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**CEREAL BANKS IN NIGER**

by

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## INTRODUCTION

Niger, a predominantly agro-pastoral country, has experienced a precarious economic evolution in its 30 years of independence. The combined effect of drought, poor markets, lack of means of communication and low population density has been lack of food security for rural Nigeriens. As a consequence, the Nigerien Government has made food security a top priority, and cereal banks (CB) are considered to be one means of achieving this goal.

The first section of this report, after providing some background on Niger, defines the CB concept and the objectives that they pursue.

The second section evaluates the procedures for establishing CB, emphasizing their organizational structure, the training received by their staff and the accounting methods used by their management committee (comité de gestion).

In the third section the status of cereal stocks in the CB are estimated by means of a sample survey.

CB activities can be properly analyzed only in the context of the environment in which they have evolved. The fourth section of this report therefore examines the legal and institutional status of the CB. It also studies the possibility of creating a savings and loan scheme for the benefit of the membership.

A synopsis of field visits to gather information for this report is presented in the fifth section. This part of the report provides the reader with an idea of the conditions under which the CB operate.

A section devoted to conclusions and recommendations completes the report.

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## LIST OF ABBREVIATIONS

ACOPAM	Cooperative Action Enterprises with the aid of PAM
CB	Cereal Banks
CCB	Cooperative Cereal Banks
CFAF	Currency of the West African Monetary Union (\$1 = about 270 CFAF)
VCB	Village Cereal Banks
CAV	Campaign for a Green Africa
CLUSA	Cooperative League of the USA
GCPS-NER-026-NET	FAO project: Appui aux organismes cerealiers chargees de la commercialisation et de la gestion des stocks cerealiers (UNC-OPVN)
DEP	Direction des Etudes et de la Programmation
DPC	Direction de la Promotion Cooperative
DSA	Direction des Statistiques Agricoles
DPA	Direction de la Production Agricole
FAO	Food and Agriculture Organization of the United Nations
GA	General Assembly
GB	Governing Board ( <u>conseil d'administration</u> )
GM	Groupement Mutualiste
GTZ	Gesellschaft fur Technische Zusammenarbeit (German Agency for Technical Cooperation)
ILO	International Labor Organization
MC	Management Committee
OPVN	Office des Produits Vivriers du Niger
PAM	Programme Alimentaire Mondial (World Food Program)
PDES	Plan de Developpement Economique et Social
SNV	Association Neelandaise d'Assistance
ULC	Union Locale des Cooperatives
UNC	Union Nationale des Cooperatives
URC	Union Regionale des Cooperatives
USAID	United States Agency for International Development
USRC	Union Sous-Regionale des Cooperatives

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The terms of reference for the study are found in Appendix A. Specifically, they call for:

- i. A study of the possibility of adopting a decree or order conferring legal status on the Cereal Banks (CB).
- ii. An estimation of stock levels by means of a sample survey of the CB.
- iii. An analysis of the organizational structure and the accounting system used by the CB.
- iv. A study of the creation of a savings and loan scheme.

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## 1. BACKGROUND

### 1.1 Niger: Site for the Study

Niger is poor. Low soil fertility and sparse rainfall are the major hindrances to the development of agricultural production. Most of what Niger produces consists of food crops. Millet and sorghum are the food staples of the majority of the population. Complementary food crops include rice, cowpeas, cassava, sweet potatoes, onions, tomatoes and groundnuts. Nonetheless, despite the important role it plays in personal income, agriculture has stagnated.<sup>1</sup>

The stagnation in agricultural yields combined with unfavorable climatic conditions have made food security a major preoccupation of the Nigerien Government.<sup>2</sup> This has been made manifest in the 1987-1991 Economic and Social Development Plan, which contains the three top priorities of the Nigerien Government. The first is to continue implementing reforms in public finance, reducing the public sector and promoting the development of the private sector. The second is to improve incomes and employment and to provide incentives for the transformation of agricultural products and the consumption of local produce. Finally, priority is given to preparing for the future by exploiting natural resources, preparing youth and integrating women into the economy.

The concept of the Cereal Bank (CB) program comes under the second of these priorities. The basic idea and interpretations thereof which are found in the field are examined in the next section.

### 1.2 The Cereal Bank Concept: Field Applications

It is difficult to retrace the evolution of the cereal bank concept. The idea seems to have been born in Burkina Faso in the 1970s. It was not until 1985 that a precise definition was proposed. Emanating from the Round Table held in Bamako under FAO auspices in that year, it states that:

a cereal bank is an organization in a village or group of villages which buys, stores and sells foodgrain in order to guarantee the food security of the village community, and it is managed by a management committee appointed by this community.

This definition of cereal banks contains two important elements. On one hand, it defines the goal and on the other it describes the functions of cereal banks.

#### 1.2.1 Goal of the cereal banks

The Bamako Round Table clearly indicated that the goal of cereal banks is to assure the food security of the village community. It is worth noting, however, that the Round Table of Niamey in 1986 attributed more ambitious goals to cereal banks. According to the latter Round Table, the banks must also:

- i. stabilize prices and afford consumers access to foodgrain at reasonable prices; and

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<sup>1</sup>Bakari Seydou indicates that 80% of the population is supported by agricultural income. See "L'impact des banques céréalières sur la vie socio-économique des villages dans l'arrondissement de Ouallam, République du Niger", Université des Sciences et Techniques de Montpellier, 1989.

<sup>2</sup>The food situation has been critical in recent years. The average level of food self-sufficiency has not reached 50%. To compensate for this deficiency, free food distributions have been organized each year during the period before the harvest (soudure). The main sources have been the U.S., the European Community and France.

- ii. allow producers to obtain a reasonable return on their productive efforts.

Reasonable prices. The present level of cereal bank stocks is limited. In the short and medium term it is unlikely that the CB will have any impact at all on price levels during the soudure period before harvest.

In Niger the annual cereal balance between production and consumption is often in deficit. Imported cereal volumes as well as food aid levels suggest that the average annual deficit is 100,000 metric tons (MT). The amounts stored by cereal banks in the main agricultural development projects are shown in Table 1. A glance at the table shows that cereal banks stocks, while substantial, are far from the amount needed to cover consumption requirements.

Table 1. Amounts Stored in Cereal Banks  
(in metric tons)

<u>Main Projects</u>	<u>Amount Stored</u>
FAO*	1,200
Green Africa*	1,100
ILO-ACOPAM	1,179
ILO-Zinder	840
GTZ	562
UNICEF*	400
Keita Project, Africare*	600
<hr/>	
TOTAL	5,881

\* Approximation

With regard to the setting of prices, it is advisable to adopt a prudent approach. If one wishes the CB to become viable economic agents, members must learn to set the sales price above cost. While waiting for producers to be able to calculate cost, we suggest that the selling price of the CB be aligned with market prices in the soudure period.<sup>3</sup>

Adequate remuneration. Nigerien producers consume most of grain production themselves.<sup>4</sup> Although any surplus over consumption needs could in theory be purchased by CB, the marketing operation between producers and CB is subject to the same risks as agricultural production. After a good harvest, CB do not have the cash to buy the surplus. When the harvest has been bad, there is nothing for sale at the local level and CB stocks are often exhausted. When that happens, villagers are obliged to turn to the closest marketing center to find grain.

Villagers' lack of understanding should be added to the problems of cash shortage and risky agricultural production. Our field interviews clearly demonstrated that even when there is a surplus, most villagers intend neither to sell nor to store their grain in the CB. This attitude can be attributed to lack of information available to villagers.

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<sup>3</sup>The conclusions section of this report presents the elements that should be included in calculating costs.

<sup>4</sup>Bernard Guillermain, GLG consultant, estimates that only 10 to 15% of cereal production is marketed.

In conclusion, we think that under present conditions it is not realistic to give CB any goals other than food security. In fact, just knowing that food security had been achieved would be a major accomplishment.

1.2.2 Cereal bank functions

According to the definition proposed by the Bamako Round Table, CB activities include (i) buying grain, (ii) storing grain and (iii) selling grain. Under this definition, a timeline for CB activities would look as follows.

Figure 1. Timeline for CB Operations<sup>5</sup>

	Soudure		Harvest		Storage	
x		x		x	x	x
<b>July</b>	<b>September</b>		<b>December</b>		<b>January</b>	<b>June</b>
	Loans in Kind Grain Sales		Recovery in Kind Grain Purchases			Training Construction

If the timeline is accurate, it is clear that the goals of the CB is to meet the population’s needs during the three to four months of the soudure period. The CB thus answers an acute need felt during the wait for the next harvest. At this time the grain volumes stored by producers are often inadequate to meet daily nutritional requirements. This situation obliges heads of household to pay usurious rates of interest to merchants.<sup>6</sup>

The CB thus differ from village granaries whose purpose is to help villagers when the harvest has been bad. This function is also filled in part by the security stock of the national grain board, OPVN.<sup>7</sup>

We observed during our field visits that the functions of CB have evolved. This evolution seems to have been the result of the somewhat mixed experiences of donor organizations.

The first CB conducted transactions only in kind. In these CB initial operating capital was provided by donors. Villagers did their best to return in kind, at a rate of interest that varied from 25% to 50%, the amount of grain that they had borrowed from the CB. These cereal banks, whose number is in decline, are situated at the two lowest levels of the cooperative hierarchy, the groupements mutualistes (GM) and the cooperatives.<sup>8</sup>

We believe that this type of CB is destined to disappear. Aside from the problems caused by difficulty in getting back the grain that has been loaned, the real rate of interest may well be negative. When

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<sup>5</sup>This figure was suggested by M. Vandeweert, technician on the ILO Zinder Project.

<sup>6</sup>According to the ILO cooperatives project known as ACOPAM, rates of interest can exceed 100%.

<sup>7</sup>The Office des Produits Vivriers du Niger (OPVN) was established by the government in 1970 to guarantee grain supplies in urban areas, assure orderly marketing and stabilize prices.

<sup>8</sup>The cooperative structure is in the form of a pyramid with the national union (UNC) at the top, followed by the regional (URC), sub-regional (USRC) and local (ULC) unions, then by the cooperatives and the GM at the bottom.

the harvest has not been bad, millet prices are 30 CFAF per kilo at Maradi, 55 CFAF/kg at Niamey and 60 CFAF/kg at Agadez. During the soudure prices reach 45 CFAF/kg at Maradi, 80 CFAF/kg at Niamey and 100 CFAF at Agadez. With an average harvest, the average rate of increase in prices is on the order of 63%. With a poor harvest, however, prices fluctuate more widely. On one market prices may be multiplied by two or three. In such a situation, it is difficult to understand why villagers do not borrow grain from CB during the soudure and sell it on the local market. Considering the limitations of the CB which handle transactions only in kind, donors now recommend that villagers sell their grain for cash.

Some of the newer CB make loans in kind and sell for cash while others only sell for cash. In the latter CB, despite difficulties in price determination, cash accumulates. The proceeds are kept in a cash box or placed in a savings account. In general, these CB have been endowed with operating capital by donors and operate at the cooperative or GM level.

In the last few years a third kind of CB has appeared. In the CB of this group, activities cover two or more geographic zones. Those situated in surplus zones sell to other CB in deficit zones.

Having defined CB and outlined their functions, we have what is needed to evaluate procedures for establishing new CB. The organizational structure of CB, villager training and the adequacy of accounting documents are the subject of the next section.

## **2. CB ESTABLISHMENT, STRUCTURE, TRAINING AND ACCOUNTING**

In order to evaluate the CB, their operating efficiency and the quality of training provided to villagers, we tried during field visits to gather information on the following points.

- i. Procedures for establishing CB;
- ii. Organizational structure and functions; and
- iii. Training and accounting.

### **2.1 Procedures for Establishing CB**

Although criteria for establishing CB differ from one donor to another, five criteria are mentioned frequently by project technicians.

- i. The region's agricultural production should be only marginally adequate if not occasionally in deficit;
- ii. CB are particularly useful in zones far from sources of supply;
- iii. The dynamism and cooperative spirit of the village population must be evaluated;
- iv. The size of the village is important; and
- v. The literacy level of the population must be examined.

The choice of marginal or occasionally deficit zones as CB sites is justified by donors on the grounds that CB should be financially viable. The structurally deficit zones like Agadez run into difficulty in re-establishing their stocks. However, the experience of the Green Africa Project (CAV) merits consideration. The Project has CB in surplus zones as well as in deficit zones. Project technicians organize the transfer of grain from one to the other. If this type of CB organization became more widespread, the first criterion above could be discarded.

The second criterion, distance from OPVN sales outlets and large markets, is intended to improve food self-sufficiency in zones poorly supplied with grain. Considering the challenge posed by food security requirements, it is easy to understand this criterion. However, we do not think that the goal of food security should be used to prevent villagers from freely choosing sites for CB. Their legitimate concern should be to make their CB financially viable enough to compete with local merchants and OPVN stores.

The dynamism and motivation of villagers are indispensable for the success of CB projects. An evaluation of these factors is beyond the scope of the present work. We should point out, however, that when we made field visits we noticed that in certain villages the inhabitants knew neither who owned the CB nor what their own responsibilities were. As long as this situation is allowed to endure, the CB are unlikely to become financially viable activities.

Village size must be taken into consideration. Success of the CB operation often depends on the level of collaboration which exists between villagers. Limiting CB to a single, average-sized village is therefore desirable.

In our field visits we studied the two types of CB -- cooperative cereal banks (CCB) and village cereal banks (VCB). CB created before 1987 were often established at the level of the cooperative. Each cooperative serves a number of groupements mutualistes (GM). The CCB have certain underivable advantages. They cover a larger zone than the VCB and can achieve some economies of scale. The advantages are largely attenuated, however, by lack of cohesion. Even though the sponsoring donors stipulated that the members of the management committee would be elected "democratically" by representatives of the participating GM, it has proven difficult to recover grain loaned by the CCB. Moreover, since certain villagers do not realize that a village CB belongs to them, how likely are they to think that a cooperative CB belongs to them? It is therefore recommended that CB be situated at the village level.

The population's literacy level is important. It is difficult to imagine CB functioning properly unless the village managers understand the basic principles of management and accounting. However, there is no reason to penalize a village without literates. Why not envisage several levels of training program instead? Farmers with less than the required level of literacy should be the first to be trained. In other words, the lack of literate farmers should not be an absolute reason for rejection.

To conclude, the criteria covering the region's agricultural production characteristics on one hand and distance from sources of supply on the other should not be determining. The following three criteria, dealing with the dynamism of the population, the structure of the village and the level of literacy, merit special attention. Finally, we believe that two additional criteria merit being included.

- i. Accessibility of the CB.<sup>9</sup> This criterion should be taken into consideration if an intensification of the approach of the Green Africa Project, inter-zone exchange, is desired.
- ii. Constitution of the CB's social capital by the population. It is reasonable to suppose that personal contributions would give villagers a greater sense of responsibility. After all, it is their CB and their grain stock.

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<sup>9</sup>This criterion should be distinguished from (ii) in the original list. The latter recommends establishment of CB in zones far removed from sources of supply such as OPVN sales outlets and large markets. As previously mentioned, the purpose of this criterion is to assure supply in zones that have been poorly supplied in the past. By accessibility we mean the ease with which one can reach the CB. This is an important point. As we will see in the conclusions section, transport costs are high. Ease of approach is one way to reduce these costs.

## 2.2 CB Organizational and Functional Structure

The organization structure of the CB differs from project to project. Some CB function with a pyramid-type structure of three levels: a general assembly (GA), a governing board (conseil d'administration -- GB) and a management committee (MC). Other CB operate with only a management committee. Table 2 shows the division of responsibilities between the different levels.

Table 2. Structure and Responsibilities

<u>Level</u>	<u>Responsibilities</u>
General Assembly	(1) Election of the GB (2) Internal rules and regulations (3) Sales procedures: prices, interest rates, composition of stock, warehouse organization (4) Marketing and recovery arrangements (5) Distribution of profits
Governing Board	Hiring and supervision of the Management Committee
Management Committee	(1) Accounting (2) Warehouse upkeep (3) Fumigation of stocks (4) Distribution and/or sale of grain (5) Recovery and/or purchase of grain

During our field visits we attempted to compare the two types of CB structure and to obtain information on the regularity with which villagers carry out their responsibilities.

The results of our examination of these matters show that when the structure includes all three levels, the villagers at the GB level do not carry out the responsibilities assigned to them. CB structure can thus be simplified and reduced to two levels -- GA and MC. This structure should be extended to those CB which now operate with only a management committee. It is desirable that the hiring of the members of the MC and the supervision of their activities be undertaken by a General Assembly. The GA should be made up of the full membership of the CB since they have the right to oversee the banks's activity.

The management committee usually consists of four individuals: president, secretary, treasurer and warehouseman.<sup>10</sup> The responsibilities of the MC members are indicated in Table 3.

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<sup>10</sup>In some CB, two internal auditors (commissaires aux comptes) are added to the MC. The auditors are asked to audit the bank's operations.

Table 3. Activities of the Management Committee

President	(1)	Representation of the CB
	(2)	Chairmanship of the GA
	(3)	Monitoring of activities
Secretary	(1)	Bookkeeping
	(2)	Filing of documents
Treasurer	(1)	Management of the cash box
	(2)	Filing of documents
Warehouseman	(1)	Management of grain stocks
	(2)	Operation of scales at time of receipt and time of distribution

Although it may appear paradoxical, it is perhaps desirable to include the village chief as a member of the management committee. The chief could act as a representative without any real decision-making power, which would allow him to feel, whether correctly or not, that the CB is one of his concerns. This recommendation should be carefully considered. Those CB that have removed the village chief have sometimes experienced conflicts between the chief and the management committee.

There is considerable variation in the tasks carried out by the members of the management committee. The quality and regularity of performance seem to be a function of the amount of training the officer initially received, the amount of training provided by the donor and the level of motivation of the individual. Follow-up on training often leaves something to be desired. Some project technicians are buried under administrative tasks and do not have time to follow up. Other technicians are too authoritarian. They also forget for whom the CB works. In such cases the villagers dare take no initiative. They wait for the technicians to come and make all the decisions.

The CLUSA formula is worth emulating. Trainers paid by the project are constantly in the field to train villagers and to monitor their work. Although the system seems to work, one wonders what will happen to these trainers once the project withdraws. Measures should be taken to assure continuity. If the CB were financially viable, one could imagine them sharing the operating costs of the trainers among themselves. Indeed, each CB could take a share equivalent to the share of the trainers' time that it used.

We also examined the problem of paying villagers for contributing their time to the operation of the CB. Unpaid labor has an opportunity cost that is too frequently ignored.

Some donors envisage the payment of salaries to the secretary and treasurer. Others believe that the principles on which the CB are founded imply no remuneration. Be that as it may, the staff of the CB ought to be paid. Lack of a reasonable salary saps morale. It encourages fraud and renders calculations of financial viability erroneous. The time that villagers donate to the CB should be estimated and they should be paid accordingly. While awaiting for data to be collected on this, an average could be used to allow CB managers to be compensated. For those CB that still handle transactions in kind, we suggest that the GTZ model be imitated. In the GTZ project, after the marketing campaign, if 100% of the grain has been reimbursed, the CB managers receive part of the amount considered to be interest. In the CB operating on a cash basis, preferential prices should be given to the members of the management committee.

### 2.3 Training and Accounting

Training provided by donors is short-term. Some donor organization envisage four phases: (i) an information phase, (ii) literacy training, (iii) training in accounting and management techniques and (iv) monitoring and follow up. Training usually takes place in centers away from the village and is paid for by donors.

The initial information phase does not live up to expectations. We have already mentioned that some villagers do not know that the CB belongs to them and will not belabor the point.

The third phase concerns accounting and management principles. Table 4 lists the accounting documents used by the CB and their content.

Table 4. Accounting Documents<sup>11</sup>

1. GM transactions	For each participating GM: amounts loaned, interest owed, payments overdue, total to be reimbursed
2. Household transactions	For each household in a GM: similar data
3. Receipt book	Records loan reimbursements
4. Stock record book	Records additions to and withdrawals from stock
5. Cash reimbursements	Records cash reimbursements and converts into kg
6. In-kind reimbursements	Records reimbursements in kind
7. Cash box ledger	Cash received and paid out
8. Membership ledger	Records members' paid-in capital
9. Membership register	List of stockholders

As previously mentioned, the future of the cooperative cereal banks (CCB) is precarious because of the lack of cohesion between the cooperatives and their GM. This being the case, documents numbered 1, 2 and 3 above are destined to disappear. Moreover, as more and more CB operate only on a cash basis, documents 5 and 6 lose their reason for being. Finally, contrary to the opinion of donors, we do not consider documents 8 and 9 to be accounting documents. One can therefore conclude that only two of the existing documents are worth saving: the cash box ledger (7) and the stock record book (4). The former records the movement of cash: purchases and sales. The latter records the movement of grain. Such a simplification would certainly improve the quality of bookkeeping.<sup>12</sup>

The degree of follow up on training depends on the donors and on the amount of funding they make available for it. In any case, the ILO-Zinder project seems to have found a good solution to the problem of assuring effective follow up. Project technicians carry out evaluations of the quality of bookkeeping. On the basis of what they find, they organize follow up training sessions. They seem to have had good results, and it would be desirable for other projects to use similar methods.

### 3. ESTIMATION OF CEREAL BANK STOCKS

The goal of the CB is to assure the food security of their members during the soudure period. With this goal in mind, the state of grain stocks is a determining element. When we met with project technicians and made field visits, we attempted to estimate the stocks of the five donor-sponsored organizations that we included in our sample. These are:

- i. ILO-ACOPAM
- ii. ILO-Zinder
- iii. GTZ
- iv. FAO
- v. Green Africa Campaign (CAV)

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<sup>11</sup>The table includes nine documents. Some donors operate with six while others use only four.

<sup>12</sup>We note that for the medium term it would be useful if the CB managers learned how to draw up a balance sheet and a tally of results.

We selected these organizations for three reasons. First, they are all quite active in the field in Niger. Second, this particular combination allowed us to visit CB which handle transactions in kind, CB operating on a cash basis, and CB which transfer grain from one geographic zone to another. Third, this group allowed us to see both CCB and VCB and to visit CB in both surplus and deficit zones.

### 3.1 The Status of ILO-ACOPAM Stocks

As indicated in Appendix B, the ILO-ACOPAM project covers 31 CCB with 10,035 members, an average of 324 members per cereal bank. Since 1985 the project has created 18 VCB with 2,180 households, an average of 121 per cereal bank

The initial grain stock which the project agreed to furnish was 780 tons, of which 645 tons were for the CCB and 135 tons were for the VCB. Each CCB thus received an average of about 20 tons and each VCB an average of about eight tons.

For the banks which conduct transactions in kind, project technicians determine the quantity of grain to be "recovered." They consider this amount to be the number of tons which should be in stock at the end of the marketing campaign. It is calculated by multiplying the sum of amounts loaned by one plus the rate of interest applied by the CB.

For the 1989 campaign, project technicians estimated that the quantity to be recovered amounted to 1,232 tons for the CCB and 233 tons for the VCB, a total of 1,465 tons. With 1989 stocks amounting to 780 tons for the CCB and 191 tons for the VCB, project technicians calculated that the average recovery rate was 64% for the CCB and 89% for the VCB.<sup>13</sup>

From data provided by project technicians we can determine the theoretical stock level which the project's CB could have reached. The following formula may be used to make the calculation.

$$S_i \times (1 + i)^t (1 - D)^t$$

where

$S_i$	is the initial stock
$i$	is the rate of interest
$t$	is the number of years the CB has operated
$D$	is the default rate

Two different hypotheses about the default rate allow us to test this formula. Under the first, it is assumed that the default rate was 0% and the full quantity loaned was recovered. Using this hypothesis and an average interest rate of 25%, the stocks on hand in 1989 produce a recovery rate of 38% for the CCB and 65% for the VCB. The second hypothesis provides more realistic results. It assumes a default rate of 10% annually. The recover rate results are similar to those determined by the project technicians: 65% for the CCB and 83% for the VCB. The actual annual default rate is therefore close to 10% on average.

Data gathered and shown in Appendix B allow the calculation of a summary food needs balance sheet for the project's CB. We have used national food needs estimates for this purpose. Specifically, we have assumed the following figures.<sup>14</sup>

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<sup>13</sup>The recovery rate is determined by the ratio of quantity of foodgrain in stock to quantity of foodgrain to be recovered.

<sup>14</sup>These figures were taken from an internal document of the USAID mission in Niamey.

- i. Based on several food consumption studies, the average requirement per person is 2,400 calories per day.
- ii. One kilo of edible product provides an average of 3,500 calories.

With these norms being applied, the 1989 foodgrain stocks of the ILO-ACOPAM project's cooperative cereal banks covered 15% of the food requirements of the membership during the soudure while the stocks of the VCB covered 18% of members' needs.<sup>15</sup>

### 3.2 The Status of ILO-Zinder Stocks

Appendix C provides data on the ILO-Zinder Project. The project has 12 CCB and 61 VCB covering some 4,342 members.<sup>16</sup>

The initial stock provided by the project amounted to 594 tons, of which 237 tons were for the CCB and 357 tons for the VCB. Calculating on the basis of 1989 stocks (356 tons for the CCB and 483 tons for the VCB), project technicians estimate that the average recovery rate is 104% for the CCB and 95% for the VCB. The formula shown above and a hypothetical default rate of 0% give a recovery rate of 62% for the CCB and 58% for the VCB.<sup>17</sup> These rates rise to 84% and 80%, respectively, if the second hypothesis is used. The VCB recovery rate in the ILO-Zinder Project is similar to the one for the ILO-ACOPAM Project. We note, however, that the rate for the ILO-Zinder CCB is much higher than that of the ILO-ACOPAM cooperative banks. It is also noteworthy that the CCB in the Zinder project have a higher rate than the VCB, which is surprising since the CCB usually have the problem of lack of cohesion.

The food requirements estimate for the project shows that the VCB cover 22% of the membership's needs during the soudure.<sup>18</sup>

### 3.3 Status of GTZ Stocks

Appendix D provides data on the GTZ Project. There are six CCB and 64 VCB.

We were unable to obtain information on the amount of the initial stock and on the date of creation of the CB. Calculations of the theoretical stock level and of recovery rates by means of the default rate hypotheses are not possible. Nor are we able to estimate coverage of food requirements since we could get no data on the membership.

Project technicians estimate that the recovery rates are 57% for the CCB and 54% for the VCB. These are the most reliable estimates to date. The stock held by the CCB was 281 tons and the VCB had an identical amount.

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<sup>15</sup>We further assume that an average household has seven members and that the average duration of the soudure is 105 days.

<sup>16</sup>This figure is to be treated with caution. As Appendix C indicates, we do not have detailed data.

<sup>17</sup>Based on information obtained during our visit, we estimate that the project's CB were established in 1985.

<sup>18</sup>We were unable to make an estimation for the CCB.

### 3.4 Status of FAO Stocks

Data for the eleven CCB of the FAO Project in the Ouallam arrondissement are shown in Appendix E. The final stock of the project CCB was 52 tons but is for only six of the eleven.

The project, which has allowed cash sales since 1988, gave the CCB an initial operating capital of 12,125,100 CFAF, an average of about 1.1 million CFAF per bank. The CCB have 10,510,850 CFAF in liquid assets of which one third is in cash and two thirds in savings accounts.

The project recommends cash sales. We attempted to calculate the financial viability of the banks despite limited data. Table 5 shows some information on the two banks that we visited.<sup>19</sup>

Table 5. Viability of Two CB with Cash Sales

Name of CB	Date	Stocks (bags)		Cash Transactions*	
		In	Out	In	Out
Diguinassa	7/88	150	-	-	-
	9/88	-	150	1,613	-
	11/88	346	-	-	1,575
Banimate	7/88	105	-	-	-
	9/88	-	105	1,153	-
	12/88	210	-	-	992
	1/90	-	61	396	-

\*amounts in thousands of CFAF

These two banks were created in 1988. There were no transactions recorded in 1989.

In September 1988, during the soudure, the Diguinassa bank sold the entire quantity of its initial stock. The grain sold, valued at 1,102,000 CFAF, brought in 1,613,000 CFAF. This first transaction thus generated a gross margin of 511,000 CFAF, about 47%, which was certainly enough to cover direct costs (transportation, handling, etc.) and the indirect costs of operating the bank. The second transaction was to use part of the sale proceeds to purchase 346 bags of grain in November, while the harvest was in progress. If these bags were sold during the next soudure, the transaction would also show a profit. The Diguinassa bank thus seems financially viable.

The Banimate bank functions similarly, but its viability is somewhat weaker. The bank made purchases in January 1990 when prices were slightly higher.

### 3.5 The Status of Green Africa Campaign Stocks

As shown in Appendix F, the Green Africa Campaign (CAV) provided data on 13 of the 51 CB established by the project. The initial capital furnished to these 13 banks by the project was 18,070,000 CFAF, an average of almost 1.4 million CFAF per CB.

As mentioned above, CAV organizes inter-zonal exchanges. The four CB of Tanout supply the 47 CB situated in deficit zones (Tera and Ouallam). The grains supplied consist almost entirely of millet, sorghum, maize and rice.

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<sup>19</sup>For more information on these two banks, see section 5 below.

During the 1988-89 campaign the 13 banks for which we have data made purchases amounting to 39,847,300 CFAF, an average of 3,065,000 CFAF per CB. Sales brought in 44,525,630 CFAF. The gross margin was therefore 4,678,330 CFAF, an average of 360,000 CFAF per bank. After deducting the cost of transportation and handling, the average profit was 18,408 CFAF per CB for a total of 239,300 CFAF.<sup>20</sup> The CAV project's cereal bank operation thus turns a small profit and each General Assembly has about 18,400 CFAF to distribute. Part of this amount is used to compensate the management committee. Project technicians state, however, that most of the profit is reinvested in the CB. Some CB uses their profit to purchase equipment such as hulling machines.

These results pertain to the 1988-89 campaign. For 1989-90, project technicians stipulated to the cooperatives that part of the profit would be used to pay back the original project loan and to provide capital for the creation of new cooperatives. Although this reimbursement transaction is easily understood, it is important for project technicians to re-evaluate their method of calculating profits. The cereal bank activities that they have promoted do create profits. However, it would be short-sighted to insist that the CB make reimbursements that are excessive. Such a practice runs the risk of undermining the profitability and viability of the CB.

Table 6 provides a synopsis of the results of our examination of the status of stocks in the five projects.

Table 6. CCB and VCB Stocks

	<u>CCB</u>				
	BIT-ACOPAM	BIT-Zinder	GTZ	FAO	CAV
Number of CB	31	12	6	11	13
Total Beneficiaries	10,035	-	-	-	-
Avg Number Benef	324	-	-	-	-
Initial Stock#	645	237	-	12,125,100**	18,070,000**
Stock in 1989	780	356	281	52	-
Replenishment rate	64%	104%	57%	-	-
Scenario 1 Rate ##	38%	62%	-	-	-
Scenario 2 Rate ##	65%	84%	-	-	-
Needs Coverage	15%	-	-	-	-

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<sup>20</sup>This amount of profit differs greatly from the amount claimed by the project officers. The difference is due to the accounting method used. We estimate profit to be the difference between income from sales and expenses.

## VCB

	BIT-ACOPAM	BIT-Zinder	GTZ	FAO	CAV
Number of CB	18	61	64	-	-
Total Beneficiaries	2,180	4342*	-	-	-
Avg Number Benef	121	-	-	-	-
Initial Stock#	135	357	-	-	-
Stock in 1989	199	483	281	-	-
Replenishment rate	89%	95%	54%	-	-
Scenario 1 Rate ##	65%	58%	-	-	-
Scenario 2 Rate ##	83%	80%	-	-	-
Needs Coverage	18%	22%	-	-	-

Key: \* = approximation    \*\* = amount in CFAF units  
# = metric tons    ## = recovery rate

Cereal bank activity cannot be studied in a vacuum. The fourth part of this report studies the legal and institutional situation in which the CB are evolving and also examines the possibility of creating a loan fund.

## 4. CEREAL BANKS: LEGAL ASPECTS AND LOAN ACTIVITY

### 4.1 Legal Aspects

The rural economy has not benefitted from the marketing policy in effect in recent years. The present cooperative system, whose goal is to increase rural consciousness of the need to manage its own affairs, was put in place in 1984 when the old UNCC was abolished and the new UNC structure replaced it.

Development policy is based on four structures:

- i. a governmental structure represented at all levels of administration;
- ii. a political structure which aims to encourage village initiative;
- iii. a structure of mutual assistance, known as Samariya, which seeks unity, security and well-being for villagers; and
- iv. a cooperative structure whose chosen approach is one of local management and local training.

Ministerial order (ordonnance) no. 89-010 and decree no. 89-074 of April 7, 1989 modified the law of May 31, 1984. The changes concern:

- i. the legal status;
- ii. the establishment;
- iii. the goals;
- iv. the membership;

- v. the operation; and
- vi. the supervision

of rural cooperative organizations or groupements mutualistes (GM).

There were four new elements in the new statutes. First, the cooperatives and GM must have some concrete form of activity. Second, membership is no longer automatic. Nigerien villagers have the right to join or to leave the cooperative or GM. Third, the general assembly, whose responsibilities are defined more explicitly, is now authorized to dispose of its capital in case of dissolution.<sup>21</sup> Fourth, the role of the supervisory authority is more limited. The authority can no longer act as advisor and encourage the creation of GM. Table 7 presents a synopsis of these modifications.

Table 7. Main Modifications to Statute

	Old Law	New Law
Legal status	<ul style="list-style-type: none"> <li>o The cooperative had no legal standing</li> <li>o All inhabitants are members of GM</li> <li>o Membership is automatic</li> <li>o Withdrawal from the group is forbidden</li> </ul>	<ul style="list-style-type: none"> <li>o The cooperative is incorporated</li> <li>o Inhabitants may choose to join or not</li> <li>o Membership must be desired</li> <li>o Withdrawal from the group is allowed</li> </ul>
Goals	<ul style="list-style-type: none"> <li>o Development of economic activities</li> </ul>	<ul style="list-style-type: none"> <li>o Cooperatives are non-profit enterprises of their members</li> </ul>
Supervision	<ul style="list-style-type: none"> <li>o Considerable authority (including daily intervention)</li> </ul>	<ul style="list-style-type: none"> <li>o Reduced authority</li> </ul>
Capital	<ul style="list-style-type: none"> <li>o No requirement to have paid-in capital</li> </ul>	<ul style="list-style-type: none"> <li>o Paid-in capital required</li> </ul>

The new statutes allow the cooperatives and GM greater flexibility. In the long term, it is hoped that the new provisions will allow decentralization of governmental responsibility.

Several initiatives are needed if the new statutes are to have any real impact. First of all, an action plan to spread information and understanding must be developed. Next, it would be a good idea to decide which organization will be responsible for assisting cooperatives to adopt new legal forms and to develop internal rules and regulations. Finally, we should remember that the long term solution for the cooperatives and GM rests in the search for an equilibrium between the cost of activities and farmers' incomes. In the medium term, the introduction of some form of rural credit program could contribute to the attainment of this objective.

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<sup>21</sup>Paid-in capital consists of the amounts contributed by individual members.

The cooperative activities which are subject to the new statutes include: (i) obtaining supplies, (ii) services to members, (iii) social activities, (iv) training and (v) women's programs. Services to members, created as a result of donor support, are: (i) general stores, (ii) cereal banks, (iii) pharmacies, (iv) warehouses and (v) grain hulling machines. Table 8 provides some data on these activities.

Table 8. Services to Members

	Agadez	Diffa	Dosso	Maradi	Tahoua	Tillabery	Zinder	<u>Total</u>
Boutiques	15	13	18	44	34	41	27	192
Cereal Banks	25	3	46	49	63	78	58	322
Pharmacies	3	2	-	24	36	-	1	66
Storage	26	8	50	28	71	92	74	349
Mills	7	18	40	49	32	83	33	262

Source: UNC activities report, November 1988

Despite the optimism which the new statutes engender, it is worth asking what the impact will be for the CB. In fact, the impact may well be marginal. The freedom to choose whether or not to become a member of a cooperative organization has already been granted in the case of some CB. Some donors, desiring to work with "real members", have advocated the sale of membership cards and thus created part of the paid-in capital. Membership is thus freely chosen by villagers and they contribute to the paid-in capital.

For the CB it would be desirable to create a text specifying:

1. goals and objectives of CB;
2. their activities;
3. their structure;
4. their authority;
5. rights and duties of CB members;
6. obligations of and sanctions for CB members;
7. delegation of powers;
8. remuneration of members; and
9. creation and dissolution of CB.

The adoption of a decree covering these nine points would confer legal status on CB. They could then negotiate with outside economic agents and possibly obtain bank loans. This last point is addressed in the following section.

#### 4.2 Credit Agency

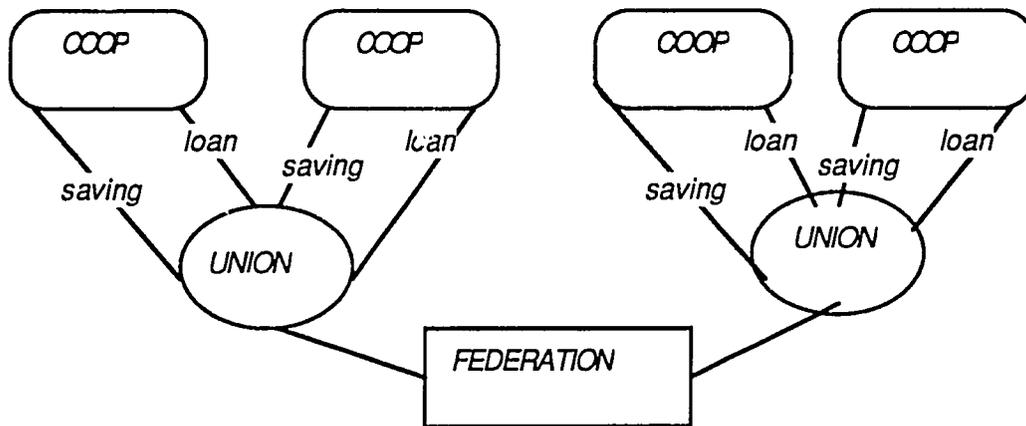
The rural sector must generate the resources it needs for development if the state is not to remain the only source of funding. Niger cannot do without an agency to finance the rural sector.

This financial entity must have the means to attract savings from the rural sector and to make loans at the same level. Intermediation in the rural sector is the key element. Rural savings should not be

transferred to the urban sector. The temptation to divert savings to urban centers can be strong. There are often more opportunities with higher return in the cities than in the countryside.

To encourage rural savings and develop capacity for loans, the creation of Savings and Loan Cooperatives (Coopératives d'Épargne et de Crédit – COOPEC) is appropriate. As shown in Figure 2, COOPEC could mobilize household savings.

**Figure 2: Rural Credit**



The COOPEC could accumulate their capital by taking small, guaranteed deposits. The first priority for loans would be to members of cooperatives. Cereal banks generate cash surpluses, which are usually kept in a cash box or placed in a savings account. It can easily be imagined that CB make deposits instead in financial entities such as COOPEC. On our field visits, some villagers expressed a desire to develop cooperative activities around the CB. With an opportunity created for rural credit, the CB could become poles of attraction around which other village economic activities could revolve.

## 5. OUR FIELD VISITS

### 5.1 The ILO-ACOPAM Project

The ILO-ACOPAM Project, financed in part by Norwegian funds, is one of the first to have incorporated cereal banks in the Maradi region. As shown in Appendix B, the project covers 18 CB at the cooperative level and 31 at the GM level.

The first CCB we visited was at Bamo and the second was at Atchidakofoto. The buildings of both are impressive. They are made of cinder block, each with a capacity of 75 tons.<sup>22</sup> The buildings are well maintained, clean and well organized. The crop protection service in Maradi had recently taken charge of maintaining foodgrain stocks.

The operating structure of the project CB is along classical lines: a management committee consisting of president, secretary, treasurer and warehouseman. The responsibilities of the president consist

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<sup>22</sup>The project warehouses, having a capacity of 45, 50 or 75 tons, are built with local labor. The initial contribution of the World Food Program covers 10% of needs during the soudure. It is not reimbursable.

of convening the general assembly and organizing the grain recovery campaign. The secretary is responsible for keeping the books, and it was evident that they were well kept.<sup>23</sup>

The project's training program has four phases:

- i. mass training;
- ii. technical training;
- iii. training in organizational methods; and
- iv. literacy training.

The objectives of the first phase do not seem to have been reached. The president informed us that the villagers believe that the members of the management committee are being paid. We did not evaluate the quality of the technical training and management training. In the two CB we visited the villagers who had benefitted from this training had been sent away. The secretary was the only literate person.

The wishes to the villagers are difficult to discern. When asked what quantity of grain they were ready to take to the CB to add to its stock or to obtain some cash, they replied that they preferred to keep their own stocks or to sell their grain on local markets. This lack of interest in the CB is surprising when one considers that the villagers requested the creation of the CB and participated in its construction.

## 5.2 The ILO-Zinder project

The ILO-Zinder Project benefitted from the experience of ILO-ACOPAM. Now in its second phase (the first began in 1985 and a third is planned), the project has given precedence to village cereal banks over cooperative cereal banks. Like ILO-ACOPAM in the Maradi region, ILO-Zinder has diversified its activities, creating pharmaceutical depots and women's activities. Data for the project are found in Appendix C. The data concern only the Zinder Department. Our field visits included the CB of Aroungouza.

The buildings which house project activity are of two types:

- i. 30-ton warehouse, part cinder block, part banco; and
- ii. hybrid warehouse of about 85 ton capacity, made of two metal ocean freight containers joined together by an office that is part cinder block, part banco.<sup>24</sup>

Since the ILO-Zinder Project is largely an offshoot of the ILO-ACOPAM project, the organization structure and the responsibilities of the CB officers are similar.

The management committee operates the CB.<sup>25</sup> There are two internal auditors in addition to the four committee members. The following documents are well kept.

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<sup>23</sup>However, the cash box ledger, whose importance is clear with the introduction of cash sales, is denominated in kilograms rather than francs.

<sup>24</sup>According to project technicians, this model reduces the cost of construction.

<sup>25</sup>Here also the crop protection service maintains the foodgrain stocks and is financed by the project.

- i. cash box ledger;
- ii. distribution ledger;
- iii. recovery ledger;
- iv. receipt book;
- v. stock record book;
- vi. membership ledger; and
- vii. bank book.

Sums are done fairly regularly and no important error was noted. This is without doubt due to the frequent monitoring and re-training conducted by the project technicians. Monitor visits occur through three or four marketing campaigns, and training seminars are organized for the members of the management committee.

ILO-Zindei wishes to work with real members. To reach this objective, membership cards have been sold.

### 5.3 The GTZ Project

The GTZ project also attempts to develop the rural sector. This project covers 62 CB established at the village level. We visited two VCB, one at Founkoye and one at Sabon-Gary.

The initial capital for the VCB of the GTZ project is established by a contribution of 50 kg of grains per household. When reimbursed in four annual payments, this capital will become available for the creation of other VCB. Since 1990 the project has employed cash sales.<sup>26</sup> Project technicians advance three justifications for this change in the system of CB management.

- i. Cash sales simplify management;
- ii. In deficit years cash sales allow villagers to purchase grain in other zones.
- iii. Cash sales reduce the possibility for unscrupulous behavior.

The criteria for establishing GTZ banks are similar to those of the other projects. The buildings that house the CB are built by the local population in banco. In those we visited, millet, cowpeas and fertilizer were stored.

The CB of the GTZ project are managed by six villagers: two presidents, secretary, treasurer, and two internal auditors. One of the presidents is active. His responsibilities include convening the general assembly, the distribution campaign and the recovery campaign. The second president has only an honorary title with no real decision-making power. This duplication of presidential responsibilities might seem surprising. However, when one realizes that it is the village chief who has the honorary title, it is clear that the project technicians have found a way to sooth sensitivities.

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<sup>26</sup>Prior to 1990 the project CB made loans in kind and employed a 50% rate of interest.

The secretary is responsible for bookkeeping and for keeping the minutes of meetings. The books are similar to those of other projects but employ a simplified system. The bank's balance sheet includes salary costs<sup>27</sup>, maintenance costs and the cost of bags. Proceeds are the "potential" sales revenues.<sup>28</sup>

The training of the management committee members occurs during the dry season at the nearest Technical Training Center (Centre de Perfectionnement Technique). The acceptable quality of the books indicates that the ten days of training received is an adequate period.

Appendix D contains technical information about project storage.

#### 5.4 The FAO Project

The FAO is the implementing agency for a project financed by the Netherlands, GCP-NER-026-NET. This project manages two CB programs covering 30 FAO banks and 49 banks of the Dutch aid agency SNV. The banks, established at the cooperative level, receive equipment and operating funds which are not reimbursable.

We gathered technical data on 11 CCB (see Appendix E) established in the Ouallam arrondissement. We visited the CCB at Diguinassa and the one at Banimate. Both make cash sales and generate gross revenues of 2,851,000 CFAF. The warehouses have a capacity of about 50 tons. The organization of the banks and the responsibilities of the management committee members are similar to those already discussed.

The books are well kept (receipt book, stock record book and cash box ledger.) Training in bookkeeping seems to reach its objectives. We even observed that minutes were kept of meetings. For training purposes, an instructor is recruited from the village. Responsible for training management committee members, he receives a monthly salary.

The villagers of the second CCB did not know to whom the bank belonged. They stated that it belonged to the official of the sub-regional cooperative union (USRC) who accompanied us. The FAO project carries out its activities in collaboration with Nigerien government offices. However, it seems important to give responsibility to the villagers. They need to become more aware of their property, duties and rights.

The representative of the sub-regional cooperative union has a dominant role in the management of the banks. The sub-regional union is responsible for monthly monitoring visits and receives a gasoline allowance for this purpose. The project, which seems to have benefitted from good conditions for launching the CB, plans to compensate the management committee members.

#### 5.5 The CAV Project

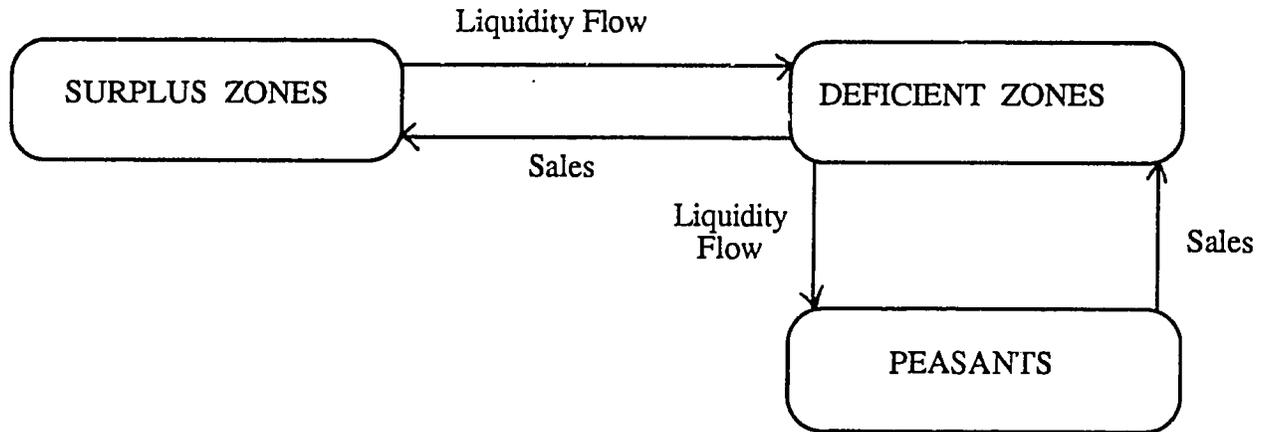
In Niger the Green Africa Campaign (CAV) Project has undertaken to render the CCB more dynamic, in particular to promote exchanges between cereal banks. Cash sales are transacted between surplus and deficit zones as shown in Figure 3 below.

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<sup>27</sup>If loans are 100% reimbursed, members of the management committee receive 2% of the interest charges received.

<sup>28</sup>Project technicians use market price less 5% as a sales price.

**Figure 3: CAV project organization**



The CAV Project presently has 51 CB, of which only four are in surplus zones and 47 in deficit zones. According to project officials, the four banks in the surplus zone are able to supply the 47 in the deficit zones at reasonable prices (on average 20% below market prices). A priori, it seems that the cooperative exchanges of the CAV project contribute significantly to the goal of food self-sufficiency.

As a non-governmental organization "more or less" detached from the oversight of the national cooperative union (UNC), CAV subcontracts with the Cooperative League of the USA (CLUSA) for training. The training programs appear to attain their objectives, although villagers complain that they have had no training in maintenance of grain stocks. The initial contribution of CAV of 1.5 million CFAF (120 tons of grain per CB) is to be reimbursed. We visited the CB of Dangazi and Fanaka. Their buildings were of cinder block, clean and well maintained.

## 6. CONCLUSIONS AND RECOMMENDATIONS

In the short and medium term it is probable that with the help of donors the cereal banks will participate in the attainment of food self-sufficiency.

In the long term it is to be hoped that by becoming a source of food supply the CB will be able to encourage village autonomy. They would thus reinforce local solidarity and aid in the development of other activities.

The present policy on agricultural sector reform aims to reduce state intervention and to foster the emergence of the private sector. One way of reaching this objective is to increase village participation through the creation of local enterprises. Existing and future CB should be structured so as to become real local enterprises.

Analysis of the current situation indicates that there are three crucial elements which must be given attention if the CB are one day to become local enterprises. It is a question of (i) augmenting the training received by members of the management committee, (ii) assuring the financial viability of the CB and standardization of their operations, and (iii) transforming the institutional framework in which they are operating.

## 6.1 Training

The cereal banks must be managed by village organizations. The objective is to have the banks function autonomously, independent of official agencies. Although no definitive conclusions can be drawn about training programs, it is worth emphasizing that a substantial effort must be made in this domain. Two recommendations emerge.

(1) There must be training to supplement the "information" component of current programs. Training is necessary for any success of cereal banks. The CB, like other development activities put under village control, may well disappear if a significant effort is not made to provide proper training.

(2) Training must be a continuous process. Follow-up on training sessions must be augmented. Project technicians must establish and use firm criteria to evaluate the training of villagers and to plan for follow-up training.

## 6.2 The Financial Viability and Standardization of the CB

For CB to succeed they must become financially viable. Those that conduct transactions in kind do not seem likely to become viable. Aside from the difficulty encountered in recovering grain that has been loaned, the CB which have transactions in kind use a negative rate of interest for the quantities loaned. We therefore recommend that:

(3) The CB make their sales for cash.

When they do conduct transactions in cash, the responsibility of the members of the management committee becomes one of generating a positive balance. Their responsibilities will also include management of the CB's operations, which is to say: (i) purchases, (ii) storage and (iii) sales.

### 6.2.1 Purchases

Experience has shown that CB often have supply problems. Often the quantities of grain offered to the CB are insufficient. Supply shortages are the consequence of several elements, the first being the siting of CB in marginal or even deficit zones. By definition these zones produce little. A second element is linked to farmers. As previously mentioned, many prefer to store their own or to sell on local markets. It is therefore important that the first phase of training have as an objective to make clear to villagers the advantages of collective storage in order to convince them to sell first to the CB. In fact, if CB become viable enterprises, they will be able to offer the advantage of service under better conditions.

### 6.2.2 Storage

Grain storage must be approached with care. Great care must be taken in warehouse layout, warehouse cleaning and pest protection. When there has been a good year, it is possible that demand for grain will be less than supply. The members of the general assembly and of the management committee must then decide how to take care of the surplus. In such circumstances, the creation of CAV banks offers a possible solution.

### 6.2.3 Sales

Sales is certainly the most delicate of the three phases of activity for the management committee. Determination of a sales price and thus of costs is the essential element of the operation. Our field visits indicate clearly that the present state of knowledge of accounting and management is not adequate for correct price determination.

With regard to determining costs, we suggest that the following be taken into account: (i) purchases valued at the purchase price, (ii) carry-over stocks from previous years valued at cost as determined for these years and (iii) direct and indirect costs of operation. These costs include the cost of bags, salaries, transportation, maintenance, repairs, administration, finance and amortization of buildings and equipment.

It falls to the donors to help villagers implement the three phases of CB operation. We believe that the work of these organizations could be simplified if the Cb were standardized and if their structure was improved. We therefore recommend that:

(4) the CB be standardized.

The criteria for creating CB must be re-examined and changed. The following criteria seem pertinent.

- i. The dynamism of the population and the structure of the village are determining criteria. Without firm support and widespread participation on the part of villagers, CB are destined to fail sooner or later.
- ii. Villager literacy improves CB management. However, as mentioned above, there is no a priori reason to punish a village with few literates. What is required is to undertake training programs at several levels.
- iii. It is desirable to add criteria on accessibility of the zone and on villager contributions to capital.

The organic structure of the CB ought to include the general assembly as well as the management committee. In addition to president, treasurer, secretary and warehouseman, the management committee should include the village chief.

Accounting documents could be simplified. Initially, stock record books and cashbox ledgers are sufficient. The latter records cash movements--purchases and sales--and the former records movements of grain. This simplification would certainly lead to better bookkeeping. Membership cards and a register of members should also be kept.

(5) The creation of an NGO responsible for CB operations should be envisaged.

The purpose of the NGO would be to aid donor organizations in standardizing their efforts.

Before addressing the institutional aspect of CB activity, we wish to point out that the role of women should be enhanced. Women often participate actively in grain marketing, and they are often responsible for family food supplies. They should therefore be encouraged to participate in decision-making and to provide their support to the CB.

### 6.3 Institutional Aspects

It would be desirable if the Nigerien Government gave real legal status to village groups. As we have mentioned in this report, Decree no. 89-079 and Ministerial Order (ordonnance) no. 89-010, which concern cooperatives and groupements mutualistes (GM), modify the legal status of cooperative organizations. A document containing the four primary modifications to the law should be promulgated. Project technicians and villagers should be informed. This leads us to three final recommendations.

(6) A document informing the populace of the following modifications should be made widely available.

- i. Cooperatives and GM must have real economic activity.
- ii. Cooperatives and GM now have the status of corporate entities with variable capital.
- iii. Automatic membership in cooperatives and GM has been eliminated.
- iv. Cooperatives and GM may dispose of their capital in case of dissolution.

(7) A new decree specifying the concept, objectives and functions of CB should be drafted and submitted to the authorities. It would be desirable for this decree to specify:

1. the goals and objectives of CB;
2. their activities;
3. their structure;
4. their powers;
5. rights and duties of members;
6. obligations of and sanctions for members;
7. delegation of powers;
8. remuneration of members; and
9. creation and dissolution of CB.

The adoption of a decree covering these nine points would confer legal status on CB. They could then negotiate with economic entities and possibly acquire bank loans. In this latter regard, CB generating cash surpluses could utilize the services of the COOPEC.

## APPENDIX A: TERMS OF REFERENCE

### 1. Mission

- a. Study the possibility of adopting and promulgating a decree or order conferring legal status on cereal banks to allow them to acquire bank loans, to negotiate with economic agents, and finally to appear in court.
- b. Estimate grain stocks at a sample of cereal banks and make recommendations on improving estimates of stocks.
- c. Analyse the structure and accounting system and then propose a [modified] system adapted to the banks' situation and capable of being mastered by the individuals concerned. Propose practical training programs for managers.
- d. Study, along with concerned parties, the possibility of creating a parallel savings and loan agency which would make investment loans.

### 2. Methodology

#### a. In Niamey:

- (1) Documentary research
- (2) Consultations with concerned donor agencies

#### b. In the field:

- (1) Survey of 10 cereal banks
- (2) Visit local, state and private organizations at CB sites

### 3. Timetable

The consultant will have three weeks for field visits and one week in the U.S. to complete the report.

## APPENDIX B: BIT-ACOPAM STOCK

### BIT-ACOPAM

BCC	Nombre benefi.	Stock initial	Qtas a recup.	Stock 1989-1990	Soide a recup.	% recup
1 Atchidaxofoto	198	29,750	42,462	21,062	21,400	49.60
2 Atconilafia	513	30,000	43,666	33,571	9,995	77.11
3 Badaria	320	20,000	36,926	19,701	17,225	53.35
4 Bamo	634	26,000	38,222	31,380	6,452	33.17
5 Batonaka	236	20,000	53,360	30,514	22,846	57.19
6 Chadakori	136	20,000	23,249	12,304	10,945	52.92
7 Dadani	213	20,000	42,756	34,962	7,796	31.77
8 Dan Al Saboua	167	20,000	26,461	18,072	8,389	68.30
9 Dan Goulbi	232	25,000	37,340	13,600	23,740	36.25
10 Dan Kari	433	23,000	33,392	20,777	12,615	62.22
11 Dan Kori	170	23,740	25,250	18,600	6,650	73.66
12 Dan Malam	208		29,364	23,213	6,151	77.68
13 Dara	449	23,350	35,134	15,000	20,134	42.63
14 Dargue	353	19,100	30,361	26,789	3,572	68.23
15 Debi	376	18,700	27,297	19,213	8,079	70.40
16 Fatouma	383	20,000	45,750	29,967	15,783	65.50
17 Gakoudi	30	9,130	10,367	7,300	3,067	70.28
18 Djantoudou	214	20,000	45,664	36,000	9,664	79.31
19 Guidan Gaiadima	124	6,000	20,713	15,236	5,482	73.54
20 Guidan Teye	685	25,000	36,511	25,155	11,356	68.90
21 Guidan Wali	893	20,000	55,687	50,168	5,519	90.09
22 Kanan Bakache	250		23,155	21,657	6,498	76.92
23 Korin Habdja	163	26,650	51,735	46,500	5,235	89.66
24 Kotara	133	14,220	19,173	12,000	7,173	62.57
25 Koudou	350	20,000	61,550	22,575	38,975	36.68
26 Oura	139	15,000	21,437	16,129	5,308	75.24
27 Roubou	316	20,000	39,696	13,471	26,225	33.94
28 Sabar	276	20,000	54,543	33,313	21,230	61.06
29 Sae Saboua	296	20,000	37,613	18,950	21,863	42.18
30 Sarba	394	20,000	24,565	19,256	5,329	78.32
31 Sarkin Arewa	350	14,400	31,160	17,200	13,960	55.20
32 Sarkin Macussa	56	10,000	11,046	9,300	1,746	84.19
33 Soly	279	20,000	50,055	32,646	17,409	65.22
34 Taqriss	262	20,000	44,977	32,655	12,322	72.60
35 Tapkin Guiwa	75	20,000	54,205	29,663	24,542	54.72
36 Wakasso	266	20,000	56,280	24,214	32,066	43.02
37 Zarounmeya	640	20,586	31,056	28,300	2,756	91.12
38 Aitadan	103	9,000	12,093	11,500	593	95.10
39 Attantane	65	6,000	7,500	7,500	0	100.00
40 Janbaouchi	80	8,000	10,000	9,500	500	95.00
41 Mallamoua	63		7,500	7,500	0	100.00
42 Nanaya	67		8,500	8,500	0	100.00
43 Guidan Kiabeye	90	9,000	11,250	11,250	0	100.00
44 Guidan Taweye	85	8,000	10,500	6,701	3,799	63.32
45 Issawane	76	7,000	7,500	7,500	0	100.00
46 In Walla	89	6,000	7,335	6,250	1,085	85.21
47 Kalgo	50	5,000	7,300	7,300	0	100.00
48 Guidan Kache	86		5,750	5,750	0	100.00
49 Kafin Kafin Kassao	47		12,500	12,300	200	98.40
STATISTIQUE						
Total	12,215	761,678	1,466,141	979,969	486,172	
Mean	249	17,713	29,921	19,999	9,922	73.107

BCV	Nombre benefi.	Stock initial	Qtes a recup.	Stock 1989-1990	Solde a recup.	% recup
1 Gakoudi	30	9,180	10,387	7,300	3,087	70.28
2 Kanan Bakache	250		28,155	21,657	6,498	76.92
3 Kotare	133	14,220	19,178	12,000	7,178	62.57
4 Sarkin Haoussa	56	10,000	11,046	9,300	1,746	84.19
5 Zarounmeya	640	20,538	31,058	28,300	2,758	91.12
6 Aitadan	103	9,000	12,093	11,500	593	95.10
7 Attantane	65	6,000	7,500	7,500	0	100.00
8 Janbaouchi	80	8,000	10,000	9,500	500	95.00
9 Mallamoua	63		7,500	7,500	0	100.00
10 Nanaya	67		8,500	8,500	0	100.00
11 Guidan Kiabeye	90	9,000	11,250	11,250	0	100.00
12 Guidan Taweye	85	3,000	10,500	6,701	3,799	63.32
13 Issawane	76	7,000	7,500	7,500	0	100.00
14 In Walla	89	6,000	7,335	6,250	1,085	85.21
15 Kalgo	50	5,000	7,800	7,800	0	100.00
16 Guidan Kache	86		5,750	5,750	0	100.00
17 Kafin Kafin Kassao	47		12,500	12,300	200	98.40
18 Dan Kori	170	23,740	25,250	18,600	5,650	73.56
STATISTIQUE						
Total	2,180	135,728	233,302	199,208	34,094	
Mean	121	10,441	12,961	11,067	1,894	88.682

## APPENDIX C: BIT-ZINER STOCK

### BIT-ZINDER

BCC	Nbre benef.	Stock Init.	Crtm.	Qtes Recup.	Stock 89-90	Solde Recup.	% recup. Zinder	
1	Jambirdji	-	20,000	-	-	37,550	37,550	100%
2	Beykori	-	20,000	-	-	44,950	44,950	100%
3	Angeol Keore	-	15,000	-	-	19,087	19,087	100%
4	Koudidihi	-	17,500	-	-	16,800	16,800	100%
5	Kounjanjan	-	20,000	-	-	33,840	33,840	100%
6	Dangoudaou	-	25,000	-	-	43,280	43,280	100%
7	Katofou	-	17,500	-	-	27,638	27,638	100%
8	Doundou	-	22,000	-	-	29,775	23,225	78%
9	Gazamni	-	25,000	-	-	23,500	24,350	104%
10	Dagradi	-	15,000	-	-	21,100	11,500	55%
11	Gagawa	-	20,000	-	-	33,615	33,615	100%
12	Sabon Kafi	-	20,000	-	-	25,589	25,589	100%
Stat. Tot			237,000			356,724	341,524	
Mean			19,750			29,727	28,460	95%

BCV	Nbre benef.	Stock Initial	Creati	Qtes Recup.	Stock 89-90	Solde Recup.	% recup. Zinder	
1	Mazanya	-	5,000	-	-	6,505	6,568	101%
2	Tick	-	5,000	-	-	10,000	10,000	100%
3	Doungouzourou	-	5,000	-	-	8,700	8,298	95%
4	Majan Kare	-	5,000	-	-	5,000	5,000	100%
5	Rubunji	-	5,000	-	-	6,000	6,000	100%
6	Katourje	-	5,000	-	-	5,000	5,043	101%
7	Matarawa	-	5,000	-	-	4,000	4,150	104%
8	Moa	-	10,000	-	-	12,450	8,200	66%
9	Sabon Roua	-	7,000	-	-	8,750	7,837	90%
10	Gueza II	-	7,000	-	-	10,750	11,450	107%
11	Aroungouza	-	8,000	-	-	14,300	14,000	97%
12	Maikombouroua	-	8,000	-	-	12,000	8,100	68%
13	Kagna Wame	-	10,000	-	-	10,000	10,000	100%
14	Tchidassaou	-	4,000	-	-	4,000	3,600	90%
15	Garin Kwari	-	8,000	-	-	8,000	8,275	103%
16	Daganou	-	6,000	-	-	6,000	6,000	100%
17	Gongoeboul	-	6,000	-	-	6,000	6,550	109%
18	Kwarin Toumni	-	7,000	-	-	7,000	3,700	53%
19	Daoutche	-	5,000	-	-	7,665	9,500	124%
20	Ganawa	-	5,000	-	-	6,250	6,950	111%
21	Birgi Baba	-	7,000	-	-	7,000	6,250	89%
22	Marekou	-	8,000	-	-	8,000	7,700	96%
23	Amsoudou	-	9,000	-	-	9,000	9,600	107%
24	Daratchama	-	5,000	-	-	5,000	4,300	86%
25	Roua Koussa	-	4,000	-	-	14,468	14,468	100%
26	Guellam	-	4,000	-	-	11,550	11,550	100%
27	Garazou	-	4,000	-	-	12,820	12,820	100%
28	Daoutcha	-	4,000	-	-	12,150	12,150	100%
29	Kanakazou	-	4,000	-	-	6,300	6,300	100%
30	Kageria	-	4,000	-	-	5,400	5,750	106%
31	Gassari	-	4,000	-	-	5,375	5,375	100%
32	Karbo	-	5,000	-	-	7,450	7,450	100%
33	Bargoudi	-	4,000	-	-	7,600	7,600	100%

34	Kiringuim	-	9,000	-	-	9,000	9,200	102%
35	Alkamaram	-	4,000	-	-	4,000	3,900	97%
36	Komi Zabewa	-	5,000	-	-	5,000	5,000	100%
37	Bassori	-	6,000	-	-	6,000	4,920	82%
38	Guirdiguiski	-	8,000	-	-	8,000	7,700	96%
39	Kaoutchilim	-	10,000	-	-	10,000	9,800	98%
40	Karamba	-	4,000	-	-	4,000	2,900	72%
41	Wodo	-	7,000	-	-	7,000	7,500	107%
42	Ijeje	-	5,000	-	-	7,813	6,888	88%
43	El-Daweye	-	5,000	-	-	7,600	6,000	79%
44	Maidiga	-	5,000	-	-	12,250	7,950	65%
45	Maidachi	-	5,000	-	-	8,150	8,450	104%
46	Badoukaye	-	5,000	-	-	9,300	8,050	87%
47	Zeni	-	5,000	-	-	11,250	11,250	100%
48	Changneta	-	5,000	-	-	7,500	7,450	99%
49	Zomoto	-	5,000	-	-	8,500	8,500	100%
50	Dakaira	-	5,000	-	-	7,813	7,813	100%
51	Bakari	-	5,000	-	-	5,700	5,300	93%
52	Guidan Bakous	-	5,000	-	-	7,500	7,150	95%
53	Guidan Bija	-	5,000	-	-	7,500	7,400	99%
54	Guidan Ranao	-	5,000	-	-	7,300	6,000	82%
55	Bourourou	-	5,000	-	-	6,700	6,600	99%
56	Dan Dardou	-	5,000	-	-	7,813	7,813	100%
57	Takoukout	-	8,000	-	-	8,000	8,000	100%
58	Garin Nori	-	7,000	-	-	7,000	4,575	65%
59	Farin Toudou	-	7,000	-	-	7,000	5,100	73%
60	Kokaram	-	7,000	-	-	7,000	7,000	100%
61	Mai-Sap-Sap	-	8,000	-	-	8,000	8,000	100%
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Stat. Tot			357,000			483,372	456,743	
Mean			5,852			7,924	7,488	95%

## APPENDIX D: GTZ STOCK

GTZ						
BCV	A recup. 1989 (kg)	Impayés anter.	Total a recup.	Recup. (kg)	Reste a recup.	Taux de recup.
1 Samo	10,050	10,565	20,615	12,800	7,815	62.09%
2 Guidan Kago	5,025	6,173	11,198	9,000	2,198	80.37%
3 Karadji Sud	0	10,216	10,216	7,200	3,016	70.48%
4 Toudouni	0	4,999	4,999	2,800	2,199	56.01%
5 Tchala MG	0	970	970	0	970	0.00%
6 Tchala Agali	0	1,027	1,027	145	882	14.12%
7 Samo Peulh	11,100	0	11,100	11,100	0	100.00%
8 Adouna	0	5,805	5,805	4,000	1,805	68.91%
9 Galmouwa	5,212	9,955	15,167	12,570	2,597	82.88%
10 Tchibaro	0	1,225	1,225	150	1,075	12.24%
11 Latchiaua	11,115	12,950	24,065	9,336	14,729	38.79%
12 Imbalgan	6,193	7,810	14,003	9,400	4,603	67.13%
13 Damargou	0	5,490	5,490	0	5,490	0.00%
14 Agoulmaua	2,850	8,650	11,500	7,900	3,600	68.70%
15 Kehehe Sed	12,287	0	12,287	4,700	7,587	38.25%
16 Kehehe Peulh	4,162	0	4,162	1,800	2,362	43.25%
17 Founkoye	19,380	9,520	28,900	17,400	11,500	60.21%
18 Kafou Dabagni	450	15,300	15,750	8,200	7,550	52.06%
19 Kafou R.	300	2,900	3,200	1,000	2,200	31.25%
20 Alibou	0	11,250	11,250	3,550	7,700	31.56%
21 Tchinkaki	0	15,750	15,750	5,200	10,550	33.02%
22 Guigane	0	1,202	1,202	750	452	62.40%
23 Bagney Gorba	16,850	7,562	24,412	13,000	11,412	55.25%
24 Bagney T.G.	5,250	6,250	11,500	5,600	5,900	48.70%
25 Bagney Tchedi	0	4,350	4,350	3,650	700	83.91%
26 Kounkouzout	3,600	10,912	14,512	8,600	5,912	59.26%
27 Kolloma	4,350	23,925	28,275	11,450	16,825	40.50%
28 Sabon Gari	9,432	1,062	10,494	9,100	1,394	86.72%
29 Konreya	1,200	0	1,200	1,200	0	100.00%
30 Lilingo	2,700	6,175	8,875	3,450	5,425	38.87%
31 Tchinahar	2,287	4,287	6,574	4,250	2,324	64.65%
32 Minao	3,862	425	4,287	2,900	1,387	67.65%
33 Chakott	0	5,925	5,925	2,925	3,000	49.37%
34 Mountcheri	4,200	918	5,158	4,875	283	94.51%
35 Moujia	2,100	600	2,700	2,700	0	100.00%
36 Faska	10,800	0	10,800	10,800	0	100.00%
37 Kolkoli	8,025	283	8,308	8,020	288	96.53%
38 Toukoussa	2,775	0	2,775	-	-	-
39 Toukoussa P.	19,350	0	19,350	19,350	0	100.00%
40 Gao Moussa I	0	1,275	1,275	100	1,175	7.84%
41 Gao Moussa II	600	800	1,400	775	625	55.36%
42 Gatrarua	787	1,000	1,787	875	912	48.96%
43 Ararvaye	3,654	0	3,654	1,950	1,704	53.37%
44 Magheur M.	300	1,150	1,450	550	900	37.93%
45 Magheur T.	963	3,750	4,713	2,225	2,488	47.21%
46 Magheur K.	3,075	1,610	4,685	2,890	1,795	61.69%
47 Magheur N.	3,561	910	4,471	2,390	2,081	53.46%
48 Magheur G.G.	2,583	1,450	4,033	2,450	1,583	60.75%
49 Magheur D.	3,150	2,975	6,125	3,075	3,050	50.20%
50 Falali	1,447	1,475	2,922	1,525	1,397	52.19%
51 Talaskia	804	2,787	3,591	1,600	1,991	44.56%

52 Roubao	2,587	175	2,762	1,700	1,062	61.55%
53 Zardana S.	2,217	100	2,317	1,100	1,217	47.48%
54 InKafir	330	500	830	400	430	48.19%
55 Inguina	367	850	1,217	500	717	41.08%
56 Rafin Saki	1,275	500	1,775	1,150	625	64.79%
57 Galatan	150	1,100	1,250	400	850	32.00%
58 B.T. Awanchal	3,075	1,050	4,125	0	4,125	0.00%
59 B.T. Zardana	0	700	700	300	400	42.86%
60 Gadda	12,049	1,530	13,579	8,593	4,986	63.28%
61 Rididi	3,450	300	3,750	1,150	2,600	30.67%
62 Malamwa	2,625	0	2,625	2,425	200	92.38%
63 Tabla	2,925	137	3,062	2,100	962	68.58%
64 Aguey	1,950	700	2,650	0	2,650	0.00%

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Statistique

Sum	238,829	241,295	480,124	281,094	196,255	
Mean	3,732	3,770	7,502	4,392	3,066	53.50%

BCC	A recuper 1989 (kg)	Impayes anterieur recup.	Total a recup. (kg)	a Recupere (kg)	Reste a Recupere	Taux de recup.
1 Samo	31,387	50,935	82,322	59,765	22,557	72.60%
2 Latchinva	36,608	34,900	71,508	33,436	38,072	46.76%
3 Forunkaye	87,687	53,160	140,847	98,425	42,422	69.88%
4 Kalfou	26,450	75,477	101,927	49,550	52,377	48.61%
5 Bagga	22,999	2,667	25,666	14,268	11,398	55.59%
6 Magheur	30,927	23,980	54,907	25,955	28,952	47.27%

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Statistique

Sum	236,058	241,119	477,177	281,399	195,778	
Mean	39,343	40,187	79,530	46,900	32,630	56.79%

## APPENDIX E: FAO STOCK

FAO-OUALLAM					
BCC	Capital Initial	Annee Creation	Caisse	CNE	Stock Final (kg)
1 Fandou Beri	660,000	1988	73,775	650,000	-
2 Banimate	1,555,000	1988	689,000	125,000	12,200
3 Diguinassa	1,702,350	1988	587,320	1,450,000	-
4 Tolkoboye	1,326,750	1988	516,500	1,065,000	-
5 Maourey	1,367,500	1988	422,500	620,000	7,500
6 Tougle Faire	747,000	1988	380,000	335,000	1,700
7 Dango Zoumi	1,257,500	1988	116,750	150,000	19,300
8 Saptaka	834,000	1988	225,000	760,000	-
9 Banni Beri	978,000	1988	640,000	500,000	1,400
10 Bano Koirra	572,000	1988	26,000	609,000	-
11 Kabe Kaina	1,125,000	1988	-	570,000	10,000
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Statistique					
Sum	12,125,100		3,676,845	6,834,000	52,100
Mean	1,102,282		367,685	621,273	8,683

APPENDIX F: CAV STOCK

CAV													
BC	Fonds initiaux	Qtes achetees			Prix Achat	Qtes vendues			Prix vente	Chiffre d'affaire (-)	Charges	Profit ou (Perte) campagne 88-89	
		Mil sacs	Sorgho sacs	Autres sacs		Mil sacs	Sorgho sacs	Autres sacs					
1 Say	1,350,000	235		70	1,725,000	235		70	1,787,500	62,500	185,000	(122,500)	
2 Boki	1,800,000	618			4,550,750	618			5,031,500	480,750	54,750	426,000	
3 Gueladjo	1,350,000	980	12		6,968,500	980	12		7,696,750	728,250	458,250	270,000	
4 Fala	1,250,000	130		109	1,514,500	130		26	1,437,250	(77,250)	962,530	(1,039,780)	
5 Bomfeba	625,000	147		53	1,396,100	147		29	1,638,800	242,700	580,035	(337,335)	
6 Sanguile	1,250,000	270			1,755,500	270			2,274,000	518,500	202,710	315,790	
7 Famale	1,250,000	443		20	3,361,800	428		12	3,829,100	467,300	179,785	287,515	
8 Ayorou	1,250,000	606			4,824,050	606			5,642,980	818,930	400,250	418,680	
9 Simiri	1,665,000	260			2,119,500	247			2,375,500	256,000	310,100	(54,100)	
10 Ouallam	1,665,000	436	50		3,456,650	436	50		3,799,250	342,600	374,400	(31,800)	
11 Tondiki.	1,665,000	217	30		1,916,750	217	30		2,223,500	306,750	218,925	87,825	
12 Bani-Ban.	1,550,000	162	23		1,357,250	162	23		1,563,500	196,250	153,515	42,735	
13 Koygolo	1,400,000	232		417	4,890,950	231		377	5,226,000	335,050	358,780	(23,730)	
Stat	TOT	18,070,000	4,736	115	669	39,847,300	4,707	115	514	44,525,630	4,678,330	4,439,030	239,300
	MEAN	1,390,000	364	29	134	3,065,177	362	29	103	3,425,048	359,872	341,464	18,408

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