Integrated Financing for Value Chains
Credit unions fill the agricultural lending gap and create market linkages

This technical guide provides an overview of WOCCU's recent initiatives to help credit unions finance agricultural production in Peru and Kenya. It highlights best practices in providing value chain finance to increase income among small farmers, promote economic growth and ensure food security.
What is a Credit Union?

Credit unions, called by various names around the world, are financial cooperatives that provide savings, credit and other financial services to their members. Credit union membership is based on a common bond, a linkage shared by savers and borrowers who belong to a specific community, organization, religion or place of employment.

Credit unions worldwide offer members from all walks of life much more than financial services. They provide members the chance to own their own financial institution and help them create opportunities such as starting small businesses, growing farms, building family homes and educating their children. In some countries, members encounter their first taste of democratic decision making through their credit unions.

Who is WOCCU?

World Council of Credit Unions (WOCCU) is the global trade association and development agency for credit unions. WOCCU promotes the sustainable development of credit unions and other financial cooperatives around the world to empower people through access to high quality and affordable financial services.

WOCCU introduces new tools and technologies to strengthen credit unions’ financial performance, improve governance and increase their outreach. It also advocates on behalf of the global credit union system before international organizations and works with national governments to improve legislation, regulation and supervision. In 2008, WOCCU’s technical assistance programs reached 8 million people in 16 countries.

Learn more about WOCCU’s impact around the world at www.woccu.org/microfinance.

What is a value chain?

Value chains encompass the full range of activities and services required to bring a product or service from its conception to sale in its final markets—whether local, national, regional or global. Value chains include input suppliers, producers, processors and buyers. They are supported by a range of technical, business and financial service providers. (USAID)

Agricultural Finance: Fulfilling an Unmet Need

Small farmers play a critical and often undervalued role in ensuring global food security. When food supply is threatened and global commodity prices rise, the work of small farmers becomes more important than ever. Their crops feed not only their own local communities, but also the millions of people migrating to crowded towns and cities.

Without affordable financial services, reliable information on market demand or direct market linkages, many small farmers remain in the unprofitable trap of low-investment and low-return production cycles. They also need improved inputs to break into more profitable commercial production. But many of them do not have capital to invest at the outset, own traditional forms of collateral or even have safe places to save their money.

Small farmers who do have access to bank loans frequently find the terms to be too rigid, the amounts too small or fees too high to permit the kinds of investments that can significantly increase production. As a result, they often borrow from family, friends or moneylenders who typically charge high interest rates and have limited potential to expand.

In some cases, small farmers borrow their working capital from other non-financial participants within the value chain (whether formal or informal), such as input suppliers, associations, buyers or traders. While borrowing from these sources may be appropriate in some situations, it offers little transparency and can put significant constraints on financing due to the lenders’ limited liquidity and lending knowledge.

Many financial institutions have been hesitant to work with value chains because of the complexity of relationships and the risks, costs and partnerships associated with financing them. Credit unions, however, make promising partners in value chain finance due to their deep community ties, presence in rural areas and lending experience with low-income individuals and small firms. And they are finding new ways to manage the risk of lending to these important producers.

World Council of Credit Unions (WOCCU) is working with credit unions in Peru and Kenya to develop sustainable models for agricultural finance that benefit both the credit unions and the value chain participants they serve. As the small farmers move into more
profitable small-scale commercial production, WOCCU’s methodology ensures they will have access to the financial services they need to continue growing long after the WOCCU program has closed.

*The right finance at the right time can mean greater efficiency, improved product quality and increased incomes.* (USAID)

**Peru**

**Financing Increases Value Chain Productivity**

In partnership with Peru’s National Credit Union Federation (FENACREP) and with funding from the Office of Microenterprise Development at the U.S. Agency for International Development (USAID), WOCCU and six credit unions in Peru are collaborating with local producer groups and other value chain participants to develop a market-driven model for value chain finance.

WOCCU provides technical assistance to the credit unions in Peru, and they assume full risk of the loans they make. They do not receive any grants, external funding, subsidies or guarantees.

The four-phase value chain finance methodology in Peru is designed to assess and mitigate the specific risks associated with financing existing rural value chains and to determine at which point in the process—from production to commercialization—financing adds value to the participants. Credit unions can use the methodology to design a variety of products with characteristics that meet the various financing needs along the value chain. Most credit unions have or hire staff with a background in agriculture to manage the process.

**Value Chains are Market-Driven**

*Phase I: Identify and evaluate potential value chains*

The credit union first ensures that market demand exists for a particular product and that the producers have the ability to meet the demand. Without adequate product demand, both the financial institution and the producers are at risk of significant loss.

Next, the credit union analyzes the strengths, weaknesses, opportunities and threats of each value chain. It then identifies points along the value chain where providing access to finance could bring the greatest value to small producers and would represent a good investment for the institution. At the end of this phase, it uses a scorecard tool (see p. 5) to evaluate and rank each value chain and create a map of potential financing options.

**Value Chains Financed by Credit Unions in Peru**

*October 2007 – December 2008*

WOCCU has trained six credit unions in the value chain finance methodology. Most of the credit unions have already begun to apply the lending methodology to new value chains with limited monitoring and support from WOCCU.

- 18 distinct value chains: alpaca fiber, cacao, coffee, guinea pigs, industrial oats, kiwicha (amaranth), milk, palm hearts, peas, potatoes, purple corn, rice, tropical flowers, and trout
- 41 cycles of financing
- 1,026 loans disbursed to small producers and associations
- US$1.58 million in total loans disbursed
- 3,668 producers served
- 2.65% delinquency on value chain loans
WOCCU’s value chain finance methodology provides credit unions with the technical and operational capacity to put resources into agricultural finance while maintaining an adequate margin and mitigating the risk of loan default. The methodology includes tools for evaluating opportunities, designing products and administering loans—all crucial for institutions interested in financing value chains to reduce the risk of doing so when they do not have access to subsidies, grants or guarantees. The model is adaptable to any type of financial institution and may be applied to non-agricultural value chains.

Direct Relationships are Key
*Phase II: Facilitate and leverage market linkages*

To help improve efficiency and reduce dependency on intermediaries, the credit union brings together all of the value chain participants to identify problems, review their needs based on the evaluation in phase I and commit to finding solutions. The credit union gathers production and financial data at the meeting to design appropriate loan products, and the participants identify and contractually agree on quality standards, minimum purchase prices for the producers’ goods and non-financial activities that would improve the value chain’s efficiency. The direct connections provide reliable market information to solidify the small producers’ business relationships and secure market access for years to come. The commitment participants make in this phase is an integral part of mitigating the financial risk of lending.

Financial Products Meet Specific Needs
*Phase III: Design the products and evaluate capacity to pay*

In the third phase, the credit union analyzes potential cash flows based on information gathered during the workshop. It then designs a product that directly reflects the financing needs of the borrowers and the specific characteristics of each commodity and value chain. The credit union bases disbursement and repayment schedules on production cycles and sets competitive interest rates to cover costs and provide a profit margin.

The credit union also establishes the policies and procedures needed to address the risks associated with value chain loans, especially those made directly to producers. It then determines the best combination of collateral and signed contracts to cover the loan.
Phase III reduces the financial risk of granting loans with unrealistic terms and/or inadequate amounts. By basing loans on both the participants’ real needs and capacity to pay, the credit union is more likely to increase productivity and guarantee repayment.

Disbursement and Collection Techniques Reduce Risk  
*Phase IV: Grant, monitor and collect loans*

The credit union disburses loans in cash or in vouchers that permit the borrowers to obtain discounted inputs such as quality seeds, fertilizers, pesticides, tools, labor and equipment from other value chain participants. Producer associations and technical assistance providers help monitor production, which reduces the credit unions’ operational costs and allows them to reduce interest rates on loans.

Once the buyers receive the products, they channel payments to the producers or associations via the credit union. The credit union deducts the full loan payment of principal plus interest from the sale amount and deposits the remainder into the individuals’ or producer associations’ savings accounts.

After financing a value chain once, the credit union only needs to apply phases III and IV to grant subsequent loans unless there have been significant changes to the value chain structure. It should, however, reaffirm market demand for each cycle of financing.

In the case of Peru, credit unions provided financing to participants in pre-existing value chains. Many of the value chains were already involved in some type of commercial production but lacked the financing and direct market linkages they needed to grow.

Financing is available to all value chain participants, such as input suppliers, producers, producer associations, processors and buyers. The bulk of credit union loans have been made to the small producers and producer associations who are often the most vulnerable links in the chain. As these producers and other value chain participants become credit union members, they gain access to additional financial services including savings and insurance.

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**WOCCU’s Value Chain Finance Scorecard**

*A tool for value chain finance analysis*

**Core purpose:** Loan officers use the scorecard tool at the end of phase I in the value chain methodology. The evaluation provides credit unions a framework for deciding whether or not to work with a particular value chain.

**Analysis:** Loan officers use a weighted scoring system to evaluate each indicator based on pre-set criteria. They use the total score in combination with the qualitative information gathered during phase I to determine the viability of financing the value chain.

**Indicators**

**Market Demand**
- Is the value chain connected to a viable market?
- Is there sufficient demand to incentivize production?
- Can the producers compete with their peer group to successfully meet demand?

**Producers’ Technical Ability**
- Do the producers have the appropriate level of technical ability to understand and meet demand?
- Will the producers receive technical assistance from strategic partners who can ensure product volume and compliance?
- How will technical assistance services be financed?

**Producers’ Organization**
- Are the producers organized?
- Do the producers need training to strengthen the association?

**Market Access**
- Does the local infrastructure allow basic market access, e.g., public transportation for goods and people, modes of communication, etc.?

**Environmental Factors**
- Does supporting the value chain encourage the employment of underage workers or interfere with the completion of their schooling?
- Does supporting the value chain encourage environmentally friendly practices?
- Does supporting the value chain encourage practices that violate local or national laws?

The scorecard is designed to be a decision making tool, not a formulaic means to arrive at an exact answer. The qualitative analysis in the value chain diagnostic is of equal importance.
In recent years, small coffee growers in Peru’s Amazon region of Alto Mayo have received technical assistance and certification to grow high value organic coffee, but they have not been able to increase their incomes as much as expected. On one hand, the growers lacked access to affordable financing, and on the other, they had few profitable opportunities to market their coffee.

As with many other financial institutions in the region, Santo Cristo de Bagazán credit union considered small producers to be very risky clients. The credit union had tried agricultural lending in the past but had failed, and by the time WOCCU began working with the credit union in 2007, its bylaws prohibited agricultural lending.

WOCCU encouraged the credit union to use its value chain finance tools to evaluate the risks and market opportunities associated with financing the coffee producers. As a result, the credit union identified and worked with the participants in the coffee value chain to determine ways that financing could boost competitiveness and profitability, as well as increase the producers’ profit share.

The evaluation revealed that intermediaries provided the only source of financing for the coffee growers, and they required the growers to sell to them at well below market prices. Loans from intermediaries were not sufficient to cover the costs of production and maintenance, so crop quality and yields suffered.

The assessment also revealed that coffee growers could earn more by selling to a producers’ association that had a direct relationship with the commercial buyer, but the credit union discovered that the association lacked sufficient capital to pay the growers immediately upon delivery. Needing immediate cash to support their families, growers had to sell to intermediaries or the local market for significantly lower prices. And without adequate financing to purchase additional coffee from the growers, the association had no room to increase its bargaining power on their behalf.

With financing needs clearly defined, participants of the coffee value chain gathered information about production cycles, costs, yields and prices so that the credit union could design appropriate products that fit their real needs. After all participants signed contractual agreements, the credit union agreed to lend the growers up to 70% of their production costs and to make a short-term loan to the association so that they could pay the coffee producers upon delivery. The buyer agreed to purchase the coffee at a set price and to repay the loan through the credit union.

The credit union disbursed its first loans to 97 coffee growers in Rioja in January 2008, followed by a loan to the association in March 2008. All loans were repaid on time, and the growers’ earnings increased by 53%.

In the next production cycle, the credit union continued to provide financing to the Rioja coffee value chain and expanded access to small producers in coffee value chains in Moyobamba and Nueva Cajamarca. More than 445 small coffee growers have increased production having gained access to finance through the credit union.
Kenya
Market Linkages Mitigate Lending Risk

Credit unions are establishing new value chains in Kenya, where nearly 80% of the population relies on agriculture to make a living, and where many small farmers are trapped in subsistence-level farming without access to affordable financing and reliable markets. In Kenya’s western region, the challenge of farming is compounded by political strife, the country’s highest rate of HIV/AIDS infection and unpredictable climate change that threatens food supply.

As in Peru, credit unions in Kenya have struggled for years to find an agricultural loan product that both responds to farmers’ needs and benefits the institution. With funding from the U.S. Department of Agriculture’s Food for Progress program, WOCCU is adapting best practices from its Peru experience to create an integrated approach that helps farmers—many of them women—overcome the financial and market access barriers to growth. Through the program, subsistence-level farmers are not only producing more food for their families, but they are gaining a greater stake in securing their nation’s food supply as well.

The value chain finance methodology for agricultural lending in Kenya manages risk at all levels. Credit unions employing the methodology provide farmers voucher-based financing for inputs and facilitate reliable market linkages. At the same time, farmers learn improved agricultural practices, and people affected by HIV/AIDS are introduced to low-labor crops.

Institutional Capacity Drives Success

With WOCCU’s assistance, credit unions are building their institutional capacity to take on agricultural lending. Credit unions in the program have committed to opening their bonds of membership beyond employer-based groups, adopting new products and hiring loan officers with agricultural expertise.

The agricultural loan officer, financed by earnings on the loan portfolio, oversees lending and crop management. The loan officer is also responsible for identifying marketable crops and working with existing technical assistance providers, including buyers and representatives from the Ministry of Agriculture, to provide technical assistance to farmers before and during the growing season.

Diversification is critical to the success of the program. WOCCU recommends that the credit unions invest no more than 30% of their loan portfolios in agriculture, and that they finance a variety of crops. Farmers should also diversify production so they do not rely on a single crop for their food and income.

Alex Omino is an enterprising young farmer in the Bondo district of western Kenya. Responsible for supporting his two children and extended family, he could not produce enough corn on his plot to feed them all. With a small loan from his local credit union, technical assistance from WOCCU and a contracted buyer, Alex planted ‘New Rice for Africa’ (NERICA) in addition to his traditional corn crop. NERICA is upland rain-fed rice that does not require irrigation, matures in 90 days and produces four to five times the yield of other varieties. NERICA not only provides Alex and his family with more food, but it also gives him a greater cash income and puts more rice—the bulk of which Kenya imports—on the local market. With the right financing and market arrangements, new cash crops like NERICA offer real promise for combating the pervasive hunger in Kenya.
Market Relationships Provide Sustainability

With few established value chains in the region, creating new market linkages is critical to the success of agricultural lending. To ensure sustainability, the value chains established must be beneficial to all participants and structured in a way to minimize risk. WOCCU has identified local farmer groups, input suppliers, buyers and credit unions to establish and maintain new value chains in western Kenya. The relationships are formalized through contracts or memorandums of understanding that define each participant’s obligations.

Farmer groups organized by the credit unions, WOCCU or the United Nations’ Food and Agriculture Organization in its Farmer Field Schools, form the foundation of the value chains. The groups consist of 20 to 40 subsistence-level farmers who meet regularly to learn about new crops and farming techniques. Financing from the credit union means they no longer have to rely on expensive intermediaries, and they now have access to market information, new crops, techniques and technical assistance designed to help them break into small-scale commercial production.

Suppliers in the area sign contracts with the credit union in which they agree to charge farmers fair prices for inputs and receive payment in the form of credit union vouchers. The agreement guarantees the suppliers payment through the credit union and improves their competitive position in local markets by introducing a large number of new clients.

Buyers and processors in the region work with the credit union, WOCCU and the farmers to identify appropriate crops and agree on a fair price and schedule (see p. 9). In some cases, the buyers provide seeds and direct technical assistance during the growing cycle. They also arrange transportation for the crop. By ensuring better and stable prices, buyers help the farmers minimize the risk of their investment. Buyers help reduce the lending risk by channeling their payments through the credit union. Value chain financing from the credit union means buyers no longer have to provide direct lending to the farmers and are guaranteed a quality product at harvest time.

Credit unions manage the value chain linkages and relationships and, where appropriate and necessary, provide financing and other services. The credit unions offer voucher-based loans and a range of savings products to the small farmers. The agricultural loan officers also monitor the farmers’ production. The value chain finance methodology helps credit unions attract new members and penetrate the rural market in a sustainable manner that minimizes risk.

Farmers Manage Risk from the Start

The lending methodology relies in part on the existing bonds of the farmer groups. Agricultural loan officers meet the groups in their

Low-Labor Crops Provide Options for HIV/AIDS-Affected Families

Virtually no one is left unaffected by HIV/AIDS in western Kenya. And in rural areas, AIDS has not only weakened the work force, but it has left behind thousands of orphans. As a result, widows have formed caregiver groups to look after children whose family members have perished. The women are struggling to survive themselves, but in many ways they are visionaries, as they work together to create a more solid foundation for the orphans in their care. WOCCU and local credit unions are working with the groups to introduce and finance the production of low-labor crops, such as green grams (a lentil-type legume), that have high nutritional value and local market demand. The output is shared among the women and sold in local markets to generate income for the groups.
communities to sign up new credit union members and introduce them to value chain finance.

Individuals without traditional forms of collateral can borrow with a group guarantee on the loan. If one farmer fails to pay, the other farmers in the group are responsible for repaying the loan. As a result, group members monitor and help each other with farming activities. Some farmers prefer to grow commercial crops collectively, so group loans are available in addition to individual loans. Each group member is required to join the credit union before the group may apply for a loan.

Loan officers conduct pre-loan surveys with individual farmers to assess their land, the cost of inputs and the expected yield. Loan sizes are based on the information collected in the survey.

For crops with contracted buyers, the credit union disburses agricultural loans in the form of vouchers. Borrowers receive vouchers at different phases of the production cycle to pay approved suppliers for seeds, fertilizer and tools. Suppliers then cash in their vouchers at the credit union. A small amount of cash may be available to farmers who employ field laborers.

Payment Goes Straight to Savings

Buyers arrange transportation of the crop at harvest time. Upon delivery, farmers receive a receipt that indicates the volume and grade of their crops.

Immediately after receiving the goods, the buyers make payment to the farmers through the credit union. The credit union uses the payment to cancel the farmers’ loans and contribute a small amount to the group risk management pool on behalf of the farmers. The fund is a simple form of agricultural risk management that could help control production risk in the event of drought or hail.

Remaining proceeds go into the farmers’ savings accounts, and the farmers withdraw funds as needed. One percent of the return on each harvest must remain in each farmer’s savings account to build collateral for future growing seasons.

Credit union loan officers meet with farmer groups in their villages and fields throughout the process, so the farmers save on the cost of transportation and time it would take them to travel to the branch offices. The farmers only need to visit the credit union branch to collect small cash loans to pay field laborers or to withdraw funds from their savings accounts once their loan has been paid off. With the voucher-based system, loan officers do not need to carry cash with them on the visits.

The WOCCU program is working with three credit unions to disburse more than 2,000 loans in the first growing season of 2009.

Community Groups Educate Youth Through Junior Farmer Field Schools

Education is highly valued in Kenya, and primary school is free. But resources are severely lacking. In places like the village of Odhuro, many school-age children survive on one meal a day in good times and less in bad ones. Agricultural agents and group members are working with primary school children and a local orphanage to help the youth plant seeds, use farm implements and improve the quality of their school gardens. Harvests from the school gardens provide nutritious school lunches and sometimes a small amount of cash to help add protein to the children’s diets and purchase basic school supplies. As the children learn agricultural skills to feed their families and generate income, the program not only provides food for today, but it also creates a safer foundation for a future in which young adults have a viable alternative to life on the streets.

Selecting an Appropriate Crop

The farmer, buyer and credit union should all be involved in deciding which crop is best suited for the value chain.

Some factors to consider include:

- Crop value
- Market demand
- Availability of inputs
- Ease of transport
- Climate and growing conditions
- Farmers’ experience and ability to perform labor
Managing Risk at Every Step in Agricultural Lending

Ensure Market Demand for Crops
Loans are made only for crops with reliable buyers that have already been contracted. Crops to be financed are selected according to local conditions as well as the farmers’ technical experience and ability to perform labor.

Create Proper Policies and Procedures
The credit union addresses the following risks when establishing the policies and procedures for value chain financing: geographic distance from the borrower, weather, crop failure and the use of balloon payments at the end of the production cycle.

Assess Real Financing Needs
Loan officers use WOCCU tools to conduct pre-loan surveys that evaluate the total cost of production based on available land, expected yield, pricing of inputs and labor. They base the loan amount on the evaluation.

Establish Appropriate Guarantees on Individual Loans
Credit unions are able to lend to small farmers without requiring traditional forms of collateral. In Peru, loans are guaranteed by a combination of collateral and signed contracts with other value chain participants. In Kenya, individual loans have group guarantees. If one farmer fails to pay, the other farmers in the group are responsible for repaying the loan. As a result, group members monitor and help each other with farming activities. Credit unions in Kenya may also use crops as collateral.

Diversify the Loan Portfolio
WOCCU recommends credit unions invest no more than 30% of their total loan portfolios in agricultural production. They should further diversify the agricultural portfolio by financing a variety of crops in different geographic regions.

Adapt Loan Terms According to Crop Seasons
Loan terms are structured around the production cycle of different crops. Repayment occurs after harvest, once the purchase contract is fulfilled.

Distribute Loans in Vouchers
When possible, borrowers receive the loan in the form of vouchers to purchase inputs from pre-approved suppliers during different phases of the production cycle. The farmers are also able to borrow small amounts of cash to pay field laborers if necessary.

Encourage Farmers to Diversify Crops
Crop diversification helps ensure that small farmers will not become dependent on a single crop. It also encourages commercial production beyond the traditional crops they grow to feed their families.

Monitor Crop Performance
Agricultural loan officers and other technical assistance providers visit the farmers throughout the growing season to provide technical support and monitor production.

Receive Payment through the Credit Union
Buyers pay the credit union directly for crops they receive from the farmers. The credit union deposits the remaining profits into the farmers’ savings accounts after deducting the loan amount, thus promoting savings while recovering the loan.
Adapting the Methodology

The value chain finance methodology developed in Peru has a relatively low implementation cost and can be adapted to diverse contexts, products and environments. However, it requires the presence of an individual who is able to bring together, facilitate and monitor business relationships that will lead to a more productive value chain that meets all participants’ individual goals.

In both Peru and Kenya, the credit unions are building their agricultural portfolios over time. They needed to see that the methodology worked before assuming the increased risk of agricultural lending. As they continue to see the positive results, they become more willing to take on the additional risk and to look for new value chain financing opportunities. In all cases, the financing arrangements need to be mutually beneficial for all value chain participants in order to achieve the sustainability that results from market-driven relationships.

Looking Forward

Gaining access to affordable finance, reliable market information and direct market linkages is enabling small farmers to increase their production. By becoming credit union members in the process, small farmers not only obtain affordable credit, but they also gain access to savings accounts, insurance and money transfer services for years to come.

The agricultural lending methodology outlined here is building the capacity of local credit unions and producer groups to work together and to help subsistence-level farmers move into more profitable small-scale commercial production. The methodology not only provides higher income for the producers and their families, but it lays the foundation for increased food security into the future.

While WOCCU continues to build on lessons learned through serving small farmers, it is also testing new technology solutions, such as point-of-service devices and cell phones, and building the back-end infrastructure that will support them so that credit unions can reach more people more efficiently.

By providing members with affordable financing and increased access to markets, credit unions will continue to open new windows of opportunity for small farmers long after the WOCCU technical assistance programs close. And by supporting increased production capacity in developing countries, credit unions are once again demonstrating the critical role they play in the fight against poverty.

References

USAID. Value Chain Finance, RAFI Notes, 2005.
In 2009, USAID awarded its first Innovations in Financing Value Chains competition award for pioneering/groundbreaking to the Credit Union Market Integration Program in Peru, co-funded by WOCCU, FENACREP and USAID. The award recognized the top programs in providing financial and increased market access to value chain participants.

Alpaca farmers involved with WOCCU’s program in Peru sort and weigh alpaca fiber on a scale they purchased with a credit union loan. Newfound access to finance has reduced the producers’ dependency on intermediaries and increased their bargaining power with buyers.