debt	$4,000
Inventory	10,000	Accrued expenses	$8,000
Total current assets	$35,000	Total current liabilities	$18,000
Fixed assets	15,000	Long-term debt	$20,000
		Total liabilities	$38,000
		Equity	$12,000
Total assets	**$50,000**	Total liabilities and equity	**$50,000**

Fiscal Year Ended Dec. 31, 2010

Assets		Liabilities and Equity	
Cash	$7,000	Accounts payable	$5,000
Accounts receivable	11,000	Short-term debt	$5,000
Inventory	12,000	Accrued expenses	$6,000
Total current assets	$30,000	Total current liabilities	$16,000
Fixed assets	13,000	Long-term debt	$18,000
		Total liabilities	$34,000
		Equity	$9,000
Total assets	**$43,000**	Total liabilities and equity	**$43,000**

The income statement provides a picture of the revenue, expenses, and profit during a given period (commonly one year). The income statement starts with revenue (sales) generated during the period and subtracts from revenue all expenses associated with generating revenue during the period. The net balance, hopefully positive, is the profit (or loss) during the period. A basic income statement will look as follows:

Exhibit 12. Sample Income Statement

Fiscal Year Ended Dec. 31, 2011	
Sales	$84,000
Cost of goods sold	$56,000
Gross profit	$28,000
Salaries	$10,000
Rent	$6,000
Utilities	$2,000
Insurance	$1,000
Other	$5,000
Profit before taxes	$4,000
Taxes	$1,000
Net income	$3,000

The cash flow statement is a combination of the two statements, reflecting changes in the balance sheet accounts (excluding cash and retained profit) and the addition of profit for the period. The loan officer or credit analyst can build the cash-flow statement as long as there is a beginning balance sheet, ending balance sheet, and income statement for the full period in between the beginning and ending balance sheets. The crop template (see sample in Annex L) information compiled for key crops in the value chain will be an essential resource for verifying information provided by the client. A basic statement of cash flow will look as follows:

Exhibit 13. Sample Cash-Flow Statement

For Fiscal Year Ended Dec. 31, 2011	
Net income	$3,000
Change in accounts receivable	($2,000)
Change in inventory	$2,000
Change in accounts payable	$1,000
Change in short-term debt	($1,000)
Change in accrued exp.	$2,000
Cash flow from operations	$5,000
Change in fixed assets	($2,000)
Change in long-term debt	$2,000
Cash flow from investment/loans	$0
Net cash flow during the year	$5,000
Change in cash balance	$5,000

Increases in assets between the beginning and the end of the period reduce cash flow, while increases in liabilities increase the cash flow. This is logical. Simply stated, an increase in accounts receivable means more cash is not collected from customers at year end. An increase in accounts payable means more suppliers are not paid at year end. Likewise, an increase in fixed assets means more assets were purchased during the year. An increase in long-term debt means a long-term loan was taken out during the year.

Sophisticated farmers and businesses might also provide financial projections for the coming year along with financial statements. Financial projections will provide the analyst with a better understanding of what the sources and uses cash will be over the ensuing period.

Financial analysis entails looking at the above financial statements to get a broad picture of the financial condition of the business. It helps to compare one period to another and to use several ratios to get a better picture of the financial condition of the business. Annex BB provides a list of financial ratios and their descriptions and interpretations.

Most importantly, financial statements and financial ratios are merely tools for the credit analyst to prepare questions for further inquiry of the credit-worthiness of the prospect. From the financial analysis of the financial statements, it is possible to move on to credit analysis process.

Credit Analysis

Credit analysis usually refers to evaluation of the five Cs of credit: character, capacity, capital, collateral, conditions. In the case of this toolkit, it is important to highlight collateral, which is typically high the DRC, as well as some additional Cs – crop and chain. (An explanation of the five Cs is in Annex M.)

Collateral is often the secondary or tertiary source of loan repayment. The bank will look for adequate collateral coverage for the loan. The financial analyst must look for all assets available to secure the loan and security commitments to other lenders. In the case of agricultural loans, the bank may find it difficult to realize the value of property or installed equipment located in remote rural areas. Location should be considered when deciding what value (if any) to assign to proposed collateral. The ability to repossess movable property (vehicles, tractors, harvesters, animals) also needs to be considered in assigning value (if any) to proposed collateral. If animals are taken as collateral, they need to be branded with the brand of the bank, and police/livestock market authorities warned not to allow such animals to transit roads or to pass through markets without the brand having been appropriately cancelled.

For agricultural lending, two additional Cs are relevant: crop and chain. This toolkit discusses in great detail in Section II on how to work within a value chain. This subsection will focus on the crop aspect.

Lending to the Value Chain: Know Your Crop

The particular challenge for expanding lending to the agricultural sector revolves around the lowest levels of the value chain, agricultural producers, which often involves unsophisticated borrowers, with varying levels of formality. Financial management at the producer level is often weak, and profit margins at this level are in flux. Thus, of particular importance for agricultural sector lending is an understanding the actors and pricing dynamics in a particular value chain and where applicable, the underlying market condition for the crop on which the value chain is based. Fundamental to all steps in the

lending process is “know your crop.” Producers make up as much as 80 percent of the participants in the chain in some cases, so this layer is critical for understanding the value chain as a whole.

Lending for agricultural production has specific inherent risks, such as:

- Long-loan terms with bullet repayments
- Production risk associated with weather and disease
- Price risk due to market volatility and weak markets
- Lack of regular monthly income for farmers
- “Side selling” by producers to cover short-term cash needs, in some cases at disadvantageous rates
- Over-indebtedness of borrowers, who turn to money lenders to meet short-term cash needs

As a banker embarking on this market segment in Africa, “knowing your crop” is a critical element of risk mitigation. Crop templates are a tool to provide key cost and pricing information for specific commodities. Lenders should develop in-house crop templates or profiles to identify the market price and unit-based cost of production for primary local crops in value chains targeted by the bank. A sample crop template is in Annex L, to be adapted to local market conditions in the DRC with input from an agronomist. In addition, lenders should educate themselves on the strengths and weaknesses of the crop and markets and the weather-risk premium for certain crops (tea is lower than maize), and consult with market participants to verify potential production and yield information provided by clients. Crop templates should be updated regularly, as cost and market dynamics change, as part of portfolio monitoring in value chains where the bank has exposure.

As mentioned previously, the primary focus crops for the DRC would include coffee, maize, peas, soy, cassava, rice, and beans. Others could be included based on market research and the bank’s strategy for targeting value chains. Bankers should familiarize themselves with other participants in a value chain as part of the credit analysis process. For example, input suppliers who deal with producers in key local agricultural products may be a potential client segment for the bank. Their primary cash needs and selling seasons will align with the planting season. Suppliers of fertilizer, for example, may require a working line of credit to provide short-term supplier credit to farmers. Understanding cash flows and seasonality of the underlying crops will provide the lender better insight into potential credit needs of the fertilizer supplier. Training should be given along with this toolkit.

Proposed Loan Structuring

The structure of the loan can be critical to the success or failure of the borrower in meeting loan payments. Agricultural loans in particular must be structured to suit cash-flow needs of the borrower. Because agricultural production is by its nature seasonal, loans must be structured to allow repayment when cash flow is at its peak.

Exhibit 14. Crop Loan Repayment Structure

For example, the bank may offer a crop or livestock production loan. These loans generally provide funds at the beginning of the growing season to allow farmers to purchase inputs such as seed, fertilizer, feed, livestock, and fuel. The farmer receives an advance for the cost of inputs, usually in tranches of 40 percent at the time of purchase and 60 percent when the crop insurance report (if insurance is available in the DRC) is issued. The bank may withhold fees from advances. These loans are short term, and mature shortly after harvesting, often less than 180 days from the time of advance. Interest is accrued on the borrower's account and paid in full at maturity.

As a second example, a loan for feeding cattle and breeding livestock would call for a pre-approved revolving line of credit that allows the farmer to receive funds for the purchase of livestock when it is most advantageous, but require repayment of principal and interest when the livestock is sold. Evidence of the purchase and sale of livestock would be required. As security, the bank would require a first lien on the cattle financed and offspring and an assignment of livestock insurance (if such insurance is available the DRC).

Credit Enhancement/Risk Mitigation Strategies
Credit enhancements and risk mitigation strategies are additional ways for a bank to secure its loans and encourage borrowers to make timely payments. Simple enhancements may include taking collateral in the assets of the farm or business, requiring personal guarantees of key owners/management, and requiring all operating accounts be maintained at the bank.

For farmers, crop and livestock insurance are important forms of risk mitigation, as are property and life insurance policies. If insurance is locally available, the bank should

insist that the borrower have such insurance and that such policies are pledged to the bank. Currently, the only available insurance in the DRC is through the state-run monopoly *Société Nationale d'Assurances*, which is not considered effective due to the lack of insurance claims that are paid.[34] However, the agency does offer a multi-risk agriculture insurance product that covers loss of expected harvest from natural disasters, loss of stock, and death of animals.[35] In the absence of insurance, banks should look to other forms of risk mitigation, such as credit enhancement vehicles.

Another form of credit enhancement includes third-party guarantees. Commonly, government-sponsored programs provide risk management support to agricultural producers to encourage crop and livestock production and to insure against production losses for specified perils (weather, pests, and disease). Occasionally, government-sponsored programs help producers with funding with direct loan guarantees and match funding. USAID's Development Credit Authority offers guarantees to private lenders to extend financing to new sectors of the economy, such as agriculture. More information is available at
http://www.usaid.gov/our_work/economic_growth_and_trade/development_credit/.
The bank should inquire about these risk mitigation products as a tool to expand lending to the agricultural sector. If loan guarantee programs from donors or the government can be negotiated, it is recommended they be kept secret from the public, clients, and lower-level staff.

Assessment of Business Owner's Management Capacity and Experience
Having full confidence in the capabilities of the owner/management is essential. The bank must have confidence that the owner/management can conduct business affairs successfully. Getting to this understanding takes time and patience. The banker must spend time with business owners/managers, asking questions, listening, and getting to know them and their business.

If possible, the banker should meet all the key management personnel, as well as the owner(s). Some issues the banker should watch for include:

- The age and health of the owner(s)/manager(s)
- The experience and record of the owner(s)/manager(s)
- Who makes important decisions and how they are made
- The people responsible for production, finance, MIS, marketing, human resources, research and development, etc.
- The approach the owner(s)/manager(s) take to finance and marketing (i.e. is it conservative or will he or she sell to all customers and borrow heavily to finance sales?)
- A succession or transition plan for the owner(s)/manager(s)
- Legal suits against the owner(s)/manager(s)

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[34] AgCLIR: Democratic Republic of the Congo
[35] Catalogue de produits d'assurance, *Société Nationale d'Assurances.*

Aside from these issues, it is important to learn as much as possible about the history of the owner(s)/manager(s) and the business, methods for growing the business, legal structure, sources of financing, and marketing and collection methods. Due diligence requires diplomacy. The more trust the owner(s)/manager(s) have in the banker, the more information the owner(s)/manager(s) will reveal to the banker. All information must be kept confidential.

Leveraging Extension Agents, Input Suppliers, and other Stakeholders
Farmers and producers at the bottom of the value chain will typically have less sophisticated management and business systems. Informality of businesses is particularly prevalent in the agricultural sector in Africa. Agricultural extension services of local universities, for example, provide support to farmers in good agricultural practices, which can reduce wastage and improve crop yields, thus improving capacity to repay. Input suppliers can be clients of the bank, as well as provide information about local producers and market dynamics.

Market analysis for product to establish risks to projections on sales. Market analysis begins with a broad understanding of the agricultural industry. Because agricultural lending is a specialty field, it is helpful to use bankers with first-hand knowledge of the industry. Experience notwithstanding, the banker needs to have an understanding of the competitive environment facing the business, its strengths and weaknesses in the market, and overall market conditions.

The banker may wish to use a SWOT analysis to evaluate the business and determine the effects the market environment will have on the business. SWOT analysis of a farmer requires knowing if the farmer owns his or her land and has efficient production methods, reliable suppliers, easy access to markets, ready buyers, and/or a strong balance sheet. Improvement and enhancement of any one of these factors could be an opportunity for the farmer, but the lack of some or all of them would be a weakness and potential threat.

Issues to consider when identifying SWOT include:

- Length of time in business
- Product importance
- Diversification of products
- Supply concentration
- Availability of supplies
- Supply price characteristics
- Production consistency
- Production technology
- Production costs
- Vulnerability to disasters
- Control of distribution
- Flexibility of distribution
- Competitive position
- Customer concentration
- Management integrity
- Management competence
- Management experience
- Management depth
- Management breath
- Correct use of loan proceeds
- Business and strategic planning
- Organizational qualities
- Cost controls
- Reputation of management
- Reputation of the business
- History of adjustment and improvement
- Attitude toward risk

With this analysis, together with the crop template, the banker can assess whether the client's projections of sales are reasonable and achievable. The banker should never develop projections or impose projections on a client. Projections are the responsibility of the business and not the banker. However, the banker can help the client prepare projections by providing templates and guidelines, leveraging the crop templates developed by the bank.

Collateral Assessment of Condition, Value, and Potential Selling Price

Many farmers also have urban property and non-agricultural businesses. This property and assets of other businesses should also be considered for use as collateral. Collateral for farmers and other agricultural businesses may include assets such as livestock, trucks, tractors, combines, grain elevators, warehouse receipts, buildings, and land. The type and amount of collateral will largely depend on the type and size of loan. For example, a pre-harvest loan might require land and livestock or warehouse receipts as collateral, while a real estate loan will require security of the real property and plant.

There are several ways to value collateral: historical purchase price, cost to buy/reconstruct the asset today, prevailing market price for a similar or comparable assets, and liquidation value of the asset if it were sold immediately. The values can come from book entries on the financial statements, purchase and construction contracts, markets, appraisals, asset audits, and liquidation experts.

The value applied to collateral is often more art than science. Each approach is valid and probably will result in significant variation in price for the same asset. The credit department and loan officer probably will have to agree on which approach to use and what value to apply to collateral at the time of loan origination.

In the end, however, the value of collateral at the beginning of the loan process is less important than the value of the collateral in a worst-case situation (loan workout). It is important, however, that the collateral be properly secured and sufficient to repay the loan if the circumstances should arise. The value of rural property should be downgraded based on its location and to the extent that an easy sale may not be possible to realize the purported value of the asset.

Land ownership and titles are problematic in many African countries and present problems for the lender. USAID's 2010 AgCLIR report on the DRC indicates an average of six procedures are needed to register property, for an average of 54 days, with a cost of 7 percent of the underlying cost of the property value.[36] It is important for bankers to educate themselves about land ownership and property rights as part of the collateral evaluation process. Even for those farmers with legal tenure, property rights can be impinged on by local governments expropriating land for private or public purposes.[37]

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[36] USAID AgCLIR DRC, p. 50, 2010.
[37] Ibid

Reference Checks for Credit History and Business Experience
Reference checks are a simple, yet effective, way of gathering information on the prospective borrower's character. A reference check entails little more than contacting customers, input suppliers, agricultural extension agents, business associates, employees, and creditors, and asking simple questions about the prospect. For example, the banker calls on the prospect's suppliers and asks about the prospect's payment history, timeliness of payment, number of orders, and payments during the year. The banker also calls on customers and asks questions about the prospect's reliability, quality of product, speed of delivery after purchase orders, and collection history. Of course, business and farming experience tells a lot about a prospect's character.

C4. Primary Implementation Steps

A strong underwriting process will require credit staff to:

- Create financial statements from information collected from borrower and observations during site visits.
- Analyze resulting financial statements, including a projected cash flow for requested loan period.
- Determine an optimal loan structure based on client needs and capacity for repayment, documented by the cash flow budget.
- Identify ways to reduce credit risk or mitigate it through requirements such as modified disbursement methods, insurance coverage, and requiring evidence of previous cash flows through a bank.
- Evaluate the business owner's business management and technical skills.
- Perform a market analysis for the product to establish risks to changes in price or achievement of sales target.
- Assess collateral condition, value, and potential selling price.
- Conduct site visits to collect and verify information from the applicant.
- Make reference checks on applicant's credit history and business experience.

Tools relevant to this subsection can be found in these annexes: Collateral Considerations, Collateral Assessment Deed, "Five C's" of Credit Analysis, Crop Template, Example – Completed Crop Template (French), Loan Memorandum, Disbursement Strategy, Risk Rating System - Basic Structure, Statement of Assets and Liabilities.

D. Loan Servicing

D1. Purpose

Although agricultural lending is similar to other types of credit, it can be challenging due to its unique business cycles merited by diverse crop requirements. Businesses in the agriculture value chain also often lack good financial information. And finally, due to weather risks, strong restructuring procedures are imperative.

Because of these factors, establishment of an effective and consistent monitoring program is one of the easiest and most cost-efficient ways to reduce loan losses in the agriculture portfolio. The purpose is to ensure that loans stay current and to pre-empt potential problem loans and arrears.

D2. Expected Results

There should be specific policies and processes to manage each of the following areas:

- Monitoring requirements for individual loans:
  - Should include guidelines and processes for regular and consistent follow-up calls with each client. This includes all communications with the borrower after the loan is booked, including follow-up sales calls, arrangements for loan payoffs, collateral checks, documentation audits, and other operational matters.
- Reporting requirements for loan portfolios, including but not limited to:
  - Total portfolio.
  - This should include vertical breakdowns (bank as a whole, by region, by city, by branch, by loan officer), as well as horizontal breakdowns (by product type, by industry type).
  - Non-performing loan breakdowns by days.
  - This should include current portfolio by size and number of loans, including non-performing loans less than 30 days in arrears, 30-60 days in arrears, 60-90 days in arrears, greater than 90 days, in arrears and total non-performing loans.
  - Non-performing loan breakdowns by value chain, crop, geography, size, and product type.
- Default guidelines and processes:
  - Should include schedule of activities that occur at each stage of delinquency, as well as the timing and person responsible for each.

- Write-off guidelines and processes
- Product profitability reviews
  – Although this profitability analysis will guide management to a better understanding of which products constitute most of their bottom line, it will also indirectly lead them to underwriting issues for particular products. Typically, if a product is unprofitable or not as profitable as expected, a big part of the issue is losses through faulty underwriting guidelines.

D3. Guidelines for Loan Servicing

Loan monitoring program. A strong monitoring program, to be implemented by each lender for his or her own portfolio and supervised by credit management, is often one of the best tools at a bank's disposal to ensure that individual loans remain current and are repaid on time. As the loan officer is the agent for the bank and the primary interface between the bank and the client, he or she is the most important point of contact and is best positioned to effectively monitor each loan within his or her individual portfolio.

Additionally, loan officers should educate themselves on industry-related reasons for late payments. If there has been a weak harvest, the loan officer and his or her managers should have already been thinking through workout and restructuring plans. Indeed, for agricultural production lending, the loan officers will remain closer to the borrowers business and should be consistently aware of crop conditions, including harvest sizes and current crop prices.

Finally, by making the loan officer responsible for all collection issues within their individual portfolios, they begin to understand the costs associated with late payments, in terms of time and monetary losses. They quickly realize that it takes time away from making new loans and reaching their targets. All of these facts combined work to make better lenders for the bank.

As such, an organized and systematic loan monitoring program should be in place, which guides loan officers in managing their agriculture portfolios. This should include a monitoring schedule to be administered by the loan officer, which will include scheduled e-mails (if available), calls, and client visits. The purpose of these interactions with the client is to build rapport with the loan officer, to continually gain a better understanding of the clients business, update financials and collateral valuations, and pre-empt possible problems in payment.

It is important in the case of building any new business line, especially in agricultural lending, to have a branch rollout and portfolio growth strategy that can not only originate a new book of business, but can also have the operational platform to monitor it.

Therefore, it is prudent to train loan officers and servicing staff of the bank in agricultural lending best practices, crop templates, market specifics for primary crops, and so on, so they can manage the risk of the portfolio. Also, the bank should prioritize those branches

with the best market potential and provide training to staff on originating and monitoring loans.

Handling delinquencies. A strong loan monitoring program should also guide personnel at each stage of delinquency. Typically, for loans in arrears for less than 30 days, the responsible loan officer will handle collection efforts. This is logical in that the loan officer has the closest relationship with the borrower, as well as a moral duty to collect all loans in his or her individual portfolio.

Within the program should be a schedule of activities that occur at each stage of delinquency. The bank should use this schedule to increase the pressure and the level of response to the client as the loan passes delinquent milestones. An example of this is:

- *10 days before loan payment.* Communication[38] sent to borrower reminding him or her of upcoming payment due date. The communication should remind the borrower that any loan that is more than five days in arrears will be charged a payment penalty, typically 5-10 percent. This penalty should rarely and only in special instances be waived.

- *One day delinquent.* Loan officer makes phone call to personally remind the borrower of the payment due and to ascertain if there is a problem with payment. During this call, a promised date of payment should be attained by the loan officer. This promised date of payment should be less than 30 days or the next payment due, whichever occurs soonest. The loan officer should build in time for broken promises instead of accepting a promise to pay at the end of the 30-day period.

- *On date of promised payment.* If the payment has been made, the loan officer should call the client thanking him or her for the payment and reminding him or her of the next payment due, getting a verbal promise to be on time. The object of this call is to retrain the client to make the payments on time to pre-empt future problems. If payment remains unpaid, the loan officer should visit the borrower at his or her place of business. The officer should discuss the seriousness of delinquent payments, ascertain if this is a onetime cash-flow crunch or a symptom of a larger problem, and make an appointment with the client to come into the branch with the payment before the 30-day period has passed.
- *Loan payment more than 30 days in arrears.* The loan should be officially classified as delinquent, and the loan officer should hand-deliver a template letter stating that the loan is officially delinquent. The loan officer should create a new and updated set of financials with the client, and a repayment plan should be put into place that allows the client to return to a current status. If the payment problem is a short-term issue, the loan officer may offer to extend the loan by one

[38] Communications with clients in rural areas should be adapted for the situation of the client. If clients are located a distance from the bank branch and lack computers or reliable postal services, branchless banking technologies such as automatic instant messaging via cell phone can be utilized to send payment reminder.

month. This will bring the client to a current status, easing short-term cash flow issues while keeping him or her on pace to pay out the loan. Extending loans by one payment period should not be used too frequently, however. Normally, it should be done no more than once or twice on any loan. Additionally, a fee should be collected for this service.

- *Loan payment more than 60 days in arrears.* The loan should be placed with a problem loan specialist, who will take over responsibility for collection. The loan officer is still responsible for the client and will actively assist and work alongside the problem loan specialist.

- *Loan payment more than 90 days in arrears.* The loan is placed in non-accrual, and legal action is started to foreclose/collect all collateral held against the loan.

- *Loan payment more than 180 days in arrears.* The loan is officially written-off. The foreclosure or repossession process is finalized, with the bank taking ownership of all collateral.

  The foreclosed or repossessed assets are sold, with funds in the first instance going to pay off remaining loan principal, remaining loan interest accrued, attorney fees, and all collection costs incurred by the bank. If there are any remaining funds after the bank costs have been covered, they should be returned to the client.

Restructuring. Within agricultural lending, restructuring is not used as often as it could be to assist with delinquent loans. Delinquent clients must be divided between those who are "unwilling" to pay, those who are willing but "temporarily unable to pay," and those who are willing but have permanently lost the ability to generate profitable cash flows. Among these three types of clients, restructuring is appropriate only for the second type.

Once credit risk managers, after discussions with the loan officer, have decided the client is willing, but temporarily unable, to pay, then thought should go into restructuring. Some key questions that should be answered at this juncture are:

- What is the reason for the current delinquency, and is it a short-term problem or a broader, long-term issue?

- If the loan is restructured, will it allow the business to begin operating at a profitable level?

- Is the collateral held on the loan maintaining its value, or is it decreasing at a much quicker rate than the loan pay-down? In other words, if the restructuring doesn't work, is the bank at a much less desirable position at a later date?

- Is the client furnishing updated financials?

- Is the client working with the bank to find solutions?
- Is the client willing and able to offer additional collateral?
- Is the client willing and able to accept a higher interest rate in return for restructuring?

With agricultural loans, this type of arrears is often due to a weak harvest, so the bank has to weigh a few additional factors:

- Can the client carry the interest throughout the next harvesting period?
- Can the client pay down the loan to a point that is manageable with a strong follow-up harvest?
- Does the client have additional sources of income that can offset the risks of continued reliance on the next harvest?

If the bank can answer these questions in the affirmative, then the first option before declaring a loan non-performing is to attempt a restructuring.

Write-Offs. Loans are typically written off once they have reached 180 days in arrears. Upon writing off a loan, the responsible loan officer should prepare a report covering the following:

- Underlying problem causing the borrower to go into default
- Short history of communications between bank and borrower, explaining steps taken in an effort to remedy the situation
- Evaluation of the borrowers' ability to pay off the loan with an appropriate restructuring
- Evaluation of bank's collateral and expected recovery compared to the remaining principal, interest, and costs outstanding
- Lessons learned section describing issues that may have been overlooked during the original underwriting
- Final recommendations to be presented and approved by the board

Within this report, one of the most important sections for the loan officer is the lessons learned section. It is a critical learning opportunity for the loan officer to discuss with the head of credit what went wrong and how it could have been prevented. It is important, however, that although this will be a reprimand for the loan officer that will be reflected in his or her yearly goals, it is also used as a learning tool for the loan officer.

D4. Primary Implementation Steps

Development of an agricultural loan monitoring program. This monitoring program should include:

- Monitoring requirements of loan officers and their supervisors, including regular follow-ups. Schedule should include timings of e-mail contacts, phone calls, and client visits and should be set according to the needs of each crop portfolio.

- Monitoring guidelines in relation to crop, borrowing, and repayment cycles, especially in connection to projected cash flows.

- Reporting requirements for loan officers and managers.

- Review of information collection, including what is collected, when it's collected, how it's collected, and how often it's audited.

- Incentive schemes should be developed for all lending staff to link any bonus incentives to the number and volume of loans generated as well as the quality of the outstanding portfolio. As a higher-risk product, agricultural lending requires a strong alignment of incentives with outstanding portfolio quality.

Reporting requirements. Develop management reporting packages (see above outline in Expected Results for reporting breakdowns).

Default Processes

- Establish procedures for each level of arrears.
- Develop loan restructuring guidelines specifically for agricultural products.
- Design and put in place formal payment request letter templates to delinquent clients.

Write-Off Processes

- Establish procedures for a write-off process, including a schedule of actions to be taken, as well as reporting requirements.

- Review product profitability.
- Develop a product profitability review that shows which products are profitable, which are lagging, and possible reasons for unprofitable performance. For those instances where faulty underwriting is to blame, have the product reviewed by credit risk department.

Tools relevant to this subsection can be found in these annexes: Loan File Closing Checklist/ Coversheet, Loan Monitoring Report, Collateral Inspection Form, Portfolio Review Tool.

E. Portfolio Management

E1. Purpose

Careful monitoring of the agricultural loan portfolio will allow bank management to better control the portfolio's risks. For portfolio monitoring, the purpose is to continually gauge and analyze the overall portfolio's real level of risk and how this is related to the overall business strategy. For example, many portfolios can suffer from rising concentration risks due to recent portfolio growth within a sector or geographic region. Without a strong monitoring program, this type of risk can go unnoticed.

E2. Expected Results

Through normal and regular portfolio risk management reports, management will understand the composition of its portfolio in terms of clients, business activities, financing terms, repayment experience, and most importantly, where the greatest risks are.

Through a regular loan rating process, management and the lending team will be armed with the information they need to identify potential problem areas before loan groupings turn into delinquencies. With this information, loan officers can better focus their monitoring visits and financial reviews, and managers can better guide their loan officers to possible problem areas. But most importantly, the banks' management can use these reports to make broader strategic decisions going forward.

E3. Guidelines for Portfolio Management

Portfolio management depends on numerous actors and actions to be effective. As Annex V illustrates, portfolio management covers the whole range of commercial banking, from the planning to marketing, to credit analysis and loan origination, to monitoring and collection. Portfolio management in the broader sense deals with the integrity of the loan portfolio. Risk management, specifically, the chief risk officer, oversees the credit portfolio and sets the strategy for managing the portfolio. The duties of risk management are numerous, but they center on controlling overall credit exposure. Management does this by designing, developing, and implementing policies and procedures that balance credit underwriting activities with prudent management of the bank's capital and that enable the assessment, measurement and monitoring of such risks. The credit information system plays an important role in this process, as a robust reporting system is essential to risk management for identifying and addressing areas of greater risk.
The credit department also plays an important role in portfolio management. This department is responsible for reviewing the borrowers on periodically — at least annually — to ensure the integrity of the risk rating assigned to the borrowers. The credit department is often more objective than the loan staff, and therefore is likely to catch borrower issues often overlooked by the loan officers.

From a portfolio point of view, the primary areas of risk that the credit department is attentive to during portfolio monitoring are:

- Geographic risk
- Industry risk
- Product risk
- Collateral risk
- Loan personnel risk
- Overall economic risks, particularly within distinct sectors

As the credit department reviews each of these factors, it is continually trying to ascertain whether resulting weaknesses are caused by personnel inadequacies, system inadequacies, or general economic weaknesses. It is imperative that the department isolate which of these three causes are to blame, so that it can effectively manage and guide the portfolio. Again, "knowing your crop" and maintaining up-to-date in-house market information on core value chains and crops will help the bank ascertain general market weaknesses for specific sectors, such as a dip in market prices for maize, an outbreak of disease, or government subsidies creating market distortions.

Finally, the internal audit staff plays a part by checking the integrity of the documentation and ensuring for the most part that all loan documents are in order. The internal audit acts as a critical support to senior management, giving them a view as to how well policies and procedures are followed.

E4. Primary Implementation Steps

Create a comprehensive system of reporting from the core banking system to do the following:

- Create management responsibility (or portfolio management committees) for monitoring portfolio quality and composition.

- Implement a loan rating system.

- Conduct a portfolio quality review to assist in the identification of problem areas within underwriting, personnel training, and portfolio structuring related to specific economic weaknesses. This should be broken down by crop for the agriculture portfolio.

- Review current procedures and processes for all monitoring systems with the goal of shoring-up weaknesses and implementing improvements.

- Analyze market conditions throughout agricultural portfolio, broken down by crop or value chain.

Tools relevant to this subsection can be found in these annexes: Portfolio Management Process, Risk Rating System Structure, Loan Monitoring Report, Collateral Inspection Form, Loan Officer Productivity, Portfolio Review Tool.

F. Management Information Systems

F1. Purpose

Appropriate use of MIS systems to gather and analyze agricultural portfolio data is a core principle of financial institution management, and is one of the primary success factors that can make the difference between achieving good results and great results. Indeed, MIS systems have moved from being a business-enabler to being a business-driver for financial institutions and play a vital role in achieving the strategic objectives of financial institutions entering the agricultural segment.

Within financial institutions, there is often a disconnect between what MIS software provides and the actual management and operational needs of the agricultural business line. It is of critical importance to quantify and define reporting outputs required to operate a profitable agricultural business line. Once this has been achieved, the IT department must ensure that this information can be obtained in a timely and organized manner through a comprehensive reporting system.

F2. Expected Results

An MIS system that ties together the parts of a strong agricultural program will include:

- A computerized workflow process for origination and management of agricultural loan files. If a credit scoring program is being developed and instituted based on a statistical scorecard approach, the data and system requirements for this should be considered as well.

- A reporting system that allows for standardized management and sales reports (with breakdowns by product line, use of funds, and geography), as well as the creation of ad-hoc reports as needed.

- The ability to code and generate detailed analysis of portfolio risk breakdowns by credit vintage, segment, or client groups within the agricultural portfolio.

- The ability to code use of funds along different loan purposes is especially important for better understanding trends among clients and will assist the bank in monitoring.

To produce these results, financial institutions should:

- **Centralize Client Information**
  Centralized client information makes it easier for data to be manipulated, maintained, and used in a wider variety of sales and management reports. Once centralized, data can be used to:

- Develop more accurate and timely management reports
- Support sales efforts through cross-selling reports
- Guide product development
- Develop real-time portfolio information to ensure that field staff has robust client information at hand

- **Design and Develop a Data Needs and Uses Plan**
  Once a financial institution understands the need to leverage information and is working toward centralizing all data, the next primary task should be to develop a comprehensive data needs and uses plan. This plan should ensure that all required data are collected and maintained to facilitate a comprehensive reporting system that allows a financial institution to manage and grow its agricultural business. MIS managers, senior management and leaders of the agricultural business line should be involved in designing reports, as well as in determining the most efficient and effective means of collecting and storing the required data.

F3. Guidelines for Developing Effective Management Information Systems

Many financial institutions view information-gathering solely as a means to satisfy internal auditors and external regulators. Although this is an easy trap to fall into, it can also be a costly one, to the extent that it blinds organizations to the true value of collecting appropriate client and portfolio data. Systematic information-gathering and centralized data management can help management better understand the characteristics of its client base and translate directly into sales opportunities, as well as greater revenue capture and improved credit risk management. This is true because the ability to paint a more comprehensive picture of clients can be leveraged into better understanding of what defines value for customers, what products they will respond to, and what sales approaches work best. This information would outline a clear picture of an organization's client base. Thus, one of the most important outcomes of a comprehensive MIS system is to help financial institutions to fully realize and take advantage of the monetary value that good data management can offer. This is especially true for the agricultural lending unit, as this issue takes on more importance as the agriculture value chain is examined from horizontal and vertical perspectives.

Although there are a multitude of benefits to having a strong MIS, the core benefits to be gained are the ability to:

- More effectively manage clients along the agriculture value chain by better understanding trends and needs at each level of the chain.

- More effectively understand the cost/profitability of each product and client along the value chain, allowing the financial institution to make needed adjustments in pricing, packaging, and even client segmentation.

- More effectively manage staff by having standardized reports that show a wide range of performance indicators for employees, business sectors, and products —

vertically and horizontally. Vertical management reports should be available by region, city, branch, and loan officer. Horizontal management reports should be broken down by profitability, portfolio quality, line of business, and individual products.

Maintaining a world-class MIS comes at a high cost, but one that the world's leading financial institutions are willing to make to keep up with growing needs of the bank and its clients. These institutions require an MIS system that is able to grow with the bank, work in multiple countries, integrate current IT systems, operate in real time, provide accurate information in a timely manner, and easily produce useful reports to enable management to make sound decisions.

F4. Primary Implementation Steps

- Conduct an exploratory meeting with MIS managers to ascertain the comprehensiveness and flexibility of current systems, and collect a full list of current reports generated, as well as the timing of each, to find out how and where information is stored. During these meetings, limitations of the current MIS infrastructure, in regard to needs of the agricultural business line, should be identified, with solutions explored in addressing all deficiencies.

- Review all reports generated for the agricultural business line. Design and improve on the current reporting package as needed.

- Review the newly designed reporting package. To ensure comprehensiveness and managerial buy-in, the review should be conducted by senior management and the leaders of the agricultural business line.

- Create a data needs and uses plan, which is used to outline data needed to create proposed reports.

- Present the agricultural reporting package and data needs and uses plan to MIS managers.

- Discuss with the MIS managers how the reporting package can best be implemented. This should be done with the agricultural business line leader.

- Pilot and test the proposed reporting package.

- Ensure that the reporting package meets all agricultural business line needs and the correct data are being collected and reported. Make corrections and improvements as needed.

- Implement the new reporting package.

Tools relevant to this subsection can be found in this annex: MIS Data Reporting Needs.

ANNEX A. COOP-BANK RISK MANAGEMENT

Potential Risks:

Fluctuations in market prices due to oversupply e.g. grains. This is mainly occasioned by farmers harvesting at the same time and illegal imports

Lack of market access due to weak structures and cartels, hence no cash inflows to repay the loans

Fluctuations in market demand for the produce

Failure by the buyer to pay for the delivered produce; sometimes even the collapse of the buyer. Past experiences include sugar and coffee

Forgery of the delivery documents by borrowers e.g. crop advances

Diversion of the loan to uses other than the ones applied

Side selling (breach of supply contract) in order to evade loan repayment

Vagaries of weather, poor weather forecasting (early warning systems) and lack weather-index insurance measures

Lack of insurance of cover for crops and animals

Destruction / encroachment of water catchment areas posing risks to environment hence affecting rain patterns

Poor/bad cooperative governance

Poor record-keeping and MIS reports

Commonly Adopted Risk Management measures

Loan applications must be supported by the following;

- Tri-partite agreement involving the borrower, buyer of the produce and Cooperative Bank to safeguard the market and remittances
- Delivery statement indicating the date of delivery, quantities, grade and its net value in Kenya shillings certified by the buyer in case of crop advances
- Proof of steady cash flows for the last 2 seasons and over the loan period
- Written instructions by the borrower to the buyer to channel proceeds to his/her/their account at Coop Bank
- Proof of net payments received for the enterprises in the last season and the expected net payment the new season

- Account(s) with Coop Bank to channel disbursement and loan repayments
- Certified copies of the formal identification documents e.g. national ID card/PIN/
- Certificate of incorporation of the borrower and buyer
- Letter of undertaking by the buyer to honor remittance instructions
- Collateral e.g. Chattel mortgage, debentures, land title deeds and guarantee or their combination
- Audited accounts for the last three years or for the period in existence if less than 3 years
- Registration/ trading certificates
- Evaluation report on credibility, ownership and liquidity of the buyer
- Call report by the CRO/CRM on physical verification of the deliveries and existence of the borrower

Measures of Risk Monitoring

- Reports: Used by CMD, Branch Managers and CRMs/CROs. They include: Daily Arrears reports, showing outstanding amounts/days. Tolerable limits for PAR shall be 5% and 90 days past due.
- Monthly procedures compliance report, prepared by the CRMs ascertaining adherence to approved guidelines.
- Early Alert meetings with Credit Administration Division (CMD)
- Regular meetings with clients to assess business

Savings and Credit Cooperatives Societies- SACCOs (Risks Associated with Saccos)

- Lack of loan repayment ability- loss of members, parent company winding up
- Misappropriation of funds by the officials
- Misallocation of funds by the officials

Risk Mitigation

- Proper verification of the parent company i.e. to establish its reputation
- Proper and full appraisal, looking at all aspects
- Ensure proper record keeping

- Education of members and officials
- Ensure proper internal controls and procedures are in place
- How long has the SACCO been in existence
- Where it derives its membership
- The stability of the membership against the employer (parent company).
- The stability and experience of management
- Identify the products they are offering to the members and the terms of such products.
- Identify if they have any credit policy/ procedure and their adequacy
- Identify problem areas such as loan backlogs, establish their extent and reasons
- Look at issues that are or may affect the employer and hence impact on the SACCO
- Ensure that the check-off (monthly remittances) are regular

ANNEX B. INDICATIVE SCOPE OF WORK FOR MARKET ASSESSMENT

The core elements of the assignment consist of the following:

I. Introduction

A. Overall assessment of agriculture market
   1. Description of current macroeconomic situation
   2. List macroeconomic agriculture indicators
   3. Description major economic drivers

B. Number of firms in agriculture sector listed by official government data and the sectors.
   1. Comprehensive internal analysis of SMEs in the agriculture sector; review the bank's list of economic subsectors.

   2. Comprehensive analysis on historical performance of sub sectors (the analysis should include detail characteristics, SWOT, and sensitivity analysis of each subsector; Based on comprehensive research, determine the most profitable and scalable subsectors for the bank

II. The characteristic and size of market demand for financial services

Accurate data on characteristics of respondents: The data will allow the consultant to start conducting sampling for each segment, for what financial services they have and need:

A. Background information on the respondents:
   1. Size of the businesses:
      a. Revenues
      b. Total assets
   2. Type of business
   3. Location
   4. Industry
   5. Number of employees

B. Characteristics of financial products they currently have:
   1. Loans
      a. Types of loan (working capital and/or investments)
      b. Terms (rate, fixed or variable, fees, collateral, installment frequency, etc.)
      c. Loan size
      d. The financial institutions and the marketing channels (how they learn about the products)

2. Deposits
    a. Types of deposit
    b. Average balance
    c. Average transactions
    d. Interest rates
    e. The financial institutions and the marketing channels (how they learn about the products)
    f. Types of secondary services provided (ATM, debit card, mobile banking, Internet banking, etc.)

3. Other services (including the marketing channels — how they learn about the products)
    a. Cash management
    b. Wealth management
    c. Credit cards
    d. Payment insurance
    e. Life insurance
    f. Informal sources included

C. Characteristics of financial products they desire:
1. Loans
    a. Types of loan (working capital and/or investments)
    b. Terms (rate, fixed or variable, fees, collateral, installment frequency, etc.)
    c. Loan size
    d. Other desired features

2. Deposits
    a. Types of deposit
    b. Approximate balance
    c. Average transactions
    d. Interest rates
    e. Other desired features

3. Other services
    a. Cash management
    b. Wealth management
    c. Credit cards
    d. Payment insurance
    e. Life insurance
    f. Informal sources included

III. Description of existing financial products offered by the bank

A. Loans
  1. Types of loan (working capital and/or investments)
  2. Terms (rate, fixed or variable, fees, collateral, installment frequency, etc.)
  3. Loan size
  4. Target clientele and the marketing channels

B. Deposits
  1. Types of deposit
  2. Average balance
  3. Average transactions
  4. Interest rates
  5. Types of secondary services provided (ATM, debit card, mobile banking, internet banking, etc.)
  6. Target clientele and the marketing channels

C. Other services (including target clientele and the marketing channels)
  1. Cash management
  2. Wealth management
  3. Credit cards
  4. Payment insurance
  5. Life insurance
  6. Product bundling
  7. Others

IV. Summarize gaps between demand and supply, explain, findings and make recommendations

A. What is the overall impression?
B. What are the most profitable and scalable size of businesses?
C. What are the most profitable and scalable type of businesses?
D. By comparing: the results of the market research with the bank’s financial product offerings and existing targeted industry segments, what are the natural areas of confluence?
E. What product packages and marketing channels are needed?

ANNEX C. MARKET RESEARCH REQUIREMENTS AND SOURCES

Type of Analysis	Questions to Focus On	Details Collected
1. Market Analysis	• What is the size of the market? • What are the main segments (at different levels of value chain), their characteristics, and growth potential? • What are the risks associated with each segment? • What are your strengths serving key segments? • What is your competition in targeting each segment? • What are the cost implications in serving each segment? • What channels can the bank use to reach each segment?	• Overall sector analysis for key agriculture value chain • Detailed value chain map • Crop production calendars • Prices for inputs and sales prices for crops • Regional crop production profile • Weather conditions requirements for types of agriculture activity • Key crop production activity profile
2. Competitor Analysis	• What are our market share analysis and market share trends • Which institutions are our main competitors in agriculture finance market? • "8 Ps" analysis for primary competitors: ○ Product ○ Price ○ Positioning (market perception, branding) ○ Place ○ Promotion ○ People ○ Physical evidence ○ Process • Competitor SWOT analysis	• Competitors' strengths and weaknesses • Changes/trends in competition over time • Market share analysis • Customer perception of banks' products and services compared to competition
3. Customer Analysis	• What are our target market client profile and demographic for agriculture lending? • How does it compare with our current client profile? • What do clients seek/need financing for? • What is clients' price sensitivity? • What is the target clients' perception of our bank/ satisfaction with current service?	• Basic demographic profiles • Current financial services use vs. needs • Perceptions of product benefits • Recommendations for product development • Recommendations on current bank position and perceived performance

<table>
<tr><th>Type of Analysis</th><th>Questions to Focus On</th><th>Details Collected</th></tr>
<tr><td>5. Pre- and Post-product Testing</td><td>What are target clients’ understanding of:
Brands
Taglines
Corporate identity/position
What is target clients’ perception of the product concepts?
What is target clients’ feedback on product relevance and correctness?</td><td>Satisfaction with the product
Relevant recommendations for revision</td></tr>
<tr><td colspan="3">Data Collection Options
Market research conducted internally by the bank
Secondary research
Bank expert knowledge
Current client quantitative analysis
Focus groups with current/target clients
Client interview
Hire market research firm to develop the survey tools and conduct a detailed assessment
Combination of detailed external market research complemented with internal data and expert knowledge</td></tr>
</table>

ANNEX D. COMPETITIVE POSITION ANALYSIS

Competitor Analysis

Rate your product's strengths and weaknesses relative to your main competitors' products.

Product	Bank 1	Bank 2	Bank 3	Bank 4	Bank 5
Product (Design)					
Minimum amount					
Maximum amount					
Repayment period					
Repayment flexibility					
Collateral requirements					
Grace period					
Specific qualification criteria					
Other requirements					
Product Price					
Interest rate					
Loan appraisal/ processing fees					
Penalty charges					
Other fees					
Promotion					
Marketing/information dissemination					
Advertising					
Positioning					
Slogan/branding					
Corporate image					
Product image					
Place					
Physical evidence (branch location)					
People (staff quality)					
Process					
Loan application documentation/ requirements					
Loan processing time					

ANNEX E. MARKETING STRATEGIES

Strategy	Characteristics	Implications
Mass Marketing	No differentiation by customer; assumes user homogeneity Only option for a bank that does not segment its market Bank will have one marketing mix for its entire market	*Advantages.* Mass marketing creates the largest potential market, which leads to the lowest marketing costs, which in turn can lead to lower prices or higher margins. *Disadvantages.* Strategy is rarely successful because markets are not homogeneous; they are made up of different types of buyers with diverse wants regarding product benefits, price, channels of distribution, and service.
Segment Marketing	Implies ability to segment a market and cater to the varying needs of different segments Each segment's buyers are assumed to be quite similar in wants and needs. Bank will tend to concentrate on selected segments that it will seek to dominate Separate product and marketing programs are developed for each segment Bank will have several marketing mixes	*Advantages.* Bank can create a more fine-tuned product/service offering and price it appropriately for the target audience. The choice of distribution and communication channels becomes much easier. The bank may face fewer competitors in particular segments. Risk is lower; even if one segment's profit potential weakens, the bank can be sustained by other segments. Permits the bank to enjoy certain economies of scale and scope, thus giving the company a cost advantage in each segment in which it competes. *Disadvantages.* Requires more resources and effort to develop separate product/service offerings. The bank must be able to effectively segment its market; if it does not, segment, marketing may be unsuccessful or unnecessarily expensive.
Niche Marketing	The bank serves a group of customers who seek a distinctive mix of benefits All bank activities are concentrated on a particular market with a view to achieving the strongest position within that market Implies ability to segment a market and select a profitable segment to serve Bank will have one marketing mix Often the best strategy for a smaller bank	*Advantages.* Niches are fairly small and normally attract few competitors. Because it is focusing on one market segment, the bank should be able to understand its needs and preferences better than anyone else and therefore serve it best. The bank will enjoy a good chance of becoming the supplier of choice to the segment and earn the largest market share and margin. *Disadvantages.* Higher risk; if the segment becomes less populated as consumer preferences shift or attracts too many competitors, all banks in the segment will see profits shrink and those who depend on the segment for their livelihood will have greatest difficulty surviving.

ANNEX F. SAMPLE BUSINESS PLAN STRUCTURE

1. Executive summary

2. Bank strategic goals and objectives for agriculture lending

3. Analysis of the external environment
    a. Macroeconomic factors
    b. Political factors
    c. Social factors
    d. Technology factors
    e. Regulatory and legal environment affect agriculture lending
    f. Financial sector factors

4. Analysis of the country financial sector with a focus on the main competitors in the agriculture sector
    a. Demand and supply of financial services
    b. Agri-finance industry
    c. Market sizing relevant market segments
    d. Demand for agriculture products
    e. Trends in the sector and competition

5. Internal organization structure
    a. Products and segmentation, portfolio, operational performance, productivity, service, branch network, organization, human resources, marketing/promotion, market research and development, credit risk management systems, other operational issues, SWOT analysis

6. Products and services
    a. Pricing
    b. Promotion
    c. Delivery channels

7. Market research and development

8. Human resources

9. Operations
    a. Operational efficiency
    b. Physical, administrative, and security infrastructure
    c. Internal controls

10. Information technology and management information systems

11. Risk and corporate governance

12. Capitalization

13. Financial projections

ANNEX G. STEPS TO IMPLEMENT AN EFFECTIVE STRATEGY

ANNEX H. AGRICULTURAL LENDING GUIDELINES

Attached hereto as part of the Annex are Excel Spread Sheets that provide you with Templates that can be customized to serve your financial institution's needs. As you revise and implement the system you will need to ensure that your Core FIing System can be parameterized to accept the data you are collecting. The tools essentially for part of the Loan application and documentation process as outlined herein.

Customer Screening

Lending money is a risk - you might not get it back. So you will do everything possible to try and make sure you get it back through client selection, careful loan appraisal, asking for security or guarantees, building loyalty and so on. Using a mix of all of these has meant that even lending to very small scale entrepreneurs with limited assets is possible. It requires an initial investment of time, which is costly but less costly than making loans that cannot be repaid. The mix of activities typical of farm based households make collecting information on them particularly time-consuming, so an institution wishing to concentrate on this target audience can prepare a list of basic criteria that will rule someone in or out of a chance of getting a loan immediately. That way staff time will not be wasted gathering detailed information only to find that that person does not qualify for a loan due to some basic criterion not being met.
These eligibility criteria are highly context specific and any lending institution must carefully consider what criteria it will include in such a list, in order not to exclude potentially good clients.

There are three core criteria to consider:

1. Previous loans. Lenders back office staff review whether the farmer interested in obtaining a loan already has a credit track record with the FI. This information is automatically checked in the computer system by entering the name and ID number of the farmer. If the person has accumulated more than 30 days overdue on the previous loans, access to future loans is denied and the loan request is turned down immediately.
2. Previous or current loans with other lending institutions. In the absence of a credit reference bureau in the country, the FI can agree with other rural financial intermediaries to circulate lists with overdue borrowers that are updated on a monthly basis. Whenever a farmer contacts the FI and presents a loan request, these lists are checked to find out whether the person has unpaid loans or has a loan that is currently overdue. If people are listed as overdue borrowers, the FI immediately refuses their loan requests.
3. Borrower characteristics. As a final step, FI staff check whether the potential borrower complies with FI specified eligibility criteria contained in the FIs lending policy and procedures.

In addition, the FIs staff who carry out screening interviews sometimes develop a "gut-feeling" about a client's probable creditworthiness. If there are indications that the loan applicant is hiding information or telling lies, the officer can stop the interview and tell the person they are not eligible.

In order to prevent the information being collected several times, e.g. during the screening interview, when the loan application is filled out, and during the field visit, the various forms used for these different purposes can be inter-linked in a database. If this is done, all the information that is collected during the screening interview will automatically appear in the loan application form.

THE LOAN APPLICATION

Once the eligibility of a potential client has been established, FIers can proceed to make an application for a loan. Financial institutions usually have application forms which may need to be filled out by the staff together with the loan applicant. Loan application forms should contain much of the information a loan officer needs to plan a visit to the applicant's business and carry out the loan appraisal at a later stage.

The key factors for successful loan analysis: character, capacity, capital, collateral and conditions. All these factors matter but for micro entrepreneurs like small farmers, the first two – character and capacity – are the most important.

In order to be able to visit the client, the home address needs to be documented. As official street names are lacking in rural areas, FI staff often add a little drawing on the back of the sheet and take note of reference points in order to be able to locate the loan applicant's home more easily. GPS if availed is also useful.

It is important to know the civil status of the loan applicant and to find out more about his/her family background. So the loan applicant should provide information about the name and age of the spouse as well as about the time they have lived together. This will give an impression about the stability of the family and will also help to involve the partner in the credit process. The FI may require spouses to co-sign loan contracts in order to ensure that they know about the loan obligation and feel responsible for it.

Agricultural lending

Knowing about the overall family situation is important to ensure that the loan officer appreciates the need to analyze the monthly family budget requirements in-depth during the field visit. The number of children and other dependents, who do not generate income, clearly has an influence on household expenditure. While young children lead to school expenses, older children may contribute significantly to household income and help to diversify the family income sources.

Another important part of a loan application form is the section on the economic activities carried out by the farm household. This information helps to build a risk profile

for the farm household, particularly when analyzed together with the family structure and land situation. It also allows the loan officer to obtain insights into the variety of income sources and if they produce a continuous and reliable cash-flow or not.

The number of years of professional experience for each economic activity gives an indication of the production skills in the farm household. The variety of crops that are under cultivation, for example, provides an indication about how well the farmer manages crop rotation systems and how well the different crops complement each other. When we analyze this information in the light of the location and size of the plots, we will have the possibility to project very roughly the expected yield of the farm household. Because in rural areas the location of the area under cultivation is not always in the same place as the home, it is important to get a very clear and detailed description of the location of the plot. These descriptions are especially important for planning the field trip. GPS as noted earlier can be used as well.

In addition, the exact location of all properties is also important in order to know about the land property situation in legal terms as well as in terms of land quality. A classification of the borrower in legal terms regarding land titles and possible disputes over them can be based on this information. Also, later in the appraisal process, estimations of yields can be cross-checked against the known quality of the cultivated land used by the farmer.

Finally, the information about the number of plots that are cultivated, which size they have and where they are precisely located provides further insights into the production strategy of the farm household and the associated cost-income structure and risks. For example, very small plots do only allow manual production, requiring a lot of labor. The existence of several very small plots that are spread over a larger area might contribute to mitigate climate risks but increase transportation costs.
Previous and current loans

Obtaining information about previous loans shows how familiar the loan applicant is with borrowing money. The name of the lending institution or person might provide an insight into the potential creditworthiness of the loan applicant. Previous loans from a highly subsidized program might give warning of lax repayment morale.
Information on current loans is particularly interesting as it shows the current level of indebtedness and how much of the current income is already absorbed by servicing other loans.

Details of the proposed loan

Information about the applicant's preferences regarding the proposed loan gives FI the opportunity to tailor the loan to customer needs. The desired disbursement date, for example, is particularly important for agricultural production as a delay in planting crops can result in significant income losses due to the reduced yield. At the same time, the information provided in this section indicates how realistic the borrower is as regards his

financial needs, the term required to repay and the repayment schedule. It gives a clear indication how well a loan applicant knows and manages his cash-flow.

In addition, this section of the application can show whether borrowers are interested in a partnership with the FI that is frank and honest or whether they are distorting the facts. In many cases, for example, borrowers overestimate their loan amounts and required repayment period. However, once the loan applicant describes in more detail what he or she needs the loan for, FI is in a better position to assess the loan amount and term structure in the light of the actual needs.

References

Each loan applicant must name at least two reference persons who can provide further information to. If loan applicants refuse to provide this information, FI turns down the loan application immediately as it suggests a degree of moral hazard.

Declaration

Once the loan application is filled out, FI asks the loan applicants to sign two statements. These statements show that FI is very strict as regards customer transparency. Before visiting the loan applicant at his/her home or fields, the loan officer to which the loan application is assigned, should carry out several cross-checks to review the information that has been provided. This can be considered a third screening mechanism that should prevent a costly field visit taking place with borrowers that have little or no creditworthiness.

Once the information provided by a farmer during the loan application process has been checked, the loan officer can schedule an on-site visit to the farm household. The objective of this visit is to capture further information about those crucial "C" factors:

REPAYMENT CAPACITY

Small farm businesses have different characteristics from bigger companies. They are family-based, involve multiple economic activities and income and expenditure is generally shared. There is no clear distinction between the family and the business.
The repayment capacity of a borrower depends on whether there is enough cash available in the “family pot” to service the loan. Loan installments normally do not represent “ear-marked” funds but are simply taken out of the cash reserves of the household. Thus the lender needs to figure out if there will be sufficient cash inflows to offset all the outflows, including loan repayment.

Cash flow analysis is the single most important analysis a lender has to do. The diversity of enterprise activity on a small farm makes it seem complicated but it can and must be done. Some of the cash flows will be regular, while others will be irregular. For agricultural producers, most production-related cash flows are irregular, i.e. seasonal in nature. Regular income may come from petty trade or the regular employment of some

family members, although even trading activities may peak around festival dates for religious or national commemorations.

Analyzing the current income and expenditure pattern of a farmer provides a picture of the cash fluctuation and risk profile of the farmer. We must, however, remember that a loan has to be paid back from future income. Therefore, income and expenditure must be projected into the future in order to determine whether the farmer is able to repay a loan or not. Historic data about past cash-flows do not reflect the true future repayment capacity. As we all know, price volatility is particularly high in the agricultural sector. Weather conditions can change from one year to the next as can international crop prices. It is therefore important to make a cash flow projection based on past experience and trends but oriented to take account of future predictions.

The FI's loan officers are expected to capture information on the amounts, timing, frequency and probability of future income and expenditure flows during their farm visits. They must consider seasonal and perennial crops, livestock with periodic sales of products (wool, meat) and those with daily sales (milk, eggs), temporary and permanent non-farm activities, and all kinds of regular and sporadic family expenditures.

In order to make realistic cash flow projections, the loan officers must obtain insights into the production methods, farm management skills and other external factors that may affect the farm household during the repayment period of the loan. These external factors can include weather forecasts as well as problems in the loan applicant's irrigation co-operative or marketing problems.

During the field visit, the loan officer should keep the following in mind:

- Possibility of delayed payments. Some applicants may purchase raw materials on credit or sell their crops on credit. When asking about income and expenditure, it is important, therefore, to check when the cash inflows and outflows actually occur. Current and proposed agreements should be discussed to provide a complete picture.
- Underestimated household expenses. It is important to obtain information not only about regular consumption expenses, e.g. food, transport, gas etc., but also expenses for extraordinary events. These can include expenses for pilgrimages, weddings or the annual village festival. Since family expenditures do tend to be underestimated, FI include an additional 10% for unforeseen expenses.
- Unrecorded debts. Although information about existing loans is recorded on the loan application form, it is important to cross-check this information again during the interview. In many cases, farm households have additional obligations that they do not consider to be loans as such. These can include, for example, pawning transactions or lease agreements for a lorry.
- Importance of cross-checking. FI's loan officers cross-check data by asking for support documentation (e.g. receipts, invoices etc.). Another cross-checking method is to include various family members in the interview. Suppliers and

traders who were mentioned by the loan applicant during the field visit can also be contacted to reconfirm information.
FI's loan officers do not just take information at face value from the farmers. They analyze the information in the light of the risk profile and management capacity associated with the potential borrower and adjust the income and expenditure accordingly. They also compare the collected information with data available from similar farm households. If there are major deviations, the loan officer tries to reconfirm the information and generally opts for the more conservative figure.

The following list presents a sample of other aspects that are reviewed during the field visit to ensure realistic income and expenditure projections:

- Weather and pest risks. Agricultural production can always be hit by bad weather conditions or pests. Many farmers mitigate these risks by applying different techniques.
  Some, for example, deliberately produce in various small plots that are spread out over a larger region instead of producing in one large plot. The advantages associated with the former approach are obvious: While one plot might be hit by bad weather, another plot might not be affected, so only part of the harvest would be lost.
  Other techniques to reduce weather and pest risks range from the simple use of seed-boxes to facilitate germinating in cold climates or using disease resistant varieties, to the installation of complex irrigation systems.
- Rotation of crops. Appropriate crop rotation is important to maintain the soil fertility and structure, control diseases and pest and facilitate weed control. If this is not done properly, soil quality deteriorates, resulting in decreasing yields and, hence, income.
- Erosion control. Erosion results in a loss of land for production. To prevent erosion and maintain the maximum area of fertile land possible, there are many different techniques. These range from reducing grazing pressure to the introduction of cultivation practices like terracing or planting trees and hedges.
- Crop storage. Selling the harvest at the right moment is difficult for many farmers. Only few have sufficient and appropriate storage facilities to keep the harvest for a longer period and benefit from higher prices later. Most farmers are forced to immediately sell their harvest. Therefore it is important to know whether the loan applicant might face marketing constraints.

This list is merely illustrative and is not intended to be exhaustive at all. There might be many other aspects a loan officer should have a look at. If any of the factors considered give cause for concern, the loan officer might opt to adjust income projections towards more conservative figures. In extreme cases, loan officers might even decide to reject the

loan application following the field visit, if risks are considered to be too high and not manageable by the farmer.

CHARACTER AND WILLINGNESS TO REPAY

The field visit should be used to gain an insight into the character of the prospective borrower and whether there is any risk of moral hazard. While farm income may be sufficient to repay the loan, a client may decide not to repay for a variety of reasons – maybe due to urgent family needs, or a desire to reinvest directly etc.

In normal commercial FI, the most important methods used for character assessment include a personal presentation by the applicant about his / her business plans, an assessment of the quality and reliability of the information given, and the applicant's credit history with the financial institution. Character assessments of rural smallholders focus on the same issues, but differ in the methods used to obtain the information and the key aspects to focus on.

Another key element FI loan officers focus on is the client's openness in disclosing information and sharing it with the financial institution. Does the loan applicant voluntarily identify his assets? Does he readily provide receipts and other documentation that the officer asks for?

Reputation in the community. How do the leaders of the village community see the loan applicant? What kind of reputation or image does the loan applicant have? Is he known for being a drunkard or addicted to gambling? Is he seen as reliable and trustworthy, someone his family and the community are proud of?

Finding reliable answers to these questions is a sensitive issue. FI loan officers use a very indirect approach. They listen while having lunch at local restaurants or while travelling on the bus. They go to the local events like football games or religious ceremonies and use these occasions to obtain more information about the villagers.

The only people that are interviewed directly are the referees that the potential borrower has indicated in the loan application. Loan officers usually decide on a case by case basis whether it is necessary to follow these references up.

Previous track record with financial institutions. The most reliable source of information for a lender is the individual client records within the institution itself, i.e. FI account details or loan records. Evidence that previous loans have been repaid remains the key source of information on the repayment willingness of the applicant. If payments have often been late, it is very likely that the next loan again will perform irregularly.

FI loan officers are encouraged to stop a field visit if they have the feeling that the client is hiding important information or is not co-operative. However, there is a thin line between good and bad judgment. There is a difference between people who are just too shy to talk or have very little capacity to provide accurate figures and others who

deliberately hide information and openly tell lies. Distinguishing between these two groups requires an experienced loan officer who has good communication skills and knows how to deal with different people.

CAPITAL AND COLLATERAL

A balance sheet is the key document for understanding the capital position of a potential borrower. Of course, small farmers do not usually prepare accounts but it is not difficult to construct a balance sheet during the course of a field visit. It comprises two lists - on the one hand all the assets of the farm household and on the other all the liabilities. The difference between the value of all the assets and the liabilities to people outside the family equals the net capital or net worth of the farmer. This is a measure of the loan applicant's ability to withstand possible adverse circumstances. Net capital is largely built up by ploughing profits back into the business.

Constructing a balance sheet is like taking a snap shot of the business at that particular moment. You can see everything the family owns - the land, buildings, machinery, livestock, growing crops, crops or inputs in store, vehicles, goods purchased for resale and so on. Things that you cannot "see" but are still part of the asset picture are the cash the farmer has in his pocket or saved in the FI, post office or cooperative, and the money that other people may owe the farm (accounts receivable or debtors) because this will become cash in the future. The liabilities picture includes all the short, medium and long term debts that the farmer has - unpaid bills (accounts payable or creditors), leasing charges, informal and formal loans from other people or institutions. Most small farmers have no idea how much they may have invested in the business themselves over the years, so working out the net capital can prove quite a surprise. It is certainly indicative of whether the family's enterprises have been profitable enough to allow them to save and reinvest.

In preparing a balance sheet we have to consider (again) the fact that rural smallholders do not clearly differentiate between household and farm/enterprise sphere. Therefore, a balance sheet including only farm-related assets and liabilities may seriously misrepresent the financial situation of the applicant. Some agricultural lenders do only analyze the specific investment project to be financed. Others focus only on the assets and liabilities related to the economic activity to be financed. Inclusion of household assets and liabilities will require more loan officer time, but will also lead to substantially more reliable figures.

A practical benefit of including assets not directly related to the loan purpose or the economic activity to be financed is the signal to the borrower, that he/she will not be let off the hook if the financed activity does not turn out to be as successful and profitable as envisaged. The borrower is accountable to FI with all his/her assets, including household goods.

An important side effect of constructing a balance sheet is the potential identification of assets which can be pledged as collateral for the loan.

Being certain of the accuracy of balance sheet information is not an easy task for a loan officer. FI's loan officers have identified the following problems in setting up a balance sheet with reliable data:

- Asset ownership. Farm assets are often located or stored in many different places, so it is a challenge to identify and record everything and to make sure that these assets are actually owned by the farm household. For example, if a farmer claims that cattle grazing on community grassland are his, this statement must be reconfirmed. Some farmers may claim that they own certain machinery that is currently lent to others so that it cannot be shown to the loan officer. FI's loan officer must carefully check the situation to obtain reliable figures.
- Asset valuation. A particular challenge is determining a reasonable value for each of the existing assets. It is imperative NOT to just take down the historical purchase price of an item or simply accept selling prices suggested by the farmer. Loan officers need to develop a good understanding of valuation, particularly for machinery. The FI inventory form asks the loan officer to evaluate the condition of items. Machinery must be seen in running order to be able to evaluate it. Items which need repair or maintenance in order to become useable should be limited to say 20% of its sale value.
  Raw material should be valued at purchase price after a thorough check of the quality. The same procedure applies to stored agricultural produce. Loan officers need to check with their own eyes the quality of the stock and the quality of the storage facilities. A good knowledge of current prices on the agricultural market is vital for the valuation of these asset items. Growing crops are usually valued at cost of inputs used to date.
- Cash and deposits. The cash in hand noted in the balance sheet should only be the amount actually shown to the loan officer. By the same token, only those cash savings that are shown in savings passbooks should be recorded. This is a conservative approach as many loan applicants might still have a "reserve for a rainy day" that they do not want to disclose to the loan officer. However, it is better to underestimate the available short-term liquidity than to overestimate it.
- Accounts receivable and payable. Though many farmers might sell on credit or purchase input goods on credit, they might not appreciate that these future cash transactions should be included in the current information. Therefore, it is very important to ask directly for these transactions.
- Loans from informal funding sources. Liabilities to friends, family, neighbors and informal moneylenders are difficult to trace and require experience, a good interview technique and a lot of asking around in the applicant's environment.
- Pawn loans. In some countries, pawning gold or jewelry is widespread, particularly in rural areas. However, as the repayment of these loans may be

several months ahead and not very certain, many farmers forget to mention about them. FI’s loan officers, therefore, always ask specifically about pawn loans.

Successful field visits require many skills - officers must be alert, sensitive, observant, knowledgeable and able to quickly check figures in their heads. Supportive documentation should always be cross-checked whenever available (i.e. receipts, ownership documents) and the process should not be hurried. It is too costly to go back to ask about things you have forgotten. The greatest investment of time will be in first time borrowers. Working with existing clients is much quicker because much of the essential information is already known.

CASH FLOW ANALYSIS

All the income and expenditure information that has been collected during the field trip is now consolidated in a cash flow projection. The exact period of the projection depends on the envisaged loan term. In agricultural households, one year projections are common because they encompass the majority of crop growing seasons. Loan projections beyond 12 months are very uncertain so it is recommended that cash-flow projections are renewed annually for medium and long-term loans.

A typical layout for a cash flow projection can be found in the spread sheets provided as sample templates. The instructions are quite simple – you have to write down all the money coming in each month and all the money going out and find the difference between them. This gives the monthly balance or net cash flow. It may be positive or negative. Positive balances can be regarded as net income or surpluses which can be saved provided all the household expenses have been taken into account in the plan. Cumulative net income is cumulative savings from which loan repayments can be made. Information can be grouped together by economic activity, e.g. crop type or product categories, e.g. fertilizers, pesticides, machinery costs. All the facts that were assembled regarding weather impacts, price trends, market conditions, management capacity, risk reduction, etc. should be taken into account when deciding on what figures to put in the cash flow budget. As a general rule it is best to be conservative with estimates especially for new or expanded enterprises.

Remember the quality of your loan portfolio and the health of your financial institution are going to depend on the quality of your cash-flow projections and your assessment of each applicant's repayment capacity. You need sound data from the field, good judgment and accurate arithmetic. You will need a calculator and should work in pencil until you have got it right, unless of course you have a computerized spreadsheet to help you.
A cash flow can be prepared first without including any loan assumption or the proposed amount can be included from the beginning.

Once a cash-flow projection has been prepared for all the economic activities of all household members, and all the family expenditure has been incorporated, it needs to be assessed in relation to the loan proposal. The most commonly used indicators for doing this are:

- the accumulated repayment capacity; and
- net cash flow after loan repayment or "free net cash flow" i. The accumulated repayment capacity indicator is calculated as follows:

This indicator is calculated by adding up all the monthly balances during the envisaged loan term and comparing this figure to the total amount to be repaid (including both principal and interest). Since the cumulative net cash flow needs to be higher than the total repayment obligation which the applicant would have towards the lender, this indicator must be above 1.

Since it is advisable to have a substantial security cushion for unforeseen events, it is recommended that the ratio should be at least 2:1. Needless to say, the higher the benchmark is set for this ratio, the more conservative is the lender's risk-taking approach. Due to seasonal variations in agricultural activity, the net cash flow of a farm household generally varies from month to month. Between planting and harvest periods there is always a period of reduced cash availability that has to be bridged by the applicant. Loan repayments, if required by the lender during this period, may not be at the top of the borrower's priority list for using scarce cash.

However, accumulated repayment capacity is more important than monthly free net cash flow. As many farm households have a highly variable income and expense structure, loan products which require equal repayment installments are not really appropriate. Ideally, a more flexible repayment schedule is required. A number of variations are possible:

- Monthly interest payments combined with lump-sum repayment of the capital at the end;
- Various irregular payments of interest and capital;
- The entire loan amount plus interest paid at loan maturity.

In these instances the monthly free net cash-flow will not be of much help. However, the accumulated repayment capacity ratio will be very critical to decide whether a loan should be approved or not. In addition, the free net cash-flow must be positive in all those months where payments are planned.

Sensitivity analysis

In order to find out how a cash flow might be affected by adverse factors, the loan assessment may include a sensitivity analysis. The objective is to know whether adverse circumstances would undermine the repayment capacity to such a degree that the loan repayment will be at risk.
Factors to be considered in the sensitivity analysis of cash-flow projections could include:

- Reduced yields due to bad weather conditions, diseases or pests;
- Delays in payments, e.g. delays in payments for crops after harvest;

- Lower than expected sale prices;
- Higher input costs;
- Additional labor costs, e.g. replacing a sick family member with hired labor.

The cash flow indicators should be carefully assessed regarding their sensitivity to possible changes. In this way, a specific risk profile for the individual loan can be constructed. Financial institutions need clear policies which state what level of tolerance in relation to cash flow indicators is acceptable. For example, it could be stated that the monthly free net cash flow should not fall below zero more than three times within a year for even worst case scenarios.

It is important not to take too simplistic an approach to sensitivity analysis, by just recalculating numbers in a mechanical fashion. We learned earlier how farmers use different risk mitigation techniques to keep their vulnerability to risks at a reasonable level. When analyzing a cash-flow, these risk mitigating techniques must be taken into account as part of the risk profile of a farm household. Here are some examples:

• Diversification of income sources. Prudent farmers tackle income insecurity by diversifying income sources. Potential losses in one agricultural activity may be offset by other agricultural or non-agricultural income-generating activities.
Many farmers have off-farm activities, such as wage-based seasonal labor at other farms, work for large agri-business enterprises or the production of handicrafts. Family members may carry out exclusively non-agricultural activities, such as running a small grocery shop or working in the nearby town for a wage. Relatives may also regularly send payments from distant places, or even from abroad.
Many farmers try to quickly diversify their sources of income under a crisis scenario, particularly by selling their labor to others.
• Liquidation of assets. The majority of farmers have savings in-kind. One of the most popular forms of saving is buying livestock. So confronted with an emergency, many farmers sell a pig or a goat to obtain funds.
• Family safety networks. In many countries, informal safety networks exist within extended families or clans. If one person has a problem, family support is mobilized. In many cases however, this support structure is not without cost. Farm households must constantly contribute to maintain it. When festivities take place, cash contributions from all invitees are expected.

In many countries, it is very popular to borrow money at 0% interest rate from family members and repayment conditions are very lax. However, if a person has lent to others, he obtains the right to gain immediate access to money when he needs it. Understanding how these informal networks work is helpful in determining whether a borrower is likely to be able to mobilize money at short notice from within his extended family to repay.

CAPITAL

As the next step of the loan appraisal, a brief analysis of the balance sheet should be carried out to assess the applicant's capital position. It is not as critical as the cash flow

projection but we can gain some useful insights into a business, even that of a small farmer, from a balance sheet.

1. Large amounts of cash - especially outside harvest time – should trigger a closer investigation as to why this available cash has not been invested and where it is coming from. Comparably low amounts of cash after harvest combined with a lack of investment in visible household or farm assets on the other side will also signal a potential problem. A close analysis should then be carried out by the loan officer.
2. The existence of savings in a deposit account indicates that the loan applicant does not consume or invest all his/her income but rather sets a certain amount aside. On the one hand, this could be a sign of thriftiness and creating a safety reserve for rainy days. On the other hand, it could mean that there are little investment opportunities and there is a lack of entrepreneurial initiative. It would therefore be very important to scrutinize the reasons for savings.
3. The value of the existing agricultural stocks – supplies or harvested crops – provides insights into how successful the farm business is. Very low stocks prior to the start of the agricultural season can indicate the farm's dependence on external funds to keep on running. In contrast, large quantities of stored crops show that the farmer is able to postpone selling crops until prices are more favorable.
4. Accounts receivable (debtors) is an important figure as they can cause severe liquidity problems if they are not received on the due date.
5. The composition of fixed assets reveals key information about production methods. In addition, the figures indicate how modern the equipment is and whether the farm household is able to maintain its machinery.
6. The amount of total assets indicates how successful the household has been and how much wealth it has accumulated over the years. This figure is particularly interesting when farm households with similar family and production patterns are compared.
7. Accounts payable (creditors) indicate that the potential borrower already has obligations with other funding sources. This means that there will be cash outflows in the future that must be taken into account.
8. Level of indebtedness – expressing liabilities as a percentage of total assets indicates what proportion of the farm's assets has been financed through borrowing.

COLLATERAL

Another purpose of examining the asset and liability structure in the balance sheet is to identify appropriate collateral. Compared to the repayment capacity that is the sine qua non in lending, collateral is only of second priority.

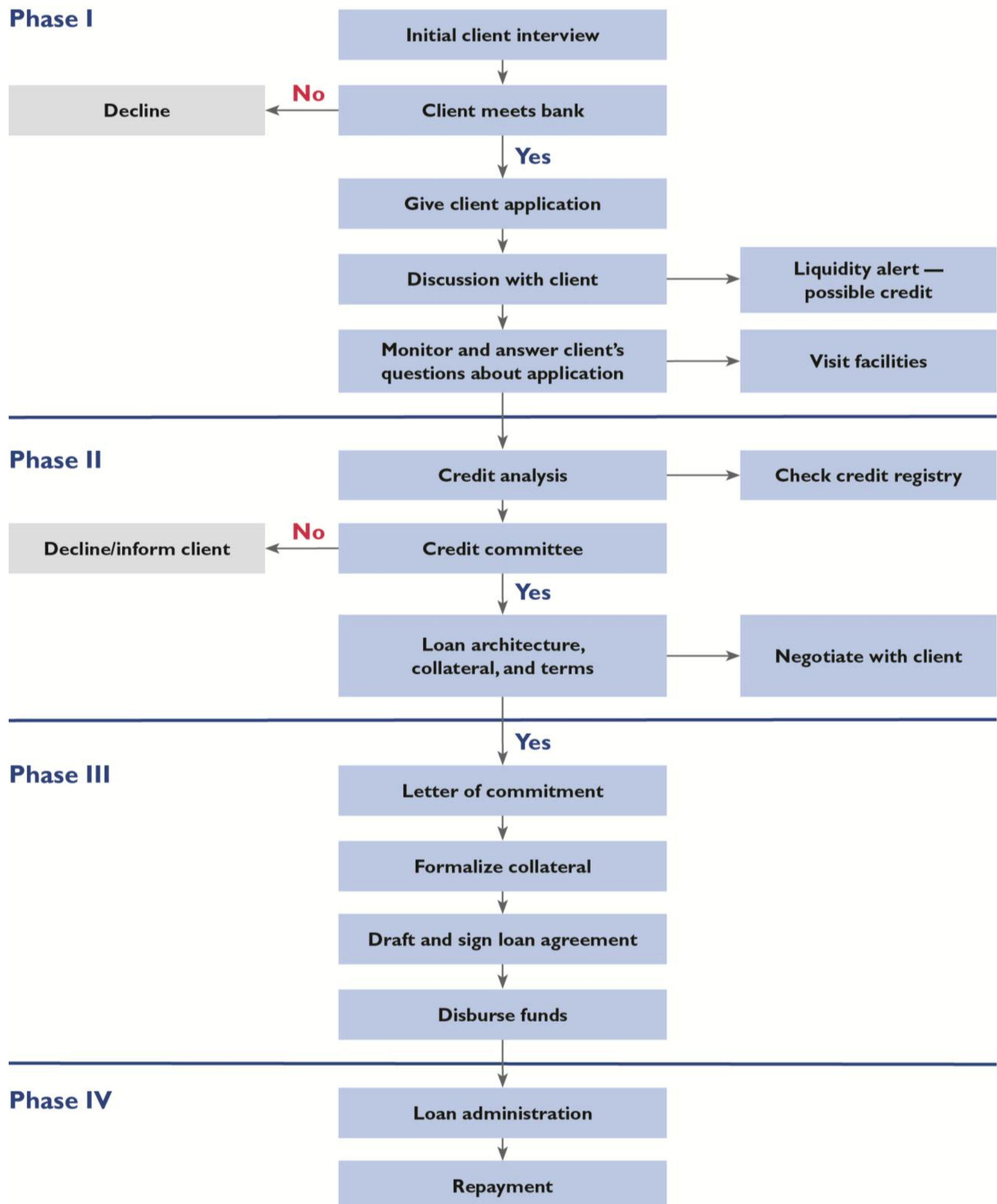
FI considers collateral primarily as a repayment incentive, putting pressure on the borrower to repay in a timely fashion. They have defined the following conditions for any asset that they would accept as collateral:

1. Importance to the borrower. The asset must be of high personal value to the borrower. He/she must be psychologically hurt if the asset were to be taken away by FI.
2. Value. The asset must be known to have a value that is sufficient to cover the loan amount, interest for the entire loan term and a possible penalty charge. The minimum value of the asset(s) must be 1.35 of the loan amount.
3. Marketability. The asset must be easy to sell. Transfer of property rights should take place at little cost and with little formalities. In addition, the assets must be free from liability of third parties.

According to these three factors, the economic value of the collateral is only one side of the story. It is even more important that the borrower feels attached to the asset and that losing it would cause him/her considerable – even though psychological - damage. Against this background, FI accepts a wide range of collateral, including household goods like TV sets or bicycles, personal guarantors, livestock and land. In the majority of cases, a combination of collateral items is used.

In order to avoid lengthy legal procedures, FI asks the borrowers to sign a document agreeing to hand over ownership of certain assets to FI at the moment of signing the loan contract. With this document, FI becomes the owner of these assets during the entire loan period. FI allows the borrower to continue using these assets but is allowed to remove them at any time, if the loan becomes overdue. This allows FI to immediately enforce repayment without a court decision.

ANNEX I. LOAN PROCESS



ANNEX J. STEP-BY-STEP LENDING PROCESS

Name of Client: ____

Steps	Form Used	Days to Complete	Date Completed
Identification and Introductions with New Customer			
First client contact — screening with credit officer	Screening form	1 day	
Information session — client informed about agriculture products	-	Same day	
If the credit officer determines that the client has a qualifying project, he/she assists the client in completing the agriculture loan application form	Loan application form	Same day	
Credit officer opens a client file.	Client file cover sheet	Same day	
Credit officer adds client to agriculture pipeline report	Pipeline report	Same day	
After completing loan application, borrower gives documents (collateral, references) to agriculture credit officer	-	1 day	
Credit officer assigns a day to call the client and get more detailed information by phone	Loan analysis worksheet	Same day	
Credit officer carefully examines all documents related to collateral, paying particular attention to the status of inventory land records, coordinating with legal staff and government as necessary	Loan analysis worksheet	1 day	
Credit officer reviews the borrower's relationships and determines if he or she can be placed into a group of similar borrowers in the area	Loan analysis worksheet	1 day	
Credit Analysis			
Credit officer conducts due diligence by carrying out reference checks of suppliers, customers, and, where possible, bank records of customer, and checks market and competitors	Loan analysis worksheet	1 day	
Credit officer meets guarantors and checks collateral	Loan analysis worksheet	1 day	
Credit officer and agriculture director identify which outstanding issues remain and decide whether to continue with this client	-	Same day	
Credit officer makes follow-on surprise site visit to the company to inspect all company premises, inventory, and internal books, and checks inflow of customers	-	1 day	
Credit officer analyzes final cash flow, income statement, and balance sheet prognosis; structures the loan accordingly; and completes analysis, write-up, and final documentation check	Loan analysis worksheet	1 day	

Steps	Form Used	Days to Complete	Date Completed
Credit officer and lawyer(s) review final documents and forwards loan memorandum to relationship manager	Loan memorandum	Same day	
Relationship manager reviews and provides approval for submission to agriculture credit committee	Loan memorandum	1 day	
Approval and Disbursement			
Submission to agriculture credit committee		1 day	
If approved, sign off on loan approval form; if rejected, client is provided with a list of deficiencies and can resubmit when these are addressed	Loan memorandum	Same day	
Client informed of loan decision	Client letter	1 day	
Credit officer requests any additional documentation required to fulfill conditions and for closing	Agriculture loan checklist	Same day	
Credit officer arranges collateral registration and insurance documentation with local and/or district government	Collateral evaluation form	1 day	
Credit officer prepares loan/collateral agreements based on credit committee decision	Agriculture loan/ collateral agreements	1 day	
Credit officer ensures that all disbursement conditions have been met	-	1 day	
Credit officer walks client through disbursal of loan proceeds at the agriculture office	Client loan checklist	Same day	
Credit officer follows through on fulfillment of all conditions of loan disbursement	-	Same day	
Relationship manager checks all documentation and conditions and signs approval form	Loan approval form	Same day	
Documentation signed with client and guarantor(s)	-	1 day	
Repayment schedule provided to client	Repayment schedule	Same day	
Loan disbursed to client		1 day	
Total Days		**16 days**	
Monitoring and Reporting			
Credit officer and client agree to monitoring schedule	Monitoring report form	As necessary	
Monitoring visits to client	Monitoring report form	Monthly	
Agriculture updates monthly report	Agriculture pipeline report	Monthly	
Credit officer updates relationship manager on problem loans	Watch list	As necessary	
Other reporting as determined by bank	TBD	TBD	

ANNEX K. CLIENT SCREENING FORM

Pre-qualification Questionnaire

<table>
<tr><td colspan="2">Name:</td><td colspan="2">ID No.</td><td>No. of family members:</td></tr>
<tr><td colspan="4">Address:</td><td>Tel:</td></tr>
<tr><td>Current job (if any):</td><td colspan="3">Company Name:</td><td>Salary:</td></tr>
<tr><td>Loan Requested:</td><td colspan="2">Loan Term:</td><td colspan="2">Purpose</td></tr>
<tr><td colspan="5">Description of business:</td></tr>
<tr><td colspan="5">How will you use the loan?</td></tr>
<tr><td colspan="5">Property (vehicles, livestock, land and etc.)</td></tr>
<tr><td colspan="5">Own capital (source and amount)</td></tr>
<tr><td colspan="5">Collateral (type and value)</td></tr>
<tr><td colspan="5">Do you have any other loans?</td></tr>
<tr><td colspan="5">Notes:</td></tr>
<tr><td colspan="5">BRANCH USE ONLY</td></tr>
<tr><td colspan="5">Comments:</td></tr>
</table>

Signature: ____________________ Date: ____/____/___

ANNEX L. AGRICULTURE PRODUCERS APPLICATION FORM

LOAN REQUEST

The applicant _____________________________ hereby applies for a loan of $ _______________
for a term of ____ months, including a grace period of ______ months.

Branch:	Applicant's location	Date:

Personal

Name:		ID #:
Date of birth:	Sex: M _____ F _____	No. of dependents:
Address:		Tel. No.:
Education:		
Years working in agriculture:	Years producing product to be financed:	
Other address:		Tel. No.:
Name and address of spouse/other contact:		

Your Employer

Name of company:		Sector:
Address:		Tel. no.:
Your position:	Salary:	Years worked:

Credit Details and History

Amount of credit requested:	Drawdown date:	Final payment date:
Principal payment method: Monthly: ___ Quarterly: ___ One payment at end: ___ Other: ___		

Ever received credit from another lender? Yes: __ No: __	Was it repaid in full? Yes: __ No: __ When: ___/____/__
If Yes, lender's name and address:	If No, explain why:

Business Operations (Use Page 4 if Necessary)

Main farming activity: Crops: ___ Livestock: ___ Processing: ___ Other: ___

Describe your input suppliers:	*Number of workers:* __________
How will crops/animals be watered?	*Family members:* M ___ F___
How will crops/produce be harvested and stored?	*Paid workers:* M ___ F___
Sales price; How have you calculated it?	*Full-time paid workers:* M ___ F ___

No. hectares used :	Owned:	Leased:
Hectares arable land:	Hectares irrigated:	Hectares pasture/hay:
Who runs the business when you are sick or away?		
Summarize the project you will finance with the loan:		

Resources you have already contributed to the project:
Resources you will contribute to the project:
Do you have any other income-generating activities? Describe them:
Who are your clients? Wholesalers: ___ Retail stores/markets ___ Processors: ___ Other: ___
Describe:
Are there any threats to the following? Client base ___ Input supply ___ Irrigation: ___ Distribution/sales: ___
Describe:

Inventory of Machinery and Equipment

Make & Model	Year	Rented?	Own?	Bought	Price Paid	Condition	Value:

What Fully Grown Livestock Do You Own?

	No. Of Animals			Current (Average) Price Per Head	Total Value
	24 Months Ago	12 Months Ago	Now		
Cattle					
Sheep					
Buffalo					
Goats					
Chickens					
Other					
Other					
				Total	

What Buildings Do You Own or Rent?							
Buildings and Use	**Square Meters**	**Age**	**Condition**	**Owned/ Est. Value**		**Rented/ Rent Paid**	
House							
Barn							
Warehouse							
Other							

Household Assets Do You Or Other Members of Your Household Own Any of The Following?							
	Yes	**Make/ Model**	**Year**		**Yes**	**Make/ Model**	**Year**
TV				Motorbike			
Video				Car/other vehicle			
Stereo				Car/other vehicle			
Gas stove							
Electric stove							
Refrigerator							
Freezer							
Radio/cassette				Other (Specify)			

Schedule of Assets Owned by You Offered as Collateral					
Description (e.g., make and model, size, etc.)	**Address**	**Serial #**	**Condition**	**Year Made**	**Value**

Insert Disclaimer

Applicant(s) signature(s): (1) ___________________________________ Date: ____/____/____

(2) ___________________________________ Date: ____/____/____

<table>
<tr><th colspan="2">BRANCH USE ONLY</th></tr>
<tr><td colspan="2">Comments:</td></tr>
<tr><th colspan="2">RECOMMENDATION</th></tr>
<tr><td colspan="2"></td></tr>
<tr><td>Assistant Manager: _____/_____/____</td><td>Branch Manager: _____/_____/____</td></tr>
<tr><th colspan="2">Other Relevant Information</th></tr>
<tr><td colspan="2"></td></tr>
</table>

ANNEX M. RETAILERS LOAN APPLICATION FORM (SME)

LOAN REQUEST

The applicant ___________________________ hereby applies for a loan of $ ______________
for the term of ____ months, including a grace period of ______ months.

A. LOAN STRUCTURE AND PURPOSE

A1. Source of Funds for Project Amount

1. [Bank] loan _____________
2. Other loans _____________
3. Other borrowings _____________
4. Owner's funds _____________

** TOTAL SOURCES OF FUNDS FOR PROJECT _____________

A2. Use of Funds for Project
Please be very specific (specify type of machine, address of building, type of construction job, etc.), and attach offers or pro forma invoices for fund uses if available.

Use **Amount**

1. [Bank] Loan Uses

____
____
____
____

2. Owner's funds

____
____
____

3. Other loans and/or other funds (specify)

____
____

4. Loan servicing fee 1% _____________

5. Other (specify) ____

** TOTAL USES OF FUNDS FOR PROJECT
** Note that total uses must equal total sources.

A3. Please describe your business briefly, the project for which you intend to use the loan proceeds, and how the project will affect your business (include an explanation of why exactly you are choosing to purchase aforementioned specific machinery, equipment, buildings, raw materials, etc. Attach copies of all tenders and bids.

____
____
____

____
____
____
____
____
____
____
____
____
____
____
____

A4. If the source of funds includes amounts from other loans and borrowings describe the purpose, lenders, relevant terms and conditions and security for repayment for these funds.

____
____
____
____

A5. Describe the source of owner's funds.

____
____

A6. Indicate the names and addresses of the banks where the company's current accounts are held, along with the name and telephone number of a person to contact at the bank.

____
____
____

A7. Proposed security for loan repayment (list all collateral proposed and value of the collateral):

Collateral and description: **Value**

1. ____
2. ____
3. ____
4. ____
5. ____
6. ____

Total ____________

B. DESCRIPTION OF THE COMPANY

B1. Industry ____

B2. Company's legal status: ____

B3. Entered in the Commercial Register of ___________ Regional Court;
Volume __________________, company file [1] _____/_____ year; page _____.
(Please attach a copy of the registration documents.)

B4. Date Company was registered _______________

B5. Company ID # ___________________(please attach a copy of registration documents)

B6. Company tax # ___________________ (please attach a copy of registration documents)

B7. VAT registration # __________________ (please attach a copy of registration documents)

B8. **Company's Owners** **Include Percentages**

Company's Owners	Include Percentages
___________________________________	____________ %
___________________________________	____________ %
___________________________________	____________ %
___________________________________	____________ %
___________________________________	____________ %
___________________________________	____________ %

B9. Date business began ____________________________

B10. Current number of employees ____________________________

B11. Projected number of employees following completion of project _______________

B12. Expected date of project completion ____________________________

B13. Production program

Type of Product/Service	Percent of Total Sales
Currently	
________________________________	________
________________________________	________
________________________________	________
After completion (date given above in B12)	
________________________________	________
________________________________	________
________________________________	________
________________________________	________

B14. Current production capacity (specify)

____
____

B15. Describe the production capacity following completion of the project (date given above in B12)

____
____

B16. Describe access by road to the current and future production facilities, including addresses and directions for locating them.

____
____
____

B17. Describe the road access to the production facilities and the parking space available for vehicles at the facility

B18. Permits/Licenses

Licenses required for the current and planned business of the company, including for the protection of the environment. Please attach copies of all licenses/permits.

Type of license	Date Obtained	Expiration Date	Issued by	License No.

B19. Existing Insurance Policies

State all types of insurance policies currently in force for the company (include policies for buildings, vehicles, employees, etc.), value of policy and name of insurance company. State the risks covered and amount of coverage for each risk. Please attach copies of all policies:

Type of Insurance	Issued by	Date Issued	Expiry Date:	Policy Number	CDF Value

B20. Management

Specify full names, qualifications, and work experience of all people who hold key positions in the company, together with their remuneration:

1.

2.

3.

4.

B21. What are the primary strengths of the management in question B20?

B22. What can the management in question B16 do to improve their skills as business managers?

B23. Duties and Exchange Rates

What is the effect of duties and exchange rates on the company's business? (Please describe if significant.)

****

BANK EVALUATION OF POINTS IN SECTIONS A & B

C. MARKET POSITION INFORMATION

C1. How many companies offer the same or similar product(s)? How do you know this?

____

____

C2. Main competitors (list them, and specify names and addresses):

____

____

C3. Main foreign competitors:

____

____

C4. In what respects is the company superior to its competitors?

____

____

C5. What should your company do to improve its competitive position?

____

____

C6. How do the prices of your company's products compare with the competitors' prices? How do you know this?

____

____

C7. Why does your company use its present suppliers instead of others?

____

____

C8. Who in the company actually sells the product/service to the customers? (Name/phone)

____

____

C9. What is the size of the market? What percentage of market share does the company have? On what do you base this opinion?

____

____

____

C10. Which market segment is your business aimed at?

____

C11. In near future, how do you expect the market to be changed due to the following factors:

- Increased domestic competition?

____

- Changes in consumer demand?

____

- Changes in government regulations?

____

- State companies' competition? What changes do you expect after their privatization?

- Other factors that may cause market changes? (Specify)

****

BANK EVALUATION OF POINTS IN SECTION C

D. BALANCE SHEET OF THE COMPANY AS OF ___________________

Every applicant must fill out this section and attach official copies of the previous year's and most current financial statements (balance sheet and income statement), not older than 90 days.

(**In 000 CDF)**

ASSETS

Item
Amount

1. Cash in cash office and bank ________________
2. Receivables due from customers ________________
3. Inventories ________________
4. Other material ________________
5. Machinery and equipment ________________
6. Real estate property ________________
7. Vehicles ________________
8. Other assets (specify) ______________________________ ________________

______________________________ ________________

****TOTAL ASSETS:** ________________

LIABILITIES

Item: Amount

1. Liabilities to suppliers ________________
2. Short-term loans ________________
3. Long-term loans ________________
4. Taxes ________________
5. Other liabilities (specify) ________________

______________________________ ________________

______________________________ ________________

TOTAL LIABILITIES: ________________

TOTAL EQUITY ________________

****LIABILITIES PLUS EQUITY** ________________

** These two amounts must be equal.

ANALYSIS OF ASSETS (in balance sheet above)

D1. Receivables Due from Customers

Debtor	Amount	Since when?	Expected Repayment Date	Current? How many days past due?

D2. Inventories

Materials and supplies	______________________	______%
Production in progress	______________________	______%
Finished products	______________________	______%
Total inventories	______________________	100%

D3. Machinery and Equipment

Type	Year Made	Year Purchased	Serial No.	Purchase Price	Residual Balance Value

D4. Vehicles

Model	Year Made	Year Purchased	Purchase Price	Residual Balance Value

D5. Real Estate Property

Address	Use	Land/Building (sq. miles)		Year Purchased	Year Built
			Land		XXXXXX
			Bldg		
			Land		XXXXXX
			Bldg		
			Land		XXXXXX
			Bldg		

D6. Other assets (specify)

____

____

____

____

____

ANALYSIS OF LIABILITIES (in balance sheet above)

D7. Liabilities to Suppliers

Supplier	Amount	Since when?	Expected Repayment Date	Current? How many days past due?

D8. Short-Term Loans (up to one year)

Lender	Loan amount		Due date	Interest rate (%)	Monthly pmt	Loan security
	Initial	Outstanding				

D9. Long-Term Loans (in excess of one year)

Lender	Loan amount		Due date	Interest rate (%)	Monthly pmt	Loan security
	Initial	Outstanding				

D10. Liabilities related to taxes (describe)

____
____

D11. Other liabilities (describe)

____
____
____

D12. Are there any loans made to the company by the owners? If so, what are the payment terms?

____
____

D13. Does the company have any potential liabilities — for example, resulting from guarantees issued by the company? If yes, describe amount, to whom issued, when guarantee expires, and for what purpose guarantee was given.

____
____

D14. Since the date on the latest balance sheet submitted, have any significant changes occurred? If so, specify.

____
____

****

BANK EVALUATION OF POINTS IN SECTION D

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____

E. Assumptions for Financial Projections

Date this is being filled out: ____________________

E1. Schedule for project realization

Realization starting date: __________________
Realization completion date: __________________
Date of arrival at full production: __________________

Briefly outline the stages of project realization

Activity	**Start/Completion Date**
____________________________	_________/_________
____________________________	_________/_________
____________________________	_________/_________
____________________________	_________/_________
____________________________	_________/_________

Use the figures below as the basis for preparing your pro forma financial projections, which follow this section!

E2. Planned monthly sales during the first year after loan disbursement

Month Used: ______________________

Name of Product/Service		Measures	Volume	Unit Sale Price	Total	
					Amount	%
1.						
2.						
3.						
4.						
5.						
				Total:		

E3. Planned monthly costs during the first year after loan disbursement

Month Used: _______________________ _ ___.

Planned Consumption of Materials and Supplies

Type of Materials/Supplies		Measures	Volume	Unit Purchase Price	Volume of Consumption	
					Amount	%
1.						
2.						
3.						
4.						
5.						
6.						
7.						
				Total :		

E4. Planned Monthly Wages

Total Employees	Average Salary Plus Bonuses	Total per Month	Taxes	Total Wages

E5. Planned total monthly amount of management remuneration and number of persons included in this total:

____

E6. Planned monthly cost of transport (specify level and method of calculation)

____

E7. Planned monthly cost of power, gas and water (specify level and method of calculation)

____

E8. Planned monthly cost of administration and advertising (specify level and method of calculation)

____

E9. Planned monthly level of remaining costs (specify types and method of calculation)

____

____

____

E10. Planned taxes to be paid by the company (specify type of taxes and method of calculation)

____

____

____

E11. Does the company benefit from tax allowances? If yes, describe.

____

E12. Are there any government policies that limit your ability to set prices or make a profit?

____

____

E13. In which of the above categories are costs most likely to change? Why? What change would you predict, and over what period of time?

____

____

____

****

BANK EVALUATION OF POINTS IN SECTION E

____

Space for Additional Information:

____

PERSONAL INFORMATION QUESTIONNAIRE

Each owner of the business must fill out this entire section. A business manager who is not an owner should fill out sections F1 through F5.

Name and Surname ______________________________________

Home Address ______________________________________

____

Home Telephone ______________________________________

Civil ID ______________________________________

If you have resided at this address for less than 10 years, please specify previous address:

____

____

Date and Place of Birth: ______________________________________

Citizenship: ______________________________________

Profession: ______________________________________

F1. Education and Qualifications:

____

____

____

F2. Do you have a criminal record? If yes, give details.

____

____

____

F3. Have you ever been unable to meet your financial obligations? If yes, give details.

____

____

____

F4. Employment History

From	To	Employer (Full Name)	Position	Industry	Exact Duties

F5. Current or Past Ownership or Shares in any Other Businesses (Specify if yes)

Name and Address	Legal Status	% Owned	Type of Business	Currently Owned?
________________	__________	__________	_________	____________
________________	__________	__________	_________	____________
________________	__________	__________	_________	____________

F6. People Sharing the Household with Applicant

Name and Surname	Relationship	Age
____________________________	___________________	_______
____________________________	___________________	_______
____________________________	___________________	_______
____________________________	___________________	_______

F7. Monthly Family Income (including applicant)

Remuneration for work ________________
Dividends from business ________________
Income from real property ________________
Other income (specify)
______________________________ ________________
______________________________ ________________

Total Monthly Income: ______________

F8. Total Monthly Expenses: ________________

F9. Personal Financial Summary as of Date

ASSETS

Item	**Amount**
Cash at home and in bank	_________________
Securities	_________________
Receivables Due	_________________
Inventories	_________________
Loans given to others	_________________
Real property	_________________
Vehicles	_________________
Other assets (specify)	
______________________________	_________________
** T**OTAL ASSETS**	_________________

LIABILITIES

Item	Amount
Short-term loans	________________
Long-term loans	________________
Taxes owed	________________
Other liabilities (specify)	________________
TOTAL LIABILITIES	________________

Assets minus liabilities = net worth ________________

** **Total liabilities + net worth** ________________

****These two amounts must be equal.**

Analysis of Personal Assets and Liabilities

F10. Bank Deposits

Name of Bank	Address	Type of Account	Amount
________________	________________	________________	________________
________________	________________	________________	________________
________________	________________	________________	________________

F11. Name and phone number of a person to contact at each bank:

____

____

F12. Securities

Name Value	**Number**	**Par Value**	**Current Market**
________________	__________	__________	__________
________________	__________	__________	__________

F13. Receivables Due

Debtor	Amount	Since When?	Expected Repayment Date	Current? How many days past due?

F14. Vehicles

Model	Year Made	Year Purchased	Purchase Price	Residual Balance Value

F15. Real Estate Property

Address	Use	Land/Building (square meters)		Year Purchased	Year Built
			Land		XXXXXX
			Bldg		
			Land		XXXXXX
			Bldg		
			Land		XXXXXX
			Bldg		

F16. Other assets (specify)

____
____
____

Analysis of Liabilities

F17. Short-term loans (up to one year)

Lender	Loan Amount		Due Date	Interest Rate (%)	Monthly Pmt	Loan Security
	Initial	Outstanding				

F18. Long-term loans (in excess of one year)

Lender	Loan Amount		Due Date	Interest Rate (%)	Monthly Pmt	Loan Security
	Initial	Outstanding				

F19. Liabilities related to taxes (describe)

____
____

F20. Other liabilities (describe)

____
____
____

F21. Do you have any other liabilities, for example those resulting from issued guarantees? If yes, describe.

____
____
____
____

****

BANK EVALUATION:

____
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IMPORTANT!

[Bank] will start processing the application only after the applicant provides all data and documents required for a proper assessment of his or her credit capacity. Any delays in presentation of said data and documents will result in an extension of the application evaluation period. By submitting this application, the applicant declares his or her wish to obtain financing. However, the applicant understands that [Bank] by accepting this application, are in no way obligated to provide this financing.

Copies of the following documents are an integral part of the [Bank] loan application and must be attached to this document

1. Company's court registration decision
2. Company tax registration
3. Statistical registration
4. Official financial statements (balance sheet and income statement) for the last fiscal year
5. Tax declaration for the last fiscal year
6. Financial statements (balance sheet and income statement) for the last financial period (prepared no more than 90 days prior to submission of application)
7. Documents proving ownership of assets being proposed as collateral

Copies of the following documents are a part of the [Bank] loan application and must be attached to this document if they apply to your company. Please check the box of each document you are attaching.

1. Documents proving ownership of company assets (machinery, real estate, etc.).
2. Rental or lease agreements
3. Licenses or permits
4. Chamber of Commerce registration
5. VAT registration
6. Specific information about assets to be purchased with loan proceeds (offers, letters, pro forma invoices, purchase contracts, auction documentation, etc.)
7. Contracts with suppliers
8. Contracts with customers
9. Existing Insurance policies
10. Existing loan agreements, repayment schedules and security documents
11. Construction plans, costs and completion schedules, if the proposed project includes construction or renovation

ANNEX N. CROP TEMPLATES

NOTE: Fill in only white boxes		
CROP:		**CORN**
GENERALASSUMPTIONS		
Crop cycle (in months)		0
Number of hectares:		0
Estimated sales price/kg:		0.00
Estimated kg /hectare:		0
Cost of land rental/hectare:		0.00
Tax rate		0%
INTEREST EXPENSE		
Loan amount:		0
Loan period (months)		0
Interest rate		0.00%
INPUT COSTS/HECTARE		
	Cost/kg	# kg required/hectare
Seeds	0.00	0.00
Fertilizer	0.00	0.00
Nitrogen	0.00	0.00
Phosphate	0.00	0.00
Potassium	0.00	0.00
Lime	0.00	0.00
Herbicide	0.00	0.00
Insecticide	0.00	0.00
Other	0.00	0.00
Other	0.00	0.00
Other	0.00	0.00
Total Input Costs/Hectare		**0.00**
OPERATIONAL COSTS/HECTARE		
Labor		
Number of workers required per hectare		0
Monthly cost per worker		0
Total Labor Costs/Hectare		**0**
Equipment Rental Costs:	Cost per day	# of days required/hectare
Combine	0.00	0
Grain cart	0.00	0
Haul	0.00	0
Handle (auger)	0.00	0
Other	0.00	0
Other	0.00	0
Other	0.00	0
Total Equipment Rental Costs/Hectare		**0**
Transport Costs	Cost/load	Loads needed/hectare
Cost per load	0.00	0
Total Transport Cost/ Hectare		**0**
Total Operational Costs / Hectare		**0**

NOTE: Fill in only white boxes

INCOME STATEMENT PER CROP CYCLE

Total Revenue	0.00	#DIV/0!
Input Costs		
Seeds	0.00	#DIV/0!
Fertilizer	0.00	#DIV/0!
Nitrogen	0.00	#DIV/0!
Phosphate	0.00	#DIV/0!
Potassium	0.00	#DIV/0!
Lime	0.00	#DIV/0!
Herbicide	0.00	#DIV/0!
Insecticide	0.00	#DIV/0!
Other	0.00	#DIV/0!
Other	0.00	#DIV/0!
Other	0.00	#DIV/0!
Total Cost of Sales	0.00	#DIV/0!
Gross Profit	0.00	#DIV/0!
Operating Expenses		
Land rental	0.00	#DIV/0!
Labor costs	0.00	#DIV/0!
Equipment rental: combine	0.00	#DIV/0!
Equipment rental: grain cart	0.00	#DIV/0!
Equipment rental: haul	0.00	#DIV/0!
Equipment rental: handle (auger)	0.00	#DIV/0!
Transportation cost	0.00	#DIV/0!
Other	0.00	#DIV/0!
Other	0.00	#DIV/0!
Other	0.00	#DIV/0!
Total Operating Expenses	0.00	#DIV/0!
Earnings Before Interest and Taxes	0.00	#DIV/0!
Interest expense	0.00	#DIV/0!
Other income and (expenses)	0.00	#DIV/0!
Earnings Before Taxes	0.00	#DIV/0!
Taxes	0.00	#DIV/0!
Net Profit	**0.00**	#DIV/0!

ANNEX O. SOYBEAN PROTOCOL

PROTOCOL DEVELOPMENT FOR SOYBEANS 2012

FARMING ACTIVITY	START TIME	END TIME	RESOURCE			RESPONSIBILITY
			QTY	UNIT PRICE	TOTAL	
Clearing of land	12/05/12	30/05/12	2 people	5	10	NF/Lead farmer
Ploughing of land	1/06/12	15/06/12	½	30	30	NF/Lead farmer
Harrowing	1/06/12	15/06/12	½	15	15	NF/Lead farmer
Ridging	1/06/12	15/06/12	½	15	15	NF/Lead farmer
Procurement of Seed	May	10/06/12	10kg	5.4	54	Simple Prince/ Baba Kumasi
Procurement of inoculant	25/05/12	10/06/12	50 grams	2.5	2.5	Proj. staff/NF/Lead farmer
Pre-Herbicide	1/06/12	15/06/12	1 lit	15	15	LDC Ghana
Sowing	10/06/12	10/07/12	4 people	5	20	NF/Lead farmer/proj.staff
Herbicide application	10/06/12	10/07/12	1 person	5	5	LDC Ghana/proj. staff/NF
Fertilizer application	10/06/12	10/07/12	1 ½ bags	30	45	Yara/proj. staff/NF
2nd weeding	10/08/12	10/09/12	8 people	5	40	NF/Lead farmer
Pesticide spraying	Germination period	Before harvest	1 lit	7	7	LDC Ghana/proj. staff/NF
Spraying services	Germination period	Before harvest	1 person	5	5	LDC Ghana/proj. staff/NF
Harvesting	10/10/12	20/10/12	4 people	5	20	NF/Lead farmer
Gathering	10/10/12	20/10/12	2 people	5	20	NF/Lead farmer
Threshing	10/10/12	20/10/12	4 people	5	20	NF/Lead farmer
Willow	10/10/12	20/10/12	3 people	5	15	NF/Lead farmer

Transportation	10/10/12	20/10/12	5 bags	2	10	NF/Lead farmer
Loading on /Loading off	10/10/12	20/10/12	5bags	2	10	NF/Lead farmer
Storage			5 bags	2	10	NF/Lead farmer
TOTAL					378.50	

* Nuclease farmer

ANNEX P. RICE BUDGET EXAMPLE

USAID - ADVANCE Project, June 2012

N.B. The below table indicates the estimated costs per hectare and acres for rice production in Northern Ghana in the 2012 cultivation season

Estimated Average Costs of Production for Rain fed Rice Crop in 2012 Season in NORTHERN REGION				
Activity Cost	**Price per Acre Correctly Grown**	**Price Per Acre Actually Grown**	**Price Per Hectare Correctly Grown**	**Price Per Hectare Actually Grown**
Cost of Land	-	-	-	-
Cost of plowing (range Ghc 30-50) average Ghc 35.00	35.00	35.00	86.45	86.45
Cost of land preparation (double harrowing)	35.00	-	86.45	0
Cost of land preparation (using power tiller) irrigation	70.00	-	172.90	0
Cost of Certified Seed (40kg at .875 Ghc/kg)	35.00	35.00	86.45	86.45
Cost of labor for sowing (10 people / day)	20.00	20.00	49.40	49.40
Cost of SRI transplanting-irrigation	100.00	-	247.00	-
Cost of Weedicide chemical (second application)	13.00	13.00	32.11	32.11
Cost of Fertilizer (2 bags NPK at Ghc 39 each + Urea 1 bag Ghc 35)	113.00	113.00	279.11	279.11
Scaring	60.00	20.00	148.20	49.40
Cost of Weedicides (1 liter per acre Ghc 6 each)	6.00	6.00	14.82	14.82
Cost of Services (spraying/advisory/information) spraying Ghc 5-8 / acre x 2	10.00	10.00	24.70	24.70
Cost of harvesting at the field (combine)	120.00	120.00	296.40	296.40
Cost of Sacks (Ghc 3 per bag)	60.00	30.00	148.20	74.10
Cost of Harvesting/Gathering (manual Labor - 10 people) - 60 if a combine is not used			-	-
Cost of threshing (manual labor) - 60 if a combine is not used			-	-

Transportation Cost (from farm to house) Ghc 1.5 per bag	30.00	15.00	74.10	37.05
Total Cost of Production	**707.00**	**417.00**	**1,746.29**	**1,029.99**
Yield per acre (with proper practices yield of 6-18 x 100 kg bags per acre)	20.00	10.00	32.00	24.70
Income from Sales (Ghc 50 per 85 kg bag at harvest and stays stable throughout selling period) *	1,000.00	500.00	1,600.00	1,235.00
Gross profit	1,000.00	500.00	1,600.00	1,235.00
Net profit	**293.00**	**83.00**	**(146.29)**	**205.01**

USAID - ADVANCE Project, June 2012

N.B. The below table indicates the estimated costs per hectare and acres for soybean production in Northern Ghana in the 2012 cultivation season

Estimated Average Costs of Production for Soybean Crop in 2012 Season in NORTHERN REGION				
Activity Cost	**Price per Acre Correctly Grown**	**Price per Acre Actually Grown**	**Price Per Hectare Correctly Grown**	**Price per Hectare Actually Grown**
Cost of Land	-	-	-	-
Cost of plowing (range Ghc 30-40) average Ghc 35.00	35.00	35.00	86.45	86.45
Cost of land preparation (harrowing)	17.50	-	43.23	-
Cost of Certified Seed (Subsidized) (Ghc 1 per kg at 18kg)	18.00	10.00	44.46	24.70
Cost of labor for sowing (range of Ghc 15-30) depending on number of people hired and whether ropes are used for planting in rows (labor costs 1 person Ghc 3 per day on average) Averaging cost of use of dibbler/manual planters	30.00	25.00	74.10	61.75
Cost of labor for weeding (1st, 2nd) (labor costs 1 person Ghc 3 per day on average) approx. Ghc 15 per acre	30.00	15.00	74.10	37.05
Cost of Fertilizer (1 bag NPK at Ghc 39 each)	39.00	-	96.33	-
Cost of Weedicides (1 liter per acre each; Ghc 7 post emergence, Ghc 16 pre-emergence	23.00	7.00	56.81	17.29

Cost of Inoculants (Ghc 7.50 per 200 gms pack) 1/2 pack used per 20 kg seed per acre	3.75	3.75	9.26	9.26
Cost of Services (spraying/advisory/information) spraying Ghc 5-8 / acre x 2 (or one time)	12.00	5.00	29.64	12.35
Cost of harvesting at the field (labor)	20.00	20.00	49.40	49.40
Cost of Jute Sacks (Ghc 2.5 per bag)	35.00	20.00	86.45	49.40
Cost of mechanical processing (threshing equipment)	25.00	-	61.75	-
Transportation Cost (from farm to house) Ghc 1-3 per bag, average Ghc 2 per bag	28.00	16.00	69.16	39.52
Total Cost of Production	**316.25**	**156.75**	**781.14**	**387.17**
Yield per acre (with proper practices yield of 6-18 x 100 kg bags per acre)	14.00	8.00	23.00	18.00
Income from Sales (Ghc 35-100 per 100 kg bag at harvest and stays stable throughout selling period) *	770.00	440.00	1,265.00	990.00
Gross profit	770.00	440.00	1,265.00	990.00
Net profit	**453.75**	**283.25**	**483.86**	**602.83**

USAID - ADVANCE Project, June 2012

N.B. The below table indicates the estimated costs per hectare and acres for maize production in Northern Ghana in the 2012 cultivation season

Estimated Average Costs of Production for Maize Crop in 2012 Season in NORTHER REGION				
Activity Cost	**Price per Acre Correctly Grown**	**Price per Acre Actually Grown**	**Price Per Hectare Correctly Grown**	**Price per Hectare Actually Grown**
Cost of Land	-	-	-	-
Cost of plowing (range Ghc 30-50) average Ghc 35.00	30.00	35.00	74.10	86.45
Cost of land preparation (harrowing)	30.00	-	74.10	-
Cost of Certified Seed (Ghc 1 subsidized seed per 1kg seed) - 9 kgs used	9.00	9.00	22.23	22.23

Cost of labor for sowing (range of Ghc 15-30) depending on number of people hired and whether ropes are used for planting in rows (labor costs 1 person Ghc 3 per day on average) Averaging cost of use of dibbler/manual planters	25.00	25.00	61.75	61.75
Cost of labor for weeding (1st, 2nd) (labor costs 1 person Ghc 4.5 per day on average) approx. Ghc 15 per acre	22.50	22.50	55.58	55.58
Weed twice per season	20.00	-	49.40	-
Cost of Fertilizer (1 bag sulphate ammonium – Ghc 39, 2 bags NPK at Ghc 39 each)	117.00	74.00	288.99	182.78
Cost of Weedicides (1 liter per acre Ghc 15 per acre) x two applications	30.00	15.00	74.10	37.05
Cost of Services (spraying/advisory/information) spraying Ghc 5-8 / acre x 2	20.00	10.00	49.40	24.70
Cost of harvesting at the field (labor)	30.00	30.00	74.10	74.10
Cost of Jute Sacks (Ghc 2.5 per bag)	25.00	25.00	61.75	61.75
Cost of mechanical processing (threshing equipment)	30.00	30.00	74.10	74.10
Transportation Cost (from farm to house) Ghc 1 per bag	15.00	10.00	37.05	24.70
Total Cost of Production	**403.50**	**285.50**	**996.65**	**705.19**
Yields per acre (with proper practices yield of 10-18 acre)	15.00	10.00	23.00	18.00
Income from Sales (Ghc 35-60 per 100 kg bag at harvest and stays stable throughout selling period) if all sold (and maize is used for HH consumption) * and **	750.00	400.00	1,035.00	630.00
Gross profit	750.00	400.00	1,650.00	880.00
Net profit	**346.50**	**114.50**	**762.30**	**251.90**

ANNEX Q. FAMERS CASHFLOW STATEMENT

	2012								2013						
	Dec	Feb	Mar	May	June	July	Aug	Nov	Jan	Mar	Apr	Jun	Sep	Oct	TOTAL
Beginning Cash Balance	4,000	11,250	20,450	34,585	24,935	27,935	27,935	26,285	29,585	29,585	29,585	29,585	29,585	29,585	
Cash Inflows															
Sale of White maize	8,250		11,400		15,600										35,250
Sale of maize seeds					7,700	5,500									13,200
Sale of Soya bean seed						330									330
sale of cowpea								3,300							
sale of millet		1,800													
sale of groundnut			400												
sale of sorghum		900													
Sale of Rice		7,500		11,250											18,750
Outgrowers (Maize)					7,650										7,650
Outgrowers(rice)			3,335												
Outgrowers (soybean)					1,200										1,200
Total Cash Inflows	**8,250**	**10,200**	**15,135**	**11,250**	**32,150**	**5,830**	**-**	**3,300**	**-**	**-**	**-**	**-**	**-**	**-**	**76,380**
Available Cash	**12,25**	**21,45**	**35,585**	**45,835**	**57,085**	**33,765**	**27,935**	**29,585**	**29,585**	**29,585**	**29,585**	**29,585**	**29,585**	**29,585**	

Balance	**0**	**0**						
Cash Outflows								
Operations								
Cost for producing White maize				8,750	8,750	8,750		26,250
Cost for producing maize seed				2,250	2,250	2,250		6,750
Cost for producing Soybean seed					550	550	550	1,650
cost of producing cowpea					400	300	300	
cost of producing millet				800	800	800		
cost of producing groundnut						375		
Cost for producing sorghum					800	800	800	2,400
cost of producing rice				2,100	2,100			
Salaries and wages	1,000	1,000	1,000	1,000	1,000	1,000		6,000
Ourgrower cash cost				6,000	6,500			12,500
Loan repayment					6,000	5,600		
Permits and licenses								
Fuel cost for Transport Services								

Other															
Other															-
Total Operations	**1,000**	**1,000**	**1,000**	**20,900**	**29,150**	**20,425**	**1,650**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**55,550**
Total Cash Outflows	**1,000**	**1,000**	**1,000**	**20,900**	**29,150**	**20,425**	**1,650**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**55,550**
Net increase (Decrease) in Cash	**7,250**	**9,200**	**14,135**	**(9,650)**	**3,000**	**(14,595)**	**(1,650)**	**3,300**	**-**	**-**	**-**	**-**	**-**	**-**	**20,830**
Ending Cash Balance	**11,250**	**20,450**	**34,585**	**24,935**	**27,935**	**13,340**	**26,285**	**29,585**	**29,585**	**29,585**	**29,585**	**29,585**	**29,585**	**29,585**	

ANNEX R. "FIVE Cs" OF CREDIT ANALYSIS

Capacity to repay is the most critical of the five factors. The prospective lender will want to know exactly how you intend to repay the loan. The lender will consider the cash flow from the business, the timing of the repayment, and the probability of successful repayment of the loan. Payment history of existing credit relationships — personal or commercial — is considered an indicator of future payment performance. Prospective lenders also will want to know about your contingent sources of repayment.

Capital is the money you have personally invested in the business and is an indication of how much you have at risk should the business fail. Prospective lenders and investors will expect you to have contributed from your own assets and taken on personal financial risk to establish the business before asking them to commit any funding.

Collateral or guarantees are additional forms of security you can provide the lender. Giving a lender collateral means that you pledge an asset you own, such as your home, to the lender with the agreement that it will be the repayment source in case you can't repay the loan. A guarantee, on the other hand, is just that — someone else signs a guarantee document promising to repay the loan if you can't. Some lenders may require such a guarantee in addition to collateral as security for a loan.

Conditions focus on the intended purpose of the loan. Will the money be used for working capital, additional equipment, or inventory? The lender also will consider the local economic climate and conditions both within your industry and in other industries that could affect your business.

Character is the general impression you make on the potential lender or investor. The lender will form a subjective opinion as to whether you are sufficiently trustworthy to repay the loan or generate a return on funds invested in your company. Your educational background and experience in business and in your industry will be reviewed. The quality of your references and the background and experience of your employees also will be taken into consideration.

What do the 5 Cs of credit mean to a small business?
One of the most common questions among small business owners seeking financing is, "What will the bank be looking for from me and my business?" While each lending situation is unique, many banks utilize some variation of evaluating the five Cs of credit when making credit decisions: character, capacity, capital, conditions and collateral.

1. **Character.** What is the character of the company's management? What is management's reputation in the industry and the community? Lenders want to put their money with those who have impeccable credentials and references. The way the owner/manager treats employees and customers, the way he or she takes responsibility, timeliness in fulfilling obligations are all part of the character question.

This is really about the owner or manager and his/her personal leadership. How the owner or manager conducts business and personal life gives the lender a clue about how he/she is likely to handle leadership as a CEO. It's a banker's responsibility to look at the downside of making a loan. The owner/manager's character immediately comes into play if there is a business crisis, for example. Small business owners place their personal stamp on everything that affects their companies. Often, banks do not differentiate between the owner and the business. This is one of the reasons why the credit scoring process evolved, with a large component being personal credit history.

2. **Capacity.** What is the company's borrowing history and record of repayment? How much debt can the company handle? Will it be able to honor the obligation and repay the debt? There are numerous financial benchmarks, such as debt and liquidity ratios, that lenders evaluate before advancing funds. Become familiar with the expected pattern in the particular industry. Some industries can take a higher debt load; others may operate with less liquidity.

3. **Capital.** How well capitalized is the company? How much money has been invested in the business? Lenders often want to see that the owner has a financial commitment and has taken on risk for the company. Both the company's financial statements and the personal credit are keys to the capital question. If the company is operating with a negative net worth, for example, will the owner be prepared to add more of his or her own money? How far will his or her personal resources support both the owner and the business as it is growing? If the company has not yet made profits, this may be offset by an excellent customer list and payment history. All of these issues intertwine.

4. **Conditions.** What are the current economic conditions, and how do they affect the company? If the business is sensitive to economic downturns, for example, the bank wants to feel comfortable with the fact that the business is managing productivity and expenses. What are the trends for the industry, and how does the company fit within them? Are there any economic or political hot potatoes that could negatively affect the growth of the business?

5. **Collateral.** While cash flow will nearly always be the primary source of loan repayment, bankers should look closely at the secondary source of repayment. Collateral represents assets that the company pledges as an alternate repayment source for the loan. Most collateral is in the form of hard assets, such as real estate and office or manufacturing equipment. Alternatively, accounts receivable and inventory can be pledged as collateral.

   The collateral issue is a bigger challenge for service businesses, as they have fewer hard assets to pledge. Until the business is proven, a loan should nearly always have collateral. If it doesn't come from the business, the bank should look to personal assets.

Keep in mind that, in evaluating the five C's of credit, lenders don't give equal weight to each area. Lenders are cautious, and one weak area could offset all the other strengths. For example, if the industry is sensitive to economic swings, the company may have difficulty getting a loan during an economic downturn — even if all other factors are strong. And if the owner is not perceived as a person of character and integrity, there's little likelihood he or she will receive a loan, no matter how good the financial statements may be. Lenders evaluate the company as a total package, which is often more than the sum of the parts. The biggest element, however, will always be the owner.

ANNEX S. COLLATERAL CONSIDERATIONS

Type of Collateral	Questions to Consider
Residential/commercial real estate *Reasonable liquidation value = 60-70% of value*	• Who owns the property? • Would losing this property have a significant effect on the borrower (psychological value of property)? • Are property values in the district increasing or declining? • What is the condition of the property? Has the property recently been renovated?
Equipment *Reasonable liquidation value = 40-50% of value*	• Who legally owns the equipment? • How old is it? Is it in good condition? • Would there be a market for the equipment if the financial institution had to sell it? (Typically, the more specialized the equipment, the more difficult it is to find a buyer.) • How important is the equipment to the borrower's operations (psychological value of property)? Is it integral to the borrower's operations or a piece of equipment that is no longer used? • How difficult is it for the equipment to be moved?
Vehicles *Reasonable liquidation value = 30-40% of value*	• Who legally owns the vehicle? • How old is it? Is it in good condition? • How important is the equipment to the borrower's operations (psychological value of property)? • Can/should the vehicle be locked during the term of the loan? • Will there be insurance for the vehicle if the borrower will continue to use it?
Inventory *Reasonable liquidation value =* *0-10% of value — raw materials and work in progress* *50-60% of value — finished products*	• What is the average level of inventory that the business typically maintains? • How important is the inventory to the borrower's operations (psychological value)? Is this inventory that the borrower doesn't expect to sell? • Should the inventory be locked? • What is the shelf life of the inventory? Is there a risk of obsolescence during loan term? • How difficult would it be for the financial institution to sell this inventory?
Accounts Receivables *Reasonable liquidation value = 50-60% of value*	• Used only for borrowers with stable sales, credit functions and borrowers. • How difficult would it be for the financial institution to collect these receivables?

When considering collateral coverage, it is important to remember that the collateral position will improve with each repayment of principal that the borrower makes (assuming that the collateral holds its value over the period of the loan). Consider the following example:

Example of Collateral Coverage

Loan: CDF 450 million for 24 months at 24% interest (equal monthly payments). Collateral liquidation value: CDF 675 million in Month 0 **Collateral Coverage**					
Month 0	**Month 3**	**Month 6**	**Month 9**	**Month 12**	**Month 18**
1.50	1.67	1.89	2.21	2.68	5.067

ANNEX T. COLLATERAL ASSESSMENT DEED

Collateral Assessment Deed

Borrower						Loan agreement #
						Collateral agreement #
Date		Appraiser				
Raw material		Inventory		Equipment		Transportation

Type of Warehouse							
Warehouse		Office		Sales point		Private house	
Stored in the borrower's private warehouse				Stored in the third party's warehouse			
Exact address of the collateral entity							

Monitoring Timing of Collateral				
1.	Free cash flow timing			
2.	Monitoring of minimal balance			
3.	Timing of bank sealing			
4.	Customs control			

Responsible for Monitoring			**Name**
1.	Monitored by bank manager		
2.	Monitored by third party		

Description of Subject

	Item	**Price per Unit $**	**Liquidation Price $**	**Quantity**	**Total Cost $**
1					
2					
3					
4					
5					
6					
7					
8					

(In case the number of collateral items exceeds 10 units, attach a full list to this document).

Monitoring frequency	

- Credit manager signature ____________________________

/I confirm given information/

- Controller ______________________________

/I confirm given information/

ANNEX U. LOAN MEMORANDUM

Illustrative Loan Memorandum

Answer all questions in italic font, and erase the questions. Fill in all blanks. Delete highlighted items, if not needed.

Production Loan Write-up **Bank, branch: __**

Company's name		**Borrower's name**	
Company's address		**Borrower's address**	
Company's telephone		**Borrower's telephone**	
Other contact name and number			
Type of business			
Legal structure			
Staff (present/planned)	/		
Ownership official	(account for 100%)		
Ownership unofficial			
Loan amount (USD)	$		
Loan term/payment frequency	Months/semi-monthly payments		
Interest rate	% per month declining balance – equal installments		
Other conditions			
Date			
Exchange rate used	USD1= ____ CDF		
Original translation by			

1. PROPOSED PROJECT

- Briefly description of what the business does.
- How will the loan be used?
- Impact this project will have on the business (lower COGS, increased production capacity, etc.).

	Item	**Loan**	**Owner's Contribution**		**Total Project Cost**
			To be done	**Completed**	
1					
2					
3					
4					
5	Inv Bureau, Notary & Collateralization				
6	Insurance				
7	Bank 1% withdrawal fee				
	Total	$ -	$ -		$ -
	% of Total	#DIV/0!	#DIV/0!		#DIV/0!

Project Costs *(double click on table to activate):*

- How will the loan be disbursed, and what is the timing of the disbursements? How will the disbursement be evidenced and verified? When will the project be complete (source of information, e.g., invoices, contractor quotes, etc.)?

- What is the source of owner's contribution? How has been or will be evidenced? How will it be controlled (deposit at the bank, transfer to supplier, etc.). The owner's contribution may only include owner's previous or concurrent investments in the project being financed.
- What other costs has the owner contributed over the last six months? What percentage of these contributions can be proven through invoices, bank transfers, and other means? (Do not ask the owner to get the invoice if they do not have it the first time you ask; anyone can get an invoice for anything.) If is not verifiable, state "This is according to the owner. There is no supporting documentation or invoices available."

2. STRENGTHS, WEAKNESSES, RISKS AND MITIGATING FACTORS

Clear and concise bullet point phrases. Include financial data points (example: based on historical data the borrower can repay the loan without increasing sales or profit). From these points the credit committee should be able to quickly get an entire overview of the project and business. It is your responsibility to identify all risks and mitigating factors of the loan; let the credit committee make the credit decision based on these points. **Include at least two points for each.**

Strengths	**Weaknesses**
1. Competitive advantages 2. Skilled and experienced management 3. Strong balance sheet 4. Profitable operating history 5. Ability to service debt from existing cash flow or with only slight sales or margin improvement 6. Importance of project being financed	1. Be honest. You should demonstrate your understanding of the borrower's key weaknesses of the borrower. 2. (e.g., one manager, no substitutes)
Risks (internal and external) 1. 2. 3.	**Mitigating Factors** 1. 2. 3.

3. CHARACTER

References: Did you check at least three references (suppliers, customers, bank, etc.)?

Company/ Contact	Type of Cooperation	Term of Cooperation	Date Loan Officer Contacted Referee	Comment of Referee

Scoring: (5= Excellent, 4=Good, 3=Satisfactory, 2= Poor, 1=Unsatisfactory)

Appraisal of Borrower/Management

1. Open and straightforward	
2. Relevant experience	
3. Strong character references	
4. Understanding of the market	
5. Commitment to the business	
6. Accounting records	
Average	

KEY

1. **Open and Straightforward**
   5 = Client responded very cooperatively, openly, and sincerely to all questions and provided additional information without questioning during the loan-analyzing period. Borrower gave all financial data on the first site visit without any problems. The borrower's honesty was verified during the verification process.
   4 = Client was open and provided all necessary information. Borrower gave all financial data on the first site visit.
   3 = The information received from client was mostly reliable, but during verification some discrepancies were found. The inconsistencies were accidental, not deliberate. Additional information was found by checking the client's records and sources. Client allowed credit officer to check internal records on the first visit.
   2 = The client was afraid to tell the truth, but later opened up; in the end, all information was provided. It was partially due to unawareness of the business and unwillingness to share available information. Client did not give internal records on the first visit.
   1 = Information from client was misleading or not available at all. Client refused to cooperate or was dishonest during due diligence.

2. **Relevant Experience**
   5 = Client/manager has more than three years of experience and has in-depth knowledge of the administrative, financial and technical areas of the business. Business has management depth.
   4 = Client/manager has more than two years of experience and has good administrative, financial, and technical business skills. Business has management depth.
   3 = Client/manager has good administrative skills but no specific financial or technical skills. The business has professional staff in these specific areas.
   2 = Client has poor administrative and no available technical staff in place. No management/technical depth.
   1 = Client is unaware of the business and has zero knowledge of business operations. No management/technical depth.

3. **Strong Character References**
   5 = At least four excellent and detailed references; no negative remarks.
   4 = At least three good references; no negative remarks.
   3 = At least three references; 90 percent positive.
   2 = Fewer than three references and/or there is a mixture of positive and negative responses.
   1 = Fewer than three references and/or mostly negative.

4. **Understanding of the Market**
   5 = Fully understands the market (i.e., competitors, suppliers, customers, etc.) and takes specific actions to fulfill the specific target and/or expand the target market.
   4 = Knows the market well, has identified and targeted specific customers, and tries to expand targets.
   3 = Has a good understanding of the market, tries to fulfill the target market, but makes no effort to expand knowledge of the market or target market.
   2 = Weak understanding of market, but is making an effort to understand it.
   1 = No understanding of market and no plans to improve.

5. **Commitment to the Business**
   5 = Fully committed to the business, devotes 110 percent to the business, and is the only business for the client.
   4 = Fully committed to the business, devotes 100 percent to the business, is present 100 percent of the time, and this business is the only business for the client.
   3 = Fully committed to the business, spends at least 90 percent of the time at the business, but may have other work/business.

2 = Spends less than 75 percent of time at the business and may have another business on the side.
1 = Completely uninvolved and not aware of situation in the business. Has other work/business.

6. Accounting Records
5 = Existing written internal records in good order for at least the past year, which the credit officer has verified through another source.
4 = Existing written internal records in good order for at least the past six months, which the credit officer has verified officer through another source.
3 = Existing written internal records in good order for at least the past six months which the credit officer cannot completely verify through another source.
2 = Willing to provide information, but has no written records.
1 = Not able or unwilling to provide internal records.

Comments:

Motivation to Repay

1. Desire to maintain reputation	
2. Desire to obtain future loans	
3. Pressure of collateral/substitute	
4. Reputation with [Bank]bank	
Average	

KEY

1. Desire to Maintain Reputation
5 = Extremely good reputation; this would be one of the strongest points to use for repayment.
4 = Extremely good reputation; would be one of the points to use for repayment.
3 = Extremely good reputation, but this would be a weak point to use for repayment.
2 = Good reputation, but this would be a weak point to use for repayment.
1 = Does not have a particularly good reputation and/or does not care about this factor.

2. Desire to Obtain Future Loans
5 = Will repay on time and definitely has future expansion plans for which a loan has been requested.
4 = Will repay on time and needs another loan.
3 = Will repay on time and will most likely apply for a future loan.
2 = Will repay on time and may apply for an additional loan, but does not have any immediate plans.
1 = Will repay on time, but probably will not need another loan.

3. Pressure of Collateral/Substitute
5 = Extremely significant psychological value (jewelry, newly renovated primary residence); will do anything to repay loan rather than have the collateral taken.
4 = Extremely significant psychological value (newly renovated primary residence); will repay loan rather than have the collateral taken
3 = Significant value (primary residence, equipment in SOC warehouse)
2 = Good value, but not so special (secondary residence, business premises)
1 = No pressure and/or third-party guarantee

4. Reputation with [Bank]Bank
5 = Repaid two or more loans without any problems; exemplary client; good, open relationship with bank

4 = Repaid one bank loan without any problems; cooperative, honest client; good relationship with bank.
3 = Repaid at least one bank loan with no problems or a few days delays due to external factors; good client.
2 = Referred by another bank client with one or more loans repaid without any problems.
1 = New client or had loan(s) with significant problems.

Comments:

4. CAPACITY

Credit History: If no official credit history, state "none" and delete the table

Lender (name of bank, other lender)	Amount	Interest rate/ Term	Date disbursed/ Date repaid *(Current loans outstanding *)*	Delays in repayment? Penalties paid?	For what purpose was the loan used?	Written letter from lender?
			/ *			
			/ *			

Previous collateral used to secure loans?

Business

1. Length of business history	
2. Future income from project	
3. Diverse customers	
4. Stable sales/little seasonal flux	
5. Credit history	
6. Secondary sources of income	
7. Alternative suppliers available	
8. Official income reported	
9. Effect during devaluation	
Average	

KEY

1. **Length of Business History (this exact business)**
   5 = > 3 years
   4 = 2-3 years
   3 = 1-2 years
   2 = 6m -1 year
   1 = <6m

2. **Future Income from Project**
   5 = Significant future average monthly EBT growth >20 percent and < 50 percent and/or will reduce COGS >20 percent.
   4 = Future average monthly EBT growth >10 percent and/or will reduce COGS >10 percent.
   3 = Future average monthly EBT growth >5 percent and/or will reduce COGS >5 percent.
   2 = Project will have little EBT growth and may reduce COGS by a small amount.
   1 = There is negative EBT growth or no effect in sales or COGS.

3. **Diverse Customers**
   5 = more than 30 customers, retail chains, or distribution channels and proportional concentration of sales per customer; not more than 10 percent for any one customer; if some customers withdraw, the business will survive.

4 = More than 20 customers, retail chains, or distribution channels and proportional concentration of sales per customer; not more than 20 percent for any one customer; if some customers withdraw, the business will survive.
3 = More than 10 customers, retail chains, or distribution channels and proportional concentration of sales per customer (not more than 25 percent for any one customer); if one or two customer, withdraw it will not greatly affect client's business.
2 = Client has fewer than 10 customers and/or sales to one or more customer equals more than 25 percent of total sales.
1 = Client has no diversification of client base, fewer than 10 customers and/or sales to one or more customer equals more than 40 percent of total sales.

4. Stable Sales/Little Seasonal Flux
5 = Historical sales are stable with no seasonal fluctuations and/or may have increased fluctuation for a couple of months in high season.
4 = Sales are stable with less than 10 percent fluctuation and/or may have increased fluctuation for a few months in high season.
3 = Sales are relatively stable with < 20 percent fluctuation in low seasons.
2 = Sales are not stable (>20 percent fluctuation) in certain months and need a careful cash flow planning for high and low seasons.
1 = Sales are not stable, with high fluctuations that make the business extremely risky; client is not able to plan for the fluctuations.

5. Credit History
5 = Repaid two or more loans without any problems with lending bank or another bank.
4 = Repaid one loan without any problems with lending bank or another bank.
3 = Repaid at least one loan without any problems or a few days delay due to external factors with lending bank or another bank.
2 = No credit history.
1 = Loan history with significant problems or defaulted.

6. Secondary Sources of Income
5 = Significant stable secondary source(s) of income; could repay loan with this/these source(s).
4 = Stable secondary source(s) of income that contribute to income of the client.
3 = More than one source of income, but not stable.
2 = No secondary source of income.
1 = Client has secondary source(s) of income, which pulls a large portion of income from the primary (bank) source.

7. Alternative Suppliers Available
5 = More than five reliable suppliers and a proportional concentration of purchases per supplier. Other suppliers are available for the same products.
4 = Diversified supplier base and not more than 25 percent purchased per supplier. Other suppliers are available for the same products.
3 = Little diversification of supplier base, but many other suppliers are available for the same product.
2 = Poor supplier base; depends on supplier's viability, and not many other suppliers for the product.
1 = Client has no diversification of supplier base and /or existing supplier(s) very risky and unreliable

8. Official Income Reported
5 = More than 75 percent of income is reported and verified by VAT and profit invoices; credit officer has these in the file
4 = More than 50 percent of income is reported and verified by VAT and profit invoices; credit officer has these in the file

3 = More than 35 percent of income is reported and verified by VAT and profit invoices; credit officer has these in the file
2 = More than 20 percent of income is reported and verified by VAT and profit invoices; credit officer has these in the file
1 = Less than 20 percent of income is reported and verified by VAT and profit invoices; credit officer has these in the file

9. Effect During Devaluation
5 = Almost no effect on sales demand, and prices stay the same in U.S. dollars (e.g., doctors, prescribed drugs)
4 = Little effect on sales demand, and prices stay almost the same in U.S. dollars (e.g., sugar, domestic pasta, public transport)
3 = Some variance in sales demand, and prices vary in U.S. dollars from 10 to 20 percent (e.g., cigarettes, meat, cheap clothes)
2 = Sales demand decreases, and prices vary in U.S. dollars > 20 percent (e.g., wine, photo labs, high-end luxury goods; in some cases, when almost all buyers have high incomes, the demand will be lower than with medium-priced products)
1 = Significant decrease in sales demand, and prices vary in U.S. dollars > 30 percent (e.g., cakes, taxis, medium-priced clothes)

Comments:

Competitive Advantages before loan

1. Cheapest price	
2. Best quality	
3. Relationship with clients	
4. Delivery to clients	
5. Quick responses	
6. Location	
7. Marketing efforts/plan	
8. Convenient hours	
9. Payment terms to customers	
10. Suppliers payment terms	
11. Assortment of goods	
12. Customer service	
13. Renovation of facility	
14. Direct Competitors	
Average	

KEY

1. Cheapest Price
5 = Lowest price by more than 10 percent on all products.
4 = Lowest price by more than 5 percent on all products.
3 = Lowest price on all products.
2 = Same price as the competitor or a mixture of higher and lower prices.
1 = Prices are higher; not a competitive advantage.

2. Best Quality
5 = Best quality of all like products.
4 = Better than most of the same products.
3 = Exactly the same quality.
2 = Comparable quality.
1 = Lower quality; not a competitive advantage.

3. **Relationship with Clients**
   5 = Majority of clients are repeat customers; they are always completely satisfied with the product and service.
   4 = Many clients are repeat customers; they have verified the good service and management.
   3 = Some clients are repeat customers; they are satisfied with the service and management; nothing special.
   2 = This business does not depend on relationships with the clients but has other competitive advantages on which it concentrates.
   1 = Negative or no relationship with the clients established; not a competitive advantage.

4. **Delivery to Clients**
   5 = Delivers items to clients free of charge.
   4 = Delivers to clients.
   3 = Will deliver to good clients.
   2 = Delivers from time to time.
   1 = No delivery provided; not a competitive advantage.

5. **Quick Responses**
   5 = Follows up on customers' orders within one day.
   4 = Follows up on all customers in a timely manner.
   3 = Follows up with all customers.
   2 = Sometimes follows up with customers.
   1 = Does not follow up with customers; not a competitive advantage.

6. **Location**
   5 = Excellent location that has significant advantages over competitors.
   4 = Very good location with advantages over competitors.
   3 = Good location for business.
   2 = Poor location; competitors have better locations.
   1 = Extremely bad location; not a competitive advantage.

7. **Marketing Efforts/Plan**
   5 = Completes regular market analysis and acts on it with in-depth marketing and advertising campaigns.
   4 = Basic marketing strategy with definite efforts and plans to implement it.
   3 = Some marketing/advertising, but no real strategy.
   2 =Little or no marketing/advertising efforts other than a sign on the front door.
   1 =No marketing/advertising; not a competitive advantage.

8. **Convenient Hours**
   5 = Open for extended hours (24 hours per day).
   4 = Open for more than normal business hours.
   3 = Open during normal business hours.
   2 = Open during normal business hours, but owner may close to re-supply or for other reasons.
   1 = Claims to be open during normal business hours, but frequently is closed without warning. Not a competitive advantage.

9. **Payment Terms to Customers**
   5 = Gives advantageous terms for clients; better than all competitors.
   4 = Slightly better terms than competitor.
   3 = Cash payment.
   2 = Partial prepayment.
   1 = Full prepayment; not a competitive advantage.

10. **Suppliers Payment Terms**

5 = All suppliers allow payment after sales of items or a few weeks grace.
4 = All suppliers allow payment after a few weeks.
3 = Some suppliers allow payment after a few days.
2 = Suppliers demand cash upon buying.
1 = Suppliers demand partial or full prepayment; not a competitive advantage.

11. Assortment of Goods
5 = 50 percent more than closest competitors.
4 = 25 percent more than closest competitors.
3 = More than closest competitors.
2 = Same as closest competitors.
1 = Less than closest competitors; not a competitive advantage.

12. Customer Service
5 = Customers are always first; will go out of their way to satisfy the customers' demands.
4 = Always attends to clients in a pleasant and helpful manner; tries to fulfill all client needs.
3 = Attends to clients in a pleasant and helpful manner, but does not make extra effort to always please the customers.
2 = Customers are not the first priority, but staff is pleasant to the customers.
1 = Customers are not treated well; some complaints have been lodged; not a competitive advantage.

13. Renovation of Facility
5 = Modern/newly renovated.
4 = Modern.
3 = Looks nice, but not renovated.
2 = Old style.
1 = Old style and not neat or clean; not a competitive advantage.

14. Direct Competitors
5 = Only business of this type within 1 kilometer
4 = Only business of this type within 500 meters
3 = Only business of this type within 100 meters
2 = Direct competitor(s) within 500 meters
1 = Direct competitor(s) within 100 meters of the shop

Comments:

Suppliers

Name	What do they supply?	Cost of goods? Payment terms? Delivery terms?	% of total supplies	Years/ months of relationship	CM visited this source	# of alternate sources available
Accounts payable outstanding?					$	
Amount of goods on consignment? What percentage is this of the total inventory?						

Customers

Name	What is sold to this customer?	Cost of goods? Payment terms? Delivery terms?	% of total sales	Years/ months of relationship	CM visited this source?
Accounts receivable outstanding? Previous collection history? Are there any bad debts?					
Consignment outstanding?				$	

Competition

Name	Distance from client	Advantages client has over this competitor?	CM visited this source?
What percentage of the market share does the borrower currently have?			%
Marketing?			

Item	Borrower's Cost per Item	Borrower's Sales Price per Item	Profit Margin (sale-cost/sale)	Sales Price per Item	% Difference Between Borrower's and Competitor's
					Less / more
					Less / more
					Less / more

5. PRODUCTION PROCESS

What is the production process, cycle, and timing?

Cost of Goods Sold Breakdown per unit

Name of Item:	
Raw materials	
Production-related wages	
Utilities	
Transport	
Other:	
Other:	
TOTAL cost of goods per unit	

- What is the current sales now versus the capacity?

- What will the sales level be versus capacity after the loan?
- What is the minimum level of inventory that is needed to keep on hand at all times?

Seasonality/Cyclicality:

Are there seasonal fluctuations in the company's sales?	___No ___Yes If yes, why?
Look at the historical numbers and your forecast; explain the fluctuation and trends. What do you estimate as seasonal fluctuations in percentage?	High season ____% increase for months: Low season ____% decrease for months:
Risk of industry if there is a currency devaluation or downturn in the economic cycle?	

Site Visit	First Visit	Surprise Visit
Date of visit		
Who attended from the program and the company?		
Description of the premises — size, condition?		
Level of activity/utilization of equipment during your visit?		
Current inventory levels (quantity and amount in USD)? Storage conditions?		
Business facility owned or rented? Rental contract through loan period?		
Amount of cash on hand? How did you verify this?		
Impression of management on the site visits?		
Customers present? Were they buying? Did employees attend to customers in a professional manner?		
Any significant changes since first visit?		

Other comments:
Include additional information to which you wish to draw the credit committee's attention.

6. COLLATERAL

The bank lawyer verified and inspected all the documentation and real estate assessor evaluated the collateral. The collateral is valued below according to the real estate expert's opinion and the documented collateral evaluation form which is in the client's file.

Item	Acquisition Cost	Acquisition Date	Market Value	Liquidation %	Liquidation Value
1. Business premises, owner's private flat or owner's private house and address					
2.					
3. Personal guarantee from owner(s) of the business.					
4. Guarantee from all businesses owned by any of the owners.					
Total Liquidation Value				$	
Total Liquidation Value/Total Loan Value *(at least 135%; need explanation if more than __%)*				%	

7. LOAN OFFICER'S RECOMMENDATIONS

I recommend this loan to the credit committee for the following reasons:

- **Please specify below why you are recommending this project to the credit committee.**

Conditions of disbursement:

SECURITY

1. Receipt of first security interest on commercial property located at [address], prior to first disbursement.
2. Receipt of first security interest on residential property located at [address], prior to first disbursement.
3. Receipt of first security interest on machinery and equipment to be purchased with loan proceeds, prior to or concurrent with loan disbursement.
4. Receipt of first security interest on machinery and equipment located at [address], prior to first disbursement.
5. Receipt of first security interest on all inventory being purchased with loan proceeds, prior to or concurrent with loan disbursement.
6. Receipt of first security interest on all inventory located at [address], prior to first disbursement.
7. Receipt of first security interest on automobile being purchased with loan proceeds, prior to or concurrent with disbursement of loan.
8. Receipt of first security interest on vehicle owned by [name] prior to first disbursement.
9. Receipt of personal guaranty of [name] prior to first disbursement.
10. Receipt of corporate guaranty of [company] prior to first disbursement.
11. The collateralized items for this credit must be insured up to a value no less than the loan value and assigned to [bank]. Insurance will be proportionally distributed between the collateral according to liquidation value.
12. Receipt of assignment of all rental and lease income accruing from the commercial property located at: [address] for the term of the loan, prior to first disbursement.
13. Receipt of assignment of life insurance on [name] in an amount no less than [dollar amount] for the term of the loan, prior to first disbursement.
14. Receipt of borrower agreement to incurring no additional debt or capital expenditures for the life of the loan without the prior written consent of [bank].

VALUATION

1. Receipt of evidence, satisfactory to [bank] that the commercial property located at: [address] has a market value of not less than [dollar amount] prior to first disbursement.
2. Receipt of evidence, satisfactory to [bank] that the personal property located at: [address] has a market value of not less than [dollar amount] prior to first disbursement.
3. Receipt of evidence, satisfactory to [bank] that the existing machinery and equipment being taken as collateral has a market value of not less than [dollar amount] prior to first disbursement.
4. Receipt of evidence, satisfactory to [bank] that the existing inventory being taken as collateral has a market value of not less than [dollar amount] prior to first disbursement.
5. Receipt of evidence, satisfactory to [bank] that the automobile being taken as collateral has a market value of not less than [dollar amount] prior to disbursement.

OTHER CONDITIONS

1. Receipt of evidence of borrower's injection in an amount not less than [dollar amount] prior to loan disbursement.
2. Receipt of insurance on all collateralized assets in an amount not less than the loan amount, prior to disbursement.
3. Receipt of evidence, satisfactory to [bank] that borrower has all necessary licenses and permits to operate, prior to disbursement.
4. Receipt of borrower's agreement to limit dividends/owners draws to an amount no greater than [dollar amount] prior to disbursement.
5. Receipt of evidence, satisfactory to [bank] that borrower is in full compliance with all environmental regulations, prior to first disbursement.
6. [Bank] will check the value of inventory purchased by loan amount according to quantity and prices and evidence/document this in the file.

Bank Loan Officer: ___________________________ Date: ___________________________

ANNEX V. LOAN FILE CLOSING CHECKLIST/ COVERSHEET

Loan File Coversheet/Closing Checklist

Borrower: __________________________ Loan Amount: _______________
Ref. # ______________________________ Branch: _____________________

Individuals	Original	Copy	Comments
Prior to Disbursement			
Screening form			
Application form signed and dated by the borrower			
Site visit form (signed by borrower and loan officer)			
Write-up/loan analysis with Excel spreadsheet, dated and signed by the loan officer			
Approval form (dated and signed by the voting credit committee members)			
Copy of all filled-in pages of borrower's passport			
Copy of documentation supporting ownership of collateral			
Consent of spouse (if jointly owned property as collateral)			
Loan agreement with enclosed USD-denominated repayment schedule (signed by both parties)			
Collateral agreement			
Monitoring schedule (obligatory monitoring of the use of loan funds and then at regular intervals to observe the status of business and collateral)			
Collateral insurance			
Proof of full repayment of the previous loans (for repeated loans)			
Rent agreement (for rented land) and, if rented for more than 11 months, proof of 2% property transfer tax payment)			
After Disbursement			
Periodic re-evaluation of collateral (for problem loans and standard long-term loans annually)			
Loan restructuring form			
Monitoring reports (including notes on phone calls) and comparison of actual against projected cash flow			
Loan payment slips (cash receipts) for periodic payments			
Additional Document for Registered Legal Entities			
Charter			
Court ruling on the registration of the entity			
Audited financial statements (annual, semiannual income statement)			
Certification from the tax inspection on outstanding liabilities to the state budget			
Bank account statement (turnover 12 months)			

Loan Officer: ____________________ Branch Manager: ___________________
Review by Lawyer/General Manager: ______________________________ Date _________

ANNEX W. DISBURSEMENT STRATEGY

The following table format can be used in the loan memorandum to clearly outline the disbursement strategy to the loan committee.

Tranche #/ Timing	Total Amount of Tranche	Loan Amount and Purpose	Owner's Contribution Amount and Purpose	Conditions of Disbursement
Tranche #1 Timing				
Tranche #2 Timing				

Example of Tranching Disbursements:

A loan has been approved for a meat processor to purchase new equipment. The equipment costs $50,000, plus $15,000 in transportation and installation expenses. The total project cost is therefore $65,000. The owners will contribute $20,000 in new capital to cover part of the cost of the equipment. The remaining $45,000 will be covered by the loan. The business must pay 50 percent of the equipment costs at the time that the equipment is ordered and the remaining 50 percent when it is ready to be shipped (estimated to be one month after the order is placed). The shipping and installation costs will be incurred approximately three weeks after this.

The loan disbursement will be structured in the following manner:

Tranche #1 (Month 0): The owner's $20,000 contribution plus $5,000 in loan disbursement to make 50 percent payment to equipment supplier.

Tranche #2 (Month 1): $25,000 in loan disbursement to make remaining 50 percent payments to equipment supplier.

Tranche #3 (Month 2): $15,000 in loan disbursement to cover transportation and installation costs.

ANNEX X. RISK RATING SYSTEM — BASIC STRUCTURE

The risk rating system reviews a business in eight basic categories:

1. Management
2. Operating margins and cash flow
3. Balance sheet
4. Competitive advantages
5. Industry and market
6. Credit history
7. Collateral and secondary source of repayment
8. Foreign exchange exposure

For farmers and farmers groups one can add elements about:

1 Yield/ha history for the particular crop in general (area specific) and for the specific farmer or farmer group and association,
2. Information on price fluctuations for the crop,
3. Info on input prices
4. Adoption of new cultivation technics,
5 Reputations within the group, community, and with other value chain actors e.g. input suppliers, nucleus farmers and aggregators

Each area is given a rating between 1 and 5. These ratings are then summed to obtain the business' overall rating, as illustrated below. Loans must be given a clear grade and may not be rated between grades.

RISK RATING

1. Management (1-5) _______
2. Operating margins and cash flow (1-5) _______
3. Balance sheet (1-5) _______
4. Competitive advantage (1-5) _______
5. Industry and market (1-5) _______
6. Credit history of the principals (1-5) _______
7. Collateral or secondary source of repayment (1-5) _______
8. Foreign currency exchange exposure (1-5) _______

Combined numerical rating _______
(sum of ratings of all categories)
Letter rating (see key below) _______

Key

8-12 = A – Excellent
13-17 = B – Good
18-27 = C - Satisfactory
28-34 = D - Substandard
35+ = E - Doubtful

Risk Category: Management

The loan officer must rate the ability of the company's overall management team. The rating is based on experience in the firm's business, understanding of finance and financial planning, ability to operate the business by following a business plan, leadership, organizational skills, and back-up management succession.

Rating	Description

Rating	Description
1	**Very strong management:** Ten or more years of direct experience, excellent management record and financial performance, understanding of budgeting, and the ability to manage the company's working capital. The firm is well led, recognizes the value of a high-quality workforce and provides employee training, benefits, and performance incentives.
2	**Above average management.** Under the control of a management team with proven experience in the same business (five or more years of experience), management experience, and a good professional record. The business must produce adequate financial statements on a timely basis. The management team operates under a financial plan and budget and demonstrates an ability to manage the firm's working capital and term financing. The firm has good management depth and no obvious organizational shortcomings.
3	**Average management.** Under the control of a management team that has the ability to manage firms of this type (one to four years of experience). The business produces regular and adequate financial statements and a budget but occasionally has unexpected needs for working capital or term financing. The firm has adequate management depth and no serious organizational shortcomings.
4	**Below average management.** Under the control of a management team whose ability to manage firms of this type is unproven (less than one year of experience). The business does not produce reliable or timely financial statements. The company doesn't produce a budget or a financial plan. The company has inadequate management depth and organizational shortcomings.
5	**Weak management.** Under the control of a management team with clear deficiencies in skills and experience or no experience in the industry. The business does not produce adequate financial statements or a budget and does not adequately manage its financial resources. The firm has inadequate management and serious organizational shortcomings.

Risk Category: Operating Margins and Cash Flow

Loan officers must remember that loans are repaid out of the cash generated by the business. Therefore, careful consideration of the business' operating margins and cash flow are required.

Rating	Description
1	Highly profitable firms with records of always servicing their debts. Projections indicate that a firm will have no difficulty generating sufficient cash flow to service all existing debt, including the loan being graded. Substantial margins will exist to cover any contingencies that might arise. Debt service coverage (including our loan) based upon projections would be 2x.
2	Profitable firms that have a record of servicing debt. Projections indicate that such firms will have little difficulty generating sufficient cash flows to service all existing debts and the loan being graded, with margins sufficient to cover contingencies. Debt service coverage (including our loan) based upon projections would be 1.6x to 1.9x.
3	Firm has adequate profitability to service senior debt including ours. Projections indicate that the firm can generate sufficient cash flows to service existing debts, but with little margin for contingencies. Debt service coverage (including our loan) based upon projections would be 1.0x to 1.5x.
4	Improvement in financial performance is necessary, or the firm will be unable to continue routine business operations and service its debts. Any projections that show a debt service capability are probably optimistic. The person grading the loan believes that future cash flows will be insufficient to keep our loan current. Debt service coverage (including our loan) based upon projections would be 0.9x.

Rating	Description
5	Business will be unable to make loan payments; will have to rely on guarantors or collateral to pay the debt; it is likely that at least a portion of the debt must be charged off. Debt service coverage (including our loan) based upon projections would be less than 0.9x.

Risk Category: Balance Sheet

The financial condition of the borrower is a measure of the financial strength of the customer as shown on the customer's balance sheet. It is a measure of liquidity, capital, and leverage. Indicators used to score this factor include working capital, current ratio, debt to net worth ratio, and turn periods for inventory, receivables and payables.

Rating	Description
1	The firm must have a low debt-to-equity ratio (less than 1.5), significantly above average working capital, and substantial retained earnings. It must be current in accounts payable as demonstrated by its accounts receivable turn ratio. Trend in these areas should be positive. A 1 rating is reserved for firms with strong balance sheets, with the strength coming from annual capital injections from retained earnings.
2	The firm must a have a better that average debt-to-equity ratio (1.5 or less), satisfactory working capital, and significant retained earnings, and be current in accounts payable.
3	The firm has an average debt to equity ratio (1.5 to 2.0), adequate working capital, and acceptable retained earnings, and is not significantly slow in paying accounts payable.
4	The firm has a higher than usual debt-to-equity ratio (over 2.0), less than adequate working capital, little retained earnings, and is slow in paying accounts payable.
5	The firm has a high debt-to-equity ratio (over 3.0), negative working capital, no retained earnings, and is quite slow in paying accounts payable.

Risk Category: Competitive Advantage

Evaluate the actual state of the borrower's competition in the marketplace to be served. Evaluate any competitive advantages the borrower may offer or promise (better quality, better distribution, cheaper cost, or better service). In this area, only three ratings are possible.

Rating	Description
1	The firm has a clear and tangible competitive advantage that it has the capacity to defend. This advantage presents significant barriers to new entrants and means of differentiating its product from its existing competitors.
2	*Do not use.*
3	The firm's competitive advantage is based on service and an intangible benefit to the customer. This provides some entry barriers to new competitors and some manner of differentiating its product.
4	*Do not use.*
5	The firm has no competitive advantage. Entry barriers into the industry are weak or nonexistent. Significant competition exists in the industry (or could easily exist), and the firm has no clear way of differentiating its product.

Risk Category: Industry and Market

No business operates without external influences. When evaluating the risk associated with extending finance to a business, the loan officer must consider external risks associated with the quality of the industry and the market.

Rating	Description
1	Business is operating in an environment that is enjoying good economic times. The industry is competitive, most firms operating in this industry are making good profits, and profits would not be significantly impacted by recession.
2	Business is part of a profitable industry that is enjoying good economic health. It is not a cyclical industry and would not be significantly affected by a recession, the closing of a local plant, or a significant change in commodity prices.
3	Business is part of a reasonably profitable industry that is enjoying good economic health, but is a cyclical business and would be affected by a recession, the closing of a local plant, or a significant change in commodity prices. This is a competitive industry, and only the better-managed firms will get through the next recession without suffering significantly.

Rating	Description
4	This is a tough business in which to make a profit. It may be a fiercely competitive business, one presently experiencing an economic recession, or a cyclical business in which company profits will suffer if there is a recession, a closing of a local plant, or a significant change in commodity prices. Only the better-managed firms will survive in this industry.
5	Business in serious trouble. It may be commodity price sensitive or interest rate sensitive. Changes in local or national markets such as a military base closing, plant closings or significant competitive changes like a national chain coming to town would be significant.

Risk Category: Credit History of the Principals

Comment on actual credit history of the principals and guarantors. Evaluate credit integrity of principals and guarantors. In this area, only three ratings are possible.

Rating	Description
1	**Good credit history.** Reviews of past bank/supplier credit has shown a solid record of on-time payment. Company/owners do not have negative information in the credit bureau.
2	*Do not use.*
3	**Satisfactory credit history.** Reviews of past bank/supplier credit has shown some problems with on-time payment and/or company/owner may have a listing in credit bureau. The company is able to explain these problems and seems to have taken steps to resolve problems. The company's payment of payables has slowed significantly over past year.
4	*Do not use.*
5	**Unsatisfactory credit history.** Reviews of past bank/supplier credit has shown significant problems with on-time payment and/or company/owner may be listed with negative information in credit bureau. The company is unable to explain these problems, or the explanation is not satisfactory. The company has not taken satisfactory steps to resolve problems and/or there is significant risk of problems reoccurring. Outstanding tax liens or previous bankruptcies are rated unsatisfactory.

The loan officer will also review the owner's personal credit rating, if it is available. Poor individual credit could have a negative impact on the loan repayment and should be considered as part of the business' overall credit history risk.

Risk Category: Collateral or Secondary Source of Repayment

It is the goal of the financial institution to be repaid from the operations of the business that took the debt. However, the reality is that even the best of businesses can face financial difficulties from time-to-time. For this reason, as prudent lenders, the financial institutions consider the strength of other repayment sources.

Rating	Description
1	The financial institution is offered first position on collateral. The collateral coverage is at least 2:1 (liquidation value to loan value), or the company has offered highly liquid collateral (cash in blocked bank account, certificates of deposit, etc.). The company may also have a strong secondary source of repayment (profits from an affiliated business) which can be guaranteed to the financial institution.
2	The financial institution is offered first position on collateral. Collateral coverage of at least 1.75:1 with collateral that is satisfactorily liquid (typically, residential/commercial real estate). The company may also have a strong secondary source of repayment (profits from an affiliated business) that can be guaranteed to the financial institution.

Rating	Description
3	The financial institution is offered first position on collateral (with collateral coverage of at least 1.5:1) or for subordinated debt the collateral coverage for the total debt is at least 1.75:1. Collateral may be less liquid or more difficult to control (including equipment, vehicles or inventory).
4	The financial institution is offered first position on collateral (with collateral coverage of more than 1:1) or for subordinated debt the collateral coverage for the total debt is at least 1.5:1. Collateral is less liquid or more difficult to control (including equipment, vehicles or inventory).
5	Uncollateralized loan, first position collateral coverage of less than 1:1 or may have poor collateral coverage on subordinated debt.

Risk Category: Foreign Exchange Exposure

The loan officer should consider the potential impact of foreign exchange exposure on the business. A company may have currency exposure because it purchases raw materials from a supplier in a foreign country, it sells to customers in a foreign country, or it has debt denominated in a foreign currency. The loan officer must consider the company's ability to manage the risks associated with dealing in foreign currencies. See Section IV in the toolkit above for a detailed discussion of the analysis of currency exposure in the due diligence process.

Rating	Description
1	**No exchange rate exposure.** Company has no USD-denominated debt and does not have expenditures in foreign currency. The company does not have export sales that will be impacted by fluctuations in the currency.
2	**Minimal exchange rate exposure.** Company makes some purchases in foreign currency or has some export sales, but they are a relatively small proportion of the company's operations; therefore, fluctuations in currency will not have a major impact on the cash flow.
3	**Balanced exchange rate exposure.** Company makes regular purchases in foreign currency or has USD-denominated debt, but has counterbalancing foreign currency sales that are sufficient to cover these payments. The exposure is relatively balanced between sales and expenditures, so impact on cash flow should be minimal.
4	**Unbalanced exchange rate exposure.** Company makes regular purchases in foreign currency or has USD-denominated debt and has foreign currency sales, but the expenditures and sales do not balance. The company may not have sufficient export sales to cover the expenditures. The foreign exchange exposure therefore represents a real risk to the cash flow of the business and therefore to the financial institution's financing.
5	**Unaddressed exchange rate exposure.** Company has significant foreign exchange exposure that it has not addressed. It might have a USD-denominated debt or major foreign exchange purchases without any export sales. The foreign exchange exposure therefore represents a real risk to the cash flow of the business and therefore to the financial institution's financing.

ANNEX Y. PRODUCT SHEETS

General Terms and Conditions for Loans

Purpose	Corn	Comments
Farm size	Minimum 5 ha	Commercial production only
Amount	Maximum CDF xxxxx /ha	Land preparation, weeding, harvest, farm chemicals, hybrid seed
Term	6 months	
Interest rate	18% fixed	
Upfront fee	1.5%	
Tranches	I – II –	
Disbursement period		
Typical borrower's contribution	Farm equipment, management, land	
Repayment schedule	Bullet payment at maturity	Standard project goes through three phases: 1. Land preparation mechanized, seed purchase, seed processing, herbicide planting, land work for drainage 2. Weeding 3. Harvesting: manual/mechanized (transportation, storage, realization)

Terms	Type	Comments
Purpose	Mangoes (short-term)	Only existing orchard
Farm size	Minimum 0.5 ha	Alternative income (e.g., other fruits, crops, cattle, transportation) is desirable
Amount	Maximum CDF2,100/ha	70% of maximum cost CDF xxx,xxx/ha
Term	12 months	
Interest rate	20% fixed	
Upfront fee	1.5%	
Tranches	None	
Disbursement period	April-May	
Borrower's typical contribution		
Repayment schedule	Bullet payment at maturity	
Interest only/interest free period	6-8 months	

Purpose	Other Tropical Fruit, Inc. Papaya	Only Existing Orchards
Farm size	Minimum	
Amount	Maximum CDF/ha	50% of maximum cost CDF xxx,xxx/ha
Term	8 months	
Interest rate	20%	
Upfront fee	1.5%	
Tranches		Pesticides
Disbursement period	April-July	
Borrower's typical contribution		
Repayment schedule	Bullet payment at maturity	
Interest only (interest-free) period		

Purpose	Vegetables	
Farm size	Minimum	Minimum two types of vegetables (diversification desirable)
Amount	Maximum CDF xxx,xxx/ha	
Term		
Interest rate	20%	
Upfront fee	1.5%	
Tranches		Pesticides and seeds, labor (30%)
Disbursement period		
Borrower's typical contribution	Preparation of soil, hand work, realization	Alternative sources of income (desirable)
Repayment schedule	Three months paying interest only; after starting sales, repayment on a weekly basis based on cash flow	
Interest only period	3 months	

Note: Higher risk product: meat production; dairy typically less risky

Purpose	Cattle (expansion of the herd, less than double); however, financing feed/vet supplies for established milk producers	Meat /Dairy
Farm size		Depends on number of cattle and type of feeding; zero-grazing possible; vet services essential
Amount	To be established;	
Term	18 months	
Interest rate	18% dairy; 20% meat	
Upfront fee	1.5%	
Tranches	Related to milk market; dry season higher prices, more need for feed to offset lack of grass	
Disbursement period		
Borrower's typical contribution		
Repayment schedule	Weekly payments	
Interest only period	1 month	

Higher Risk

Purpose	Sheep, pigs (fattening operations for specific holidays such as Christmas, Easter, etc.)	Meat; operation often carried out by women's groups with excellent or at least satisfactory repayment in other countries
Farm size	Minimum five animals	
Amount	Based on cost of feed and vet supplies	100% of feed and vet supplies; 50% of cost of buying animals for fattening)
Term	9 months or less	
Interest rate	20%	
Upfront fee	1.5%	
Tranches		
Disbursement period	Based on holiday calendar minus time needed for fattening	
Borrower's typical contribution		
Repayment schedule	At time of holiday sale	
Interest only period		

Aquaculture Risk; Joint Production Fish-Rice Less Risky

Terms	Type	Comments
Purpose	Aquaculture and rice-aquaculture joint production	Need support of local authorities to minimize theft; need technological support to introduce joint production technology
Farm size	Sufficient ponds, or 1 ha rice with 5 5x5m ponds	
Amount		
Term	12 months (maximum 24 months)	
Interest rate	20%	
Upfront fee	1.5%	
Tranches		Fingerlings and food; or rice crop finance plus fingerlings, food, and pumping for post-rice-harvest maintenance of water in ponds for final fattening of fish (300-400 gms for tilapia); guard services and/or pond located by house of owner (theft)
Disbursement period	Cycle of rice crop	
Borrower's typical contribution	Land, pond construction	
Repayment schedule	Two payments: at maturity of rice and at maturity of fish (7-8 months)	
Interest only period	Until rice harvest	

HIGH RISK (FINANCE ONLY For Established Operations)

Purpose	Poultry/Egg Production	
Farm size		Facilities in ownership and experience required
Amount	CDF xxx	
Term	6 months	
Interest rate	20%	
Upfront fee	1.5%	
Tranches		1 day old chicks, feed, labor, and security
Disbursement period		
Borrower's typical contribution		
Repayment schedule	Monthly equal installments of principal and interest	
Interest only period	6 months	

Purpose	Beekeeping	
Farm size	More than 10 beehives	Only to established beekeepers wanting to acquire improved hives
Amount	Based on cost of top-bar or similar hives or local hives, if shown to be more profitable	Owner should have or have access to a centrifuge and wax press
Term		
Interest rate		
Upfront fee		
Tranches		
Disbursement period		
Borrower's typical contribution		
Repayment schedule		
Interest only period		

Purpose	Produce processing	
Business size		
Amount		
Term	12 months	
Interest rate	20-24%	
Upfront fee	1.5%	
Tranches		
Disbursement period	Autumn	Period of purchase of local produce
Borrower's typical contribution		
Repayment schedule	Monthly installments	Credit line (3 years)
Interest-free period	Purchase period plus one technological processing cycle	

Purpose	Selling of Produce	If legal entity, own processing facilities and contract are required; if individual, owns a vehicle (collateralized, if this is possible in DRC)
Business size		
Amount		
Term	Revolving credit	Borrowing limit established and reviewed annually
Interest rate	36%	
Upfront fee	1.5%	
Tranches		Calibration, sorting, crates, declaration, certification, transportation
Disbursement period	Prior to availability of products	
Borrower's typical contribution	Labor management	Established traders only
Repayment schedule	Weekly repayments	
Interest-free period	None	

Purpose	Trade in Pesticides	Only registered dealers with own storage and selling facilities and license and formal agreements with official suppliers
Business size		
Amount		
Term	10 months	
Interest rate	24%	
Upfront fee	1.5%	
Tranches		
Disbursement period	Based on crop cycles serviced and past records of sales	
Borrower's typical contribution	Site, warehouse/office, transport, licenses	
Repayment schedule	Monthly payments	
Interest-free period	1 month	

Purpose	Trade (Working Capital)	Only registered entity in rural area with own trading facilities; references from local bank staff as to integrity and continuous operation
Business size		At least 3 years in business
Amount		
Term	12 months	2-3 year credit lines (possible)
Interest rate	24%	
Upfront fee		
Tranches		
Disbursement period		
Borrower's typical contribution	Inventory	
Repayment schedule	Monthly amortization	
Interest-free period	None	

Purpose	Maintenance and Servicing of Agricultural Equipment, Machinery, and Vehicles	Purchase of spare parts, capital repair; no start-ups
Business size		Own assets
Amount		
Term	12 months	
Interest rate	24%	
Upfront fee	1.5%	
Tranches		
Disbursement period		
Borrower's typical contribution		
Repayment schedule	Per seasonal cash flow depending on type of crops served and equipment available	
Interest-free period	Season when machinery is not being used	

No activities will be financed in the following geographic areas:

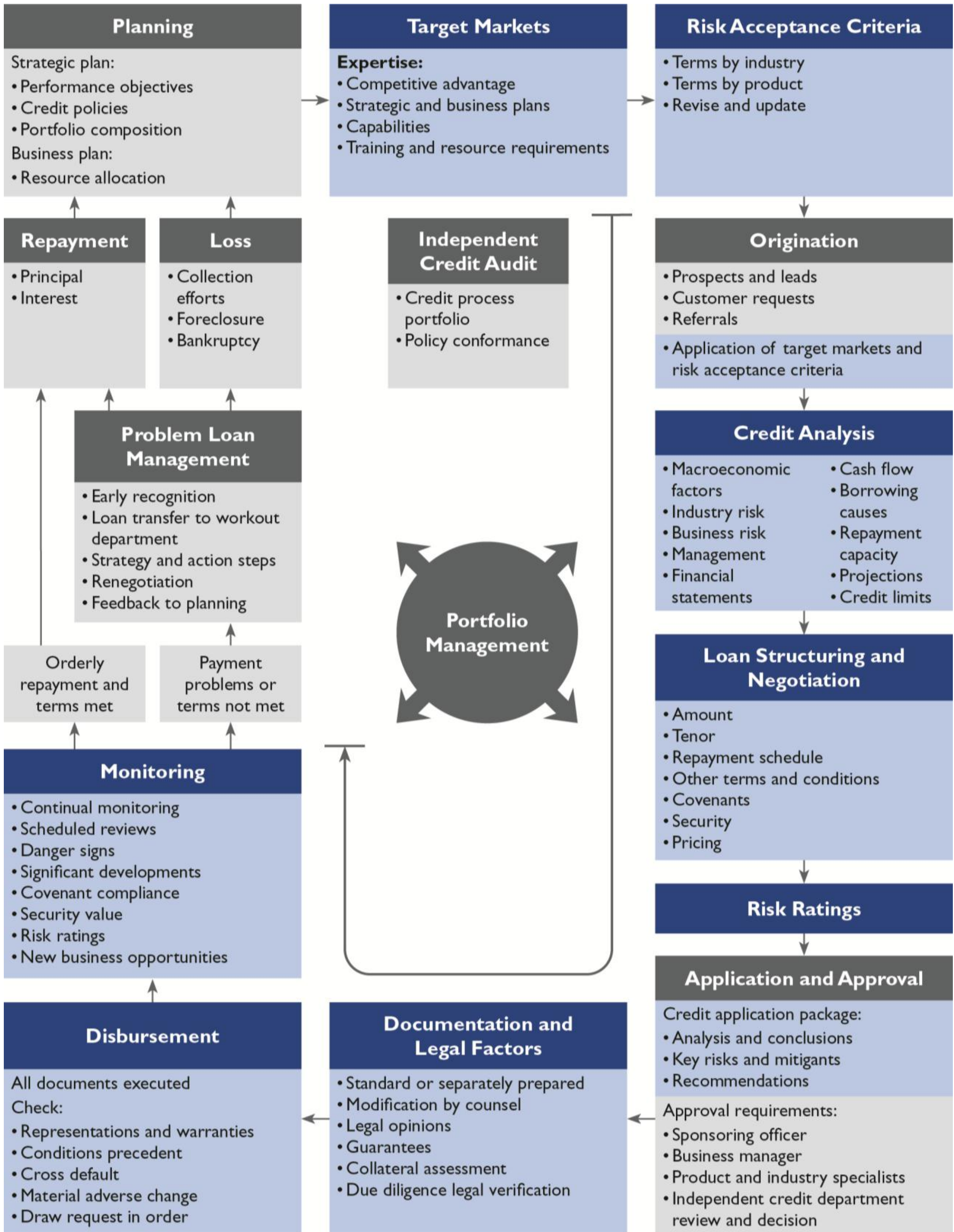
- Kivu and other conflict areas
- Any area not easily accessible to bank staff on motorcycles during the rainy season

ANNEX Z. PRODUCT PROFITABILITY MATRIX

Product Profitability

Product: Thousand $	_X Forecast	_X Forecast
Measurements		
Average outstanding receivables		
High volume		
Low volume		
Credit rates		
Default rates		
Capital contribution		
Income		
Interest income		
Fees/others income		
1 **Total Revenue**		
Expenses		
Expense 1		
Expense 2		
Expense 3		
Expense 4		
2 **Total Expenses**		
3 Profit margin		
4 Provisions for losses		
5 **Earnings before interest and taxes**		
6 Taxes		
7 **Earnings**		
Key Portfolio Indicator		
Revenue/expense ratio + provisions		
Interest coverage		
Return on assets		
Return on capital contribution		

ANNEX AA. PORTFOLIO MANAGEMENT



ANNEX BB. LOAN MONITORING REPORT

Loan Monitoring Report

Project #		**Borrower's name**		**Amount of loan/term**	
Bank Branch		**Loan officer**		**Annual % rate**	

		Before Loan	**Month 1**	**Month 2**	**Month 3**	**Month 4**	**Month 5**
1.	Monitoring date						
2.	Actual outstanding balance of loan						
3.	Principal in arrears/ Overdue days						
4.	Forecasted sales						
5.	Existing sales						
6.	Cash						
7.	Accounts receivable and advances						
8.	Accounts payable						
9.	Working capital						
10	Capital investment						

# and date of monitoring	Describe the stages and quality of the purposefulness of the loan, concordance of the project implementation with the projected indicators, comparison of forecasted and real volumes of capital investment, change in competitive environment, reasons of change in company profitability, risks associated with A/R and A/P. Taking out money from the business by the borrower and other risks emerging over the implementation of the project.

ANNEX CC. COLLATERAL INSPECTION FORM

General Information

Monitor: _______________ Date: ____/____/_2

Branch: ________________ Name of Potential Borrower: _____________________

Address: ____

Type of Business: ___________________ Loan Requested: ________________ (USD)

Purpose of Loan: ____

Status of Applicant: New Borrower ☐ Former Borrower ☐

If Bank's Former Borrower, purpose of previous loan: __________________________________

Loan Amount: _____________ (USD) Loan Used Properly? Yes ☐ No ☐

Repayment of Previous Loan: ________________________________ ______________________

Collateral Appraisal:

<table>
<tr><th colspan="2" rowspan="3">Item</th><th rowspan="3">Year Made</th><th rowspan="3">Condition</th><th colspan="4">Price ($)</th></tr>
<tr><th colspan="2">Manager</th><th colspan="2">Monitor</th></tr>
<tr><th>Mkt. Val</th><th>Col. Val.</th><th>Mkt. Val</th><th>Col. Val.</th></tr>
<tr><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>3</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td>5</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr>
</table>

Personal opinion of the potential borrower:

____

____

____

Notes:

____

____

____

Staff Member's Signature: ___________________ Date: ____/____/_2

Borrower's Signature: (required) _________________ Date: ____/____/_2

ANNEX DD. LOAN OFFICER PRODUCTIVITY

Loan Officer Productivity

Education and knowledge

The success of the lending division depends greatly upon the success of the loan officer. In turn, the productivity of a loan officer largely depends upon several factors:

- Education and training in the credit industry
- Product knowledge
- Networking capabilities
- Personal presentation skills
- Self-motivation.

When hiring an individual for a loan officer position, the lender must take time to conduct a thorough investigation of the prospective loan officer's skills and knowledge. In some cases, an internal training program must be developed to help the loan officer better understand the products and market objectives of the lender. A training program that has focus on the following subjects:

- Mathematics germane to the mortgage industry
- Underwriting objectives
- Mortgage laws of the state or nation
- Elements of the promissory note and mortgage or security agreement
- Processes of real property valuation
- Impairments to title of a property
- Communication and sales skills

Incentive Structures

In many markets, a loan officer is compensated on a commission basis of .5 to 1.0 percent of the amount of the loan. Where a loan officer is hired in his or her first position, the probability of hiring a competent person on a commission only basis is low, as the loan officer does not have a record or "pipeline" of business developed that will bring income in a reasonable period of time. Therefore the lender may be faced with providing the loan officer with a base salary plus a small commission until productivity is sufficient to support only a commission.

A new loan officer should be able to originate loan applications within 60 to 90 days after employment. Thereafter, as the loan officer matures and develops more referral sources, production should increase steadily. If after one year productivity does not continue a reasonable increase, the loan origination manager must take time to review the marketing methods and skills of the loan officer to determine the reasons for low productivity. If necessary, a low producing loan officer must be terminated as his or her presence and the cost of overhead adds to the overall increased cost of producing loans for the lender.

Productivity can be measured in one of two forms: number of units produced (say, 10 to20 loans per month); or the gross monetary amount of loan originations (say, $1 to $5 million equivalent per month).

Where the lender has a large loan officer staff, it may be necessary to apply one of these measures, but seldom both. A high achiever will work well with either system and will attempt to meet or exceed personal production goals monthly or annually. However, some loan officers may focus on a market niche of high-value originations and will meet the monetary objective rather easily with just a few loans, leaving excess time that is easily diverted to activities outside the lender. Conversely, a loan officer may develop a niche with entry-level housing and low sales prices. This loan officer will have to work very hard to meet a monetary objective, but easily meets a per-unit production goal; in the end, this loan officer will make less in commissions for more work.

There is no right or wrong system to use when compensating a loan officer and it is possible that the lender will be required to make adjustments to the plan after it is launched. A lender that is new to the mortgage lending market should consider contacting existing lenders in the area to determine customary production objectives and compensation plans.

ANNEX EE. PORTFOLIO REVIEW TOOL

Credit Risk Matrix (Based on Loan Review)

Date:				
Activity	**Quantity of Risk**	**Quality of Risk Mgmt.**	**Aggregate Risk Profile**	**Direction of Risk**
Credit Initiation				
Financial analysis (cash flow, ratios, etc.): historic	Low	Strong	Low	Stable
Financial analysis (cash flow, ratios, etc.): projected	High	Weak	High	Increasing
Non-Financial analysis (industry/market/ management)	High	Weak	High	Increasing
Collateral analysis (secondary source of repayment)	Low	Strong	Low	Increasing
Information from site visit	Moderate	Weak	Moderate	Increasing
Loan Structuring Approval Processes and Procedures				
Approval procedures and limits followed	Low	Strong	Low	Stable
Loan proceeds used as approved	Low	Strong	Low	Stable
Assessment of borrower's liquidity for renewal of lines of credit	High	Weak	High	Increasing
Credit/Collateral File Document				
All appropriate documents are in the loan file	Low	Strong	Low	Stable
Original security and insurance documents in the active file	High	Weak	High	Increasing
Collateral diversification	Low	Strong	Low	Stable
Normal Loan Monitoring				
Monitoring of payments due — P&I and expiry of insurance	Low	Strong	Low	Stable
Capacity of loan personnel to adequately monitor	High	Weak	High	Increasing
Verification of compliance with standard/special loan covenants	Low	Strong	Low	Stable
Continuous, active monitoring of loans	High	Weak	High	Increasing
Problem Loan/Loan Workout/Loan Restructure				
Use of early warning indicators	High	Weak	High	Increasing
Timely on-site visit to borrower business and collateral	High	Weak	High	Increasing
Compliance with guidelines for problem loans	High	Weak	High	Increasing
Compliance with guidelines for loan re-structuring	High	Acceptable	Moderate	Increasing
Control Procedures				
Guidelines for establishing credit approval authority levels	Low	Strong	Low	Stable
Operational controls on approval (e.g., two signatures, etc.)	Low	Strong	Low	Stable
Portfolio management tools	High	Weak	High	Increasing
Credit controls from internal audit	High	Weak	High	Increasing

Risk Assessment
Assessment Rating System
Quantity of Risk: The level or volume of risk
Low
Moderate
High
Quality of Risk Management: How well bank management identifies, measures, controls, and monitors risk
Weak
Acceptable
Strong
Aggregate Risk Profile
Low
Moderate
High
Direction of Risk
Decreasing
Stable
Increasing

ANNEX FF. FARM OPERATING STATEMENT

Farm Operating Statement

A. Crop Program

Crop	Acreage	Yield	Total	Feed	Seed Farm Use	Sold	Unit Price	Gross Income	Bank Name Only
On Owned Land									
1									
2									
3									
4									
On Rented Land			Share rent						
1									
2									
3									
4									

Acres		**Acres**		**Total Gross**		
Summer fallow		**Pasture**		**Crop Income**		

B. Crop Expenses (exclude landlord share)

Fertilizer Type	Rate/ Acre	Number of Acres	Price/ Unit	Total Cost/ Acre	Total Cost	Bank Name Only
1						
2						
3						
Chemical Type						
1						
2						
3						
4						
5						
				Sub-total — crop expenses		
				Seed and seed cleaning costs		
				Hail and crop insurance		
				Fuel and oil		
				Equipment repair and maintenance		
				Custom work		
				Wages		
				Cash rent		
				Total Crop Expenses		

C. Livestock Operation

Opening Inventory			Additions		Subtractions			Average Price/ Head	Revenue	Closing Inventory
Type Of Livestock	Numbers	Births	Transfer In	Number Purchased	Death Loss	Transfer Out	Sales			Numbers
			`							
Totals										

Livestock Products

Product Type	Number of Animals	Production per Animal	Total Production	Price per Unit	Revenue
Totals					
				Total Livestock Income	

D. Livestock Expenses

Livestock Feed	Quantity	Price/Unit	Total Cost	Bank Name Only
Roughage				
Grain				
Prepared feed				
Supplements, salt, minerals				
Feeder livestock purchase				
Vet, medicine, breeding				
Trucking, selling, fees				
Supplies and equipment				
Pasture rental				
		Total Livestock Expenses		

E. Overhead

	Description	Total Cost	Bank Name Only
Building repairs and maintenance			
Utilities			
Property and water tax			
Insurance (vehicles)			
Insurance (buildings and farm)			
Legal and accounting			
	Total Overhead Expenses		

F. Debt Retirement

Loan Description	Outstanding Principal	Annual Principal Payment	Annual Interest Payment	Total Payment	Bank Name Only
1 bank name					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11 equipment/vehicle lease					
12 interest on operating loan only					
			Annual Debt Retirement		
				Applicant	**Bank Name Only**

G. Summary

Gross crop income	______		______	
Gross livestock income	______		______	
Gross Farm Income		______		______
Total crop expenses	______		______	
Total livestock expenses	______		______	
Overhead expenses	______		______	
Farm Expenses		______		______
Net Farm Income		______		______
Annual debt retirement		______		______
Farm Surplus		______		______
*** Off Farm Income**		______		______
Leases	______		______	
Custom work	______		______	
Employment	______		______	
Living expenses	______		______	
Surplus (residual for growth)	______		______	

	Amount Available	**Source (Name Of Bank)**
Operating Credit Required	______	______

* Show net income/revenue (after deductions/expenses including debt retirement for the business).

Other Comments

____
____
____
____
____

I authorize and consent to the giving and receiving of information by and between (bank name) (including its officers, employees and agents) and other persons in connection with the loan applied for or any loan made, including the exchange of credit information with any creditor, credit grantor, credit broker, credit reporting agency or any other person with who i have had, or propose to have business and financial dealings.

I authorize (bank name) to obtain copies of my/our financial or business information held by (any other bank or financial institution) with who i have had, now have, or propose to have business or financial dealings.

The personal information on this form is collected under the authority of (bank name) and is protected by the freedom of information and protection of privacy act. (bank name) may use your information for consulting purposes, to evaluate your eligibility for loan programs, the administration of any loan(s) made, the administration of all (bank name) programs, as well as to provide your with information on (bank name) products and services. It will be used for statistical purposes, policy development, program development and program evaluation. (bank name)'s loan programs may involve an association with and referral to other credit agencies. If you have any questions about the collection and use of this information, contact (bank name).

Signature of Applicant ______________________________ Date Signed *(Mm/Dd/Yyyy)*______________________

Signature of Applicant ______________________________ Date Signed *(Mm/Dd/Yyyy)*______________________

ANNEX GG. FINANCIAL RATIOS

Category	Ratio	Description	Interpretation
Liquidity Ratios			
Current ratio	$\frac{\text{Current assets}}{\text{Current liabilities}}$	Current assets are assets that will be converted into cash in one year or less. Current liabilities are liabilities that are due and payable in one year or less. The ratio indicates whether current assets are sufficient to pay all current liabilities.	A current ratio above 1.0 indicates the business has enough current assets to pay all current liabilities. The higher the ratio, the more liquid the business. A low current ratio would imply possible insolvency. However, a very high current ratio might imply that management is not investing idle assets productively.
Quick ratio	$\frac{\text{Quick assets}}{\text{Current liabilities}}$	Quick assets are cash + accounts receivable. Quick assets are the most liquid asset available to pay current liabilities.	More conservative than the current ratio, the quick ratio can be interpreted the same as the current ratio. a highly liquid business will have sufficient quick assets to pay all current liabilities.
Profitability Ratios			
Gross profit margin	$\frac{\text{Gross profit}}{\text{Sales}}$	Gross profit is sales minus cost of goods sold. the gross profit margin measures the percentage of gross profits relative to sales.	The gross profit margin measures how well a business can price its products or services over its costs. A higher margin relative to competitors reveals that the business has stronger pricing power than the competition.
EBIT margin	$\frac{\text{EBIT}}{\text{Sales}}$	Earnings before interest and taxes (EBIT) is earnings from operations (sales – cost of goods sold – SG&A expenses). the margin reflects the cost of operating the business.	The EBIT margin should be positive, reflecting positive profitability from operating the business. The ratio should be steady or rising. A rising EBIT margin indicates that the business is controlling costs relative to sales.
Return on assets (ROA)	$\frac{\text{Net income}}{\text{Total assets}}$	Net income to total assets measures the return obtained on the assets used in the business.	The ROA ratio measures how well management is utilizing assets to generate profits. The higher the ROA ratio, the better the utilization of assets.
Return on equity (ROE)	$\frac{\text{Net income}}{\text{Equity } \textit{(capital)}}$	Net income to equity measures the return of profits for the owners of the business.	The ROE measures the profitability of the business for its owners. The owners seek the highest return possible for their business investment. Small businesses generally have higher ROEs than large business. But a note of caution is in order. A high ROE can be achieved through use of leverage.

Category	Ratio	Description	Interpretation
Efficiency Ratios			
Sales turnover	$\frac{\text{Sales}}{\text{Total assets}}$	Sales turnover ratio measures how well the business utilizes its assets by measuring the number of times (turnover) assets generate sales.	Sales turnover measures the efficiency of assets — the employment of capital — to generate sales. The higher the turnover ratio, the higher the productivity of assets to generate sales. This ratio must be measured against similar businesses in the same industry to understand whether the business utilizes assets efficiently.
Inventory turnover	$\frac{\text{Cost of goods sold}}{\text{Inventory}}$	Inventory turnover measures the speed at which inventory is sold.	Holding inventory is costly for a business, as it requires funds to purchase the inventory. Generally, the faster the inventory turns over the better. Businesses that sell perishable goods must have high inventory turnover ratios. Businesses that sell luxury goods generally have low inventory turnover ratios.
Inventory days on hand	$\frac{\text{365 days}}{\text{Inventory turnover}}$	Inventory days on hand measures the number of days inventory is held before a sale.	Holding inventory is costly, as it requires up-front purchases. As a rule, management seeks to maintain low inventory days on hand. A lower days on hand implies that the business does not hold excess inventories. A lengthening ratio could mean the business is unable to sell existing inventory stocks. Remember also that stockholdings may be seasonal.
Debtors turnover (accounts receivable)	$\frac{\text{Sales}}{\text{Debtors}}$	The debtor's turnover ratio measures the speed with which credit sales are collected.	Accounts receivable reflects sales made on credit. Sales made on credit are not money in the bank. As a result, accounts receivable must be financed from working capital. Generally, a business seeks to collect accounts receivable as fast as possible, which implies a high turnover ratio. However, the ratio must be compared to industry norms to understand whether it is high or low.
Debtor days on hand (accounts receivable)	$\frac{\text{365 days}}{\text{Debtors}}$	The number of debtor days on hand is the length of time required to collect receivables stated in days.	Most businesses provide credit to their clients of 30, 60, or 90 days. Measuring accounts receivable in days provides a comparison of the Debtor Days on Hand to the terms of trade. A low number of days is usually desirable as it means cash is collected sooner. Rising trends can mean lax invoicing, pressure from competition, slow paying customers, or bad debts.

Category	Ratio	Description	Interpretation
Creditors turnover (accounts payable)	Cost of goods sold / Trade creditors	The creditor turnover ratio measures the speed that the business pays its suppliers.	Account payable reflects credit provided by suppliers to the business. Credit provided by suppliers is free financing for the business. Generally, businesses seek to lower accounts payable turnover, thus increasing the amount of credit provided by suppliers. However, suppliers will seek payment as quickly as possible. This ratio must be compared with industry norms.
Creditors days on hand (accounts payable)	365 days / Debtors	The number of creditor's days on hand is the length of time taken to pay suppliers stated in days.	A high number of creditor days on hand is free financing for the business and could mean that suppliers give the business very good credit. However, it could also mean the business is having difficulty paying its debts and is delaying payments due to cash flow problems. A shortening trend may mean creditors are concerned and have shortened credit terms.
Leverage Ratios			
Debt-to-equity	Total debt / Equity *(capital)*	Debt-to-equity is the ratio of total liabilities to the total capital provided by the owners of the business.	The debt-to-equity ratio measures the portion of debt relative to owners' equity. The higher the ratio, the greater the risk of insolvency due to inability to generate cash flow to service creditor obligations. On the other hand, the use of debt can help improve earnings since usually businesses can deduct interest expense on their tax return. Caution is required in interpreting this ratio.
Capitalization	Total liabilities / Assets	Capitalization ratio measures the relationship of total liabilities to assets. the ratio indicates the percentage of capital provided by creditors relative to the total capital invested in the business.	The closer the capitalization ratio is to 1, the greater the balance of capital provided by creditors (non-business owners). A low ratio indicates that the business is largely funded by internal sources (the business owners), providing a larger cushion to cover losses. A high ratio may be acceptable for a business in a very stable industry but may be a concern for a business in an unstable industry (cyclical industry).

Category	Ratio	Description	Interpretation
Coverage Ratios			
Interest coverage	Net Income + Interest / Interest Expense	Interest coverage shows the number of times profits cover interest expense. It represents the margin of safety in making fixed interest payments.	A high interest coverage ratio is desirable for both creditors and management. Low coverage also has implications concerning a company's ability to finance other areas of its business from retained profits and its ability to repay its debt from profits.
Debt coverage	Net Income + Interest + Depreciation / Interest Expense + Current Portion of Long-term Debt	Debt coverage is a simplified measure of the cash flow from operations available to service debt due in the current year	A debt coverage ratio less than 1 indicates that the business generates insufficient funds to service the debt. A ratio greater than 1 is essential for repayment of term debt.

ANNEX HH. FARM LAND TRACKING

Farm Land Appendix

Land and Buildings Already Owned *(Display each piece of land in acres)transfer totals to statements of assets and liabilities*						
Legal Description	**Total Area**	**Dry Cultivated**	**Irrigated Cultivated**	**Unfit Native Pasture**	**Bare land Value**	**Value of Improvements**
Totals						
Land and Buildings Leased (list each piece of land in acres)						
Legal Description	**Total Area**	**Dry Cultivated**	**Irrigated Cultivated**	**Unfit Native Pasture**	**Bare land Value**	**Value of Improvements**
Totals						

Land and Buildings Leased (list each piece of land in acres)					
Legal Description	**Total Area**	**Dry Cultivated**	**Irrigated Cultivated**	**Unfit Native Pasture**	**Name of Landlord**
Totals					

Applicant's Signature ______________________ Date *(MM/DD/YYYY)* ______________________
Co- Applicant's Signature ___________________ Date *(MM/DD/YYYY)* ______________________

ANNEX II. FARM – OPERATING STATEMENT INSTRUCTIONS

Items 1 to 58 will assist you in completing the operating statements.

A. Crop Program

1. Indicate the production year.
1. In this column, state the type of crop to be grown (i.e., specialty crops, forage, wheat, oats, barley, etc.).
2. State the number of acres to be grown for each crop.
3. State your expected crop yields in bushels or tons/acre.
4. Multiply the acreage times the yield (Column 2 by Column 3) to obtain the total crop yields for each crop.
5. If sharecropping, state the landlord's total share of the crop in bushels or tons. If leasing on a cash basis, indicate the dollar amount of cash rent in Section 21.
6. If you are growing livestock feed, state the total amount of your crop you plan to feed in bushels or tons. If you plan to use your crop as seed, indicate the amount in bushels or tons.
7. From Column 4, subtract the total of Columns 5, 6, and 7 to obtain the amount of crop produced for sale.
8. State your expected price per bushel or ton in dollars for each crop.
9. Multiply, for each crop grown, Column 8 by Column 9 to obtain an estimated gross crop income figure for the year. Add all figures in Column 10.
10. State summer fallow acreage (owned and rented) for the year.
11. State the number of acres of pasture you lease and/or own (exclude community pastures).

B. Crop Expenses

12. State the type of fertilizer you plan to use.
13. State the type of chemicals you plan to use, including herbicides, pesticides, and fungicides.
14. Estimate in ounces, pounds or tons per acre the rate of each fertilizer or chemical you will be using.
15. Estimate the number of acres to which each fertilizer or chemical will be applied.
16. Estimate the cost of each fertilizer or chemical in dollars per acre.
17. Multiply Column 15 by Column 17 for each fertilizer or chemical used to obtain the cost per acre.
18. Multiply Column 16 by Column 18 to obtain the total cost.
19. Sum the total cost of chemicals and fertilizer.
20. In the seven categories following the subtotal for chemicals and fertilizer, indicate the dollar amount of the expenses that apply to your operation.
21. Add Line 20 plus all expenses in Section 21 to obtain total crop expenses.

C. Livestock Program

In the Type of Livestock column, state the type of livestock (i.e., beef cows, dairy cows, cattle feeders, pigs, sows, lambs, etc.).

22. State the number of animals you have on hand at the beginning of your fiscal year for each type of livestock. This figure should be the same as the closing inventory from the previous year.

23. Additions

- Births: State the number of live births.
- Transfers in: Indicate the number of animals that are transferred within your herd, such as calves retained for breeding.
- Number purchased: State the number of animals purchased throughout the year for each type of livestock.

24. Subtractions

- Death loss: State the number of deaths during the year.
- Transfers out: Indicate the number of animals that are transferred within your herd, such as bred heifers that calve. In this case, these bred heifers would be transferred to cows.
- At all times, the numbers of animals transferred out must equal the number transferred in.
- Sales: State the number of animals in each type of livestock operation to be sold during the year.
- Average price/head: Indicate the average price (dollars per animal) that you expect to receive for the animals sold.
- Revenue: Multiply the number sold by the average price to obtain the cash income received from each type of livestock.

25. Closing Inventory

For each type of livestock: opening number + births + transfers in + purchases less total of death loss + transfers out + sales becomes the number for opening inventory for the next production year.

27. Total each column as necessary.
28. State the livestock product sold, such as milk, wool, eggs or honey. Use separate lines to list product sold under quota and product not sold under quota.
29. State the number of production animals.
30. State the production in units per animal per year (i.e., hectoliters, dozen eggs, etc.).
31. Multiply Column 29 by Column 30 to obtain your expected total production.
32. State the gross dollars per unit you will receive for the product.
33. Multiply Column 31 by Column 32 to obtain your expected gross income.
34. Total each column as necessary.
35. Total the revenue from livestock sales and livestock products.

D. Livestock Expenses

36. State the quantity in tons, bushels, or units purchased where applicable. Do not include home-grown products.
37. State the cost in dollars per unit where applicable.
38. State the total cost by multiplying Column 36 by Column 37 for each expense indicated.
39. This section includes any form of cash rent that is paid for pasturing cattle, including community pasture fees, etc.
40. Add the totals in Column 38 to acquire the total livestock expenses.

E. Overhead

41. Provide a brief description of each expense.
42. Utilities include both household and farm utility expenses such as telephone, power, and natural gas.
43. State the total for property and water taxes.
44. State the total for insurance and licenses for buildings and vehicles. Include life insurance premiums with living expenses (Line 58 of the operating statement).
45. State the total for any legal and accounting expenses.
46. The remaining space is for expenses that have not been covered, such as association fees, entry fees for livestock shows and related costs, etc.
47. Add the total costs from each category.

F. Debt Retirement

48. List creditors. Note the line for operating loan(s) — Line 54.
49. Estimate as closely as possible the outstanding principal balance of each loan at the beginning of the year.
50. Estimate the amount to be paid on principal during the year.
51. Estimate the interest to be paid on the loan. For floating term loans, use the current interest rate. Do not include incentives or subsidies to be received on these loans.
52. Add columns 50 and 51 for each loan.
53. Estimate the total annual lease payment.
54. If you have operating loan(s), calculate the amount of interest that will be incurred during the last year and state only the interest cost in Column 52.
55. Total Column 52.

G. Summary

56. This section is provided to summarize your operation for the year. Figures to be entered in this section are the totals from the previous sections.
57. Indicate the amount of net income you and your spouse/co-applicant acquire from sources other than your own farm unit, including custom work, wages from labor on another farm, and employment.

58. State the total living expenses for the year, including food, medical, clothing, entertainment and any other items not covered elsewhere in the operating statement.

ANNEX JJ. STATEMENT OF ASSETS AND LIABILITIES

Date: (MM/DD/YYYY) ____

Name: ____

Assets

Non-Farm Assets	Particulars	Present Value	For AFSC Use Only
	Total Non-Farm Assets:		

Current Assets	Particulars	Present Value	For AFSC Use Only
Cash on hand			
Accounts receivable			
Inventory: grain			
(specify amount and type)			
Market livestock			
Other			
	Total Current Assets:		

Intermediate Assets Machinery, Vehicles	Make, Size, Model	Year Manufactured	Present Value	For AFSC Use Only
		Total Intermediate Assets:		

Assets

Livestock (Basic Herd)	Description, Brand	Age	Avg. Wt	No.	Value/ Head	Present Value	For Official Use Only
					Total Livestock Assets:		

Other (e.g., Quotas, etc)	Particulars	Present Value	For Official Use Only

Long Term Value Of Farm	Particulars	Present Value	For Official Use Only
	Total Long-Term Assets		
	Total Assets (A)		

Liabilities

Current (under 1 Year) Name and address of creditors	Loan Purpose	Date Of Loan	Length Of Loan	Interest Rate %	Repayment Terms	Original Amount	Present Amount Owing	For Official Use Only
Accounts Payable								
Taxes, Water Rates								
Operating Loans								
						Total Current Liabilities		

Liabilities

Intermediate (1-10 Years)	Loan	Date Of	Length	Interest	Repayment	Original	Present	For Official Use Only

Name and address of creditors	Purpose	Loan	Of Loan	Rate %	Terms	Amount	Amount Owing	
Owing on Machinery								
Bank								
Owing on Livestock								
Other intermediate								
						Total Intermediate Liabilities:		

Long-Term (Under 1 year) Name and address of creditors	Loan Purpose	Date Of Loan	Length Of Loan	Interest Rate %	Repayment Terms	Original Amount	Present Amount Owing	For Official Use Only
Owing on Land and Buildings								
Other Long Term								
						Total Long-Term Liabilities		
						Total Liabilities (B)		

Total Assets (A) ____________________

Total Liabilities (B) ____________________

Net Worth (A-B) ____________________

Prepared By ____________________

ANNEX KK. MIS DATA REPORTING NEEDS

Data and information needed to successfully operate an agricultural lending unit.

As outlined here, for a full-service lender an agricultural lending unit needs at least 30 distinct types of information and data, not including sub-categories, in its normal course of operations:

<table>
<tr><th colspan="2">Commercial Department</th></tr>
<tr><th>Marketing Department</th><th>Sales Department</th></tr>
<tr><td>• Product performance
    o By sales volume
    o By originator
• Existing loans
• Pre-booking</td><td>• Contact database
• Existing borrowers
    o Potential borrowers
• Payees
• Activities of loan officers:
    o Contact logs
    o Submission/approval ratio
    o Volume funded
• Support
    o Pricing support
• Loan proposals</td></tr>
<tr><th colspan="2">Financial Department</th></tr>
<tr><th>Accounting</th><th>Documentation</th></tr>
<tr><td>• General ledger
• Cash accounts
• Department accounts
• Treasury
    o Asset/liability management
• Funding decisions</td><td>• Documentation
• Checklist
• Document generation
• Notes
• Funding</td></tr>
<tr><th colspan="2">Servicing Department</th></tr>
<tr><td colspan="2">• Billing
• Collection
• Equipment management
    o Disposal of equipment
    o Going off lease
• Fleet management (for vehicle lessors)
    o Location
    o Repairs and maintenance
Portfolio management</td></tr>
<tr><th colspan="2">Office of General Director</th></tr>
<tr><td>• Human resources
  (employee and training records)
• Legal matters
• Information technology
• General office matters</td><td></td></tr>
<tr><th colspan="2">Credit Department</th></tr>
<tr><td>• Application information
• Credit bureau information
• References received
• Credit analysis
• Notes</td><td></td></tr>
</table>

ANNEX LL. PORTFOLIO REPORTING TOOL

XYZ Leasing - REPORT

This report should be filled out with the full LENDER FUNDED portfolio information as of the last day of each month. This is a snapshot of the portfolio as of that day, and the data for a given

	B	C	D	E	F					K	L	M	N	O	P
2007	**Amount drawn from - repaid to LENDER per month**	**No. of lease officers in Facility**	**No. of leases disbursed per month**	**Euro amount of leases disbursed per month**	**Average Euro lease amount per month**	**No. of Micro lease outstanding (cumulative)**	**Euro amount of Micro lease outstanding (cumulative)**	**No. of Small lease outstanding (cumulative)**	**Euro amount of Small leases outstanding (cumulative)**	**No. of Leases repaid per month**	**Total No. of leases outstanding**	**Total Euro amount of leases outstanding**	**YTD arrears % > 30 days* (total principal of leases in arrears)**	**YTD Arrears % > 60 days (total principal of leases in arrears)**	*check for disbursed no of loans (should=0 for relevant month only)*
Instructions	Any amounts of the credit line drawn down from LENDER or Repaid to LENDER	The number of sales persons selling leases under the Facility	The number of leases disbursed (paid out) from LENDER resources in the current reporting month	The amount of leases, in EURO, disbursed from LENDER resources in the current reporting month	Column E / Column D	Number of Leases funded from LENDER resources with original disbursment value of <= EUR 30,000 and to businesses with<=10 employees	Outstanding Value in EUR of Leases funded from LENDER resources where the original disbursement value is <= EUR 30,000 and to a business with <= 10 employees	Number of Leases funded from LENDER resources with original disbursement value of >EUR 30,000 and <= EUR 125,000 and to businesses with <= 100 employees	Outstanding Value in EUR of Leases funded from LENDER resources where the original disbursement value is > EUR 30,000 and <= EUR 125,000 and to a business with <= 100 employees	Number of leases funded with LENDER resources that are repaid in the current reporting month	Column G + Column I	Column H + Column J	SUM IF rata outstanding is >= 2; outstanding principal in EUR / Total Outstanding Value of LENDER funded leases	SUM IF rata outstanding is >= 3; outstanding principal in EUR / Total Outstanding Value of LENDER funded leases	*This column is just a check of the calculations for total no of loans if you are using this LENDER spreadsheet template*
Carried forward															
JANUARY															-
FEBRUARY															-
MARCH															-
APRIL															-
MAY															-
JUNE															-
JULY															-
AUGUST															-
SEPTEMBER															-
OCTOBER															-
NOVEMBER															-
DECEMBER															-
TOTAL	-		-	-						-					
check for 2009 (should =0)			-	-											
check for grand total (should=0)			-	-											
Total 2010	-		-	-	**EURO**										
Grand total	-		-	-	**EURO**										

ANNEX MM. SWOT SAMPLE ANALYSIS

Here is an example of a SWOT analysis for a bank's credit delivery platform

<table>
<tr><th>STRENGTHS</th><th>WEAKNESSES</th></tr>
<tr><td>Sufficient capital for growth
Network of branches in underserved areas
Strong and prestigious shareholders
Committed leadership team
Strong organizational values, commitment, teamwork, pro-activity, and leadership
Ability to approve loans quickly
High-quality portfolio showing a strong customer base</td><td>Low levels of client growth
Weak customer service
Low levels of deposits
Lack of credit best technology (workflow, scoring, etc.)
Lack of process standardization
Lack of segmentation methodology
Weak monitoring and enforcement
Weak channels of communication
Lack of innovation
Limited focus on training loan officers</td></tr>
<tr><th>OPPORTUNITIES</th><th>THREATS</th></tr>
<tr><td>Prices of agricultural products can open new niches
Widespread updating of communication technology to improve controls
Expanding market exposure – national and regional
Some competitors are weak in the agri-finance area
Develop strategies for customer retention and loyalty</td><td>Country risk – changing climate
World economy
MF industry's political situation affects asset quality, pricing, products, etc.</td></tr>
</table>

ANNEX NN. AGRI-FINANCE GLOSSARY

Unless otherwise noted, all definitions are from *Glossary of Terms for Agricultural Insurance and Rural Finance* (1992), FAO Agricultural Services Bulletin 100.

Agribusiness. A combination of the terms *agriculture* and *business,* signifying a broad definition of agriculture that includes the supply of inputs, farming, harvesting, distribution, shipping, storage, processing, advertising, and selling of agricultural products.

Agricultural cooperative. A group of farmers who pool resources for certain activities, such as to acquire volume discounts on inputs or to access credit.

Agriculture-related enterprise. Any business, organization, firm, or company of variable size whose development is based on an agriculture-related economic activity. These enterprises can be located anywhere along the value chain, from inputs to production to processing to marketing to trade.

Agricultural finance. A field of work in which people aim to improve access to efficient, sustainable financial services for the agriculture industry, including farmers and all related enterprises.

Business enabling environment. Norms, customs, laws, regulations, policies, international trade agreements, and public infrastructure that facilitate or hinder the movement of a product or service along its value chain

Capital. A measure of the accumulated financial strength of an individual, firm, or nation, created by sacrificing present consumption in favor of investment that will generate future returns above investment costs

Cash Flow. The measure of the usable profit in a business. Calculated by adding net profit and all non-cash expenses (usually depreciation and amortization). Cash receipts less cash disbursements.

Collateral. Any items pledged to secure a loan, traditionally in the form of fixed assets, particularly land. Alternatives forms of collateral include group guarantees, compulsory savings, nominal assets, and personal guarantees. See movable and immovable collateral.

Contract farming. A farmer promises/contracts with a buyer to raise a crop that the buyer will purchase at harvest at either market price or a previously agreed upon price.

Correlated risk. Potential for negative impacts on a group of people in a region or regions at the same time and to a similar extent (i.e., commodity price risk) (Skees & H.B. Price, 2006).

Credit bureau. A public or private registry that collects information about the payment habits and current debt of individuals and companies (Skees & H.B. Price, 2006).

Credit guarantee. Involves three parties — guarantor, lender, and borrower — bound by a contract. Typically, a guarantor contractually agrees with a lender to accept the responsibility, usually partial, for a borrower's obligation to the lender if the borrower is unable to meet the obligation (Skees & H.B. Price, 2006).

Credit union. A member-owned financial institution that has no external shareholders, with each member having the right to one vote in the organization. Members may deposit money with the organization and borrow from it (Skees & H.B. Price, 2006).

Debt. An obligation to pay money, deliver goods, or render services under an express or implied agreement. One who owes is a debtor; one to whom debt is owed is a debtee, creditor, or lender. Use of debt in a firm's financial structure creates financial leverage that can multiply yield on investment, provided that returns generated by debt exceed cost. Because the interest paid on debt can be written off as an expense, debt is normally the cheapest type of long-term financing ("Debt," 2009).

Debt coverage. A figure that illustrates the cash generation of the business. It is calculated by taking net profit and adding back all the non-cash expenses.

Debt service capacity. The amount available for debt servicing and calculated as net income after tax plus term interest plus depreciation minus dividends minus living expenses plus off-farm income.

Deposit mobilization. The process of actively soliciting deposits by a financial institution.

Development Credit Authority (DCA). Provides partial credit risk guarantees to private-sector lenders to encourage the provision of credit to financially viable businesses and projects that contribute to development goals. There are four basic DCA guarantee structures, but DCA loan portfolio guarantees have been used the most frequently for value-chain finance activities. An LPG provides up to 50 percent coverage on net principal losses by a private-sector lender to borrower group specified by USAID. The purpose of an LPG is to encourage a lender to extend credit to borrowers, such as local governments, that are underserved by the financial sector.

Direct value-chain finance). Financial flows between value chain actors. For example, a processor may provide cash or in-kind credit to a small farmer producing mangoes for a company. The credit is repaid when the mangoes are delivered to the processor.

Enabling environment. The system of legal, regulatory and other public institutions and infrastructure that makes sound financial transactions possible.

End market. Indicates where the final transaction takes place in a value chain, typically where the end user is located. An end user is the individual or organization for whom the product or service has been created, and who is not expected to resell that product or service ("End Market," 2009).

Equity. (1) Ownership interest or claim of a holder of common stock (ordinary shares) and some types of preferred stock (preference shares) of a firm. On a balance sheet, equity represents funds contributed by the owners (stockholders) plus retained earnings or minus accumulated losses. (2) Net worth of a person or firm, computed by subtracting total liabilities from total assets. In cooperatives, equity represents members' investment plus retained earnings or minus losses ("Equity," 2009).

Financial institution. An entity — regulated or not — that specializes in provision of financial services.

Financial intermediary. A financial institution that collects deposits and lends these deposits.

Index-based insurance. A special form of insurance that can be used to insure against types of risk that are typically uninsurable with traditional insurance, such as natural disasters. Index insurance can be used where there is an objective measurable event (extremes in rainfall, wind speed, freeze, extreme heat, etc.) that demonstrates a strong correlation with a variable of interest (e.g., crop yields or loan default rates).

Inputs. Components of agricultural production, such as seed, fertilizer, or tillage.

Leasing. A method of financing through the acquisition/use of fixed assets, predicated on the concept that the value of an asset is in its use in the business rather than through ownership. Leases are typically used to finance equipment, but can also be used for buildings and improvements and are commonly used to finance vehicles

Liquidity. Includes working capital, quick ratio, collection period, inventory turnover, bank support. Measures the enterprise's capacity to meet current obligation using its most liquid assets and short-term financing opportunities.

Line of credit. The extent to which a seller will extend credit payment terms to a buyer or bank. It is the total amount of unpaid invoices, goods in transit, and orders confirmed but yet but yet to be shipped, or loans ("Line of credit," 2009).

Microfinance institution. An organization that provides financial services to the poor. This broad definition includes a wide range of providers with varied legal structures, missions, methodologies, and sustainability, but which all share the characteristic of providing financial services to a clientele poorer and more vulnerable than traditional bank clients.

Movable property. Any property or asset other than land and buildings; for example, cars, bank accounts, wages, securities, a small business, furniture, insurance policies, and jewelry. Often referred to as personal property or chattel.

Moral hazard. The potential loss by a lender due to uncertainties and imperfections in markets that arises from the character and circumstances of individuals rather than the inherent nature of the business. An example is a borrower taking a risky action unknown to the lender (term used more commonly in insurance).

Outgrower schemes. Loans that are tied to purchase agreements. In outgrower schemes, sellers have more formal or captive relationships with buyers, who in turn commit to providing additional services, such as marketing and technical assistance. This increased level of commitment is more appropriate for buyers and sellers of high value, specialty products.

Public-private partnership. A form of private-sector participation in the financing and provision of municipal services and infrastructure. A public-private partnership is characterized by private-sector management of the project company with a public entity or municipality retaining a significant stake and sometimes the majority of the share capital.

Risk-adjusted return on capital (RAROC). Measures performance on a risk-adjusted basis. Calculated as the economic return divided by economic capital. RAROC helps determine whether a company has the right balance between capital, returns and risk. The central concept in RAROC is economic capital: the amount of capital a company should put aside needed based on the risk it runs.

Risk management. Policies, procedures, and practices involved in the identification, analysis, assessment, control and avoidance, minimization, or elimination of unacceptable risks ("Risk management," 2009).

Registry. A government agency that keeps a public register of information such as company records and land titles (i.e., collateral registry or credit registry) ("Registry," 2009).

Rural finance. A field of work in which people aim to improve rural communities' access to efficient, sustainable financial services.

Secured lending. The pledging of an asset — any marketable property — as collateral by a borrower to a lender until a loan is paid back. The asset that is pledged as collateral may be immovable or movable property.

Term loan. An asset-based, short-term (usually one to five years) loan payable in a fixed number of equal installments. Term loans are generally provided as working capital for acquiring income producing assets (machinery, equipment, inventory) that generate the cash flows for repayment of the loan ("Term loan," 2009).

Transaction costs. Costs arising from the transfer of ownership or property rights, such as in making and recovering a loan, including explicit costs and the time required for the transaction.

Transformation. A common term used to refer to how food is conserved, preserved, or processed to make it last longer.

Trust. A fiduciary relationship in which a trustee holds title of assets for a beneficiary. Trusts are increasingly used to hold wholesale funds that are lent to financial institutions for specific types of investment, upon demonstrating that they meet the qualification criteria.

Upgrading. Activities undertaken at the first or industry level to improve productivity to enable effective responses to market opportunities or increased competitiveness of all activities in a product's value chain. There are five types of upgrading at the firm level: process upgrading, product upgrading, functional upgrading, channel upgrading, and inter-sectoral upgrading ("Upgrading," 2009).

Value chain. The full range of activities and services required to bring a product or service from conception to sale in its final local, national, regional, or global markets. Value chains include input suppliers, producers, processors, and buyers. They are supported by a range of technical, business, and financial service providers ("Chain Analysis," 2009).

Value chain analysis. The process for understanding the systemic factors and conditions under which a value chain and its firms can achieve higher levels of performance ("Chain Analysis," 2009).

Value chain approach. Seeks to facilitate changes in a firm's behavior that increase the competitiveness of the chain and generate wealth for all participating firms, with the aim of contributing to equitable economic growth (Stallard, 2009).

Value chain finance. Finance that flows to or among value-chain members, including the smallest microenterprises and the largest multinational company. Value chain finance may be direct or indirect.

Warehouse receipt. A document that provides proof of ownership of commodities (e.g., bars of copper) that are stored in a warehouse, vault, or depository for safekeeping. Warehouse receipts may be negotiable or non-negotiable. Negotiable warehouse receipts allow transfer of ownership without requiring the delivery of the physical commodity.

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