

Change with Innovations

Rural Finance Knowledge Management Partnership (KMP)

Experiences from East and Southern Africa- ESA



Warehouse Receipt System: Providing collateral and maximizing value

Few smallholder farmers in Africa have collateral to make them eligible for loans from formal financial institutions to secure their livelihoods or improve their farms. But the Warehouse Receipt System provides hope to these farmers. This system allows farmers to access credit against alternative collateral—their agricultural produce, cuts out the middleman who profits at their expense, and provides them with a warehouse to safely store their goods, minimize post-harvest losses and maximize value for them.



Introduction

Improved rural finance systems are seen as crucial to achieving rural growth and poverty reduction in rural Africa. KMP conferences identified many bottlenecks to developing and accessing rural finance products, including the lack of familiarity with and suitable products for farmers among financial service providers, and the high costs of delivering financial services to small-scale, widely dispersed rural customers. Relevant to this Best Practice Guide, key bottlenecks are:

- Formal lenders often require borrowers to contribute equity arguing that the less a borrower contributes to an investment project, the more the borrower's interests diverge from those of the lender. Most rural borrowers lack surplus income to meet the minimum equity requirements of most formal lenders, thus remaining limited to informal credit systems. Moreover, many farmers lack the capacity to write proper business plans for financing by banks.
- Most rural areas in Africa lack systems and markets for risk-management instruments, such as legal registration systems for land. Partly because of this, many farmers do not meet the collateral requirements of financial service providers. In addition, credit bureaus and insurance providers are not active in rural areas.
- Most farmers do not have a credit history. Without such a track record, it is difficult to assess their credit worthiness.

This makes loaning to farmers, especially farmers operating at subsistence level, unattractive to lenders and gives the agricultural sector a high-risk profile. Systems are needed that provide farmers the opportunity to demonstrate credit worthiness and provide alternative means of collateral. Warehouse receipt systems (WRS) have proven themselves as a best practice in overcoming some of these bottlenecks and providing farmers with access to financial services, while also providing other services that facilitate agricultural production.¹

Warehouse Receipt Systems

Warehouse receipt financing is a form of collateralized commodity transaction where goods provide security for loans, as shown in the figure. The commodities are stored in a licensed warehouse, which issues a receipt verifying that specified commodities of a certified quantity and quality have been deposited at a particular location by the depositor to whom the receipt is issued. This receipt forms the basis for financing by designated lenders.³ The warehouse operator holds the stored commodities in safe custody, but does not take ownership. The warehouse operator is liable for loss due to theft or damage (e.g. by water or fire damage), which makes the availability of insurance or underwriting services vital.⁴

This type of financing allows lenders to sell off collateral if a farmer defaults on the loan. The underlying collateral is commonly a soft commodity such as grain, coffee or cocoa, which generally can be sold without major difficulty.

To farmers, warehouse receipts are a means of accessing credit for investment, working capital or consumption needs based on their harvest. As a result, not only is access facilitated to farmers normally lacking access, it also moves the financing cycle forward, from the moment of sale of produce to directly after harvesting when produce is delivered to the warehouse. Moreover, through WRS farmers can monetize their produce without selling it immediately. In the past, farmers were often forced to sell produce (almost) immediately after harvesting as expenses had piled up during the growing season when farmers have little to no income. As many farmers in a region were forced to sell, prices dropped as suitable storage was lacking, while prices were high outside the harvest season. In contrast, WRS provides farmers with the choice to store their goods and maximize its value by selling it at a later time, when prices are higher. At the same time, the loan in WRS allows farmers to secure their livelihoods or develop their farms, for example, by buying more or better seeds and fertilizer.^{5,6}



Strengths and Weaknesses of Warehouse Receipt Systems

During KMP workshops in 2009, 2010 and 2012, several key strengths and weaknesses of WRS were identified. The most important issues are discussed below.

Strengths

- The WRS formalizes the trade and financial transactions of farmers and makes these more transparent, enabling them to **overcome the problem of lack of track record**. Formalizing farmers' financial transactions enables formal lenders to screen borrowers more effectively.
- Lenders can **mitigate credit risks** by using stored commodities as collateral. This form of collateral is more readily available to lenders and less difficult to liquidate than most assets traditionally accepted by formal lenders, such as housing or land.⁷
- The WRS makes it **easier for lenders to monitor a large number of small-scale borrowers** as warehouse operators can act as control points, thus reducing monitoring costs, allowing for lower costs, and encouraging commercial lending to the rural sector.⁸
- The WRS contributes to **improved commodity marketing** as the guarantee of the warehouse operator to deliver commodities removes two major uncertainties in African commodity markets:
 - uncertainty regarding quality and quantity of the commodity, as warehouses register the quantity of goods according to established quality standards
 - ability of sellers to deliver on schedule.

Box 1: Warehouse Receipt System by the Rural Financial Services Programme, Tanzania

The Rural Financial Services Programme (RFSP) improves farmers' chances of getting credit against their farm produce. RFSP's WRS began in 2005 in four pilot warehouses. By 2009 there were 16 warehouses; of these 4 developed with minimum assistance of the Agricultural Marketing Systems Development Programme (AMSDP). The AMSDP was developed by the Government of Tanzania with assistance from IFAD and the African Development Bank to remove 'constraints that hinder effective agricultural marketing systems in Tanzania and assist small-scale producers to acquire capacity and interest to participate in the open market on favourable terms'.

AMSDP and RFSP have partnered with CRDB Bank to pilot this new model of rural finance delivery. The WRS, also called inventory credit model, has the following benefits:

- facilitates savings and credit cooperatives (SACCOs) to access wholesale loans from banks and on-lend to members
- facilitates wholesale loans to microfinance institutions and SACCOs to improve their capital base and their ability to respond to farmers' credit demands
- farmers have quick access to loans
- sales are standardized
- minimizes post-harvest losses
- provides opportunity for collective bargaining

- increased membership and income for SACCOs
- improved awareness of crop quality among producers resulting in higher income
- improved relations among farmers, banks and buyers
- success stories provided potential for expanding the scheme to new areas

An important observation is that the response from farmers usually grows fast when they see the benefits of WRS. Equally, the model benefits all parties: the members, bank and SACCO.

RFSP has also identified the following challenges: (i) collateral management is a specialized skill difficult to obtain locally, (ii) markets are not assured; (iii) rural SACCOs are usually unable to employ professional staff in the first few years of operations, affecting their efficiency and credit worthiness, (iv) SACCOs are exposed to risks when transporting huge amounts of money to remote areas to pay members for their produce, or when transporting money to banks after selling produce to buyers, (v) limited storage facilities makes the system impracticable in some areas, (vi) SACCO management is sometimes engaged in warehouse operations, which is against the law. Farmers should form management committees for this purpose, (vii) trustworthiness of collateral manager: there is a risk of cheating during weighing and analysing moisture content.

By Mr. Frank Maanzi, Rural Financial Services Programme, KMP Workshop in 2009⁹



- Although subsistence farmers may not be able to take advantage of the WRS because they produce little surplus, an **increase in food security** can materialize because:
 - declining local seasonal price variability for commodities means that the marginal sales they make after harvesting (when prices are commonly lower) command higher prices,¹⁰ while food purchases outside the harvest season are likely to cost less.¹¹
 - proper storage of produce enables smallholders to reduce post-harvest losses. This improves food security as farmers can reap more income or food for consumption from the same harvest,¹² also possibly graduating farmers beyond the subsistence level.
 - adding proper storage in food chains will reduce losses, increasing the amount of food available for consumption.
- A positive side effect of the WRS is that farmer groups work together with the warehouse operator to **establish market-based quality standards and prices**. This provides farmers with up-to-date information on prices throughout the season.

dispersed, increasing the distance to warehouses or requiring a denser network of warehouses.¹⁴

- As banks finance commodities behind the receipts with a **risk premium** compared with the market value, actual financing ratios can be as low as 60% for volatile commodities, making the system less attractive to farmers and for non-commodity products.¹⁵
- WRS may promote **speculation** on the seller's part because the farmer tries to maximize profits by holding on to commodities until the price reaches its peak. Once the price peaks, the rush of additional goods into the market causes the price to fall again. This practice may catch farmers selling their inventory at the lowest instead of the highest price.
- **Lack of access to transportation to warehouses and lack of preservation technologies** for agricultural goods in rural areas can result in spoilage, loss from pests and quality depreciation. Also, unreliable supply or shortage of storage chemicals needed to preserve agricultural goods can decrease the farmer's total volume of usable produce.¹⁶

Weaknesses

- Lenders are unlikely to partner with warehouses and producers in a WRS unless the value of products can be assessed in **transparent markets**. This means that:
 - farmers can only register commodities for which price information is available and forecasts can be made for future price developments.
 - governments do not influence a financier's ability to choose when and for what price to sell.¹³
- The quality of warehouses is important in WRS. **Licensing and monitoring systems** need to be in place to guarantee minimum quality requirements. Setting up and monitoring such systems becomes more expensive when farmers are widely

Critical Success Factors for Warehouse Receipt Systems

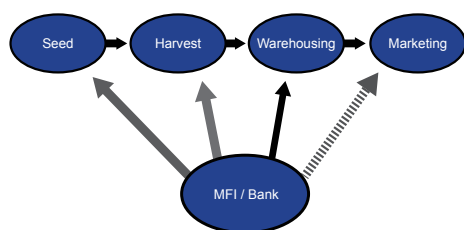
- **Partnerships:** As farmers often do not have the capacity to establish warehouses themselves, practitioners should aim for an enabling environment for putting up warehouses by partnering with important actors. Important partners that need to be aligned are farmer cooperatives, (local) governmental bodies, financial institutions and technology service providers. Together they can establish standards to ensure a high-quality WRS. In addition, governments should establish laws and registries to allow movable collateral, which is critical for a successful WRS. To facilitate WRS financing in emerging markets, a market leader's role is important. Once this bank starts its operations, other banks tend to follow.¹⁸



Box 2: CAF Isonga – Rwanda’s WRS experience

CAF Isonga has developed a variant of the warehouse receipt system. The organization wondered whether it was possible to talk about warehousing without first considering the inputs, production and allied activities or the farmer’s production schedule. CAF gives loans to cooperatives which in turn distribute the loans to their members for agricultural inputs, plantation-related activities such as paying for extra labour, and later accompany farmers along the value chain to transport their produce to the market.

CAF assists cooperatives in: (i) marketing their produce, (ii) providing loans for trucks to transport produce, and (iii) supporting cooperatives in getting other removable property for warranty. The figure shows CAF’s modified warehouse system.



By Mr. Joseph Kabundi, Managing Director, CAF Isonga, KMP Workshop in 2009¹⁷

- **Trust:** A reliable professional warehouse manager or operator should come together with the expansion of physical warehouse facilities. A farmer’s trust in warehouse managers is critical for sustainable WRS.¹⁹
- **Value addition:** Practitioners should analyse how they can include perishable products into the WRS through closely managed storage facilities. This will entail working together with partners to put up processing and cooling equipment in or near warehouses.
- **Education:** To improve the chances of success, farmers need to be educated on warehouse receipt financing. Specific focus should be placed on disadvantaged groups, such as young women cooperatives, particularly where cultural practices inhibit them from owning property such as housing or land. Another important link in the chain, the warehouse managers, need to be educated on WRS.

Critical Failure Factors for Warehouse Receipt Systems

- **Institutional framework:** Whereas land and buildings are widely accepted as collateral for loans, the use of movable collateral (for example, inventory or crops) is restricted because many African countries do not have functioning laws and registries to govern secured transactions. Reforming the framework for movable collateral lending allows businesses to leverage assets for capital for investment and growth. Modern collateral registries need to be in place to increase availability and reduce the cost of credit.²¹ The KMP workshop 2009 presented the example of Uganda (Box 3).²²
- WRS only work if there are **reliable warehouses** in place. As mentioned before licensing and monitoring systems need to be in place to guarantee minimum quality requirements.²³ These systems however can be costly, especially when operations are widely dispersed.²⁴ A solution can be ‘warrantage’, where double-lock storage facilities (jointly) managed in villages by farmer organizations and MFIs or community-based finance organizations are linked to warehouses in principal towns. However, this system involves substantial capacity building of farmer associations, and has proved difficult scale up.^{25,26}

Box 3: Institutional framework for WRS in Uganda

Unlike other countries struggling to create legal frameworks for rural financing and WRS, Uganda already has an Act in place (Warehouse Receipt Act, 2006). The Act empowers the Uganda Commodity Exchange to register warehouses to facilitate rural financing.

Uganda is working towards a framework in which farmers own the entire value chain, from production to controlling property rights over commodities they produce. The goal is to ensure farmers get maximum value from their goods by commercializing subsistence farming.

As identified during KMP Workshop 2009²

- In some cases, the introduction of WRS led to **decreasing profitability** of farmers as market prices levelled out. In methodologies





where maximum loan amounts are tied to the estimated worth of the product, decreased prices will decrease loan amounts available to the farmer and leave them over-indebted, and decreases the interest that the MFI collects.

- While WRS is beneficial to farmers, they often choose other options because WRS does not allow them to extend the loan tenure, to increase the loan-to-value ratio, and to simplify the loan application process.²⁷

Conclusion

In rural regions across Africa, warehouse receipt financing proved to be advantageous for producers and lenders. Producers gain access to storage facilities and credit, which allows them to maximize their profits by providing them with the choice of when to sell. At the same time, financial institutions can mitigate their

risks by using collateralized commodities as a loan guarantee. Moreover, warehouse receipt financing opens up a new client segment that MFIs usually find difficult to reach and to which they can also cross-sell other financial products, such as insurance and loan products. A WRS is best targeted to organized producer groups that can collectively bargain in the marketplace. At the same time individual producers should be educated on market behaviour and given adequate tools to improve their livelihoods and businesses.

It is important to note that financial service providers will face many challenges and constraints to implementing an inventory credit system successfully, many of which are out of their control. Everything from a reliable warehouse system in the region to appropriate institutional framework can greatly affect a program's success.





Endnotes

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About The Rural Finance Knowledge Management Partnership (KMP)

The Rural Finance Knowledge Management Partnership (KMP), now in its third phase, is an initiative of the International Fund for Agricultural Development (IFAD). The partners are the Alliance for a Green Revolution in Africa (AGRA), the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and the African Rural and Agricultural Credit Association (AFRACA).

KMP aims to strengthen rural finance delivery in Eastern and Southern Africa- ESA through knowledge management and experience sharing, capacity building and providing technical and implementation support. It does this by developing new, innovative ways to provide financial services to the rural poor.

An important focus of KMP is to share and disseminate best practices. The KMP experiences are intended to do just that, by bringing together all information collected by KMP and its partners on specific rural finance subjects, most notably during its Rural Finance Thematic Workshops.

After detailing the benefits and difficulties of access to finance via WRS, the experiences provide a comprehensive analysis of the strengths and weaknesses of WRS, and offer practitioners critical success and failure factors they need to consider in their interventions.

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