



**WARRANTY OR STORAGE CREDIT:
A MEANS FOR PEASANTS TO GET MORE VALUE FOR THEIR
PRODUCTS AND PROVIDE SECURITY TO RURAL FINANCE**

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Summary

Producers usually face obligatory expenses at harvest time which oblige them to sell their products, as they cannot wait for higher prices during periods of scarcity and hardship. On the other hand, there exist very few credit solutions for agriculture since the level of risk is usually very high.

Storage credit or warrant credit is a loan guaranteed by harvested stocks that are put into locked storage. This gives the producers access to credit while keeping their products, and for the MFI it is a means to increase the security of the loan. The farmers use the credit to store or to sell their products at a better price, and sometimes to increase their investments during the farming season.

Storage credit is a risky operation at the technical, economic and financial levels; the producers have to be monitored and given support to better assume these risks. Under these conditions, storage credit can be a good tool to improve revenues. Otherwise it is only a financial product like any other. However, it remains a transitory measure: once the market is regulated, the benefits realised will fall with time. Nonetheless the producers are better prepared and know how to manage their financial resources.

Producer organisations (PO) assume a range of functions in the process, to varying degrees: coordination, training, loan application by a group and its acceptance by the MFI, storage and closing of warehouses, disbursement of funds, periodic verification of stocks and setting up of income-generating activities, loan repayment (thanks to sale of stocks or external funds), as well as withdrawal of stocks and individual or collective sales. If the PO actively advises groups, it improves its credibility; the producers are much more motivated to organise and to progress technically in order to better manage their stocks as well as production. In good conditions the results are directly visible.

This document throws some light on the storage-credit process, in particular its objectives, mechanisms, key success points, results, risks, the role of each stakeholder, limits and pathways for evolution.

TABLE OF CONTENTS

INTRODUCTION	1
The seasonal nature of marketing agricultural products	1
The particular case of financing family agriculture	1
Warranting, a means to preserve products for the producer and to limit risks for the MFI.....	1
A - OBJECTIVES OF THE PRODUCER	2
B - MECHANISMS	2
C - KEY POINTS TO BUILDING COLLABORATION WITH THE MFI	4
D - RESULTS	7
For the FO	7
For the peasant	7
For the MFI	7
Some unanswered questions	7
E - THE RISKS TAKEN	8
Technical	8
Economic.....	8
Financial	9
F - THE ROLE OF EACH STAKEHOLDER	9
The FO or the individual peasant	9
For the MFI	9
G - LIMITATIONS	10
The financing capacity of the MFI is often a limiting factor (low refinancing from banks)	10
H - TRAJECTORIES FOR EVOLUTION	11
ANNEXES	12

INTRODUCTION

The seasonal nature of marketing agricultural products

Most agricultural products in developing countries are marketed at harvest time, which corresponds to periods of high financial need. This is usually after the period of scarcity and hardship (after repayment of debts, school fees, ceremonies...) and during this period, there are many buyers in the market. Since the harvesting period is often once a year, most of the products are brought to the market at the same time. Prices for agricultural products are therefore lowest at this period.

A large majority of producers would like to store their products in order to sell during periods of scarcity when the prices are high (lesser quantities of products supplied in the market) or for self-consumption rather than having to buy their own products at a much higher price. That notwithstanding, there are inevitably needs to be taken care of at harvest time and it becomes very difficult to store the products. Furthermore, those who can store their produce must be able to support the losses that will result from storage. These losses can be high especially when produce is stored by individuals with little mastery of proper techniques. And the farmers need to have storage infrastructure. All of these factors hinder the initiatives of the farmers.

The particular case of financing family agriculture

It should be noted here that only micro-finance institutions (MFIs) are interested, even if they meet only some of the farmers' needs. Family farms are most often excluded from the banking system because of the high risks involved: production depends on climatic factors, yields are variable, credit needs are seasonal; savings are difficult to mobilise (Inter-réseaux, 2002). The decisions in the farm enterprise are most often associated to those of the family: a family event for example can be reason for an early sale of a product. Micro-finance institutions are also often the only ones to finance the activities of peasant farmers.

Meanwhile, peasants demand a wide variety of credits: consumption, production, marketing operations, equipment, land, cash crops... which micro-finance institutions cannot always satisfy. They require guarantees which are most often social. This does not permit them to access large amounts of credit because there are high risks of default. More so, the MFIs often have limited financial resources. Cases of loss of confidence between the MFI and farmers or producer organisations are many. They result from defaults in repayments and at times because of lack of professionalism in credit management. Ceilings are placed on loan amounts for a limited number of financial products. Warranting appears therefore to be a means to respond to the needs of the producers while at the same time providing security to MFIs.

Warranting, a means to preserve products for the producer and to limit risks for the MFI

The term "warrant" is used in the commercial vocabulary, to designate a receipt delivered to a trader when s/he deposits goods in a store or warehouse ; and the receipt indicates the value of the goods that are deposited.

We refer here to storage credit or warrant credit: a loan issued for a couple of months whose guarantee is the stock of products, which can be liquidated by the bank in case of a default (the Warranty). The farmer can thus access credit that will permit him/her to meet needs at harvest time and keep his/her produce for the period when prices are high. For the MFI in this case, the guarantee is much more reliable. Wholesalers also use this approach to guarantee the credits they obtain from the formal banks. By so doing they are sure to meet their liquidity needs at harvest when produce is abundant in the markets. Some projects and farmer organisations have tried to adapt this practice to overcome the constraints faced by peasants (Projet Intrants au Niger, National Resources Institute in East and Central Africa, Technoserve in Ghana...). Here, we are interested in the practice of the farmers' organisations.

We will study the following aspects of warranting with small producers:
 Objectives (A), Mechanisms (B), Key Points of success (C) ; Results (D), Risks taken (E), The role of each stakeholder and their limits (F), Limitations (G), and Trajectories for the future.(H).

A - OBJECTIVES OF THE PRODUCER

The producer seeks to get value for his production and to have access to credit:

- sell the produce better by saving it until prices are higher (FOs in Madagascar);
- keep the produce for consumption during periods of scarcity (FOs in Madagascar);
- provide a guarantee to have access to a loan (FOs in Niger);
- improve the capacity to finance the farming season through proceeds obtained from the farms (FOs in Niger).

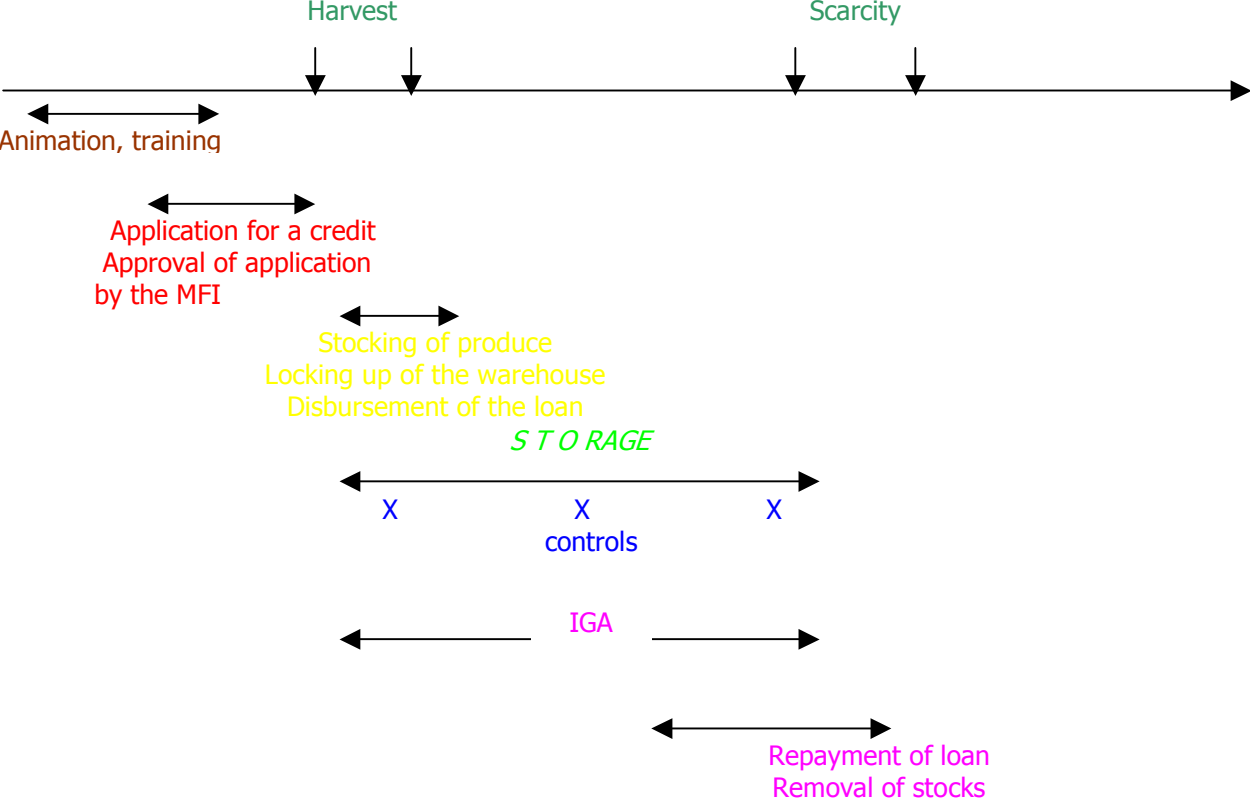
For the peasant it is most often a combination of several objectives but the management of the credit varies depending on the priority of the peasant (see below: cases of Ghana, Niger, Madagascar).

B - MECHANISMS

The guiding principle is to access credit using the stock as guarantee (this is called mortgaging of stock: (re)assure a lender by giving him something so that he consents to lend to you).

In the case of credits to small producers, the stock must be preserved in a secured place where the parties are sure that nobody will withdraw some of the bags to sell when in need. The stock is placed in a public store that has two locks (one key for the MFI and one for the group). The store is managed by the community and the MFI, or often by a specialised holder when the operation is of a larger scale (known as third-party holding). The specialised holder rents a place in his warehouse to the parties.

The general process for one year is as follows:



1. Guidance/training by the FO and the MFI

2. Application for credit by the group

3. Approval of the group's application the choice of the warehouse by the MFI

4. Storing the produce in good condition

Stored grain is fragile. It is thus necessary to store it under good conditions and to monitor its status. Depending on the case, it is the borrowing FO and/or the MFI which inspects the quality of the produce at the start (dry, clean, and healthy produce, protected against pests and diseases, and of good market value), the storage facility or warehouse (clean, ventilated, protected from rodents, watertight roofs and walls, protected from fire hazards) and during the storage period.

The MFI can permit the same group to stock and withdraw products at more than one time . This makes it possible to increase the volumes that are stored (addition of late harvests that are obtained from the first credit, purchase of a new stock, gradual removal of stocks in order to limit risks and gradual repayments of the loan).

5. Locking of the warehouse with two keys

6. Disbursement of the credit

If produce is stored at a private warehouse, the holder delivers a warrant receipt to the loan applicant. The receipt attests to the quantity of the produce that has been stored. The MFI then grants the farmer or the FO a loan indexed on the **market price of the product** at the time of storage (value of the stock). The share or proportion of the stock financed by the MFI is lower than 100 % (see the examples in boxes). This is to cover any physical losses and possible falls in price: if the stock depreciates what is left should be enough to repay the loan.

7. Periodic controls

8. Repayment

How to prepare for repayment

Loans must obligatorily be repaid before the stocks are taken out of the warehouse. The farmer must either use income from other activities (labour, small livestock, buying and selling of products...) or simultaneously sell crops, repay the loan and withdraw stocks from the warehouse.

The loan thus replaces early sales of produce. It can be used for any purpose— consumption, production, income-generating activities such as the purchase and resale of produce—and without the intervention of the MFI since recovery is secured. Storage credits can follow farming season credits by acting as security for the repayment of credits: the farmer repays his farming season loan with the money obtained from the storage credit or income from the sales of the products (the farming season loans may come due before the harvest is in).

Thus, two scenarios are possible:

- a. Part of the credit is used to set up an income-generating activity (new crop or off-season crop, purchase/resale of products, new workshop, processing...). Some FOs steer and accompany their members in this direction (case of Niger); repayments of loans can therefore be ensured by the incomes from these activities.
- b. The credit is used entirely for consumption: here the group storing the products depends on the simultaneous sales of the stock for the repayment of their debt. We will see below the different possibilities for selling. However, the FO is not covered for the risk of a fall in prices or an attack of pests: it is better to secure repayment of the loan by envisaging an alternative source of income (another crop, livestock, etc.).

The important thing is to plan the repayment, i.e. to envisage in advance how the loan will be repaid.

9. Withdrawal of Stocks

The MFI opens the store once the entire loan, plus interest and eventually late-payment penalties are repaid. However, an agreement can be reached between the parties so that repayment, withdrawal and sales are done simultaneously. Otherwise the MFI can accept that part of the stock be withdrawn as long as the value of stock remaining in store is enough to repay the debt.

To whom should the stock be sold?

With stock under lock and key, the group of stockers has bargaining power when the products are scarce for the buyers. But the group of stockers must be aware of this and prepare for sales at the time they decide to store the products.

The first idea that comes to mind is to eliminate intermediaries since the supplies are already gathered at the warehouse. At times some exporters seek to supplement their stock at the end of the export season to meet contractual obligations. For the farmers, this represents secured sales but the price will normally not be optimal (the selling price is not very variable for the exporter during the season). The volumes have to satisfy the quantities demanded and the warehouse has to be accessible. The risk of prolonged storage is borne by the peasant.

Big collectors who sell to processors or in wholesale markets may want to complete their supplies when their stocks are depleted or when they no longer want to take on stock. Large volumes can therefore be moved. The processing institutions are a good opportunity because they demand regular supplies. Contracts can therefore be drawn up with supply schedules.

Finally, small stocks can be sold to local collectors with limited storage capacities who supply the regional markets. Selling seed grain can also be a good opportunity for good quality stock. These local collectors usually have a good mastery of the local market and can therefore be useful partners for the FOs. Contact with the operators must be regular. Relations of confidence will guarantee better value: sales to one buyer partly at harvest and partly during the period of hardship can be an advantageous compromise for the two parties and help foster the trust of the buyer.

It is crucial to know the market, and trends in prices, demand and supply. This can be obtained by analysis of information from a formal information system or by experience and collective observation.

The possible distribution of roles:

	FO	Apex FO or intermediary	MFI
Stocking	X		
Management of the storage warehouse	X	X	X
Monitoring of stock	X	X	X
Training of the FO		X	
Support for repayment and stock withdrawal		X	
Repayment and stock withdrawal	X		X
Market observation	X	X	X
Management support	X	X	

C - KEY POINTS TO BUILDING COLLABORATION WITH THE MFI

We will use the example of an apex FO or an intermediary that enters into an operation with an MFI. This raises several questions about building collaboration with MFIs for storage credit.

1. Which crops should be stored?

The product must be easy to store, easy to sell, with price variations that are known and stable (or foreseeable) from one year to another (case of paddy rice in Madagascar).

2. What criteria should be used by the FO and the MFI to select the credit beneficiaries?

Members who store their produce in the same warehouse must be ready to assume collective responsibility for the stock and repayment of the credit (case of Ghana and Niger). The initial selection of the members is therefore crucial. It is also at this stage that the MFI has the possibility of reducing the risk that it takes.

3. Modalities for technical inspection during delivery and in the course of storage: by whom and how?

These two elements are fundamental for proper storage; the parties must be witnesses to the fact that the stock is clean at the outset and is placed under good conditions. Any invasion by pests, diseases or rotting of the crop has to be detected early to avoid heavy losses during storage.

4. How and when are repayment and sales schedules decided: collectively or individually?

5. Who is responsible for the stock and for repayment: the group or individuals?

Three different types of experience are described below following the five key points identified :

- in Madagascar: better value for rice through individual sales during scarcity after storage in a common village granary (CVG) ;
- in Ghana: a large-scale operation targeting small peasants with group marketing in which the group of stockers plays a major role ;
- in Niger: warranty benefits increased production through intensive use of inputs.

In Madagascar: better value for rice through individual sales during scarcity after storage in a common village granary (CVG)

In 2005, CVG loans amounting to about 3 500 000 € reached 13 500 peasants.

Answers to the five key questions are presented below:

1. Production: rice is the main product that is stocked.
2. Selection of applications: one must be a member of the mutual group in order to benefit from a loan (therefore be a trustworthy member), be up to date with his/her loans, and understand the principle of the CVGs. The application for credit is processed only after the crop is stored.
3. Technical inspection of stocks: The group storing the products is responsible for the quality of the products; they share mutual responsibility for the repayment of the loan. The group submits all the individual applications for loans.
An elected official of the local MFI and a technician oversee delivery to storage . The warehouse belongs to the regional URCECAM (Regional Union of mutual agricultural savings and credit schemes). The stock is inspected every two months by an elected oversight committee, , once a month by a technician and at unannounced times by the regional union.
4. Repayment and sales: there are no sales advisories or group operations. A large part of the rice withdrawn from storage is used for food security.
5. Responsibility for the stock and repayments: each peasant remains owner of his/her bags, but the responsibility for the repayment of the loan is collective.

The local bank accepts repayment in up to four instalments and as many as four withdrawals, enabling very poor farmers to have access credit. A farmer can store a very small quantity, purchase some products from the market and store the total amount again, and so on, providing the bank has confidence in him/her.

Conclusion

The mutualist group was already well implanted in the field, the CECAMs were strong; the credit scheme has refinancing from a bank. The beneficiaries are for the most part active in a production sector/commodity chain of major importance.

Each peasant manages his/her stock, his/her repayment and his/her sale and market outlets are secured/certain, facilitating implementation of this scheme.

Source: "Une expérience de warrantage à Madagascar: LE CREDIT GRENIER COMMUN VILLAGEOIS (G.C.V.) des CECAM (Caisses d'épargne et de crédit agricole mutuels)", by Jean- Hervé Fraslín, ICAR/PDSFR consultant , Niamey, 2005.

In Ghana: a large-scale operation targeting small peasants with group marketing in which the group of stockers plays a major role

About 100 groups of 20 to 50 peasants benefited from loans at the end of the 1990s, amounting to a total of \$170 000 (100 million Francs CFA).

Answers to the five key questions are presented below:

1. Production: The crop chosen is easy to preserve, with high and sure price increases between harvest and periods of scarcity (150 to 300%); mainly corn in the main agricultural regions and around big markets.
2. Selection of applicants: The MFI selects the FO that has proven managerial and entrepreneurial capacities: the FO in turn selects its members.
3. Technical inspection of stocks: the FO has technical responsibility: it supervises quantity and quality. It manages the warehouse. The MFI carries out quality controls thereafter.
4. Repayment and sales: The FO issues notices to defaulters but repays the entire loan. The stock is then liberated and sold to a buyer with whom the FO has negotiated.
5. Responsibility for the stock and repayments: The FO observes the market. The stored product belongs to the group. The FO is answerable to the MFI, but repayments are made individually.

Impacts

The technical support provided by the FO helps to improve production as yields have multiplied by 2.5 (the peasants are encouraged to reinvest the proceeds of the storage in production). The peasants have become more solvent and they can get some medium- and long-term loans from banks.

Because of the success of the operation, i.e. the generalisation of storage and increase in production, prices at harvest have fallen less, and risen less during the scarcity period. The variation between harvest and scarcity periods has therefore become smaller and this has led to a decrease in the benefits for the producers practising warranty lending. The most wary peasants proposed to lower the share of production they stored as guarantee stock (40-50 % instead of 70-80%). In the end, the peasants stored less and therefore better spread out their sales over time.

Source: "Ghana: Inventory Credit for Small-Scale Farmers", the World Bank Group.

In Niger: warranty spurs increased production through intensive use of inputs

Answers to the five key questions are presented below.

1. Production: Staple crops, in particular millet that is easy to store. (But storage has already been disrupted by government imports).
2. Selection of applicants: Loan applications are approved if there is an income-generating activity (IGA).
3. Technical inspection of stocks: crops are stored by unions of cooperatives or groups of producers. Inspection by the MFI before the warehouse is sealed is contracted out; subsequently stores are inspected one to four times per month. Repayment and sales: The income-generating activities serve for repayment. Partial withdrawal of stocks can be made for repayment, as a last resort to make up for a less profitable IGA. The IGA and repayments can be collectively managed. The members contribute a certain number of bags of products, not necessarily the same number, of which an equitable share equivalent to the credit will be invested in the IGA. After repayment, the contributions will be converted to inputs, which are ordered for the group. The peasants are paid at the market price when they deliver crops for storage.
4. Responsibility for the stock and repayments: The group is responsible; it manages the warehouse. However, a second option is under study, which involves recourse to an accredited holder so as to group the stocks and lighten the burden of the FO. The FO and the MFI observe the prices, sales are made collectively.

In 2002, loans of about 91 million FCFA (about €139000) were received by beneficiaries.

Impacts

Through warranty, the turnover of the FOs increased from 30 to 50%. There were also the proceeds from the IGA. This is a means to finance acquisition of inputs since the group orders are filled as soon as the crops are sold. 192 shops were set up all over the country. The credit also helps satisfy temporary and irregular demand (peasants who don't order the inputs at storage nevertheless can get them from the shops, thanks to the loans and proceeds from the IGA).

Source: CD-ROM "Project Inputs - FAO"

D - RESULTS

For the FO

We do not differentiate between farmers' organisations and groups of peasants. There has hardly been any distinction in literature. In the case of a simple group of peasants who are united solely for the storage activity, they rarely set up related activities such as technical, commercial or management schemes.

On the other hand, when an FO as a structure takes active part in the optimisation of storage, its credibility is improved because the members see the direct benefits of the action. When it plays its role, confidence on the part of the MFI is greater. It can have much more efficiency in its technical activities if the farmers mobilise funds to implement the actions or if they see the significant effect increased production has on their income.

We also note stimulation in the organisation of groups, who have to store high-quality goods together, mutually ensure the repayment of loans, jointly search for market outlets and to share out the costs and benefits accruing from storage.

For the peasant

The small producer sees a means of increasing his/her income and or his/her food security and to render them more predictable or foreseeable if the price variations are known.

He spreads out the periods of availability of funds. This helps to facilitate easy access to formal credit (Gideon). Since the quantity at storage is assessed by both the MFI and the farmer (eventually the owner), cheating on the weight as done generally by traders is avoided (peasants attest gains of 20 % !).

For the MFI

The storage credit allows the institution to spread out outstanding loans with respect to the farming season loans. The guarantee provides a high degree of liquidity and thus the risk is lower. The MFI which has been strengthened can therefore develop riskier products like medium - to long-term loans or even lower interest rates if the running costs are optimised and there risks under control (Cirad, 2002).

Some unanswered questions...

Increase the value of the products or develop production in the long term?

Some operations respond to a one-time objective: enable farmers to store their products thanks to a loan. Each farmer stocks, repays his/her credit, recovers his/her stock, and starts over the following year. This is the easiest scheme to set up and the most efficient in the short term (case of FOs in Madagascar working with the CECAMS).

Other schemes are designed to encourage peasants to manage a common income-generating activity and to use part of the proceeds obtained from the sales of the deferred stock to cover the costs of the farming season by providing technical support (case of FOs in Niger for whom warranty is a means of accessing inputs and therefore improving yields). This improves availability of liquidities, increases investment capacity and thus contributes to the progressive financial independence of the farm, at least vis-à-vis informal credit. This is the case in Ghana and Niger where warranty is the motor driving development. The storage credit corresponds therefore to the latter objective; increase the capacity to finance the agricultural season thanks to the proceeds obtained from the farm.

Market regulation: a positive or negative medium-term result for the peasant?

Regulation is often described in the literature as disadvantageous to the farmer because it leads to a decrease in income at the time of storage. Indeed, if the volumes that are stocked increase, the volumes in the market during the period of scarcity also increase. Therefore prices fall if the number of buyers does not increase much. What is more, the volumes in the market at harvest fall since an increasing portion of the harvests is stored. The price at harvest therefore tends to rise. The price variation from the harvest to scarcity period is lower, and the benefits of the storage operations likewise.

However, if the peasant knows the market better and manages his/her finances over the year, he/she should be in position to choose the sales period according to new market opportunities, or according to his/her needs (price higher at harvest, small increase during scarcity or hardship). The farming activity is more balanced and the storage credit becomes a **means**, rather than an end, to increase and better regulate his/her financial resources. This financial product is well adapted to under-developed markets with high seasonal variations but it has to remain temporary when the market changes. From the MFI's viewpoint, if the peasant becomes more solvable the risk of the bank is lower; warranty then becomes less necessary.

The commodities stored have to be of unquestionable quality. This is not only a guarantee for good conservation but also a necessity to obtain greater value for the products after storage. We note however that FOs are progressing in this direction and this will also have an impact on farming practices.

It should be noted that despite all the positive impacts identified, these operations are difficult to put in place. They generate significant costs when economies of scale (grouping of stocks) cannot be achieved. They are also difficult to manage by emerging FOs. The technical (poor conservation of products) and economic risks (decrease in value) have to be mastered as far as is possible. This has to be achieved through a clear distribution of roles between the FO and the MFI and through the strengthening of their capacities in their respective domains.

E - THE RISKS TAKEN

Technical

Even if the best conditions prevail at the start, the stock can deteriorate with time: desiccation/rot, pests and diseases, floods... It is fundamental that quality controls be regular, validated by the FO and the MFI, and that the FO should be committed to protecting the stock against deterioration. Potential losses have to be integrated in the calculations of the provisional results (according to the FAO, 30 % of farmers' stocks can be lost). Some speculations are more fragile than others and it is necessary to carefully assess the technical competence of the FO and the risks taken.

Economic

It may happen that the price at the time of withdrawal of the stocks is not high enough to repay the loans, cover the costs of storage and ensure some added value compared to sales at harvest time. To limit this risk, the FO or the MFI in each case needs to have a mastery of the market: supply and demand trends, constraints of the buyers, circumstances in other production and consumption zones, and the global situation.

A past history of price variations enables the FO or MFI to situate the year in reference to other similar years and therefore estimate the evolution of the equilibrium between supply and demand by comparing these to their knowledge of the market. A market information system is a prerequisite to this fundamental analysis. Furthermore, it is necessary to monitor public action that affects the markets (regulation of prices, supply) and to better advise the peasants, who should be advised on profitable production sectors/chains, and prudent dates for storage and removal of stocks.

Financial

The MFI takes a significant risk if its procedures are not secure, if it accepts the financing of a very high proportion of stock or appraises the storage project badly.

The producer must be fully conscious of the risks he/she takes and must look for ways to spread them out (diversify the products that are stored, storage periods...). The FO and the MFI must know the market, inspect the quality regularly, assist the group storing products... many tasks which have to be properly distributed and require some skills.

Third-party holding by a private operator also helps to limit the risk of losses by small producers. But it requires large quantities and pooling of products which is only possible with experienced organisations or a system that is oriented towards big farms in which small producers are integrated (case of Uganda).

Is the storage credit that is possible for the small producers also possible for large volumes?

In Uganda, the National Resources Institute (NRI) gives technical support to a large-scale warranty operation. Coffee producers mortgage their stocks with a specialised holder. Delivery receipts (warranty receipts) are now legally recognised as bond documents (the stocks can therefore be exchanged). A price information system by SMS guarantees transparency in the market; stocks are sold directly to exporters or in an intermediary market (a total of about 25,000 tonnes in 2005). The objectives are to improve the commercialisation of coffee in the region, thus increasing the export earnings and also increase the revenues of small producers who have lower losses and risks. All of these fit into a system where the profitability is guaranteed by the large volumes and quantities of the big producers.

Source: " Warehouse receipt systems", NRI.

F - THE ROLE OF EACH STAKEHOLDER

The FO or the individual peasant

One condition is necessary: enable peasants to assume their role in risk taking. The FO often takes up a lot of space to satisfy the MFI. Whether it is a group of peasants storing their products or a formal FO, it is crucial that the individual peasant, who contracts the credit, be conscious of his/her responsibility to repay the loan as well as manage the stocks. A supervisory FO which controls, receives payments, searches for market outlets in place of the members does not prepare for the sustainability of the system.

Training FOs to carry out market observation and manage a network of economic partners is a heavy task. It is necessary to look for partnerships.

For the MFI

Can the MFI be responsible for the management of warehouses? Can it be responsible for market observation? This requires technical (quality appreciation of stocks) and economic (knowledge and observation of the market) skills which are not available to all MFIs when profitability is not sufficient. We have seen most of the time that it is the FO which assumes these functions (excepting the case of the CECAM where the system functions by itself with market observation being an addition or a plus). But then their sustainability is not ensured...

For example, in the future we could envisage financial contribution from the MFI to the expertise of the FO. The essential thing however is to reflect on ways of making the system sustainable.

G - LIMITATIONS

The financing capacity of the MFI is often a limiting factor (low refinancing from banks)

Farmers often complain about high interest rates. It is a characteristic of MFIs because of the high up-front costs, management costs for small holders and the high interest rates on money borrowed from banks. The important thing therefore is to calculate the benefits with respect to sales at harvest. The issue is to determine whether it is advantageous to store the products or not.

	Harvest	Scarcity	
Without storage	+ sales at harvest		Total 1
With storage	+ credit - equipment and other expenses (insecticides, bags, rents...)	+ sales of products - credit - interests	Total 2
			Benefits/returns = 2-1

Money during periods of agricultural activity

If the benefits are positive, storage is financially profitable, but storage can have other objectives: to make money available during periods of agricultural activity, at interest rates that are below the market rates if the benefits are higher than the cost of a loan.

However the farmer still stands to gain: even if storage has cost money compared to sales at harvest, the farmer will still come out ahead if the costs are lower than the interest on the loan that the farmer would have contracted at the time.

The availability of products for self-consumption during periods of scarcity or hardship can also be a justification if the farmer does not have to buy more products with borrowed money. The interest rates on storage credits which are the subject of criticism are therefore to be analysed in a relative manner.

Market regulation

We have seen that this is most often presented as a positive impact for society but negative for the producer. Once again, if the FO and the MFI look beyond the storage credit - and see it not only as a temporary way to secure credit and sustainably increase revenues as well as their turnover - , price stabilisation becomes a positive impact also for farmers.

Must one have surpluses in order to store?

Some project designers think that it is necessary to store only crop surpluses and that this type of credit can target only big producers so that a minority of small producers can benefit from economies of scale. However, the particular case of the CECAMs in Madagascar shows that even a few bags that are conserved under key against a loan, guarantee food security during periods of hardship and scarcity and give the very poor access to credit.

Credit can be used to buy rice for resale or finance an income-generating activity to repay the loan.

The MFIs do not often satisfy the demand in **volume** because their refinancing capacities are limited (B. Wampfler, 2003).

Up-front costs for small and scattered stocks are heavy and the operations cannot be profitable in the short term.

The storage capacity is also usually a limiting factor, but donors are not always interested in storage facilities, as funding follows current fashions. I.

H - TRAJECTORIES FOR EVOLUTION

We have seen that MFIs may not want to be responsible for the observation of the market or technical supervision of the stocks, at least at the start of operations which are based on small quantities per warehouse and geographically scattered storage sites. The MFI puts the priority on the mastery of costs so as not to get involved in these functions.

FOs may have the necessary skills but their funding is uncertain. Why not envisage progressive financing by the MFI of the services offered by the FO?.

Most of the operations revolve around small volumes when small farmers are the priority. The MFIs have limited resources, production volumes are variable, the institutional environment does not always provide sufficient security for planning over several months for the use of its stock or money. How then can we change the scale and influence the market? In Madagascar, the CECAMs benefit from well implanted network in the field. The CECAMs are refinanced by formal banks. Only one production chain of national importance is targeted. The peasants have a mastery of their stocks and the evolution in prices. The country is not self-sufficient. In Ghana, it was only after the initiative of TECHNOSERVE was adopted by other organisations and received other support and assistance that the volumes significantly increased.

The advice that is often given is to increase volumes, evolve to the national level and open up to millers and big holders who have the capacity to stock large volumes in distant depots (Coulter and Shepherd). The risk is therefore taken by the specialised holder. In this case holding documents and risk coverage must be regulated.

We therefore move away from the objectives of better access to markets, food security and access to credit for family farms. Meanwhile, the latter could be integrated into a system that is already functioning well (case of Uganda).

Credit, production and liquidity management: a move towards sustainability

Storing and mortgaging a crop in order to have access to credit, requires planning for repayment out of an external source of income. It is therefore important to work on the management of production and of credit.

In the end, a farmer increases his/her turnover if he/she reinvests the proceeds obtained from storage, first in production and then in storage itself. This requires work on managing liquidities.

ANNEXES

Annexe 1: Complementary information

Cereal banks: furnish consumers with affordable products during periods of scarcity thanks to autonomous and professional management and the proactive approach of the FO.

Warranty is often presented as a product derived from cereal banks. Their principle is to enable peasants to store their surpluses at harvest and to repurchase them during periods of scarcity at less than the market price. This is a food security objective, geared towards consumers. After proliferation in the 1970s, cereal banks were decried. They were managed at the level of the village, with cumbersome procedures, poor technical and economic follow-up and mismanagement. Some cereal banks persist today, and even if the principle is quite different from warranty, the success factors can be assimilated to those of storage credits:

- promotion of the activity by a FO
- Autonomous management, but pooling of resources for technical support, group purchases, partnerships....
- Cash sales of cereals
- Diversification of supplies beyond staple cereals
- Access to revolving funds in the form of loans and not in the form of subsidies
- Construction of buildings with the active participation of the promoters of the cereal bank
- Charter

Source: Dynamiques paysannes.

Recovering from a failed operation: cassava in Tulear (Madagascar) in 2005

The Maison des Paysans (MdP, FO) and Vola Mahasoa (VM, MFI) initiated a storage credit operation in 2005. MdP put at the disposal of VM a line of credit to partly serve as guarantee from which deficits from the operation would be retained during the first two years. MdP was responsible for the technical and organisational follow-up and for providing marketing advice to the group storing produce.

In 2005, peasants who stored cassava preferred to rely on their own experience rather than on advice from MdP who recommended anticipated sales because of massive rice imports. Peasants were therefore unable to sell their cassava and loan repayment was long and difficult.

The peasants sought simple solutions to repay: sale of small ruminants, petty trading, even sale of zebus, arrangements with small collectors to pay the debt, numerous stock withdrawals. The average selling price was 254 Ariary/kg (0,097 €/kg), for a price at the time of storage of 259 Ar/kg (0,099 €/kg), ie. a break-even price. The average loss, with storage costs and interest, was 53 Ar/kg (0,02 €/kg).

The balance sheet of the cassava operation is not negative: it raised peasants' awareness of the risks taken and the compulsory nature of repayments. They are now more prudent about the share of stocks financed, and they are more alert to markets. The results also held plenty of lessons for MdP, who could have more strongly recommended stock removals, and for VM which is now ready to reduce quotas and today questions the storage of maize whose price is unstable.

Source: Final report on the Maison des Paysans mission, Cécile Beure d'Augères, Afdi, 2006