Agricultural value chain finance strategy and design

Technical Note

Enabling poor rural people to overcome poverty

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Technical notes provide practical suggestions and guidelines to country programme managers and project design teams to help in the design and implementation of programmes and projects. They support the IFAD Rural Finance Policy and *Decision Tools for Rural Finance* and should be read in conjunction with those documents. Field staff, financial service providers, government ministry employees, non-governmental development organizations and development agencies may also find these technical notes useful.

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Introductory note by the author

This technical note was commissioned by the Financial Assets, Markets and Enterprise Unit of the Policy and Technical Advisory Division of IFAD for the Agribusiness and Finance Group of the Food and Agriculture Organization of the United Nations (FAO). It is designed to meet the needs of the growing number of projects and programmes that are using value chains as an important investment financing instrument.

The main author of this paper is Calvin Miller, Senior Officer in the Agribusiness and Finance Group, Rural Infrastructure and Agro-Industries Division of FAO. The work was supervised by the IFAD Rural Finance Team, composed of Michael Hamp, Francesco Rispoli and Emily Coleman. The author and the Rural Finance Team welcome any comments and suggestions.

Acronyms and abbreviations

AVCF	agricultural value chain finance
FSP	financial service provider
MFI	microfinance institution
VCF	value chain finance

Introduction

Value chain finance for agriculture has become a topic of interest for IFAD and other development agencies. It is an approach that is increasingly being applied by financial institutions and those actively participating or involved in promoting and developing value chains.

The term "value chain finance" (VCF) refers to the use of a value chain and the way in which it supports participants by tailoring services and products to one or more points in a value chain in order to reduce the risk and cost of financing, and increase the efficiency of the value chain as a whole. VCF can help meet the growing need for agricultural finance and investment in response to consumer demand for more processed or value-added products. From a development perspective, governments and support agencies must ensure that the financial systems in their countries are able to meet the financial demands arising from the growth of modern agricultural and food value chains. Agricultural value chain finance (AVCF) is an innovative yet proven approach to finance that can help address these issues.

Purpose of this technical note

This technical note aims to help IFAD country programme managers and project design teams understand:

- The transformation of agriculture and modern value chains and how this knowledge can be used to benefit the financial access and delivery processes;
- How to develop value chain financial services that benefit all types of farmers and agribusiness firms within value chains and the country as a whole; and
- The best way to develop a programme implementation strategy that will strengthen priority value chains through interventions that address capacity needs and financing, policy and support infrastructure requirements.

This technical note serves as a guide to the design of appropriate programme interventions that apply VCF approaches to the development of competitive agricultural value chains. It emphasizes interventions that promote financial inclusiveness and the overall development goals of governments, as well as those of technical and funding agencies.

Although the content of this technical note addresses agricultural value chain finance, it must be emphasized that finance and its application are dependent upon the nature and context of a value chain and those involved in it. For United Nations and large-scale development projects, interventions often need to address several value chains simultaneously. This requires flexibility to accommodate the specific requirements of each value chain and context.

1. What is agricultural value chain finance?

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1. What is agricultural value chain finance?

The term "value chain finance" refers to the flows of funds to and among the various links within a value chain. It relates to any or all of the financial services, products and support services flowing to and/or through a value chain to address the needs and constraints of those involved in that chain, be it to obtain financing, or to secure sales, procure products, reduce risk and/or improve efficiency within the chain. It refers to both internal and external forms of finance:

- Internal value chain finance is financing that takes place within the value chain, such as when a supplier provides credit to a farmer or when a lead firm advances funds to a market intermediary.
- External value chain finance is financing from outside the chain made possible by value chain relationships and mechanisms; for example, when a bank issues a loan to a farmer based on a contract with a trusted buyer or a warehouse receipt from a recognized storage facility.

This definition of value chain finance does not include conventional agricultural financing from financial institutions such as banks and credit unions to actors in a chain unless there is a direct link with the value chain as noted above.

Definition of key terms

- **Value chain:** The actors (private and public, including service providers) and the sequence of value-adding activities involved in bringing a product from production to the end-consumer. In agriculture they can be thought of as a "farm-to-fork" set of inputs, processes and flows (Miller and da Silva, 2007).
- **Value chain analysis:** Assessment of the actors and factors that influence the performance of an industry and relationships among participants to identify the main constraints to the increased efficiency, productivity and competitiveness of an industry and how these constraints can be overcome (Fries, 2007).
- **Value chain finance:** Financial services and products flowing to and/or through value chain participants to address and alleviate constraints to growth (Fries, 2007).

Value chain finance offers an opportunity to expand financing for agriculture, improve efficiency and repayments in financing, and strengthen or consolidate linkages among participants in value chains. It can improve quality and efficiency in financing agricultural chains by:

- Identifying the financing needed to strengthen the chain;
- Tailoring financial products to suit the needs of the participants in the chain;
- Reducing financial transaction costs through the direct discounting of loan payments at the time of product sale; and
- Using value chain linkages and knowledge of the chain to mitigate risks to the chain and its partners.

It should be noted that AVCF is not a development goal, but rather a means of achieving other social and economic goals. AVCF is a financial approach and set of financial instruments that can be applied for agricultural and agribusiness financing. AVCF can facilitate increased financial access and lower agricultural costs and financing risks.

Business models

The strategy for developing or strengthening value chains depends on the business model. The term "business model" in value chains refers to the way value is added within a network of producers, suppliers and consumers. The business model includes the drivers, processes and resources of the entire value chain system, even if the system is composed of multiple enterprises. The business model concept is linked to business strategy (the process of business model design) and business operations. If value chain finance is to be successful, the value chain must be viewed as a single structure, with the model of this structure providing a framework for further analysis.

A value chain is not an entire sector or subsector. It involves a specific group of interrelated producers and other actors who supply **a particular end market**.

The relationship between buyers and sellers can be described through various types of linkages along a continuum:

- An instant or spot market, where producers come to sell their commodities and where prices fluctuate; this is the most risky in terms of setting market price;
- A contract to produce and buy, known more generally as contract farming;
- A long-term, often informal, relationship characterized by trust or interdependency;
- A capital investment by one of the buyers for the benefit of the producer, characterized by high levels of producer credibility and dependence; and
- Full vertical integration.

Hence, moving from an uncontrolled buyer–seller relationship model towards a more integrated model improves the prospects for financing both within and into the chain.

Smallholders account for a large proportion of rural poor people in developing countries and produce much of the countries' food. As such, they are an important target group, offering opportunities to increase the socio-economic welfare of a large number of people, improve food security and drive the economic development of the country. Special emphasis must therefore be placed on models that allow the full participation of smallholders in value chains.

Table 1 illustrates the typical organization of smallholder production and marketing – that is, the relationship of farmers to the market and/or the wider value chain. This analysis provides a basis for value chain business models and the accompanying financing approaches and is expanded upon in the sections that follow.

Table 1. Typical organizational models of smallholder agricultural production in developing countries

Model	Driver of organization	Rationale
Producer-driven (association)	Small-scale producers, especially when formed into groups such as associations or cooperatives Large-scale farmers	Access new markets Obtain higher market price Stabilize and secure market position
Buyer-driven	Processors Exporters Retailers Traders, wholesalers and other traditional market actors	Assure supply Increase supply volumes Supply more discerning customers – meeting market niches and interests
Facilitator-driven	Non-governmental organizations and other support agencies National and local governments	Make markets work for the poor Regional and local development
Integrated	Lead firms Supermarkets Multinationals	New and higher-value markets Low prices for good quality Market monopolies

Source: Adapted from Vorley (2008). In Da Silva et. al (2009).

Producer-driven business models are driven from the bottom end of the chain. They can be successful but face two major difficulties. First, producers may not understand market needs as well as others who are closer to the consumer. Second, producers often struggle to secure financing unless they can find strong partners and/or obtain assistance for financing from their buyers or others.

Buyer-driven models are the foundation for much value chain financing. It is in the buyer's interest to ensure a reliable flow of products, and many use financing as a way to promote production and/or commit producers, processors and others in the chain to sell to them under specific conditions. Most often, when financing is involved, the conditions are binding through contracts, and contract farming is the most common buyer-driven value chain model.

Facilitator-driven models are found in many countries where a developed agro-industry coexists alongside marginalized producers living at subsistence levels. The costs of organizing and training small producers can be deemed too high to be assumed by commercial companies. As a result, intermediation by development organizations, including non-governmental organizations (NGOs) and government agencies, facilitates opportunities for integrating smallholder producers into commercial value chains, and financing has become a commonplace feature of such linkage arrangements. With the goal of long-term sustainability, facilitation is ideally time-bound and includes a clear exit strategy. Facilitation approaches to value chain development have been successful around the world. With proper organization and training, the incomes of all participants in the value chain can be increased.

Finally, an integrated value chain not only connects producers to others in the chain – input suppliers, intermediaries, processors, retailers and service providers, including financial service providers – but integrates many of these through ownership and/or formal contractual relationships. The integrated model has many features of the other models, such as strong linkages with multiparty arrangements, technical guidance and strict compliance, and has a controlled, consolidated structure of value chain flows and services as well.

Instruments to promote agricultural value chain finance

First and foremost, AVCF is an approach to financing. It uses an understanding of production, value-added and marketing processes to determine the financial needs of actors in the chain and how best to provide financing to those involved. Many diverse and innovative financial instruments may be applied or adapted to meet specific financial needs. Commodities and cash-flow projections can be used to secure financing and reduce risk.

The various financial instruments often used in AVCF fall into five categories (table 2). They are described in annex 1, and their benefits, limitations and application potential are summarized in annex 2.

Table 2. Categories of financial instruments commonly used in agricultural value chain finance

Category	Instrument
Product financing	• Trader credit • Input-supplier finance • Marketing and wholesale company finance • Lead-firm financing
Receivables financing	• Trade-receivables finance • Factoring • Forfaiting
Physical-asset collateralization	• Warehouse receipts finance • Repurchase agreements (repos) • Financial leasing (lease–purchase)
Risk mitigation products	• Insurance • Forward contracts • Futures
Financial enhancements	• Securitization instruments • Loan guarantees • Joint-venture finance

These instruments can be used alone, but it is more common to use several of them within a value chain. Most of them are used in many types of finance; they are not exclusive to AVCF. However, while such instruments as factoring may be common in commerce or manufacturing, their application to agricultural financing is often new and unfamiliar. It is important to note that the use of one or more of these financial instruments does not in itself constitute value chain finance; rather, value chain finance is an approach that applies instruments appropriate to the value chain.

The descriptions of the 16 AVCF instruments in annex 1 are useful for understanding the concepts. However, for development programmes, it is important to understand their applications and implications, and annex 2 offers guidance in this respect.

Governments and donor agencies do not need to be fully versed in value chain finance instruments. However, it is important that they (a) **understand the benefits and risks of the different financial instruments to the various participants** within the value chain and (b) **ensure that adequate mechanisms** are in place to permit and govern their application.

Innovations

A number of key innovations have played an important role in the growing application of AVCF. **Process innovation** has helped develop business models, as well as improve contract-farming systems, commodity exchange linkages and other aspects of value chain operations. **Financial innovations** include the growing use of interlinked supplier-buyer-producer-bank financial arrangements to reduce cost and risk. Building on these value chain linkages can greatly reduce the need for cash payments and transactions that increase financing costs. **Technological innovations** include the application of information and communication technologies in mobile banking, mobile technical support, electronic networks, etc. and improved management information systems to accommodate tailored financial services – all of which have made AVCF much more feasible. **Policy innovations**, which have reoriented extension services towards prioritizing and strengthening value chains and investing in supportive infrastructure, are also important.

Supporting innovation is an important role for IFAD and other development agencies. However, it should not focus undue attention on the latest technologies and untested ideas but rather on all types of innovation that reduce costs and risks and improve services.

2. Strategy and design recommendations for programmes dealing with agricultural value chains and agricultural value chain finance

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Programme and project designers for development institutions face many challenges. They must match the multiple development priorities and concerns of governments, donors and beneficiaries with issues of sustainability, income, employment generation and profit. How can the programmes they design facilitate the desired effects? The following recommendations aim to provide practical principles and guidance in response to this question.

Recommendations for the design and implementation of agricultural value chain finance

Have clear development goals

The development goals of the government and/or development agency must be clear before decisions can be made about the target group, region or sector, and value chain-specific considerations.

Use a development approach

Seek to maximize returns to society as a whole and to the priority target groups and regions in particular. Thus, important considerations in designing value chains and value chain finance interventions include governance, power relationships among actors in the chain, control and sustainability of the chain, and the main beneficiaries of the intervention. A targeted effort is needed to include smallholder producers and poorer households in integrated value chains.

Identify initiatives with a strong business case

The underlying industry sector must be competitive if interventions are to be sustainable. Within a competitive sector or subsector, the most competitive value chains and niches must be identified. Avoid interventions where the prospect of long-term sustainability cannot be demonstrated.

Acquire knowledge about the value chain

Designing effective interventions requires an appreciation of the structure and dynamics of the target value chain. Ensure that value chain analysis is conducted and that the study involves an analysis of the value-added potential in the chain. This will reveal whether primary producers can benefit from organizing the chain more efficiently and whether the cost of chain organization and financial services can be recovered from product margins. Conduct a segmentation analysis to assess how the labour market is segmented by sex throughout the value chain. Consider factors and characteristics that influence the access of men and women to productive resources and their ability to deploy these resources.

Before considering financial interventions, consider non-financial alternatives

Donors should consider providing direct financial support to (commercial) chain actors only in the absence of other alternatives. Possible alternatives to direct financial support include:

- Brokering contacts with microfinance institutions (MFIs) and other financial institutions.
- Holding workshops, bringing stakeholders together to investigate whether solutions can be found within ordinary business relationships (e.g. supplier finance).
- Providing technical assistance to producer organizations or lead actors in the chain to help them meet the requirements of viable, sustainable chain operations (including related financial services).
- Facilitation of linkages with exporters (or importers in target market countries) that would demonstrate the availability of well-established market outlets to financiers and provide sufficient value-added potential at the local level.

Each of these would create an environment in which commercial financial operators could enter the market to provide value chain actors with the financing they need to improve the operation of the chain.

Avoid crowding out the private sector and other ongoing initiatives with grants

In a similar vein, donors should be very careful to avoid distorting financial markets through grant-funded interventions. Donors should finance only gaps and then only as a temporary, start-up measure. They should not use grants to fund activities that they are already financing through debt financing. Subsidies should be limited to parties and situations that are not currently supported by existing market actors (including local MFIs and other financial service providers [FSPs]) and where prospects for sustainable long-term value chain finance look promising.

Use a step-wise approach

Grant finance may be used in the start-up phase to fund the development of value chain activities, but thereafter, VCF must move towards a sustainable form of local debt financing. Ongoing services to chain actors must be paid out of revenue from value added within the chain if they are to be sustainable. The project/programme should plan for the transition from donor support to commercially supported services, with defined milestones and a clear timeline.

Create conditions for synergy between grant and debt finance

Consult local financial institutions early in the chain development process to ensure that the programme invests in promising value chains and subsectors and with partners that FSPs recognize as creditworthy. Efforts should be made to involve them in the value chain and the VCF development strategy. Local financial delivery is the best path to continuity. Develop a process to evolve towards local financing; this offers an exit route for donors of grant programmes and is the best guarantee of substantial social and economic returns.

Use agricultural value chain finance to build or strengthen actors' creditworthiness

With its linkages and relationships among value chain participants, AVCF can contribute to participants' creditworthiness and therefore support the development goals of increasing financial access and inclusiveness. It may start with embedded finance (e.g. processors financing farmers' operations), enabling actors to develop a track record of financial responsibility and competitiveness, which in turn opens up opportunities for external financing.

Farmers' financing by a processing firm (embedded finance) may be a very good solution in a situation where no external financing is available. However, financing may be better when separated and left to specialized financial institutions. Hence, it is important to recognize the benefits and limits of embedded finance, as well as the potential evolution of such arrangements over time.

Recommendations for defining a value chain finance strategy and business model

Agricultural value chain finance strategies and models must be flexible

AVCF is a comprehensive, holistic approach rather than simply a single instrument or "recipe" to be followed. It involves the systemic analysis of an entire value chain and the relationship among its actors. The actual tools used and their application depend on the particular value chain and business model and are preliminarily identified during the value chain assessment. These tools change with conditions and must be capable of modification during programme implementation to suit the interests and capacity of the partners selected.

Promote the development of promising value chain finance strategies and business models

The best strategy or model to use depends on the circumstances and maturity of the respective value chain. Development agencies can play a constructive role in discussing the pros and cons of one strategy and model versus another with their partners. Ultimately, there should be agreement on the path to follow, preferably spelled out in a strategic plan or business plan.

Support design driven by value chain actors

Creating a successful value chain is an act of entrepreneurship. While a donor/financier can play a supporting role, a value chain strategy is more robust if developed by a leading actor within the chain. In designing and assessing interventions, it is critical to understand where the initiative originates. In a producer-driven initiative, the main challenge is to turn ad hoc marketing or a supply chain into a value chain (i.e. to adjust supply to demand in a new market). In a buyer-driven model, the challenge is to identify competitive production areas and tailor products to buyers' needs. Sometimes a facilitator (NGO, government, technical agency) links producers and buyers in a chain. Whatever the entry point, a vital characteristic of a promising value chain approach is that a leading chain actor is prepared to invest time and resources in building relationships between suppliers (primary producers) and buyers. Sharing information and building trust are good indicators of mutual interest; without this, VCF should not be considered. Value chain actors have easier access to information about other value chain participants than outsiders do, particularly the willingness and ability of potential clients to honour contracts. These factors contribute to better operation of value chains when driven by an actor who understands the chain and is part of it.

Recommendations for partner selection and facilitation

Select promising partners

"This is what we produce." Developing a value chain requires someone with an entrepreneurial spirit to venture into new products or crops. Therefore, the success of a VCF strategy hinges on selecting the right partners. Rather than waiting for partners to apply for funding, a more proactive approach may be needed in scouting for promising partners and subsectors. This may require scouting and reconnaissance studies by the donor prior to partner selection.

Identify an effective lead partner in value chain finance

An active player in the chain, such as a farmers' marketing organization or a processing company, can take the lead in streamlining the value chain, thus providing a degree of chain governance. Such a party can also play a role by providing embedded financing to suppliers, and/or establishing a working relationship with an FSP to finance producers and input suppliers.

Finance efficiently

Costs and risks can be lowered by providing financing through the strongest actor or actors in the chain. Financing the stronger, less risky agribusinesses – most often those near the end of the chain – lowers the financial costs associated with risk protection. Donor agencies and governments should not demand the direct financing of smallholders if there are more efficient and effective ways to finance them.

Safeguard both the connections and the distinction between financial services and value chain development

Financial service providers, be they MFIs, credit cooperatives or banks, rarely finance all parts of value chains on their own. And finance alone is often not enough; value chain interventions are often required to link primary producers (farmers) to high-value markets. This invariably involves turning a local supply chain into a value chain that meets the demands of these new markets. While the development and finance aspects are closely linked, it is prudent to clearly separate the two. The nature of the two fields of intervention differs, with value chain development focusing on the creation of appropriate marketing channels and linkages and VCF focusing on the sustainable provision of financial services.

Work towards a clear separation of roles

Value chain development depends on a range of value chain actors, facilitators, financial service providers and other support. These roles should be clearly defined, especially in emerging value chains where their functions are not yet institutionally separated. If the finance function is performed by a chain actor, such as a farmers' marketing cooperative, attention should be paid to separating them in terms of institutional capacity, governance and accounting. Another reason for a clear demarcation of roles is the need to build capacity without threatening the viability of the actors concerned. An MFI or bank cannot be expected to assume responsibility for capacity-building and chain organization, even though these interventions are vital for risk mitigation. These functions are better exercised by a chain facilitator with a designated budget and intervention programme. A donor or financier can play a guiding role in this respect.

Facilitate linkages between local financial institutions and leaders in value chains

Development agencies that are searching for ideas to promote VCF can facilitate negotiations between leading chain actors and financial institutions and provide training and technical assistance to both. Financial institutions that are not yet active in AVCF need help understanding value chains and how to manage the risks associated with lending to the agricultural sector.

Involve financiers in risk mitigation measures

There are many ways in which banks or MFIs can be involved in risk mitigation measures. In general, if all trade transactions pass through the financial institution concerned, this will provide real-time information on chain performance and boost institutional confidence in supporting the chain. Examples are shown in table 3.

Table 3. Risks to financial service providers

Type of risk	Risk mitigation measures
Production risks: These arise from a variety of factors (input supplies, lacking or late credit, low quality standards, improper storage and packing, weather risks, diseases, etc.).	By employing a comprehensive chain approach that looks beyond the borrower to the health of the chain, the financing institution is better informed about the capacity of the chain partners and linkages, including producers' capacity to ensure adequate supply in terms of quantity and quality. The financing agency can also finance and manage financial transactions for various actors in the chain (e.g. input suppliers, storage facilities, trade) and appropriate insurance.
Supply risks: This refers to situations where producers (farmers) may not honour their contractual supply obligations. A commonly observed problem in contract farming is "side-selling," which derails the built-in repayment mechanisms for farm credits.	Strong producer organizations (farmers' cooperatives) and/or group solidarity systems (mutual guarantees based upon savings) provide some assurance that contracts will be honoured and the risks of "side-selling" minimized. Reliable supply allows for collateralization through warehouse receipts in which the FSP becomes a party.
Finance risks: These relate to the non-repayment of credit provided to farmers, other producers or other value chain actors. This risk is borne by the FSP or the chain agent acting as retail-finance provider for farmers/other actors or by both.	Non-repayment of credit to chain actors can be greatly reduced by incorporating a lead actor considered trustworthy. Such actors help instil and ensure accountability. Arrangements of this type are strengthened when a lead actor (co-signatory) is able to absorb risks (e.g. through its equity capital or member savings) and when contingency arrangements are in place to deal with unavoidable risks (such as crop failure). Providing financing through a tripartite arrangement not only improves the efficiency of credit delivery, but minimizes the risk of non-performing loans.
Marketing risks: These relate to the inability to sell on time, in the right quantities and/or at an acceptable quality standard. This includes the short- and long-term market situation and the use or absence of marketing contracts.	Fixed contracts throughout the chain help stabilize turnover, especially when dependence on one market can be avoided. Sales or export agreements are a strong asset in negotiations with financiers, especially when they are also financing other agribusinesses within the value chain. In niche markets, such as fair-trade channels, the buyer relationship can significantly reduce marketing risks, even for small-producer groups. Product standards and certification can also reduce risks.

Type of risk	Risk mitigation measures
Price risks: These arise from fluctuations in market prices in the period between, for example, the time a farm contract is signed and the delivery date. These risks are borne by producers/farmers or the buying chain actor, depending on the type of contract.	Direct linkages to the end-consumer markets can promote fair and relatively stable prices. Information technology can be used to minimize price risks. Contractual arrangements should be transparent to help the FSP assess risks. Forward contracting and futures are examples of more advanced price-stabilization mechanisms in VCF.
Climate risks: These relate to shocks produced by weather, such as droughts or floods. Weather shocks can trap farmers and households in poverty, but the risk of shocks also limits farmers' willingness to invest in measures that might boost their productivity and improve their economic situation.	Agricultural insurance, including weather index insurance, has shown potential to help smallholders, FSPs and input suppliers manage low- to medium-frequency covariate risks such as drought or excess rainfall. Farmers can buy insurance as part of a package (e.g. credit and other financial services, technology, agricultural information) or, occasionally, as a stand-alone product.

Recommendations for capacity-building and facilitation support

Build the capacity of small-scale producers and other weak partners in the chain to support growth towards maturity in the value chain

Building the capacity of weaker members of the value chain may also involve increasing the understanding and capacity of stronger partners so that they can become chain participants. There are two important steps in the evolution of a value chain involving smallholder farmers. First, farmers must be linked effectively to more attractive markets, which requires their ability to produce to exact product specifications (inclusion barrier). Second, there must be a transition towards sustainable local finance delivery (access barrier). A donor can play an important role in facilitating evolution towards sustainable VCF by supporting the array of interventions needed to develop the chain. The success of evolution in VCF is measured by the degree to which it is provided by local MFIs and formal financial institutions. Improving the creditworthiness of chain operators for debt financing is a vital step in this process. Both donors and financiers should support such medium-range perspectives.

Base interventions on a sound assessment of capacity-building needs

Capacity-building needs may be identified for each of the financing opportunities in a value chain. In emerging value chains in particular, it is likely that many intervention areas need to be addressed. While FSPs will not take prime responsibility for capacity-building, their involvement is critical to arriving at an effective strategy. Moreover, they need to boost their own capacity to deal with these issues, develop appropriate products and appraise clients from a VCF standpoint.

Develop business and service alliances

Globalization puts greater pressure on individual businesses to be part of competitive industries. Businesses and actors in durable value chains share knowledge and build lasting relationships that are mutually beneficial.

Facilitate knowledge management and training

The concepts of VCF and many of its instruments are not well understood. Universities, bank training institutes and development organizations should be encouraged and receive support to develop the training packages needed to build the necessary capacity.

Development agencies, agribusinesses and financiers can and should make a major contribution to promoting knowledge about AVCF, based on their global experience and their connections to knowledge information centres.

Recommendations for programme management and monitoring

Agree on key performance indicators

Unlike the microfinance sector, there are no generally accepted AVCF performance indicators. Indicators to be considered include:

- Greater involvement by target primary producers (number and level of participation)
- Increased sales volume of primary producers (gross sales)
- Increased value added by primary producers (income)

- Creditworthiness (greater access to commercial funding at all levels of the value chain)
- Quality of credit portfolios (percentage repayment of obligations, loans or in-kind deliveries)
- Sustainability of the financial services concerned (lending cost versus interest and fees, if applicable, and/or percentage repayment)

Target and monitor return on investment

VCF grant support should be assessed as an investment that yields a social return. Social returns can be measured in terms of agreed key performance indicators. The ratio between total donor investment and the total increase in value added (income) for primary producers may be used as one indicator that these objectives have been met.

Ensure good governance

Embedded finance arrangements must be monitored for their fairness to stakeholders, especially primary producers. Such arrangements should also be examined to determine whether they could hinder scaling up to larger numbers of producer groups. A donor can play a constructive role in designing and encouraging symbiotic business relationships. The risk of "predatory" exploitation of a dependency relationship can be reduced by putting transparent pricing mechanisms for goods and financial services, with related monitoring, in place.

Plan your own exit

The realization of self-sustaining operations and creditworthy value chain members should open the door for local FSPs to fully take over VCF. This is the natural exit strategy for donors as far as grant-funded programmes are concerned. The conditions for exit and the performance indicators used to assess it must be well-defined in the business plan underlying the intervention.

3. General principles and insights for development agencies

3. General principles and insights for development agencies

Diversify among value chains

Diversification and other ways of mitigating risk concentration in value chain activities are important considerations. Exercise caution in focusing on a single sector or value chain. While specialization is an important ingredient in achieving competitiveness, it has associated risks for both businesses within the chain and the financiers.

Weakness in any link in the chain can increase financing risk at all levels

VCF decisions derive from the health of the chain or sector, including its cash and commodity flows, rather than from the traditional collateral of an individual business or category of actor.

The viability of value chain finance depends on insider knowledge

The drivers of a value chain, which are often the businesses involved in the processing and marketing of agricultural outputs, know the business and the other actors in the chain in a way that financial institutions per se do not.

Infrastructure is a critical component

Agricultural communities often lack the infrastructure that would enable them to thrive and contribute to a nation's food security and/or exports. Too often, there are gaps in basic services: unreliable electricity supply for operating machinery and processing equipment, lack of storage facilities to ensure product quality, undeveloped road systems to promote speedy delivery and reduce spoilage, lack of greenhouse structures to prolong seasons and increase yields, and insufficient water and technologies for irrigation and other farming activities. Building this infrastructure is costly, and policymakers must make agriculture a priority to overcome these obstacles.

Supportive legislation is essential to value chain success

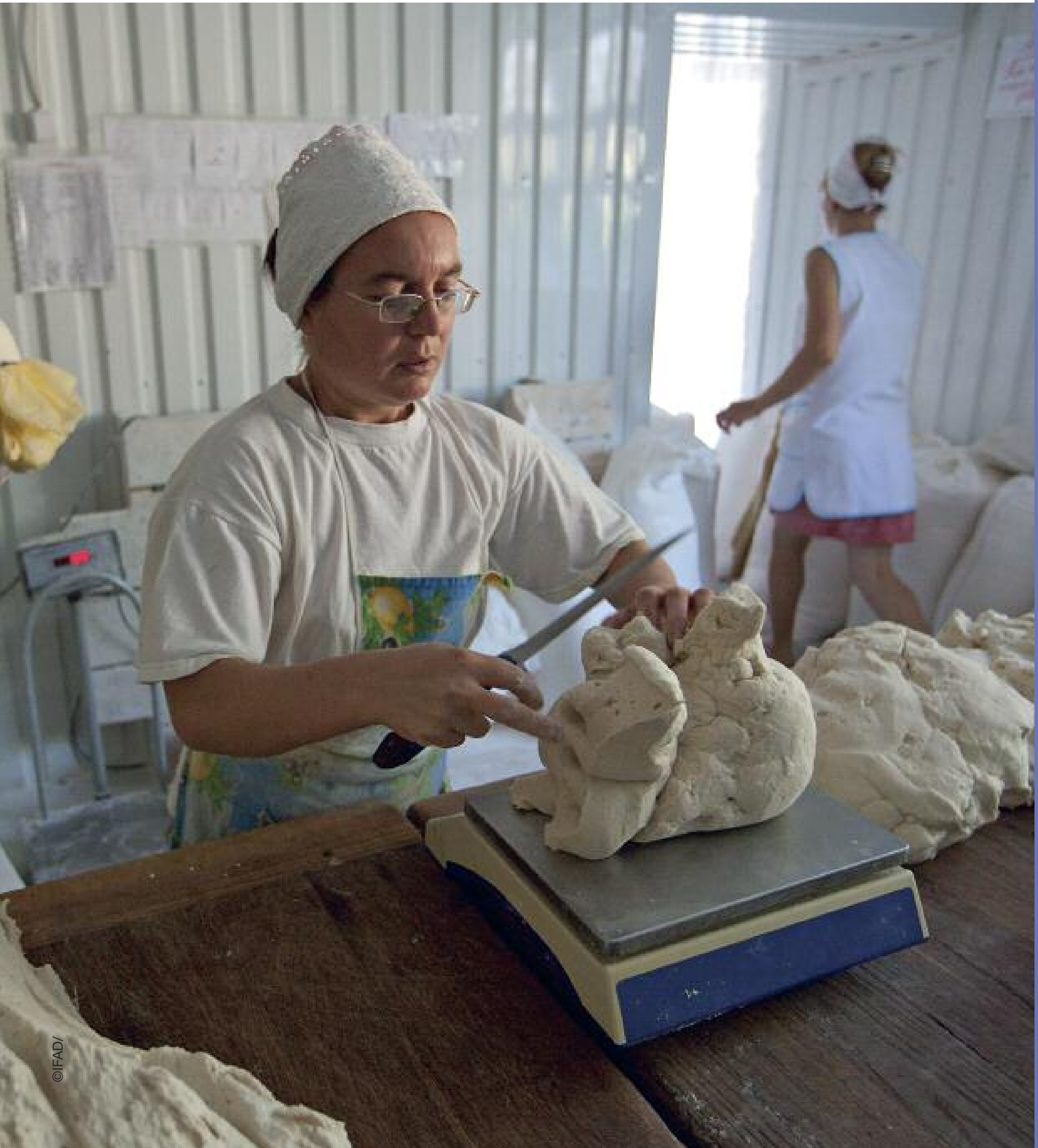
Policymakers have a critical role to play in creating enabling environments. Legislation may target financing issues, from the regulations that govern MFIs to those supporting the development of managed warehouses that enable the collateralization of inventory. Legislation can support the certification of agricultural inputs, the registration of agribusinesses, the development of industry standards, the opening of domestic and international markets, and a host of other areas that support agricultural subsectors. For value chain stakeholders, facilitators and policymakers, understanding regulatory bottlenecks and how to overcome them can produce significant changes in legislation and the enabling environment.

Understand the limitations of value chain finance

Two reasons for caution need to be taken into consideration. First, value chain integration may not be good for all parties involved; the least powerful links in the chain may be marginalized. VCF cannot address inequities that may be inherent in some value chain relationships. Governance through policies and enforcement may be required. Second, VCF can address only the financial needs related to the chain; the conditions for promoting broad-based financial services to all households and businesses must also be pursued.

Value chain finance has an important place in agricultural finance that augments, but does not replace, conventional finance; most important is its comprehensive, structured and market-competitiveness approach, which complements conventional finance, increasing access to capital and reducing risk for both clients and financiers.

4. Frequently asked questions



4. Frequently asked questions

Where does agricultural value chain finance fit within agricultural development finance, and vice versa?

AVCF is one approach to financing agriculture that works well for sectors with organized or at least partially organized value chain market linkages, i.e. it does not work for ad hoc sales scenarios. AVCF is part of development finance in that it can lower transaction costs and risks, thereby improving the outreach and inclusiveness of agricultural finance.

Should a donor or development bank provide direct financing for a value chain?

It is often inadvisable for a donor or development agency to directly lend to or invest in a value chain or set of value chains being developed. Instead, it would be better for it to use its funding to help attract local or, if needed, international funding and investment.

What is the difference between a value chain and a supply chain?

The two terms are often used interchangeably. However, the term "value chain" emphasizes the value added in each of the chain processes. Both concepts work towards supplying a particular end market.

Should international development agencies undertake agricultural value chain finance projects?

AVCF is an approach that can be used within a development project. However, it is not a goal in itself, but a means to a broader goal. AVCF projects can be recommended if the development objective is to demonstrate the use and understanding of VCF and/or the goal is to expand financial access.

How can donor support to innovation best be achieved?

Process innovation and risk reduction are two areas of need. This can be achieved through knowledge sharing, exchange visits and the provision of other opportunities for enhancing information exchange and the sharing of experiences. The donor could also consider sharing costs and/or partially assuming risks when new innovations fail.

Annexes

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Annex 1: Description of agricultural value chain finance instruments

Instrument	Brief description
Product financing	
Trader credit	Traders advance funds to producers to be repaid, usually in kind, at harvest time. This allows traders to procure products and provides a farmer with needed cash (for farm or livelihood usage) as well as a guaranteed sale of outputs. Less commonly, trader finance can also be used upstream in the chain, whereby the trader delivers products to buyers with delayed payments.
Input-supplier credit	An input supplier advances agricultural inputs to farmers (or others in the value chain) for repayment at harvest or other agreed time. The cost of credit (interest) is generally embedded in the price. Input-supplier credit enables farmers to access needed inputs while increasing sales of suppliers.
Marketing-company credit	A marketing company, processor or other company provides credit in cash or in kind to farmers, local traders or other value chain actors. Repayment is most often in kind. Upstream buyers are able to procure outputs and lock in purchase prices; in exchange, farmers and others in the value chain receive access to credit and supplies and secure a market for their products.
Lead-firm financing	A lead firm provides either direct finance to value chain actors, including farmers, or guaranteed sales agreements that facilitate access to finance from third-party institutions. Lead-firm financing, often in the form of contract farming with a buy-back clause, provides farmers with finance, technical assistance and market access, and ensures quality and timely products to the lead firm.

Instrument	Brief description
Receivables financing	
Trade-receivables finance	A bank or other financier advances working capital to agribusiness (supplier, processor, marketing and export) companies against accounts receivable or confirmed orders to producers. Receivables financing takes into account the strength of the buyer's purchase and repayment history.
Factoring	Factoring is a financial transaction whereby a business sells its accounts receivable or contracts of sales of goods at a discount to a specialized agency, called a factor. The factor pays the business the face value less a factor discount and collects the receivables when due. Factoring speeds turnover of working capital and provides credit-risk protection, accounts-receivable bookkeeping and bill-collection services. It is useful for advancing finance for inputs or sales of processed and raw outputs that are sold to reliable buyers.
Forfaiting	A specialized forfaitor agency purchases an exporter's receivables of freely negotiable instruments (such as unconditionally guaranteed letters of credit and "to order" bills of exchange) at a discount, improving exporter cash flow, and takes on all the risks involved with the receivables.
Physical-asset collateralization	
Warehouse receipts	Farmers or other value chain enterprises receive a receipt from a certified warehouse that can be used as collateral to access a loan from third-party financial institutions against the security of goods in an independently controlled warehouse. Such systems ensure quality of inventory and enable sellers to retain outputs and have the opportunity to sell for a higher price during the off-season or other later date.
Repurchase agreements (repos)	A buyer receives securities as collateral and agrees to repurchase them at a later date. Commodities are stored with accredited collateral managers who issue receipts with agreed conditions for repurchase. Repurchase agreements provide a buy-back obligation on sales and are therefore employed by trading firms to obtain access to more and cheaper funding based on that security.
Financial lease (lease-purchase)	This is a purchase on credit that is designed as a lease with an agreement of sale and ownership transfer once full payment is made (usually in instalments with interest). The financier retains ownership of the goods until full payment is made, making it easy to recover goods if payment is not made, while allowing agribusinesses and farmers to use and purchase machinery, vehicles and other large-ticket items without requiring the collateral otherwise needed for such a purchase.

Instrument	Brief description
Risk mitigation products	
Insurance	Insurance products are used to reduce risks by pooling regular payments of many clients and paying out to those affected by losses. Payment schedules are set according to statistical data of loss occurrence and mitigate the effects of loss to farmers and others in the value chain from natural disasters and other calamities.
Forward contracts	A forward contract is a sales agreement between two parties to buy/sell an asset at a set price and at a specific point of time in the future, both variables agreed to at the time of sale. Forward contracts allow price hedging of risk and can also be used as collateral for obtaining credit.
Futures	Futures are forward contracts – see definition above – that are standardized to be traded in futures exchanges. Standardization facilitates ready trading through commodity exchanges. Futures provide price hedging, allowing trade companies to offset price risk of forward purchases with counterbalancing of futures sales.
Financial enhancements	
Securitization instruments	Financial assets that produce cash flow are pooled and repacked into securities that are sold to investors. This category includes instruments such as collateralized debt obligations. This provides financing that might not be available to smaller or shorter-term assets while reducing the cost of financing on medium- and longer-term assets.
Loan guarantees	Agricultural loan guarantees are offered by third parties (private or public) to enhance the attractiveness of finance by reducing lending risks. Guarantees are normally used in conjunction with other financial instruments and can be offered by private or public sources to support increased lending to the agricultural sector.
Joint-venture finance	Joint-venture finance is a form of shared-owner equity finance between private and/or public partners or shareholders. Joint-venture finance creates opportunities for shared ownership, returns and risks. Partners also often bring complementary technical expertise and natural, financial and market access resources.

Source: Miller and Jones (2010).

Annex 2: Summary analysis of agricultural value chain finance instruments

Instrument	Benefits	Limitations	Application potential
Product financing			
Trader credit	• Farm-gate finance with ease of transaction • Culturally accepted and well-known at all levels • Secures sale/ purchase and price of seller and buyer	• Non-transparency of true market value • Often informal, with potential for side-selling • Quality and quantity uncertain when granted pre-harvest	• Middleman traders will remain important but as chains integrate will lessen in importance • Traders' tendency to act as wholesalers' agents
Input-supplier credit	• Buyers obtain needed inputs • Suppliers secure sales	• Input costs may be excessive • Lack of security in repayment • Lack of competitive suppliers in many regions • Smallholders' use and application of inputs are often poor	• The focus on reducing administration costs and risk associated with multiparty links to banks and produce buyers is promising for direct payments from sale • Food quality and safety are growing concerns
Marketing-company credit	• Secures product quantity and price • Funds advanced as needed; payments often discounted directly • Uses contracts to set finance, price and product specifications	• May not be directly accessible to small-scale farmers • Credit advances increase financial outlay and administration • Contracts often not respected	• Value chain control through contract farming is growing in importance • Value chain approaches reduce transaction costs and risks

Instrument	Benefits	Limitations	Application potential
Lead-firm financing	• Secures market and price • Offers technical guidance for higher yields and quality • Less side-selling options due to closer monitoring • Enforceable contracts with less side-selling due to closer monitoring • Lead firm can often hedge price risk	• Less accessible to smallholder farmers • Producers with fixed contracts do not benefit from rises in price • Cost of management and contract enforcement	• Growing use and high potential to provide access to markets, technical assistance and credit
Receivables financing			
Trade-receivables finance	• Reduces financing constraints for exporters and eases repayment urgency for importers • Can be cheaper than bank-loan alternatives	• Requires a proven track record • Is not suitable for perishable goods • Is most suitable for large transactions	• Used for import-export transactions for durable commodities • Increasingly used by input suppliers, equipment dealers and major commodity traders
Factoring	• Provides a source of working capital • Facilitates business and finance by passing collection risk to a third party (factor)	• Complex and requires a factoring agency • Not yet allowed in some countries • Lack of knowledge and interest on the part of financial markets	• Its use in agriculture is uncommon but growing • Best used for processors and input suppliers where product flows and accounts are stable
Forfaiting	• Makes capital available • Takes care of collection risks and cost • Can be selectively used for specific project funding or accounts	• Requires selling accounts at a discount • Complex and requires the presence of specialized forfaiting or factoring agencies	• Less common than factoring but similar in principle • Invoice instruments are negotiable but complex, limiting their application potential

Instrument	Benefits	Limitations	Application potential
Physical-asset collateralization			
Warehouse receipts	• Use inventory as collateral to increase access to financing • Where organization and trust are built, can also work on a less formal basis without the official warehouse-receipt legislation in place	• Commodity traded must be well-standardized by type, grade and quality • Increase costs • Often require special legislation	• Relatively well-known, and interest in wider use • Can be used at various value chain levels and possess growth potential • Currently used for durable commodities but with increased processing and improved storage, the range of their use can expand
Repurchase agreements (repos)	• Can reduce financial costs and have proved successful for selected commodities with well-functioning commodity exchanges	• Complex; require commodities to be stored with accredited collateral managers and require commodity exchanges	• Limited potential in near future • Used infrequently by exporters for some commodities
Financial leasing (lease-purchase)	• Provides loan security and ease of asset repossession in case of default • Especially good where legal system for loan collection is weak • Often has tax benefits	• Requires coordination of seller, buyer and financier • Only feasible for medium- to long-term purchases of non-perishable goods • Often requires insurance	• High potential use for equipment purchase if legislation allows

Instrument	Benefits	Limitations	Application potential
Risk mitigation products			
Insurance	• Reduces risk for all parties in value chain • Commonly used and easily applied to fire, vehicle, health and life insurance • Crop and livestock insurance is increasing	• Costly, requires subsidy when applied to agricultural production • Insufficient data limit weather indexing use in insurance	• High interest among many donors and governments is increasing its use • Without subsidies, growth for production insurance will be modest until sufficient data are available
Forward contracts	• Companies can hedge price risk, thus lowering financial risk and cost • Can be used as collateral for borrowing • Not dependent on commodity exchanges • Benefits can flow through chain when one party forward-contracts and can offer forward or fixed prices to others	• Require reliable market information • Commodity traded must be well-standardized by type, grade and quality	• Frequently used by larger companies and for major commodities • Have the potential to increase significantly wherever reliable market information is available
Futures	• Used globally in agricultural commodities to hedge risk • Futures serve as price benchmarks for reference trade	• Commodities are traded in standard units requiring that they must be well-standardized by quantity, type, grade and quality • Requires a well-organized futures market	• Have growing use and potential when commodity exchanges work • Use is limited to larger producers, processors and marketing companies

Instrument	Benefits	Limitations	Application potential
Financial enhancements			
Securitization instruments	• Have the potential to reach lower-cost capital market funding where homogenous pooling is possible • Have been used successfully in microfinance	• Costly and complex to set up • Are adversely affected by securitization problems from the subprime financial crisis	• Have limited potential for agricultural value chain investment tenor and cash flow
Loan guarantees	• Reduce risk to parties providing finance and/or the business venture, increasing access to funding • Can facilitate needed investment in a value chain	• Costly and often subsidized in agriculture • Can reduce lender responsibility and accountability	• Occasionally used as incentives for stimulating capital flows to infrastructure, new markets and exports, and, occasionally, production
Joint-venture finance	• Provides equity capital and borrowing capacity • Reduces financial leverage risk to investors • Often brings expertise and/or markets	• Hard to attract suitable investors with a common vision • Dilutes investor returns • Hard for small producers to participate in	• Has growing potential in a globalizing world • Strategic partnerships, including public and private sector, are increasingly important in value chains

Annex 3: Smart aid issues in value chain finance: Questions for self-assessment by technical and donor agencies

Key questions on strategic clarity

- What is our organization's approach to the development of value chains and agricultural value chain finance? Do we have an organizational policy or guideline?
- In what niche can we make a difference?
- Are our interventions in value chain finance in line with emerging good practice?
- Do we have an agency-wide commitment to this policy and to the application of good practices?
- Is compliance with this policy and good practices monitored within the project cycle?

Key questions on staff capacity

- Do we have staff with expertise in value chain development and value chain finance to ensure the quality of programme design, implementation and monitoring?
- Do we have one or more experienced focal points responsible for offering technical advice to programme developers and managers?
- Do we make resources available for technical expertise to be involved in the design of programmes for value chain development/value chain finance?
- Do we have staff with specialized value chain knowledge in the countries/regions where it is needed the most?

Key questions on accountability for results

- Do we have systems in place to ensure the transparency and performance-based management of value chain finance programmes?
- Do we systematically track and report on performance indicators for value chain finance programmes or components?
- Do we use performance-based contracts?
- What are the performance indicators?
- Do we have any measure for cost-effectiveness or return on investment?

Key questions on knowledge management

- Do we have systems to create, disseminate and incorporate learning from our own experience and that of others?
- Do we have mechanisms in place for sharing learning on our agricultural value chain programmes and latest developments throughout headquarters and field offices?
- What expertise is contracted from outside?

Key questions on appropriate instruments

- Do we have appropriate instruments for value chain finance that are used flexibly and tailored to market needs?
- Do we have clear guidelines on how we work with private actors (companies)?
- How do we manage the support for value chain development and VCF?
- Is the nature of our projects and development financing instruments consistent with our strategy and the requirements for supporting value chain development and financing?
- What role can we play in releasing funding for agricultural investments?
- How can brokerage and alliance-building functions best be organized?

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