SARFA

Strategy for agricultural and rural finance in Africa

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Strategy for Agricultural and Rural Finance in Africa (SARFA)

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Cover photo: *Customers at NMB Bank in Arusha, Tanzania, applying for loans to open agro-dealerships in rural Tanzania. The bank manager said that about 80% of the applications are successful.*

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Executive summary

The purpose of this report is to identify a **strategy for agricultural and rural finance in Africa** (SARFA). SARFA will serve as a tool for promoting smallholder access to the investment capital that they require to produce, process and market agricultural commodities. Supply of credit is low in Africa and even lower for rural areas and agriculture. Yet there is high and diverse demand for rural and agriculture finance services with especially the entrepreneurs in the "middle part of the value chains" such as smallholder producers, traders and processors which are not being met. Moreover, the rural and agricultural entrepreneurs in the "middle part of the value chains" in Africa have high entrepreneurial potential. This situation is counter developmental.

Limitations to extending rural and agricultural finance services are found in at least three levels, namely financiers, agricultural enterprises, contextual and legal / policy levels. Taken together they include those arising from the characteristics of the rural and agriculture environment (dispersed, scattered settlements and households and uncertainties), high information costs, risks and inadequate physical infrastructure, as well as restrictive or absence of requisite legal frameworks. Addressing these limitations would require identifying strategic options to facilitate access to mainstream financial services. The strategic options for effective development of financial products and services to mitigate smallholder farmer constraints to agricultural credits, would include guidelines, principles and modalities for bringing together all the essential elements needed to enable smallholders to access investment capital and rural finance policy and program formulation. Specifically, it will involve identification of innovative products and initiatives that are suitable for supporting and promoting smallholder finance, as well as identification of conditions and pre-requisites for effective and efficient rural and agricultural finance system.

A review of the literature suggests that the current perspective on how to effectively and efficiently provide rural and agriculture finance to the smallholders in Africa, is one that combines financial sector development with value chain development approaches in a complementary way. This perspective implies that the strategy to improve access to financial services involves:

1. Identification of existing financial services which could be proposed along an identified value chain from input suppliers, producers, processors, buyers and other actors.

2. Building long-term capacity of both the identified finance service providers and the value chain actors, and providing incentives for these institutions, and to facilitate access to a wide range of services such as term finance, savings, insurance and money transfers by all the actors in the value chain.

The principles emerging from this perspective include:

- Building on existing real side relationships (products, information and services) and finance flows in selected (competitive, viable, sustainable and profitable) value chains;
- Identifying and clearly understanding the actors in the selected value chains or agricultural sector, including financial institutions that are either currently providing or potential providers of financial services in different segments;
- Recognizing the importance of long-term financial intermediation;
- Importance of ensuring "a chain of value chains" become the focus of the strategy; and
- Understanding policy implications of interventions.

The modalities for operationalizing the principles include:

1. Selection of appropriate value chain(s) based on their potential economic, poverty, social and environmental impact .
2. Analysis of the selected value chain(s) and identification of current and potential finance flows from different types of financial institutions / agents to and among different value chain actors.
3. Identifying the "value chain development requirements" of the selected value chain(s). These may be the:
   a. need to craft new chain,
   b. need to expand chain liquidity in an existing chain, and
   c. need to unleash investment capital into an existing chain.

The financing strategies suitable for supporting or promoting smallholder's access to investment capital would vary according to the "value chain development requirement" identified. The options for the value chain development requirements of (i) **crafting new value chain**, would involve both:

a. The building of small-holders' management, organizational and technical capacities, so that they become solid chain actors. This will also require building cooperation between the producers and buyers based on non-profit principles from the start.
b. Facilitating cooperation between producers, buyers and a financial agent in order to provide producers with access to the financial services they need for their business. This should be based on commercial principles from the start.

When the value chain development requirement is to (ii) **expand chain liquidity**, the suitable way forward is (a) a lead firm strategy whereby strong lead firms in the chain will be used as vectors to reach non-bankable suppliers. The lead firm serves as collateral to the suppliers. In addition, there should be (b) the building of the capacities of the suppliers or producers to make them bankable to mainstream banks.

When the need is to (iii) **unleash investment capital into the value chain**, strategies such as (a) leasing through small-holder associations or directly to the small-holders is suitable. Alternatively, (b) temporary equity financing, whereby the financial institutions and the producers or traders jointly own the equipment is also suitable. Whichever of the two strategies are adopted, the smallholder associations (e.g. producers, traders, processors associations) participating in the leasing or temporary equity financing also need to receive (c) training in group development and management, input management, financial management and equipment or facility management.

Within the above strategies, different innovative value chain finance mechanisms were identified as suitable. Some of these are trade financing, *warehouse receipt lending*, *repos financing*, and *factoring.* Each of these may also be complimented with supportive mechanisms and technologies such as use of ICT, Index Insurance and use of Community Based Financial Organizations (CBFOs) such as (Village Savings and Loans Associations (VSLA's) and Self Help Groups (SHG). For any given situation, the appropriate finance mechanism and complementary supportive technologies and mechanisms need to be identified.

The options for **risk management** should also be examined and selected to be consistent with the value chain financing strategy and mechanisms selected. Some of the risk management options include pooling of risks and use of peer pressure through group formation and building their capacity to enable them see the benefits of continued membership of the group. Other risk management strategies include combining investments with other financial and non-financial services; "ownership" of financed equipment in the name and hands of the financing agent; risk-sharing by direct involvement in undertaking the activity. Further, within the perspective that combines financial sector with value chain development approaches in a complementary way, **new risk mitigation opportunities are identifiable.** These include the following:

i. The **"bringing the business into the picture" risk mitigation**. In this case the financial agent looks at the business case – the crop, the buyer, the market and the technical assistance and not the balance sheet and the profit- and- loss statement of the clients.
ii. **Soft collateral instead of hard collatera**l as risk reduction strategies – market risks are reduced through sales contracts, production risks through technical assistance, management risks through producer group formation, moral risks through regular information and communication, and repayment risks through a claim on the product.
iii. The financial agent **looking at the future – at the potential of the business case rather than the past financial records**.

These risk management and mitigation that are identifiable in the complementary financial sector and the value chain financing perspective, **must be popularised in the financial sector**.

There are about six conditions and pre-requisites that are critical for supporting and promoting this innovative smallholder finance (use of innovative rural and agriculture finance strategy), for effective and efficient rural and agriculture finance system.

i. A condition required for **trade finance /value chain financing** to flourish is contract enforcement: to address the challenges of enforcement of contractual obligations in lending involving finance mechanisms such as trade financing, warehouse receipt lending,

repos financing, and factoring which involves non-financial and informal financial actors and services providers and actors, would require strong contract enforcement legal framework. Further, at the level of the value chain, where there is a low value bulky commodity with clear constriction point for delivery **it is important to introduce *self-liquidating loans* whereby the value of the loan is deducted from sale revenue at the 'sale time and point'**. **For high value crops, this may not be the case-and may result in default. Therefore appropriate legal regime is required.**

ii. Specifically one of the conditions required for warehouse receipt lending is the need for appropriate legal environment. The **appropriate legislation should clearly make warehousing receipts functionally equivalent to cash.** The policy option for such a legal framework is the creation of specific warehouse receipts lending code in countries where they do not exist.

iii. Another condition required for warehouse receipt lending is **existence of a functioning market place**. Financiers are likely to participate in the warehouse receipt lending scheme only if the **value of the commodities can be assessed transparently e.g. – weighing**. In addition, there should be an **assurance of a way of liquidation of the commodities in the case of default**.

iv. In order to ensure **availability of quality professional commercially run warehouses**, there has to be a **licensing and monitoring procedure** in place that guarantees minimum quality standards. There should be **a licensing and monitoring agency** with **clear standards that are transparent and acceptable to all participants** in the system. As part of establishment and or operating the warehouse receipt lending, there should be a means of **performance guarantee**. This can be in the **form of indemnity fund or bonding to cover any potential fraud or negligence by the license warehouses**. This is to ensure that incase the warehouse is unable to deliver the goods upon presentation of a receipt; the financier can call up the indemnity fund or bond to cover the loss. All these can be part of the warehouse receipts lending code.

v. Leasing is a viable mechanism for rural and agricultural finance for unleashing liquidity into an existing value chain. **A pre-requisite for use of leasing is a clear legal and regulatory framework for leasing.** A good legal framework for leasing should include:

    1. Clear definitions of a lease contract, leased assets, and responsibilities and rights of the parties to a lease contract;
    2. Clarity in allocating responsibility for liability for third-party losses arising out of the operation of leased assets;
    3. Stipulation of the priority of a lessor's claim over a leased asset; and
    4. A framework for easy and fast repossession of leased assets.

The use of **internationally accepted accounting standards and an unbiased tax code enhance the development of the leasing sector. The existence of a well-functioning asset registry, the availability of insurance and maintenance services for equipment at a reasonable cost, and the existence of a good market for used assets** are also necessary for the development of the financial leasing industry. **It is important that African countries develop appropriate legal framework which is applicable to all the sectors in the country.**

Role of banks in rural and agriculture finance

i. **For trade finance / value chain financing to work** effectively, local banks must be willing to participate and **extend credit to the other actors**. Banks normally have i**ncentives** to do this if the organization of the chain is done well (with the help of Donors, Government Development Agencies, Private Development Agencies), which results in **savings on transactions cost as well as improving credit worthiness of borrowers**. Stronger members of the chain e.g. exporters can be used as more efficient *de facto* financial intermediaries. The use of the ***de facto* intermediaries can reduce transactions cost associated with credit delivery** by absorbing these costs through other links in the value chain by 'packaging' credit with other transactions.

ii. **For warehouse receipt lending to work** effectively, the local banks have to play important roles in the successful set-up of the warehouse receipt lending system (UNTCAD, 2001). These roles include **providing local expertise on the commodity sector**, acting as **agent for involvement of finance from international financiers**, **provide their existing branch network as outreach into rural areas** and **financing or co-financing the warehousing arrangements**. This involvement also **builds confidence of other financiers**, therefore it is important to integrate the local financial system.

Role of private companies in rural and agricultural finance

i. As **stronger members of the value chain** such as exporters, buyers and processors, their **contracts can be used as soft collateral for others in the chain and assure the means off-taker, and mechanism of recovery for self-liquidation loans**. They can be used as more efficient *de facto* financial intermediaries for channeling loans to suppliers and other actors in the value chain. Their use in these various ways can reduce transactions cost associated with credit delivery by absorbing these costs through other links in the value chain by 'packaging' credit with other transactions.

ii. The private sector can ensure **availability of licensed and quality professional commercially run warehouses for the warehouse receipt lending**, by both setting up the warehouse and operating it in a way that ensures the quality standards are met, and avoiding **fraud or negligence**.

Role of governments and donors in rural and agriculture finance

i. The role of banks in trade financing, warehousing receipt lending and leasing could be extended to reach a wider range of beneficiaries if banks partner existing **community-based financial organizations (CBFOs).** Partnerships between CBFOs and mainstream financial institutions should be implemented incrementally. It should be based on the ability of CBFOs to govern them effectively and to manage their operations so that savings are secure and loans are repaid. This is paramount for their long-term sustainability. Donors and government can add value by funding programs that train local people to develop viable groups and by providing technical assistance for the development of simple governance, operational, and accounting systems that can be implemented locally.

ii. The single most important performance indicator is repayment performance—that is, the ability of CBFOs to get borrowers to repay their loans in a timely way. Non-repayment of loans is the greatest threat to the financial sustainability of any financial organization, including CBFOs. This threat is increased by the tendency of donors and governments to provide CBFOs with large loan funds that are beyond their capacity to manage effectively. Significant amounts of external funding—beyond small seed funds that help groups get started—should be linked to their performance in managing the group's own funds. This careful approach will enable CBFOs to develop a strong foundation that enhances their prospects for long-term sustainability. Donors and governments should also fund program evaluations, using performance criteria that allow comparison across programs and models.

Chapter One: Introduction

1.1 Background

Agriculture remains the backbone of the African economy. It is the main source of income for about 90% of rural population in Africa (ECA, 2004), 60% of its labor force and 20% of the total merchandise exports (CAADP, 2005). Agricultural growth rates in Africa have increased marginally, averaging less than 3% in the last two decades, except the last few (pre-3F crisis) years in which the growth has averaged 5%, with all five sub-regions of Africa recording positive growth rates; led by north Africa with a 7 % annual growth rate (UNECA and AUC, 2008). Agriculture's relatively weak; often declining performance is symptomatic of inadequate investments in agriculture. African agriculture remains largely uncompetitive and under-capitalised; due to limited access to credit by smallholder farmers and weak agricultural and rural finance systems.

Although liquidity has been growing in the African banking sector, lending for agriculture has been a major constraint because of high default rates due in part to high risks (climatic risks, price fluctuations, diseases and pests) and the absence of appropriate risk mitigation/management tools. Other challenges to agricultural and rural finance in Africa include inter alia, poor infrastructure, dispersed population and high information and transaction costs; limited numbers of and inadequate capacity of rural finance institutions; crowding out of collateral due partly to lack of property rights; and restrictive legal framework for enforcing contractual arrangements.

A few African countries have established agricultural commodity exchanges in order to mitigate some of the risks factors (e.g. climate and price volatility) that prevent small holder agricultural producers from accessing investment capital. Some of these exchanges have successfully facilitated access to markets and also enhanced linkages between smallholder farmers and financial institutions. However, a majority of exchanges remain locked out of the capital market and most of the commodity exchanges remain poorly integrated with the financial systems in the countries where they operate.

Achieving the commitment to reduce hunger and poverty by half requires a dramatic improvement in the productivity and performance of agriculture. The main challenge is how to encourage investments in the inputs and services that are required to boost productivity and promote

rural development. The question therefore is: what strategies are required to effectively link small and medium scale agricultural producers to capital markets? Considering that small and medium scale farmers produce and market the bulk of agricultural products in Africa, it is important that they are facilitated and offered alternative opportunities and options to access the financial resources required for investment in the agricultural value chain. Alternative strategies that facilitate access to capital markets are required to promote investments in agricultural and rural development by small and medium scale farmers.

1.2 Purpose and objectives

The purpose of this report is to develop a **strategy for agricultural and rural finance in Africa** (SARFA) that will serve as a tool for promoting smallholder access to the investment capital that they require to produce and market agricultural commodities. The World Bank defines rural finance as the provision of a range of financial services such as savings, credit, payments and insurance to rural individuals, households, and enterprises, both farm and non-farm, on a sustainable basis (World-Bank, 2005). IFAD (2009) also defines rural finance as the financial transactions related to both agricultural and non-agricultural activities that take place among households and institutions in rural areas. It encompasses a full range of financial services that farmers and rural households require. Agricultural finance on the other hand is subset of rural finance dedicated to financing agricultural related activities such as input supply, production, distribution, wholesale, processing and marketing (World-Bank, 2005).

The strategy **identifies** strategic options for effective development of financial products and services to mitigate smallholder farmer constraints to agricultural credits. It defines guidelines, principles and modalities for bringing together all the essential elements needed to enable smallholders to access investment capital and rural finance policy and programme formulation.

1.3 Approach and activities

The development of the strategy on agricultural and rural finance document is based on desk top exercise that involved a review and assessment of existing documents on or of relevance to agricultural and rural finance in Africa. In developing the strategy, we examined the current status of agricultural and rural finance in Africa; the supply/ demand drivers of agricultural and rural finance; and strategies for promoting access to agricultural and rural finance. The following questions/ issues were addressed:

- What is the current status of supply of agricultural and rural finance services/products by financial institutions in Africa? What is the status of demand for agriculture and rural investment finance by smallholder farmers in Africa? Is the supply/ demand being met and what are supply/ and demand drivers?
- What are the limiting factors and factors and what opportunities exist for promoting/ enhancing agricultural and rural finance in Africa?
- What agriculture and rural finance products/initiatives exist and what is their suitability as instruments that can be supported/ used to promote smallholder access to investment capital?

- What are the factors and/or necessary conditions that define a conducive environment for an effective and efficient agricultural and rural finance system?
- How can smallholder farmers be integrated into the mainstream financial system so that they can benefit from the services?
- What are the respective roles of the public sector, private sector, CSOs, FOs etc in supporting/ promoting an effective and efficient agricultural and rural finance system?
- What options exist for smallholder farmer farmers to access a wide variety of financial services?
- What options are there for financial institutions to more effectively target small holder farmers who otherwise would not access credit because of lack of collateral?
- What factors and elements should policymakers take into account in the formulation of agricultural and rural finance policies and programmes?
- What alternative agricultural and rural finance options exist for the public and/ or private sector to support in order to enhance smallholder farmer access to financial services?
- What are the supportive systems/ facilities required for effective and efficient functioning of agricultural and rural finance systems?
- How should agricultural and rural finance systems be organized/ structured to better respond to investment finance needs of smallholder farmers?
- What are the modalities for linking smallholder farmers to financial markets?

1.4 Outputs

This report outlines a strategy for rural and agricultural finance in Africa. Specifically we define the guidelines, principles and the modalities for bringing together all the essential elements needed to enhance access to agricultural and rural finance. Together these outline a strategy for promoting agricultural and rural finance in Africa. The strategy identifies options for effective deployment of financial products and services to mitigate smallholder farmer constraints to agricultural credit.

Chapter Two: Current status of rural and agriculture finance in Africa

2.0 Introduction

To place the strategy document in context, this chapter reviews the current status of supply of agricultural and rural finance services/products by financial institutions in Africa, the status of demand for the same by small and medium- scale farmers, and ascertains whether the supply/demand is being met. The strategy will also identify the types of agricultural and rural finance products/initiatives that exist and determine their suitability as instruments that can be supported/ used to promote access to investment capital by small and medium scale farmers.

2.1 Current status of supply of rural and agriculture finance services/products by financial institutions in Africa

It is estimated that only 20% of populations in most developing countries have access to formal financial services (IFAD, 2009), the situation is worse for Africa where only 4% of the total population have a bank account whiles only 1% of Africans have a loan or credit facility with a formal financing institution(AFRACA 2009). Further, whilst the percentage of banked households in the high income OECD and non-OECD countries is about 91% that of Africa is about 12%. In general, whereas SME lending volumes as a percentage of GDP in OECD countries and in Europe, Australia and North America is up to 20%, compared to that for Africa is about only 4% (CGAP/ World Bank 2010). Thus, the proportion of persons in Africa using banks is far below other regions. These figures are even lower for the rural areas of developing countries where it is estimated that only about 10% have access to formal financial services and that a vast majority have no means to save money, protect their assets or make money transfers.

The supply of agricultural finance services in Africa is largely outside the banking system.

Even for a relatively more endowed Sub-Saharan African country such as Nigeria, the relatively low supply of financial services compared to the countries of the developed world is very striking. About 74 percent of all adults (64 million) have never been banked, whilst 86 percent of rural adults are unbanked, and 71 percent of salaried workers compared with 15 percent of farm employees are banked (Isern et al., 2009).

An analysis of credit supply in Africa and other developing countries confirmed that the liberalisation of the agricultural and financial sectors had led to a diminishing and costlier supply of agricultural finance. Government supply had been drastically reduced, and the bank sector had only barely picked up the slack. While the microfinance sector was developing in rural areas, as a whole, it was still quite fragile. In 1999, only around 20% of rural households in the West African Economic and Monetary Union had access to microfinance. It was noted that microfinance was nonetheless contributing to agricultural finance: in West Africa, one-third of microfinance's annual portfolio was financing agriculture (UEMOA study, 1999). Although significant, this contribution has its limitations. The credit amounts are small, considering demands. And while some large, primarily mutualist institutions (FECECAM in Benin, Kafo Jiginew in Mali) have developed in "secure" agricultural regions (areas where cash crops are cultivated, supply chains are well integrated, irrigation systems in place), microfinance is barely present in areas where subsistence agriculture dominates, areas which represent a potential demand of 50 million people throughout West Africa (FMNRFC, 2007).

Table 1: Credit Supply indicators showing relative access in selected regions or countries

Credit Supply Indicator	Developing Countries	All Africa	Rural Africa	High income OECD and non-OECD
Population with access to financial services	20%	4%		
Population with access to formal credit		1%		
% Bankable households		12%		91%
SME lending volumes as percentage of GDP		4%		20%
% of rural population with access to formal financial services	10%			
Nigeria Adult population ever banked		26%	14%	
Microfinance access by households in WAEMU		20%		
Agriculture households with access to microfinance in WAEMU			7%	

2.2 Current status of demand for rural and agriculture finance services/ products by small- and medium-scale farmers in Africa

There is a huge demand for financial services in the rural areas in the developing countries including Africa (World-Bank, 2005). According to AFRACA (2008) farmers credit requirements revolves around the provision of inputs for production and post production activities such as planting, harvesting, processing, transporting and marketing of products (AFRACA, 2008). Another classification of needs has been proposed by the (FMNRFC, 2007). They see the traditionally recognised financial needs of family farmers as opposed to new needs concerning professional organizations and agricultural enterprises. Financial needs of family farmers are classified into financial and nonfinancial items as well as terms of the term duration, and purposes.

Their lists of family farm needs for financial services include:

- Short-term input financing needed at the beginning of the crop year
- Medium and long term needs for equipment for intensification.
- Family needs for personal, durable goods and housing.

- Savings (to cope with seasonality, to protect against unforeseeable events, to prepare for life cycle events), insurance (crop, health).
- Non-financial services: monitoring demand, technical assistance and extension.

The new needs concerning professional organizations and agricultural enterprises would include the requirements for technological and organisational innovation:

- For professional agricultural actors organizations: Needs for pre-financing input stocks, working capital for commercialization activities, equipment and infrastructure needs, monitoring member demand.
- For agricultural enterprises: considerable cash flow (to finance the crop year, commercialization activities, etc.), investment (acquisition and development of land, buildings, and transportation), and new technological inputs. In addition, family expenses related to schooling, which often emerges as a key issue for these households.

Another approach to looking at the nature of demand for rural and agriculture for finance services is through the value chain lens. A value chain refers to the entire commodity system with the functions of production, processing and marketing of a particular product, from inception to the finished product. A value chain consists of a series of chain actors, linked together by flows of products, finance, information and services (KIT & IIRR, 2010).

The **chain actors** are individuals or organizations that produce the product or buy and sell it. The farmer produces the crop or the stock of its products and sells them to the trader in exchange for cash. The trader bulks the products from several farmers, cleans and sorts it and sells to the processor. The processor processes, seals them in packages, puts them in cardboard boxes, and sells them to the retailer. The retailer displays the packages on supermarket and sells them to consumers. Chain actors actually own the product at some stage in the chain. At each stage of the chain the value of the product goes up, because the product becomes more convenient for the consumer. Besides value, costs are added at each stage in the chain, including cost of processes till it gets to the consumer. Costs also arise through losses that occur along the chain.

According to KIT and IIRR (2010) when a farmer sells a product to a trader, two things change hands: the product goes in one direction and money goes in the other. This exchange is repeated at each stage in the chain, forming two parallel flows, of produce and money. In addition, each of the actors may be prepared to invest in the chain and to support the other actors to make sure that it functions smoothly. This gives rise to additional flows of finance between the different actors in the chain. These flows may go in either direction. For example, a trader may give a loan to a farmer at the start of the season so the farmer can buy inputs such as seeds and fertilizer. Or the farmer may give the trader loan- this is essentially what happens when the farmers get paid several months after they deliver the produce to the trader. Such financial flows may also include fees paid by a farmer to an association or cooperative that markets their produce. In addition, the farmer and trader exchange information. The trader may tell the farmer how much produce she wants to buy, when and where to deliver it, and what quality it should be. The trader may train the farmer on things like quality standards or new varieties. The farmer may tell the trader what the yield is likely to be and when the harvest will be ready. The two are likely to haggle over price.

There are also service providers or chain supporters who provide service to the chain. Chain supporters may provide various financial services to the chain actors. These supporters include moneylenders, savings and credit groups, microfinance institutions, banks, equity funds, and so on. The financial services they provide include loans, pre-financing, shareholdings, factoring, leasing arrangements, and so on. Further, an input supplier may give a farmer a loan in the form of fertilizer, in return for payments plus interest after harvest.

Chain supporters may also provide a wide array of non-financial services: input supplies, farm labor, transport, grading, processing, storage, packaging, advertising, research, training, advice, organisation, and so on. These services may be vital for the chain actors to produce the product, turn it into something that someone else wants to buy, and deliver it to the consumers. These are provided for a fee. Other chain supporters do not have to be paid by the chain actors, at least not directly. They include research and extension services (paid by the government out of taxes), standards organisations (ditto), and non-government organizations (paid by donors). Some chain supporters are paid directly by the chain actors through membership fees and the like. For example, a cooperative may cover some of its costs by charging membership fees or requiring members to put in work for free.

Flows of finance, information and services are not limited to the actors within a chain. Often other individuals and institutions are involved, surrounding the chain actors. We call this "chain supporters".

The chain actors and supporters operate within a chain context that includes the larger economy, currency exchange rates, government economic policy, and governance, tax, regulatory and legal frameworks. This context may help the performance of the chain, for example by promoting a transparent, stable macroeconomic policy. Or it may hinder it by imposing restrictions or allowing corruption to flourish (OECD, 2006). The context may also include influence by advocacy movements (for example NGOs that work on environmental or social issues) and by social structures (for example traditional hierarchical structures in a community).

2.2.1 The different chain actors and their financial services needs

Input suppliers – these provide farmers with seeds, chemicals, fertilizer and equipment, training or in-kind credit (such as loan of fertilizers). Various types of input suppliers exist: big foreign-owned firms, large national companies, small-scale local retailers, and farmer groups, cooperative or public bodies – all with different financial needs. *The small-scale entrepreneurs depend on small, short-term loans for working capital: they need to buy the seeds and agrochemicals and keep them in stock for their clients.*

Farmers- farmers, their families and hired workers manage the crops or animals, and are involved in post-harvesting practices and marketing. The farmers' finance needs include loans to pre-finance the crop, and prompt cash payment for their crops after harvest (or even beforehand) (KIT & IIRR, 2008). They also need credit to invest in livestock, equipment, drying and storage facilities, and to cover the cost of labour (for example, for harvesting). If they cannot get such financial support, they will not be able to produce the quantity and quality that the buyers needs, diversify their output, stay competitive, or increase their share in the final

value of the products (UNCTAD, 2004). Farmers can turn to few options for money with limited access to finance from banks or excessive interest rates on loans from the informal sectors.

Farmer organisations – cooperatives and farmers' associations or organizations have been one way of delivering credit to farmers, with loans often tied to farm input or machinery. However, like other semi-formal institutions, co-ops suffer from flawed administrative controls, lack of independent decision-making, inflexibility and high administrative cost (UNCTAD, 2004). Co-ops also face various financial needs. They need to cover their administrative costs. Those that market their members' produce need cash to pay their members promptly, which requires working capital; if farmers do not get paid quickly, they may sell to a private trader who pays less but who can provide fast cash. Farmer organizations that function as collection points need to invest in warehousing and transport.

Traders – the traders buy produce from the farmers or co-ops and bulk it before selling it on. Their business depends crucially on making their working capital flow as quickly as possible in buying and re-selling produce. Every transaction offers an opportunity to make a profit (and, of course, carries a risk of losing money). Small rural traders have to stop buying when they run out of cash, leaving farmers stranded with their products. The traders need working capital to optimize their turnover and keep transaction costs down (UNCTAD, 2004). They also need a longer-term investment capital so that they can buy a vehicle, build a warehouse, or pay for equipment to weigh or grade a product. Because so much of their funds are tied up in products at any time, traders have little collateral, so find it difficult to get loans. Few financial services are designed specifically for traders.

Processors – Small-scale processors may also lack the working capital they need to buy bulked products from a farmer group or trader. They often lack the money to invest in equipment, leading to losses, lowering quality, and pushing up the cost of processing. They typically need access to medium-term loans and the ability to lease equipment.

Wholesalers and exporters – These sell the processed products to local and global retailers, supermarkets and corners shops, who in turn sell to consumers. Wholesalers often manage credit relations in two directions: they provide money to trusted traders so they can buy on their behalf, and they provide products to retailers on credit, expecting to be paid after the retailer has sold the goods. In this way, wholesalers often act as a "bank" for other actors in the chain. They often need more capital than other traders in the value chain. To avoid bad debts they need good information on the reputation and financial status of their suppliers and buyers.

Wholesalers and exporters tend to have access to the financial services of commercial banks. These loans can be long term, or at least medium term. Exporters may have the option to provide guarantees to their suppliers (for example if they apply for a bank loan), based on an export contract. Exporters (or importers) can also participate in a joint venture together with other chain actors. Through an equity investment they become (partial) owner of a corporation (KIT & IIRR, 2008).

In conclusion, there is high demand for financial services, the nature of which differs for the different actors and service providers in the rural areas and agricultural sector. There are also different actors needs which are met to different extents with the "middle part of the value

chain" largely not having their financial services needs met. These include the small scale input suppliers, farmers and other producers, small scale traders and processors. Since the activities of the actors in the agricultural value chain are intricately linked together and are mutually beneficial to all in the sector, it is important that all the actors in the chain have adequate access to finance.

2.3 Reasons for limited access to agricultural and rural finance services

The rural and agricultural environment in Africa has considerable challenges - among these are roads with potholes, long distances to formal financial services, markets prices are often unknown and inputs are not easily available. The fact that the actors or entrepreneurs in the rural and agricultural sector have to deal with these challenges regularly point to their entrepreneurial potential. The limitations in extending rural and agricultural finance from the suppliers and agricultural entrepreneurs perspective have been well documented (KIT & IIRR, 2010; World-Bank, 2005; Yunus, 2007).

Financiers: The supply side

- Small size average farm, low population density, higher loan servicing costs due to limited volumes and high information costs.
- Lack of collateral or adequate security.
- Lack of technical knowledge at the bank level to evaluate the creditworthiness of agribusinesses.
- No specialised product offered by the financial intermediaries to better meet the financial need of the agricultural sector: rural sector requires pre-harvest financing to buy inputs that can only be repaid after harvest and show much more uneven cash flows than urban borrowers, lending to repayment in less frequent installments, which increases the risks and monitoring costs of financiers.
- No branches or limited network in rural areas, thus difficulties to reach and market to farms.
- Risk correlation when lending to farms: all borrowers are affected by the same risks, such as low market prices and reduced yield due to weather. Finance specialists call this "covariant risk" (Klerk, 2008).
- Underdeveloped communication and transportation infrastructure.

Agricultural enterprises: The demand side

- Agribusinesses suffer from poor, insufficient collateral and non enforcement of security due to lack of land and property rights, high costs, and lengthy or lacking registration and foreclosure processes.
- Low affordability for farmers of market interest rates and higher margins (up to 2% higher than standard SME loans) that reflects the risk adequately.
- Insufficient cash flow planning; farms are not obliged to keep accounts or financial statements; cash flows are hard to assess when clients sell directly to consumers.
- Repayment schedules are often difficult for the clients to meet - standard repayment schedules are not adapted to seasonality of the business.
- Lack of legal education at the farmers' level.

- Farmers are often successor's cooperatives, which are rather complex to deal with.
- Lack of initiative and articulated demand for finance by agribusinesses, especially in primary agriculture

World Bank (2005) also outlines the following contextual level constraints:

- Low population density, small average loans, and low household savings increase the transaction costs per monetary unit of financial intermediation.
- Lack of infrastructure (communications, electricity, transportation, etc.) and social services (education, health, etc.) and low integration with complementary markets result in highly fragmented financial markets that involve high costs of overcoming information barriers and limit risk diversification opportunities.
- Seasonality of agricultural production and susceptibility to natural disasters (such as flood, drought, and disease) heighten the probability of covariant risks (in prices and yields) and add to the risks and costs of rural financial intermediation.

Further at the country-level, legal policy and management levels, constraints that prevent the rural financial markets from operating effectively include:

- Unsound macroeconomic management
- Restrictive agricultural or financial policies (particularly interest rate controls)
- Insufficient institutional capacity within rural financial institutions to achieve high levels of outreach in a sustainable manner
- Underdeveloped legal systems, particularly with respect to marketable property rights, resulting in weak collateralization of claims and inadequate contract enforcement mechanisms
- Inadequate prudential regulation and supervision of financial intermediaries
- Poor governance, corruption, and other political factors that raise risks.

Due to the above reasons, traditional formal financial institutions have largely avoided providing services in rural areas, thereby making semi-formal and informal financial service providers the only alternatives in most cases. These are however not able to meet the huge demands of rural dwellers, due to the even more severe situation of these limitation and challenges in the rural areas compared to the urban areas. Neither has microfinance institutions been successful for similar reasons (KIT and IIRR, 2010).

The limitations to provision and accessing rural and agricultural finance are diverse and multi-level. They include those arising from the very geography, information costs, limited knowledge, risks and inadequate physical and institutional infrastructure, as well as restrictive or absence of requisite legal, and institutional frameworks. A strategy to address them and thus enhance the efficiency of exchange of products, information and money among the actors is likely to lead to a more efficient and sustainable access to rural and agricultural financial services. An appropriate strategy should embody addressing limitations at the country policy, legal and institutional levels, as well as those at the financiers and agricultural enterprises levels. In general terms these would include strategies that address issues on geography, cost reduction, risks mitigation and culture of innovation (World Bank 2005).

Chapter Three: Supply/demand drivers of rural and agriculture finance

3.0 Introduction

In this chapter we explore innovative rural and agricultural finance products and initiatives and their suitability for supporting or promoting smallholder access to investment capital. In addition we identify factors and/or necessary conditions (pre-requisites) that define a conducive environment for effective and efficient agricultural and rural finance systems. In particular, it will determine the supportive systems/facilities that are required for effective and efficient functioning of agricultural and rural finance systems, establish alternative options for smallholder farmers to access a wide variety of financial services and also define the options that financial institutions can use to more effectively target smallholder farmers who otherwise would not access credit because of lack of collateral.

3.1 The financial sector and value chain complementary perspective to rural and agricultural finance

Two main perspectives to providing rural and agricultural finance are identified by USAID (2005) - the financial sector approach and the value chain approach (USAID, 2005). The financial sector approach emphasises the role of financial institutions in facilitating access to a wide range of services. It involves building long-term capacity and finding incentives for institutions to offer financial services to the rural and agricultural sector. In theoretical terms, this approach proposes to offer a wide variety of services such as term finance, savings, insurance and money transfers.

This range is however limited in reality. Due to access to external sources of finance, this approach has the capacity to serve new clients and adapt products to resources available. Credits offered are not tied to any specific crops so this permits a regular and sustainable supply. In addition, the market structure within this approach tends to develop less monopolistic and predatory relationships. Despite the good attributes of the financial sector approach, it has some inherent limitations. There is a certain degree of high risk perception due to negative experiences in the past. This has resulted in the fact that less attention has been given to agricultural finance. There is also, a certain degree of ignorance regarding risk management relationships and models that can be applied

Strengthening the bookkeeping capacities of fledgling agropreneurs in order to manage agricultural loans.

to agricultural value chains. Other constraints to lending include weak systems regulating property titles, absence of laws on guarantees and poor legal systems.

Further, it is thought that programmes drawing on the financial sector approach might include some of the following components:

- Capacity building of financial institutions: institutional strengthening of rural MFIs or credit unions (e.g. introducing mobile banking, or teaching liquidity management), or teaching banks to price agricultural credit products;
- Product development for financial institutions: Helping financial institutions understand the needs of the agricultural sector and how to adapt their products accordingly;
- Risk mitigation techniques, such as partial guarantee programs, index-based insurance;
- Policy reform, such as collateral laws, land titling or bank branch regulations (USAID 2005).

The value chain approach examines the financial services that could be proposed along the entire value chain from input suppliers, processors, intermediaries to buyers. Usually it is seen that the array of value chain actors provide financing as the product moves from inputs to production to market. Non-financial actors such as processors, exporters and traders are seen as providers of financial services as well as their core role as actors in the product chain. Thus this approach is combined with commercialization activities and technical assistance. Positive attributes of this approach include the fact that the mechanisms are based on existing relationships and repayment is integrated into the system. Technical assistance can also be sought for producers. Limitations of the value chain approach include the fact that actors are not specialized in financial services and credit durations are usually short, focusing on production. There is also geographic monopoly and the risk of not serving smallholders due to high transaction costs.

Programmes interested in improving market opportunities for agricultural market chains, and in linking smallholders to such opportunities, may find that using a value chain approach would allow them to better assess the market for rural and agricultural finance. Assessing the supply and demand for financial services from a value chain lens provides a clear description of the multitude of actors involved in extending credit through the chain. Often, such an analysis reveals a high degree of informal arrangements and interlinked transactions (e.g., inputs sold on credit and advanced purchases of products) between buyers, input suppliers, traders, producer groups, and producers themselves. The phenomenon of interlinked transactions has been the private sector's answer to the historical reluctance of banks to lend to rural and agriculture dependent communities and the collapse of unsustainable state-run agricultural development banks. Some examples of value chain financing mechanisms include trader credit, out-grower schemes and contract farming, and warehouse receipts lending, (USAID 2005; World Bank, 2005; KIT and IIRR 2010) .

However, just like the financial sector approach, the value chain approach has some limitations among which are:

- The actors do not specialize in financial services and therefore generally only offer relatively short-term credit. Thus any value chain financing strategy that does not engage financial institutions will ignore the supply of crucial services such as long-term investment credit, savings, and insurance.

- Without increased access to capital from a financial institution, a value chain actor will have a difficult time expanding lending operations. This can limit potential outreach.
- Credit from a value chain actor is often tied to a specific crop, therefore when market dynamics change, the lending relationships often disappear. Further, producers develop a dependency on the buyer/lender that can (in some cases) become harmful to the producer.

The USAID (2005) therefore rightly propose a **complementary approach based on both the financial sector and the value chain perspectives**. This, they hope will encourage innovative approaches to rural and agricultural finance that address the constraints inhibiting the flow of finance through rural areas, in order to foster broad-based economic growth with significant smallholder participation.

According to USAID (2005) recent achievements with rural and agricultural finance innovations have shown that there are promising models.

> "*Initiatives using a long-term financial sector approach have shown us that financial institutions, given the right mix of incentives and guidance, can profitably serve rural areas and can become key partners in fostering growth in agricultural value chains. Initiatives using the value chain approach have demonstrated that building off the private sector relationships in agricultural value chains can quickly inject needed capital when financial intermediaries are reticent to lend; that they can provide natural channels for provision of technical assistance to producers; and that they can serve as important "stepping stones" to more formal credit relationships – all contributing to more broad-based growth in the agricultural sector as well as rural financial deepening (USAID 2005:6).*

They propose that the most promising ways of addressing the rural and agricultural finance gap is to draw on both of the financial sector and the value chain perspectives in a complementary way. The complementary perspective builds off an understanding of the different actors in the value chain and highlights the roles that different types of financial institutions currently play, and their potential role. (Figure 1).

Such an approach is based on a number of principles, such as:

- Build on existing relationships (products, information and services) and finance flows;
- Start with a clear understanding of all actors in the agriculture sector, including financial institutions that are either current or potential providers of financial services;
- Recognize the importance of long-term financial intermediation; and
- Understand policy implications of interventions.

The implications are that a strategy for rural and agriculture finance in Africa should be guided by a perspective that combines the financial sector and the value chain approaches. Such a perspective requires that the strategy would build off on an understanding of the different actors in specific value chains and identify the roles that different types of financial institutions currently play, and their potential roles in the different commodity value chains. Mechanisms for supporting both the current and potential roles should then be identified strengthened to ensure that the whole value chain is supported. The analysis should particularly pay attention to identifying "informal arrangements" and "interlinked transactions" which have been the

private sector's answer to the limited rural and agricultural finance in Africa, and seek how to build on these. In exploring how to build on these it is necessary to explore the suitability or appropriateness of different innovative value chain financing mechanisms such as trader credit, out-grower schemes and contract farming, warehouse receipts lending.

Once a suitable value financing scheme (value chain financing mechanisms such as trader credit, out-grower schemes and contract farming, warehouse receipts lending) has been identified for specific commodity value chains, suitable types of financial intermediaries can be deployed would be indentified and facilitated to link the financial intermediaries into the value chain financing. In many cases the identified financial intermediary may require its capacity strengthened as part of the preparation to participate in the value chain financing using the appropriate financing mechanisms.

The capacity building would include institutional strengthening of rural finance institutions (e.g. introducing mobile banking, or teaching liquidity management), or teaching banks to price agricultural credit products. Others may involve **product development for financial institutions such as h**elping financial institutions understand the needs of the agricultural sector and how to adapt their products accordingly. In addition, it may require building their capacity in **risk mitigation techniques**, including areas such as partial guarantee programs, index-based insurance. Further, there will be need for **policy reform, with regards to** collateral laws, land titling or bank branch regulations (USAID / RAFI 2005).

3.2 The choice of financing strategies

Three types of finance for the actors in the value chain have been identified by KIT and IIRR (2010). These are:

- Chain liquidity: short –term loans from suppliers or buyers within the value chain
- Agricultural finance: financial services from commercial banks, microfinance institutions and other financial institutions
- Value chain finance: financial services that are based on cooperation in the value chain.

Chain liquidity

Financing within a chain between farmers or farmer groups and traders is referred to as chain liquidity: these credit flows are generally trade credit, or chain credit. They consist of short-term loans to ensure a smooth flow of products, keep the chain running and maintain long-term relationships between trusted business partners. They may be given in cash or in kind. For example, a trader may provide a farmer with fertilizer at planting time, and then deduct the cost from the amount he pays when collecting the harvested crop. (De Klerk 2008).

Other actors may also be involved, and the credit flow can go on either direction, depending on market conditions. For example, a wholesaler may pre-finance a travelling trader, input supplier may provide inputs on credit, and farmer may accept a delay in payment after delivering the crop.

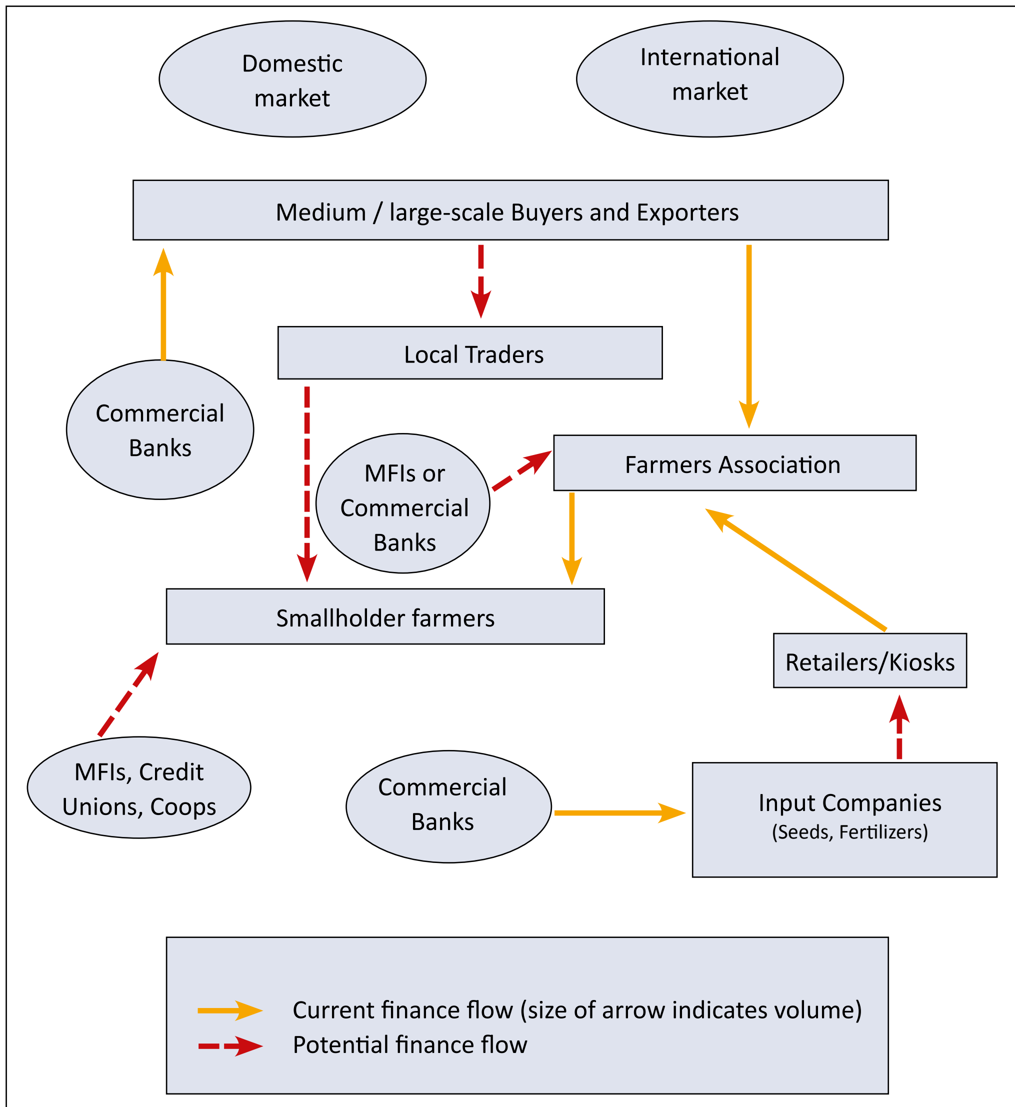

Figure 1. Complementary approach: Policy framework

Agricultural finance

Agricultural finance is the type where outside agent (the microfinance institutions, commercial banks, etc) offering specialized financial services to an actor in the value chain (e.g. the trader). The microfinance institutions, banks and other financial agents become chain supporters in one-to-one relationships with a chain actor.

Agricultural finance may take various forms and target different actors in the chain. It includes loans, deposits and insurance. These specialized financial services are longer-term loans than services falling under chain liquidity. Further, they may involve larger amounts of money, they are more transparent, and the risks of exploitation are considerably less. However, agricultural

finance has its limitation. These include lack of flexibility, bankability of small informal businesses found in the rural and agricultural sector, inadequacy of formal finance for the needs of the some actors in the sector, and lack of access.

Value chain finance

Value chain finance is when one (or more) financial institutions link into the value chain, offering financial services which build on the relationships in the chain. The seller, the buyer and the financial agent work together, using the business relations in the value chain as a carrier to provide financial services.

The main lessons from the review of the literature is that providing rural and agriculture finance through value chain finance is a way to promote rural businesses, both large and small, in ways that are financially successful and that benefit the poor.

In situations where value chain finance is relevant, how do we initiate or promote its financing? The way forward is identification of the value chain development requirement. Three situations are identifiable: crafting new chains, expanding chain liquidity, and unleashing investments in the chain. In each of these, there is a choice of strategic option.

Crafting new chains: When a market opportunity exists, but no value chain to supply the products that consumers demand, or when producers have the potential to deliver good products, but there is no value chain to link them to the market it is necessary to craft new chains. Financial services are introduced as part of an integral approach to building a new value chain with smallholder producers. The total intervention package includes organizing farmers, technical assistance, building management capacity, technological upgrading, securing a market outlet, and financing investments or business operations. Finance is then obviously one of the aspects that need to be arranged. Where there is a need to build new value chains there are always two triangles – the capacity building triangle and the financial triangle. The capacity-building triangle involves cooperation between the producer, the buyer and a non-profit service provider. The purpose is to build managerial, organizational, technical capacities among the producers so they become solid chain actors. The cooperation is initially based on non-profit principles. The finance triangle involves cooperation between the producer, the buyer, and a financial agent. The purpose is to provide the producers with access to the financial services they need for their business. The cooperation is based on commercial principles from the start.

In the capacity building triangle, investing in the basic capacities of producers cannot be done on a commercial basis, at least initially. But financial services must be commercial from the start; otherwise you create a corrupted culture of non-payment and non-compliance. The producers need to have a stake in the business: they need to be rewarded for good performance, but they also feel pain when they do not comply.

There must be close coordination to ensure that the financial services are tailored to the capacities and needs of the producers. In this way, **the capacity-building triangle provides soft collateral for the financial triangle**. It is the combination of the two triangles that makes value chain finance viable in the high-risk start-up phase of the new chain. The challenge in crafting new chains is what happens when there are no more funds to pay for the capacity-building

triangle? Where a culture of dependency of perpetuated, there is likely to be unsustainable (KIT, IIRR and Faida Mali, 2006; KIT and IIRR 2010).

In conclusion, when a new value chain is crafted, there need to be two triangles of cooperation: one non-profit triangle for capacity-building, and one commercial triangle for financial services. They need to be separated but well-coordinated. The capacity building-triangle forms soft collateral for the finance triangle. In the course of time, as the producers develop and the chain consolidates, the triangles may disappear. When the triangles are fully gone, you have reached a situation are fully empowered to have direct business relations with the buyer and financers.

Expanding chain liquidity

In situations in which an existing value chains is working reasonably well, but they cannot realize their full potential due to a lack of working capital, it may be necessary to facilitate expansion of chain liquidity. This is the case for many traders, small scale processors, who have no collateral and therefore no access to bank loans. How can financial agents start to work with these enterprises, who do not have hard collateral? Two different basic strategies are identifiable:

The Lead firm strategy: when there is a strong lead firm in the chain, this company can be used as a vector to reach non-bankable suppliers. The lead firm is the collateral for providing finance to the suppliers. So the finance agent establishes a triangular cooperation with the lead firm and the suppliers. Examples of this are the cases of tea in Kenya (KIT and IIRR 2010:125) and organic cotton in Tanzania (KIT and IIRR 2010: 94). In the lead firm strategy, a triangle is built between the producer, the buyer and the financial agent. The loan goes to the producer, while the buyer pays back the loan. So the due diligence for the loan is performed on the buyer. It is irrelevant whether the producer can provide collateral. When the buyer is solid, respectable lead firm with strong linkages to the farmer, this strategy is very powerful in delivering financial services to small-scale farmers and suppliers.

Capacity-building strategy: Another strategy is to build the capacities of the suppliers to make them bankable. When the suppliers are trained and supported in their businesses for a couple of years, they can build a proven credit history and then become eligible for financial services from mainstream banks. This strategy has been applied in cases of sal leaf in India (KIT and IIRR 2010:110) and rice in Rwanda (KIT and IIRR 2010: 135). The capacity-building strategy focuses directly on the suppliers. It aims to build their capacities of the suppliers to make them bankable. When the suppliers are trained and supported in their businesses for a couple of years, they prove a credit history and then become eligible for financial services from mainstream banks. This capacity-building strategy in this case requires three basic elements:

(i) Entrepreneurship capacity building of each individual supplier is built in financial and business management. The supplier must evolve into skillful entrepreneur, to become bankable.

(ii) Organisation building small-scale suppliers – the organisational capacity of the suppliers needs to be built to enable them become grouped in a strong organization so they can develop effective business relations in the value chain and with financial agents. Through their organization the suppliers are empowered as a value chain actor. The organization also serves as a mechanism to deliver finance to the suppliers, and the organization can evolve to become guarantor for loans.

(iii) Value chain building to address bottlenecks in other segments of the value chain. Bottlenecks may occur in value chain functions such as inputs, trading, transport or processing. Or bottlenecks may occur in chain management such as quality assurance, or information. Such bottlenecks need to be resolved for the value chain to reach its full potential.

The capacity building strategies associated with chain liquidity enhancement go hand –in-hand with making available (new) financial products that meet the needs of the involved suppliers. These products can expand the chain liquidity of the involved businesses. Expanding chain liquidity is a powerful way to boost the value chain and enable the chain actors to grow and scale up their businesses. However, it should be kept in mind that it is feasible only in value chains that show a healthy balance between supply and demand.

Unleashing investment in the chain is another way of promoting finance because another key reason why value chains may not realize their full potential is the lack of investment capital. Entrepreneurs need investment capital to upgrade their technologies, introduce new products, develop new markets, etc. The third situation where we have found value chain finance is when financial agents link up with the value chain too enable chain actors to make medium-term investment (2-6 years). This is probably even more challenging than providing working capital, due to the risks inherent in medium-term financing. How do financial agents manage these risks? How can investments in the value chain be financed in a viable way? Micro–leasing and temporary equity financial are some of the workable examples of strategies in the literature.

Micro-leasing is provided as an innovative finance investment product. To get a lease, the producer has to get two quotations from suppliers of hives and equipment, and submit these to the village financial services association. The association approves of the request and chooses a supplier, to whom it pays 60% of the price. After delivery (within 3 weeks) the suppliers gets the rest of the money. The producer pays off the lease each month over 2 years. Once the producer has paid all the installments, he or she becomes the owner of the hive. To qualify for this arrangement, the producer must belong to a group and attend training on hive management. This group, which has also received training on financial management, takes responsibility for the equipment (KIT and IIRR, 2010: 149–163).

In Ethiopia, **micro-leasing was provided as a service to women's groups for leasing a soybean-processing machine**. Buying this expensive equipment was perceived as too risky, so Harbu, microfinance institutions, proposed to lease it to the women over 5-year period, charging 10% interest a year. This arrangement was based on the long-term trust relationship between Harbu, the women groups and the farmer's marketing associations. Harbu remains the owner of the machine until the women pay it off fully. Because of the machine the women have been able to scale up their business and increase their income (KIT and IIRR, 2010: 164–173).

Temporary equity financial investments, which we see in the case of organic quinoa in Bolivia. When Irupana decided to focus on the processing and export of organic quinoa, it could not convince local banks to provide it with loans. So it approached pro-rural, financial institution that specializes in small businesses. The two organizations agreed to a temporary joint venture lasting 2 years. The first joint venture saw pro-rural investing $150,000 and Irapana about $100,000 in the marketing of quinoa. This venture was a success: it achieved a return on investment of 8.7%. In a second joint venture lasting 3 years, Irupana invested larger shares;

$272,000 (52%), while pro-rural had a minority of the shares (48%) and so reduced its risk. The venture was also successful, yielding a return on investment of 8.1%. This kind of arrangement has several benefits: it shares risks, the business is transparent to both parties, and both parties (KIT and IIRR, 2010: 187–199).

3.2.1 Finance mechanisms used in value chain finance

Within each financing strategy it is possible to use different financing mechanism. Some examples of the finance mechanisms used in value chain finance as described by KIT and IIRR (2010) and World Bank (2005) include warehouse receipt lending; contract farming and out-grower schemes; repurchase agreements (Repos); equity finance; leasing and factoring.

Warehouse receipts In this system, farmers take their produce to a warehouse and get a receipt in return. They can use this receipt as collateral if they want to apply for a loan, so do not have to wait for payment. This is a useful arrangement for cooperatives that want to store their products until prices rise, or if farmers have to wait for payment from buyers.

Contract Farming and Out-grower Schemes These are also forms of product-market financial arrangements. They involve formal relationships where buyers of produce offer credit either in cash or kind to producers. Good relationships between buyers and producers make it possible for financial institutions to step in. Buyers sometimes provide technical assistance to producers in addition. Contract farming normally exists when the crops involved are high value, usually exportable or specialty crops. Due to this arrangement, the technical expertise of producers is enhanced and their access to high potential export markets is increased. Out-grower schemes are a more integrated form of contract farming, whereby agribusiness has greater control over smallholder production: smallholder producers basically offer their land and labour in return for a package of inputs and extension services. Side-selling in contract farming and out-grower schemes is reduced through contractual agreements between farmers and buyers.

Repo finance Repurchase agreements (“repos”) are a form of commodity finance. The bank actually buys the product from the seller (e.g., a co-op), and at the same time signs a contract to sell it back to the co-op at a certain point in the future. The contract specifies a price that reflects the costs that the bank incurs.

Private equity A bank or other investor may buy shares in a company, so giving it capital it can use to invest.

Leasing This is an alternative to long-term loans to buy equipment, which many financial institutions think are too risky. The leasing company provides the farmer (or other borrower) with equipment for a few years on a contract basis, and the farmer pays off the lease in installments. At the end of the lease period, the leasing company either repossesses the equipment or offers to sell it to the farmer. Leasing is less risky than a loan because the equipment remains the property of the owner, who can withdraw it easily if the farmer defaults on payments. With a loan, by contrast, it may be difficult to take possession of the collateral offered to guarantee a loan because legal constraints and weak judicial systems (Klerk 2008; KIT and IIRR 2008).

Factoring A farmer delivers the produce to the buyer and writes an invoice for the amount delivered. Instead of asking the buyer to pay, the farmer sells the invoice to third party, a

factoring house. The factoring house pays the farmer immediately (minus a fee), then submits the invoice to the buyer for payment.

Trust is key in all value chain finance. Usually the level of trust is related to the duration of relationships and the degree of openness with which the chain partners exchange information. The more trust between the businesses partners in the value chain, the better are the conditions for good business performance. At the same time, when the chain partners share information on a frequent basis, this will also contribute to the financial agent's understanding of how the value chain works. In-depth knowledge of the value chain makes risks better manageable, so financial will be more willing to engage with the value chain and take the risk of lending to asset-poor farmers, traders and other rural businesses.

Value chain finance is not a goal in itself, as there are often other more severe constraints in value chains which are not financial, but rather lack of technical knowledge or the absence of an attractive market. However, value chain finance can help to set up a value chain, smoothen out bumps in it, or upscale the operations in the value chain, thereby increasing the chain's competitiveness. It complements (rather than replaces) existing credit flows between actors in a chain, and it empowers the chain actors by making new sources and forms of finance available.

Another principle of rural and agriculture finance is "chain of value chain" finance – for the value chain to work well there need to be proper financial services at all stages of the value chain. Thus different financial institutions may be involved at the same time, because each type has a specialisation. For example credit cooperatives are specialised in working with smallholder farmers, Microfinance institutions are strong in working with small-scale traders. Banks are good at financing larger companies. Thus multiple financial institutions offer financial services to the value chain actors. When financial institutions engage with the value chains they do make the chain more efficient and competitive, through restructuring and re-organisation which may trigger significant changes in the flows of money, information and products.

The benefits of value chain finance is a triple - win situation in which (i) value chain actors improve their access to financial services and therefore their businesses (USAID 2005 and UNCTAD 2004), (ii) the financial institutions can develop new markets for their services, and (iii) economic and development and poverty reduction are attained as small scale farmers and other entrepreneurs get better conditions which can make their businesses flourish.

3.3 Complementary supportive mechanisms and technologies – Use of ICTs, Index Insurance and Community-Based Financial Organizations

3.3.1 Use of ICT to bundling development services with agricultural finance: The experience of DrumNet

The DrumNet Project has been operating in Kenya since 2005. It uses proven microfinance principles and a supply chain approach to promote agricultural lending. The project identifies key actors in the supply chain such as banks, buyers and input dealers. Smallholder farmers are then linked to these actors. The process becomes efficient and cost effective through the deployment of ICTs.

The process begins when farmers (organised into farmer groups) sign a fixed-price purchase contract with an agricultural buyer. The contract allows farmers to approach a partner bank,

obtain credit, and get farming inputs from a local, certified retailer. At harvest, the contracted produce is collected, graded, and sold to the buyer at designated collection points. A successful transaction triggers a cashless payment through a bank transfer. DrumNet serves as the intermediary in the flow of payment to ensure that credit is repaid before earnings reach farmers' accounts. A master contract governs the entire process, and DrumNet's information technology (IT) system monitors compliance (KIT and IIRR 2010).

3.3.2 The Kenyan example of M-PESA(Mobile Money)

With the financial assistance from DFID, Vodafone developed M-PESA and was launched in March 2007. This platform allows customers who have registered to send money home without any bank account. Customers use cash to buy electronic money and use their phones to perform financial transactions. Alternatively the electronic money can be converted to cash by selling it to an agent. Agents are paid on commission basis. Other transactions that can be made through M- PESA are payment of bills, payments for services rendered, and banking services (such as deposits and withdrawals) (Lonie, 2010).

3.3.3 Biometric Technology in rural credit markets: The case of Malawi.

Biometric technology employs the use of some common biometrics such as fingerprints, face, iris, retina, speech and handwritten signature to prevent identity thefts. To assess the impact of biometric technology, the finger prints of a group of smallholder farmers who applied for loans in Malawi were taken as part of loan application process. Compared to a control group, farmers who had their finger prints taken has increased their loan repayment rates to about 40%. Finger printed borrowers requested for smaller amounts so they could repay the loans (Gine, 2010).

3.3.4 Index Insurance: ENSO (El Niño Southern Oscillation) Insurance in Peru

Given the high basis risk associated with selling index insurance to households, this insurance is designed for firms and institutions that serve households that are highly exposed to El Niño(catastrophic flooding that hits some parts of Peru). The ENSO insurance uses the monthly sea surface temperature for ENSO Region 1.2 (0–10° South, 80–90° West), measured and reported by the NOAA Climate Prediction Center. The basis for payment is the average of two months—November and December. Three contracts are available with three different thresholds where payments begin (23.4, 24.0, and 24.5 degrees Celsius); each of these contracts reaches a maximum when the measure reaches 27 degrees. The payout function is linear. Indemnity payments are made in early January, just as flooding begins, and flooding continues from February to April.

Indemnity payments are made by multiplying the payout rate times the sum insured, which is selected by the insured party. A risk assessment that estimates the largest losses that may occur under the worst flooding event is likely the best starting point for selecting a sum to be insured. This type of insurance has potential application in areas that experience extreme weather conditions such as flooding and drought (Wiedmaier-Pfister & Klein, 2010).

With assistance from the World Bank, a microfinance institution in India, BASIX and a commercial insurer provides weather insurance for small farmers to improve their access to credit. This scheme is based on rainfall index. Payments are based on weather rainfall measured as a local

weather station reaches a threshold. The insurance contracts are linked to credit because the insurance secures payments for the loans.

3.3.5 Use of Community-Based Financial Organisations

Ritchie, 2010 gives an overview of the following community-based mechanisms for providing finance:

Village Savings and Loans Association (VLSA)

This consists of informal unregistered groups of between 10 and 30 members with simple rules governing their savings and lending activities. Members save on regular basis and loans are given to both members and non members at an agreed interest rate. The amount of money loaned to members generally commensurate with the member's level of financial literacy. Members have access to lump sums of their monies at special occasions such as festivals or the start of the planting season. All monies invested are given back to members at the end of the year and another cycle of savings and earning commences in the coming year. This model does not usually link with external sources of funding. This is a key factor in their sustainability.

Self Help Groups (SHGs)

Members are between 10 and 20. Members save on regular basis and loan disbursements are limited to members only. Funds saved are not distributed back to members as in the case of VLSA but rather allowed to grow over time. SHGs also have partnerships with external agencies that make funds available to them. These agencies also assist with technical training and capacity building.

Solidarity group approach

This approach is used by some MFIs in a bid to overcome some of the challenges in individual lending, especially with respect to collateral taking. This is made up of small groups of between 5 and 20 members who meet on regular basis during which members' deposit savings, pay loan instalments and discuss the process of securing loans. Group members ensure that loans that are collected are repaid. This they do either by putting pressure on defaulting members or agreeing to contribute and pay (de Klerk, 2008).

3.3.6 Financial literacy for rural and agriculture finance

One of the innovations for addressing little, limited exposure to modern financial instruments as well as financial management required for transition into commercial farming is **financial literacy. A good description and assessment is provided by Cohen 2010.** Financial education provides a foundation for managing money, which is an indispensable skill in a world where microfinance products and services are proliferating at the same time that overly aggressive financial services providers are ever ready to pressure the consumer. Building consumers' financial capabilities is about doing more with the little at hand, readying the unbanked (people without access to conventional banking services) to enter the formal financial system and enabling the under-banked (people with limited access to conventional banking services) to do more with the financial services at their disposal. It is also about improving the performance of financial services providers.(Cohen, 2010) Findings from a randomized impact evaluation found that Self-Employed Women's Association clients who attended financial literacy classes took out twice as many loans as women who did not (Pande, Field, & Jayachandran, 2009).

Further, research shows that financially literate clients make better financial decisions and maintain a better overall financial well-being (Cole & Fernando, 2008).

With regard to how to deliver the financial education, experience has shown that there is no best way to deliver financial education; it depends on the target group, objectives of a financial-literacy initiative, and available resources. Mass media—including television, street theatre, call-in radio, or printed materials, such as posters and comics—is being used increasingly to expose poor and often illiterate people to key financial messages. Its primary impact is to spread awareness, whereas the purpose of face-to-face training and counselling is to provide participants with hands-on experience, particularly with banks, which they tend to distrust and fear. More fundamental changes in attitudes and behaviours require reinforced messaging over time. The choice of delivery systems is very much a question of resources. While tangible, direct training is expensive on a large scale, bundling delivery channels—for example, combining radio with some direct training offers—can help strike a balance between achieving both broad and focused impacts. Whatever the case, it is valued by learners, and has emerged as a key—although often overlooked—component of economic empowerment. Everyone can benefit from financial education: the banked, unbanked, or under-banked. Technology offers just one avenue to send key messages to large numbers of people; its spread therefore must not be restricted to users of formal financial services. Building financial capabilities among the low-income population is a win–win situation for the financial sector because it creates better-informed consumers.

Financial education need not be a stand-alone activity. It is very effective when combined with other development interventions aimed at reducing vulnerability and food insecurity and expanding opportunities for the poor. Thus both the public sector (government) as well as the private financial services providers can contribute to scalability.

3.4 Risks management in rural and agriculture finance

Risks Management is another reason why value chain finance is key to rural and agriculture finance. One of the main reasons for limited access to rural and agriculture finance is the perception of high risks in agricultural production and trading. The sources of risks in the agricultural sector are production risks, price risks, markets risks, default risks, currency risks and other risks such as uncertain political and legal environments. Use of chain of value chain finance is one way of managing and mitigating these risks on the basis of strong collaboration within the value chain (KIT and IIRR 2010). This is achieved by way of value chain finance reducing credit risks to performance risks, with the former risks being higher than the later one.

Some of the risk management options include pooling of risks and use of peer pressure through group formation and building their capacity to enable them see the benefits of continued membership of the group. Other risk management strategies include combining investments with other financial and non-financial services; "ownership" of financed equipment in the name and hands of the financing agent; risk-sharing by direct involvement in undertaking the activity. Further, within the perspective that combines financial sector with value chain development approaches in a complementary way, **new risk mitigation opportunities are identifiable.** These include the following:

i. The **"bringing the business into the picture" risk mitigation**. In this case the financial agent looks at the business case – the crop, the buyer, the market and the technical assistance and not the balance sheet and the profit- and- loss statement of the clients.

ii. **Soft collateral instead of hard collatera**l as risk reduction strategies – market risks are reduced through sales contracts, production risks through technical assistance, management risks through producer group formation, moral risks through regular information and communication, and repayment risks through a claim on the product.

iii. The financial agent **looking at the future – at the potential of the business case rather than the past financial records**.

These risk management and mitigation that are identifiable in the complementary financial sector and the value chain financing perspective, must be popularise in the financial sector.

3.5 Conditions and pre-requisites for innovative and effective rural and agricultural finance

3.5.1 Issues in trade finance/value chain financing contractual enforcement

The requirement that parties meet the contractual obligations may not be achieved because of participation of non-financial and informal intermediaries and actors in lending. This is because financial contracts may be made with other actors who may not be the bank. If the borrower cannot be obligated to repay their loan or deliver the physical good, this type of financing is not possible. Thus, without legal or social backing to deal with default, risk increases and financing mechanisms such as trade credit and warehouse receipts is untenable (World Bank, 2005). To address the challenges of enforcement of contractual obligations in lending for non-financial and informal source providers and actors. It is important to introduce *self-liquidating loans* whereby the value of the loan is deducted from sale revenue at the 'sale time and point'. The use of self-liquidating loans is more suitable for low value bulky commodities with clear 'constriction point' for delivery. For high value crops, this may not be the case-and may result in default. Therefore appropriate legal regime is required.

Vouchers in local currencies, like these ones in Burundi, could facilitate warehousing receipt lending in Africa.

3.5.2 Pre-requisites for warehouse receipts

In order for warehouse receipt lending to be effective, there are a number of pre-requisites for its functioning. These include appropriate legal environment, transparent market place, agricultural prices that reflect carrying cost, low financing ratios die to commodity price volatility, availability of quality well commercially run warehouses, availability and willingness of local banks for financing or co-financing for warehousing arrangements. The legal environment that will be appropriate for the warehousing receipt lending, is one that ensures easy enforceability of security, clearly defines the rights and duties of each party and foresees transferability of the receipt by delivering or enforcement. This means the appropriate legislation should clearly make warehousing receipts functionally equivalent to cash. For the African countries, according to the World Bank (2005), the options for such a legal framework are the creation of specific warehouse receipts code.

With regard to the existing of a functioning market place, financiers are likely to participate in the warehouse receipt lending scheme only if the value of the commodities can be assessed transparently eg – weighing. In addition, there should be an assurance of a way of

liquidation of the commodities in the case of default. In order to ensure availability of quality well commercially run warehouses, there has to be a licensing and monitoring procedure in place that guarantees minimum quality standards. There should be a licensing and monitoring agency with clear standards that are transparent and acceptable to all participants in the system. As part of establishment and or operating the warehouse receipt lending, there should be a means of performance guarantee. This can be in the form of indemnity fund or bonding to cover any potential fraud or negligence by the license warehouses. This is to ensure that incase the warehouse is unable to deliver the goods upon presentation of a receipt; the financier can call up the indemnity fund or bond to cover the loss.

3.5.3 Pre-requisite for using leasing

Even though leasing is a viable mechanism for rural and agricultural finance, it requires policy-level support in countries that do not have a clear legal and regulatory framework for leasing. According to Nair (2010), such a support must be sector wide and not restricted to rural leasing. A good legal framework for leasing includes (1) clear definitions of a lease contract, leased assets, and responsibilities and rights of the parties to a lease contract; (2) clarity in allocating responsibility for liability for third-party losses arising out of the operation of leased assets; (3) stipulation of the priority of a lessor's claim over a leased asset; and (4) a framework for easy and fast repossession of leased assets. The use of internationally accepted accounting standards and an unbiased tax code enhance the development of the leasing sector. The existence of a well-functioning asset registry, the availability of insurance and maintenance services for equipment at a reasonable cost, and the existence of a good market for used assets are also necessary for the development of the financial leasing industry. Targeted institutional support may also be needed to help develop the rural leasing sector.

To successfully undertake financial leasing operations, organisations need not only well-trained staff, but also high-quality lease origination processes, accounting and internal control systems, and overall portfolio risk management. Types of institutional-level support that can help include (1) subsidies for start-up costs of leasing operations to help offset the higher transaction cost and risk of operating in rural areas; (2) funding to establish links between commercial providers and community-based or non-profit organizations to increase scale; (3) technical support to leasing companies; and (4) provision of equity, loans, or guarantees to expand rural outreach.

A wide range of organizations—leasing companies, banks, financial cooperatives, microfinance organisations, and equipment-selling companies—could benefit from such support. Institutional-level support can include capital support when access to long-term funds is a critical constraint. Capital support combined with technical assistance can help leasing firms develop access to sustainable sources of capital (Nair, 2010).

3.6 Role of banks in trade financing, warehouse receipts, lending and leasing

Trade/value chain finance: For trade/value chain financing to work effectively, local banks must be willing to participate and extend credit to the other actors. Banks normally have incentives to do this if the organization of the chain is done well (Government, Donor; Bank), which results in saving on transactions cost as well as improving credit worthiness of borrowers. Stronger members of the chain e.g. exporters can be used as more efficient defacto financial intermediaries. The defacto intermediaries can reduce transactions cost associated with credit delivery by absorbing these costs through other links in the value chain 'package' credit with other transactions.

Warehouse Receipt Lending: The local banks play important roles in the successful set-up of the warehouse receipt lending system (UNTCAD, 2001). These roles include providing local expertise on the community sector, acting as agent for involvement of finance from international financiers, using their existing outreach into rural areas and financing or co-financing the warehousing arrangements. This involvement also builds confidence of other financiers, therefore it is important to integrate the local financial system.

Linkage with Community Based Financial Organisations: The role of banks in trade financing, warehousing receipt lending and leasing could be extended to reach a wider range of beneficiaries if banks partner existing community-based financial organizations. According to Ritchie (2010) two models in particular appear to work well on a large scale and have good prospects for long-term sustainability; the village savings and loan association (VSLA) model and the Self Help Group (SHG) model.

VSLA groups, consisting of between 10 and 30 members, have simple rules that govern their savings and lending activities. Each member saves on a regular basis, and this money is then lent out at an interest rate and on loan terms decided by the group. Loans may be made to both members and non-members. Indeed, many members save but do not borrow and earn a good return on their investment through the interest charged to borrowers. At the end of a given period, usually a year, the savings and the interest the VSLA earned are distributed to the members, and a new cycle begins. VSLAs do not generally link with banks or MFIs because experience has shown that members' savings are generally sufficient to meet their credit needs, and injection of external loan funds has caused many groups to fail. If banks and MFIs are distant, as in the rural areas of many African countries, attempting to foster bank linkage may be more expensive than is warranted by the limited demand for loans.

The other of CFBOs are self-hlep groups (SHGs) which usually have between 10 and 20 members who save regularly and lend the money out to members only. The funds saved are not distributed back to members, but, rather, grow over time. Many SHGs belong to federations that provide them with access to external capital, technical assistance in areas such as accounting, and greater bargaining power with government and banks.

Partnerships between CBFOs and mainstream financial institutions should be implemented incrementally. It should be based on the ability of CBFOs to govern them effectively and to manage their operations so that savings are secure and loans are repaid is paramount for their long-term sustainability. In areas with more vibrant economies and greater population density, the bank linkage and federation aspects of the SHG model enable groups to draw on external funds for the growth of members' businesses. Federations can help SHGs with financial management and may also offer training aimed at strengthening the SHGs. However, because both the bank linkage and federation aspects of the SHG model add significant levels of complexity, external support from a technical-assistance provider may be required for a long period of time.

Partnerships between CBFOs and mainstream financial institutions should be implemented incrementally. It should be based on the ability of CBFOs to govern themselves effectively and to manage their operations so that savings are secure and loans are repaid is paramount for their long-term sustainability.

Chapter Four: A Strategy for enhancing agricultural and rural finance

4.0 Introduction

In this chapter, we discuss the strategies on how small and medium scale farmers can be integrated into the mainstream financial systems so that they can benefit from the services/facilities/products will be needed to be established. In addition, we suggest the alternative strategies that the public and/ or private sector can support in order to enhance the public sector/ private sector, CSOs, FOs etc in supporting/promoting an effective and efficient agricultural and rural finance systems, as well as the factors and elements that policymakers should take into account in the formulation of agricultural and rural finance policies and programmes. Modalities for linking smallholder farmers to financial markets are also identified.

4.1 Strategy on how small- and medium-scale farmers can be integrated into the mainstream financial systems

4.1.1 The financial sector and value chain complementary perspective

The literature identifies the financial sector and the value chain perspectives to the development of the financial services to enhance access by small and medium rural and agriculture entrepreneurs. The evidence is that the most promising strategy for addressing the rural and agricultural finance gap is to draw on both of the financial sector and the value chain perspectives in a complementary way. The complementary perspective builds off on an understanding of the different actors in the value chain and highlights the roles that different types of financial institutions currently play, and as well as their potential role.

4.1.2 The principles of the financial sector and value chain complementary perspective

The complementary perspective is based on a number of principles:

- Build on existing relationships (products, information and services) and finance flows;
- Start with a clear understanding of all actors in the agriculture sector, including financial institutions that are either current or potential providers of financial services;
- Recognize the importance of long-term financial intermediation; and
- Understand policy implications of interventions.

4.1.3 The modalities in the financial sector and value chain complementary perspective

Such a perspective requires that the strategy involves identification relevant value chains (based on markets and potential impact on the small and medium scale rural entrepreneurs and other social and ecologically desirable conditions), and followed by a value chain analysis for identifying and understanding of the different actors and chain supporters in the specific value chains. The flow of products, services, information and money and identification of the roles that different types of financial institutions currently play, and their potential roles in the different commodity value chains need to be explored. Mechanisms for supporting both the current and potential roles should then be identified or strengthened to ensure that the whole value chain is supported. This is because financing the whole chain is expected to result in better assess for the small and medium entrepreneurs and enhance the performance of the chain.

The analysis should particularly pay attention to identifying "informal arrangements" and "interlinked transactions" which have been the private sector's answer to the limited rural and agricultural finance in Africa, and seek how to build on these. The focus should be to ensure identifying and achieving a "chain of value chain financing" with different types of appropriate financial services providers, such as large input suppliers and processing and trading companies, commercial banks, equity funds, credit unions or cooperatives, and associations, and other community based financial organisations and self-help groups. In exploring how to build on these it is necessary to explore the nature of financial services that will be required by the different actors. These financial services may include short term loans and savings to small producers and micro entrepreneurs, short term and medium term loans and leasing to local traders and producer associations, medium term loans and leasing to local processors and wholesalers, and long term loans, guarantees and equity to industrial processors and exporters. These different financial services are required in various stages in the value chain at the same time. Moreover, each of these financial services requires specific capacities and therefore the various financial agents that can and might be involved must the identified for each stage of the value chain.

Further, as part of the current and potential financing provision analysis, the value chain's situation need for promoting financing needs to be identified. In cases when the market potential exists but there is non-existence of a working chain, we need to craft a new chain. In the situation where the chain exist but the full potential is not reached because of lack of working capital, expanding the chain liquidity will have to be the focus. In the situation where there is an existing working value chain with need for investment capital for medium to long term, the approach will be to unleash investment into the chain.

In the situation needing crafting a new chain, the activities design should focus on both the capacity building triangle and the finance triangle, with the capacity triangle concerned with the cooperation between the producers, the buyers and a non-profit service provider and the financial triangle focusing on cooperation between the producer, buyer and a financial agent. The capacity triangle will aim at building managerial, organisational and technical capacities, and the cooperation will be initially based on non-profit principles (Support can come from Donor, Government, and Independent facilitator). To avoid eternal dependence, an exit strategy should be planned from the beginning, with the chain creating added value for all actors so that is sustainable in the long run. Generally the whole process takes and long time and so the

facilitator should prepare for this. The financial triangle, which aims to provide the producers with financial services for their business is to be based on commercial principles from the start.

In situations needing the expansion of value chains, financial agents or chain facilitators should explore whether it is appropriate to use the lead firm strategy in cases where there is a strong lead firm (buyers) in the chain can be used to reach non-bankable suppliers and other actors. The criteria are that the lead firm must be a respectable one with strong linkages to the suppliers or farmers and therefore can be used to deliver financial services to the small holders and suppliers. In addition, to the lead firm strategy a capacity-building strategy aimed at entrepreneurship, organisational and value chain capacities building should be designed.

In situations where there is the need to unleash investment into the value chain, enables us to include long term investments in rural and agricultural finance such as leasing and temporary equity. Therefore there should be exploration of the appropriateness of promoting medium term loans, leasing, and temporary equity.

For each of these value chain situations and their need for addressing specific financing needs requirement, choice(s) have to be made as to the suitability or appropriateness of different innovative value chain financing mechanisms such as trader credit, out-grower schemes and contract farming, and warehouse receipts lending for the characteristics of the value chain such as the nature of the commodity, the actors in the value chain, as well as the options for risk management in the given situation.

The options for risk management should also be examined and selected to be consistent with the value chain financing mechanisms selected and if inappropriate then a change will be required. Some of the risk management options include group formation and their capacity building; combining investments with other financial and non-financial services; "ownership" of financed equipment in the name and hands of the financing agent; risk-sharing by direct involvement undertaking the activity. In the complementary financial sector and the value chain financing perspective, new risk mitigation issues are identifiable and these must be popularise in the financial sector. These include the following:

i. the financial agent looking at the business case – the crop, the buyer, the market, the technical assistance and not the balance sheet and the profit- and- loss statement of the clients. This is referred to as "bringing the business into the picture".
ii. Soft collateral instead of hard collateral as risk reduction strategies – market risks are reduced through sales contracts, production risks through technical assistance, management risks through producer group formation, moral risks through regular information ad communication, and repayment risks through a claim on the product.
iii. The financial agent looking at the future – at the potential of the business case rather than the past financial records.

4.2 The role of government in the strategy

i. A condition required for **trade finance /value chain financing** is contract enforcement: to address the challenges of enforcement of contractual obligations in lending for non-financial and informal financial services providers and actors, **it is important to**

introduce *self-liquidating loans* whereby the value of the loan is deducted from sale revenue at the 'sale time and point'. The use of self-liquidating loans is more suitable for low value bulky commodities with clear 'constriction point' for delivery. For high value crops, this may not be the case-and may result in default. Therefore appropriate legal regime is required.

ii. One of the conditions required for warehouse receipts lending is the need for appropriate legal environment. The **appropriate legislation should clearly make warehousing receipts functionally equivalent to cash.** The policy option for such a legal framework is the creation of specific warehouse receipts lending code in countries where they do not exist.

iii. Another condition required for warehouse receipt lending is **existence of a functioning market place**. Financiers are likely to participate in the warehouse receipt lending scheme only if the **value of the commodities can be assessed transparently e.g. – weighing**. In addition, there should be an **assurance of a way of liquidation of the commodities in the case of default**.

iv. In order to ensure **availability of quality professional commercially run warehouses**, there has to be a l**icensing and monitoring procedure** in place that guarantees minimum quality standards. There should be **a licensing and monitoring agency** with **clear standards that are transparent and acceptable to all participants** in the system. As part of establishment and or operating the warehouse receipt lending, there should be a means of **performance guarantee**. This can be in the **form of indemnity fund or bonding to cover any potential fraud or negligence by the license warehouses**. This is to ensure that incase the warehouse is unable to deliver the goods upon presentation of a receipt; the financier can call up the indemnity fund or bond to cover the loss. All these can be part of the warehouse receipts lending code.

v. Leasing is a viable mechanism for rural and agricultural finance for unleashing liquidity into an existing value chain. **A pre-requisite for use of leasing is a clear legal and regulatory framework for leasing.** A good legal framework for leasing should includes (1) clear definitions of a lease contract, leased assets, and responsibilities and rights of the parties to a lease contract; (2) clarity in allocating responsibility for liability for third-party losses arising out of the operation of leased assets; (3) stipulation of the priority of a lessor's claim over a leased asset; and (4) a framework for easy and fast repossession of leased assets. The use of internationally accepted accounting standards and an unbiased tax code to enhance the development of the leasing sector. The existence of a well-functioning asset registry, the availability of insurance and maintenance services for equipment at a reasonable cost, and the existence of a good market for used assets are also necessary for the development of the financial leasing industry. **It is important that African countries develop appropriate legal framework which is applicable to all the sectors in the country.**

vi. Other roles for governments

Gobezie (2008), proposed the following recommendations aimed at improving service provision.

Minimal government intervention in the area of setting interest rates

The market should be allowed to decide on which interest rates are appropriate. If interest rates are decided by the markets, borrowers will then be in a better position to tell if particular loan product is good for them or not. When governments intervene, the interest rates are sometimes very low. In such instances the loans may be misapplied and borrowers will not be able to pay back. This will eventually collapse the system and funds will no longer be available to other people.

A critical role for governments will be to ensure that borrowers do not pay for inefficiencies in the programmes of microfinance institutions. Mechanisms should be put in place to ensure that MFIs are efficient in their operations. Some microfinance institutions operate in an environment with little or no competition. Borrowers are therefore prone to being taken advantage off. The government can then step in to ensure that only certified institutions provide services.

Monitoring market distortions and providing capacity development to MFIs

Coming up with good and laudable policies and regulations is one step and making sure they are implemented is another. Various government agencies should therefore be more effective in the area of correcting market distortions and providing capacity development to MFIs.

Expansion and development of rural infrastructure

Development of roads, telecommunications and rural information networks will open these areas up and providers will be able to access and provide services to rural people. Relevant and timely provision of market information is also necessary.

Expansion of Business Development Services

Giving of credit alone is not enough. Borrowers must also be made to know the various avenues that exist for marketing their products or services. Alternate business aside their traditional ones should also be introduced to them so they can take advantage of.

Supporting innovations in rural financial services

There should be further investigations, researching, piloting such new credit technologies. Other financial agents can then take advantage of these innovations and invest. This will be incentives for innovation, not just for rural and agriculture finance but the economy as a microcredit but also for economy as a whole.

4.3 Role of banks and other financial agents in rural and agriculture finance

i. For trade finance / value chain financing to work effectively, local banks must be willing to participate and extend credit to the other actors. Banks normally have incentives to do this if the organization of the chain is done well (with the help of Donors), which results in savings on transactions cost as well as improving credit worthiness of borrowers. Stronger members of the chain e.g. exporters can be used as more efficient *de facto* financial intermediaries. The use of the *de facto* intermediaries can reduce transactions cost associated with credit delivery by absorbing these costs through other links in the value chain by 'packaging' credit with other transactions.

ii. For warehouse receipt lending to work effectively, the local banks have to play important roles in the successful set-up of the warehouse receipt lending system (UNTCAD, 2001). These roles include providing local expertise on the commodity sector, acting as agent for involvement of finance from international financiers, provide their existing branch network as outreach into rural areas and financing or co-financing the warehousing arrangements. This involvement also builds confidence of other financiers, therefore it is important to integrate the local financial system.

iii. To improve access to buyer and supplier credit, Pearce (2003) suggests that intermediaries can play a critical role by developing or brokering links between small farmers and buyers and suppliers. Intermediaries could facilitate credit transactions and other embedded technical and advisory services. It could also help farmers organize themselves into market-oriented producer associations or cooperatives. The intermediary might even offer temporary financial guarantees to help providers overcome any perceived risk of dealing with small farmers.

iv. By forming associations, smallholder farmers will be able to improve their market position. If farmers are well organised they can produce better quality produce and together they can meet the demands of buyers. They can then take advantage of more favourable credit terms. By dealing with well organised producers, buyers will have less of a problem in aggregating produce. They will be able to get produce of uniform quality as they communicate with the farmer groups as entities. Cost of distributing inputs to these producers will also be reduced. Enforcement of contracts will be possible due to the fact that they are dealing with one body. The associations can also hold their members to strict quality requirements. The incidence of side-selling will also be reduced.

4.4 Role of private companies in rural and agricultural finance

Rural shopkeepers are essential for enhancing agricultural and rural finance throughout SSA

i. As stronger members of the value chain such as exporters, buyers and processors, their contracts can be used as soft collateral for others in the chain and ensure the means off-taker, and mechanism of recovery for self liquidation loans. They can be used as more efficient *de facto* financial intermediaries for channeling loans to suppliers and other actors in the value chain. Their use in these various ways can reduce transactions cost associated with credit delivery by absorbing these costs through other links in the value chain by 'packaging' credit with other transactions.

ii. The private sector can ensure availability of licensed quality professional commercially run warehouses for the warehouse receipt lending, by both setting up the warehouse and operating it in a way that ensures the quality standards are met, and avoiding fraud or negligence.

4.5 Role of donors in rural and agriculture finance

i. The role of banks in trade financing, warehousing receipt lending and leasing could be extended to reach a wider range of beneficiaries if banks partner existing **community-based financial organizations (CBFOs).** Partnerships between CBFOs and mainstream financial institutions should be implemented incrementally. It should be based on the ability of CBFOs to govern them effectively and to manage their operations so that savings are secure and loans are repaid is paramount for their long-term sustainability. Donors and government can add value by funding programs that train local people to develop viable groups and by providing technical assistance for the development of simple governance, operational, and accounting systems that can be implemented locally.

ii. The single most important performance indicator is repayment performance—that is, the ability of CBFOs to get borrowers to repay their loans in a timely way. Non-repayment of loans is the greatest threat to the financial sustainability of any financial organization, including CBFOs. This threat is increased by the tendency of donors and governments to

provide CBFOs with large loan funds that are beyond their capacity to manage effectively. Significant amounts of external funding—beyond small seed funds that help groups get started—should be linked to their performance in managing the group's own funds. This careful approach will enable CBFOs to develop a strong foundation that enhances their prospects for long-term sustainability. Donors and governments should also fund program evaluations, using performance criteria that allow comparison across programs and models.

iii. Donors have often been criticised for distorting the product-market because they support companies to extend credit to producers. Donors can play roles in the following areas:

- Focus should be on farmers who are not well integrated in the product-market but who have the potential of being viable market participants if certain barriers confronting them are removed.
- Subsidies should rather be used to support the capacities of lenders in areas such as training and technical assistance rather than being used to support cost of services or loans to farmers.
- Subsidies should gradually be reduced and eventually come to an end over time.
- Support to lenders should be based on some transparent criteria and available support should be open to more than one entity.

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Acronyms and abbreviations

AUC	African Union Commission
AFRACA	African Rural and agricultural Credit Association
CAADP	Comprehensive Africa Agricultural Development Programme
CBFOs	Community Based Financial Organizations
CGAP	Consultative Group to Assist the Poor
DFID	British Department for International Development
ECA	United Nations Economic Commission for Africa
ENSO	El Niño Southern Oscillation
FECECAM	Fédération des Caisses d'épargne et de Crédit Agricole Mutuel
FMNRFC	French Microfinance Network Rural Finance Commission
GDP	Gross Domestic Product
IFAD	International Forum for Agricultural Development
OECD	Organization for Economic Co-operation and Development
RAFI	Rural and Agricultural Finance Initiative
SARFA	Strategy for Agricultural and Rural Finance in Africa
SME	Small Medium Enterprises
UEMOA	Union Economique et Monétaire Ouest Africaine
UNCTAD	United Nations Commission on Trade and Development
USAID	United States Agency for International Development
IIRR	International Institute of Rural Reconstruction
KIT	Royal Tropical Institute
VSLA	Voluntary Savings and Loans Associations
SHG	Self Help Group

About FARA

FARA is the Forum for Agricultural Research in Africa, the apex organization bringing together and forming coalitions of major stakeholders in agricultural research and development in Africa.

FARA is the technical arm of the African Union Commission (AUC) on rural economy and agricultural development and the lead agency of the AU's New Partnership for Africa's Development (NEPAD) to implement the fourth pillar of the Comprehensive African Agricultural Development Programme (CAADP), involving agricultural research, technology dissemination and uptake.

FARA's vision: reduced poverty in Africa as a result of sustainable broad-based agricultural growth and improved livelihoods, particularly of smallholder and pastoral enterprises.

FARA's mission: creation of broad-based improvements in agricultural productivity, competitiveness and markets by supporting Africa's sub-regional organizations (SROs) in strengthening capacity for agricultural innovation.

FARA's Value Proposition: to provide a strategic platform to foster continental and global networking that reinforces the capacities of Africa's national agricultural research systems and sub-regional organizations.

FARA will make this contribution by achieving its *Specific Objective* of sustainable improvements to broad-based agricultural productivity, competitiveness and markets.

Key to this is the delivery of five *Results,* which respond to the priorities expressed by FARA's clients. These are:

1. Establishment of appropriate institutional and organizational arrangements for regional agricultural research and development.
2. Broad-based stakeholders provided access to the knowledge and technology necessary for innovation.
3. Development of strategic decision-making options for policy, institutions and markets.
4. Development of human and institutional capacity for innovation.
5. Support provided for platforms for agricultural innovation.

FARA will deliver these results by supporting the SROs through these Networking Support Functions (NSFs):

NSF1/3. Advocacy and policy

NSF2. Access to knowledge and technologies

NSF4. Capacity strengthening

NSF5. Partnerships and strategic alliances

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