

Seed Banks

Agriculture Project Lilongwe East, Malawi

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1. Introduction

Seed bank creation is one of the activities proposed by Inter Aide Agriculture Project in Lilongwe East, as well as as agroforestry, fruit trees and forestry, land husbandry, poultry and horticulture. As all activities carried out with the support of the project by the project, seed banks are implemented through Village Development Committees (VDCs).

The Seed banks were first implemented to introduce and spread improved variety seeds / new variety seeds, into the area of activity.

The principle is to revolve the seeds received by the villagers from one year to another with a assistance by the Project decreasing after the second year.

Seed Banks are one of the most successful activities of IA agriculture programme due to its short term benefit (unlike the soil & water conservation activity for instance!).

2. Village Development Committees (VDCs)

A VDC is a group of villages (between 2 to 4 villages), which will select a maximum of 40 members the first year, to implement agricultural activities proposed by Inter Aide Agriculture Project.

Each member is free to choose the activities in which he will participate.

IMPORTANT NOTICE

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We would like to stress here that these technical notes are not prescriptive. Their purpose is not to "say what should be done" but to present experiences that have given positive results in the context in which they were carried out.

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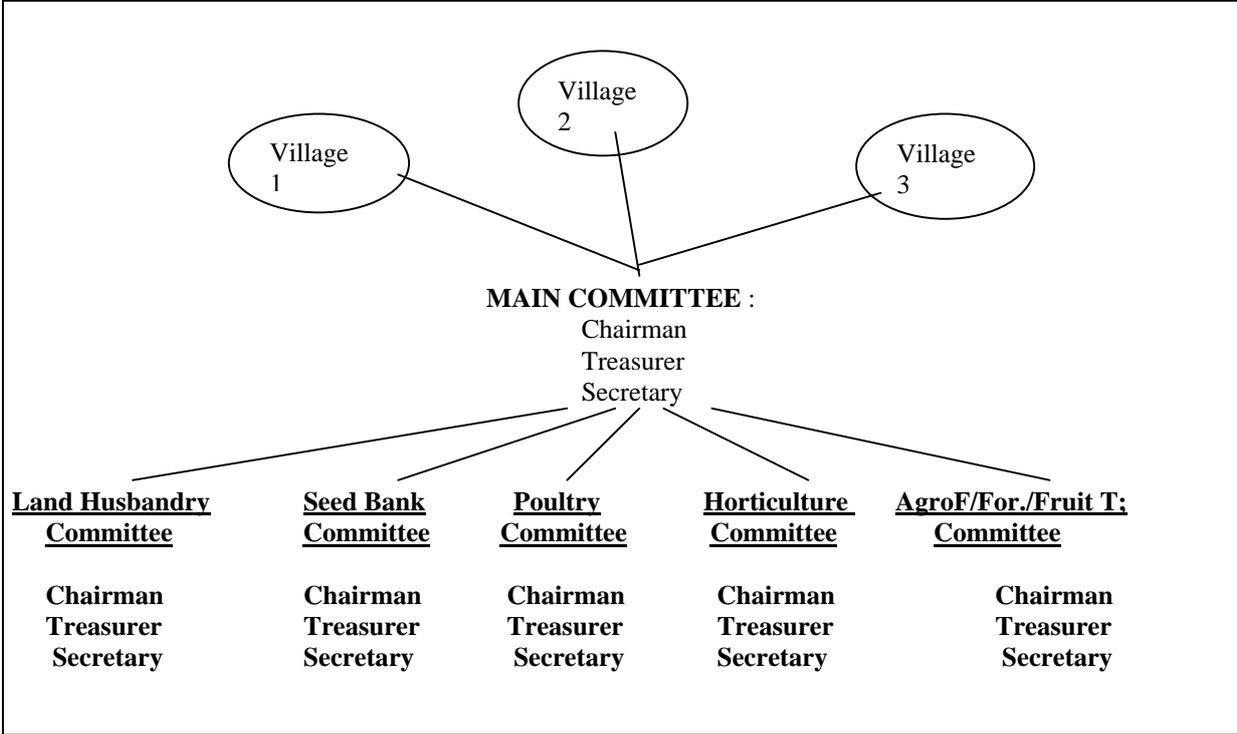
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Each activities is managed by a sub-committee, composed of a chairman, a secretary and a treasure. The sub-committees (one per activity carried out) are supervised by a main committee.

Inter Aide works on a 3-year basis with the VDCs. After the third year, the VDCs should be self-manageable.



3. Seed bank management

Once the group of farmers have been set up, each farmer involved in the seed bank activity expresses its wish about the kind of crops he wants to grow.
(Most of the time, all the farmers among the VDCs are involved in the seed bank activity).

Selection of beneficiaries:

The seed bank sub-committee is responsible for the selection of the beneficiaries. The Project aims at reaching the poorest of the poor, but most of the time, the members are selected according to their honesty and trustworthiness, rather than their income.

Follow-up and supervision :

Regularly, the sub-committee inspects the fields of its members in order to:

- check that the technical recommendations are followed up (this visit is done with the extension worker)
- check the state of each field to avoid cheating during the repayment (some farmers pretend they cannot repay because of a poor harvest).

4. The project method

SEED GRANT

The Project assists each VDC by providing the seeds the first year only. **Each farmer must repay the double quantity of seeds he has received.**

Two types of support have been experienced by IA Lilongwe-East Agriculture project:

- 1) The Project provides the seeds at the beginning of the cropping season, according to the needs stated by the VDCs, and collect them back at the end of the rainy season, once the repayments are over. The very same seeds will be redistributed to the respective VDCs. This solution involves heavy logistical means, and a strong supervision by extension workers. The positive aspect is that the seeds are kept in a safe place and stored properly. Nevertheless, because that this strategy will not make the VDCs responsible for the storage, combined with the lack of ownership observed, and the heavy assistance by the Project preventing the seed bank from being self-sufficient, the Agriculture Project is now adopting another solution :
- 2) As for the 1st solution, the Project provides the seeds to the seed bank, at the beginning of the cropping season; but, instead of collecting the seeds back, to store them and distribute them again the following year, the seeds are kept by the committee in the VDC. Therefore, the farmers feel a sense of ownership, they learn how to store seeds properly, they are more implicated in the process of repayment. We already put them in a situation where the VDC is self-managed. A supervision is nevertheless required the first two years.

TRAINING, FOLLOW-UP AND SUPERVISION***The project extension worker:***

He is present during the selection of beneficiaries which are trained on the following topics:

- Crop management;
- Pest and disease control;
- Post harvest management.



The Project field officer visits farmers regularly, and tries to identify and solve problems together with them.

Government extension workers can be involved in this process, if they are likely to take over from the Project in the future. This is what is happening at the moment here in Malawi. The Project managed to pass an agreement with the local agriculture department, and 8 extensionists are now following up the old Seed banks (3 years and more). To fully understand our strategy, it is important for them to participate in our first years' trainings.

LEADERSHIP BUILDING:

The farmers must be aware that they have received and are repaying with **THEIR** own seeds. Otherwise, most of the farmers will repay their “loan” with bad seeds and keep the better lot for them – which can sink a seed bank:

Bad seeds = bad germination rate = poor production = poor repayment rate
= seed bank extinguishing

Therefore, trainings in group dynamics are organised by project extension workers as soon as the VDC is created. Government staff are associated whenever possible.

5. Seed Bank development and problems that may arise

Year after year, the quantity of seeds is supposed to increase thanks to the “double quantity repayment” rule.

Therefore, the Seed bank can decide to accept new members in the 2nd year. 🛎 : yet it is difficult for the sub-committee to follow up and manage too many members. **Experience has shown that 40 members is an optimum.** If the seed bank exceed this number, then it is better to split the seed bank into two.

But the increase in quantities as well as the recycling of seeds may cause many problems:

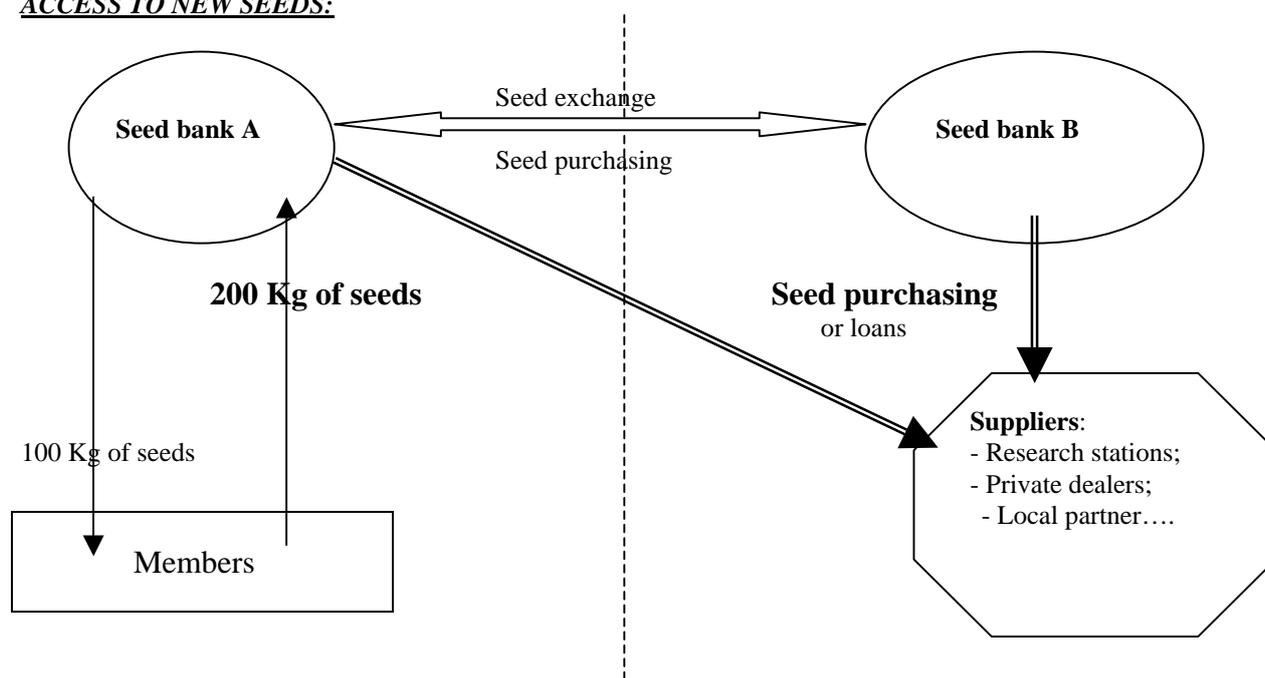
- If well managed, the volume of seeds will increased steadily. Therefore the community will face a problem of storage.
In general, and for security measures, the seeds are stored at the chairman's or treasurer's house, which are supposed to be the biggest houses of the village. Nevertheless, they remain small and cannot accommodate huge volumes (groundnuts) of seeds in adequate conservation conditions.
Therefore, the project advises and supports the construction of granaries (hard materials) to avoid the destruction of seeds due to fire. But, it is expensive, and most farmers are afraid of theft.



- Year after year, the seeds' quality might decrease. This is due to:
- The bad selection of seeds repaid by the farmers to the seed bank. Many farmers have difficulties to understand that it is essential to repay with good seeds (quality, size, etc.). If that is the case, then the seeds will have to be renewed earlier than planned. **The sense of ownership is essential, farmers have to understand that the seeds are theirs and they would suffer if not well selected.**
 - Some varieties will be cross-pollinated, and must be renewed after a few years (OPV maize).

In both cases, the VDC (seed bank) will have difficulties to have access to good variety seeds.

ACCESS TO NEW SEEDS:



To be able to recycle their seeds, the VDCs have several possibilities:

- The best way to access good variety seeds or breeder seeds would be to buy them from research stations. Unfortunately, these centres are usually situated near the big towns, far away from the beneficiaries who cannot afford to pay for transportation.
- Some close-by private dealers or shops sell some seeds, but they seldom sell the improved varieties. In that case, agreements could be signed with these shops through which the project could provide farmers with improved variety seeds.
- If the Project is working with a local partner in areas where seed banks have been created, it would be a more sustainable way to allow farmers to access improved seeds through this partner which could sell or give loans to the seed banks.

In these three cases, the seed bank will have to raise some money to recycle or renew its seeds.



If, for several reasons, the Seed bank does not want or cannot afford to purchase some new seeds from private shops, dealers or research stations, then they can exchange the seeds with other seed banks from other VDCs. Indeed, it is not rare to see VDCs looking for a specific type of seeds because of a bad harvest.

This solution seems to be the easiest in terms of time and transportation costs, but it needs to be coordinated by the Project. The project would have to record the stock and the needs for each VDC. It would link seed banks between themselves, but would not interfere in the discussion/deal.

FUND RAISING:

As already mentioned in the “access to new seed” section, raising money is necessary to keep the Seed bank alive.

In addition to recycling seeds, the seed bank has to buy some insecticides to maintain its stock during the dry season. It can also contribute to buy some chemicals to be used by farmers in case of disease outbreak during the growth of crops.

The money could also be raised to buy a piece of land for the community to increase the volume of its seed bank.

A few ways of raising money:

- Some of the Seed banks ask their member to pay an “admission fee”. (Each VDC is free to write its own constitution and rules).
- Part of the seed repaid can be sold.

FAILURE IN SEED REPAYMENT:

If one or some farmers fail to repay, then it is upon each VDCs Constitution to decide what to do. Several options are chosen, and the most commonly seen in the field are the following:

- The farmer has to give some cash to the VDC equivalent to the quantity he did not repay. The money will then be used to buy some new seeds, or insecticides to store the seeds for the following season;
- The farmer is asked to repay with another crop he has received from the VDC (ex: A farmer who received 1 Kg of beans and 1 Kg of groundnuts from the seed bank, and was only able to repay 1 Kg of groundnuts (instead of 2Kg) and 2Kg of beans, will have to repay one more Kg of beans). But if this situation happens too often, the seed bank might lose a whole type of seeds;
- The farmer is asked to buy some seeds and repay to the VDC as quickly as possible. This case has to be banned: the risk is that the farmer buy local variety seeds which will be mixed with improved varieties;
- Farmers failing to repay at all are banned from the Seed bank activity and will never be entitled to receive seeds the following seasons.



SUCCESS STORY 1:

VDC Name: SEWE

Section : DAKO-CHAUWA

Starting year: 2003

This seed bank was created in 2003 with 43 members (1 male + 42 females)

The seed bank received from the Project:

80Kg of soya

40 Kg of beans

300Kg of groundnuts

75 Kg of OPV maize

Repayments in 2004 was:

114 Kg of soya = 71%

76 Kg of beans = 95%

652 Kg of groundnuts = 108.6%

160 Kg of OPV maize = 106.6%

Some farmers not able to repay their soya or beans repaid in maize or groundnuts (over repayment).

100Kg of ground nuts were sold to purchase empty sacks and one bottle of actellic for pest control in beans and maize.

In 2004, all the seeds have been redistributed to 48 farmers (5 farmers joined the VDC the following year);

In 2005, the plan is to collect enough money to build a store room for the seeds.

SUCCESS STORY 2

VDC Name: NKHWAZI

Section : CHILEMBWE

Starting year: 2002

This seed bank was created in 2002 with 20 members

They managed to revolve the seeds received through out the seasons.

After the repayment in 2004, part of the groundnuts repaid was sold, in order to rent a piece of land to be managed at group level. 30 Kg of soya beans were planted. This cash crop will be sold entirely and will assist the seed bank or the VDC.

Appendix 2 : Database beneficiaries (sur demande).

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