

Organised for preserving local seed

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Farmers in Bwipa, a remote village in the district of Ileje, in the southern Mbeya region of Tanzania, regularly grow maize, bananas, potatoes and upland rice. The maize seed most often planted in this area is a high yielding hybrid type, but is prone to disease and pest attacks. Compared to the local varieties, hybrid maize is less tasty and more expensive – not only because of the price of the seed, but also because of the fertilizer it requires. Furthermore, because it is a hybrid, farmers need to buy new seed every year, or yields drop drastically. This general situation became even more complicated in 2003, when the seeds were not available in sufficient quantities. This led to the formation of a self-help group with the specific objective of ensuring the availability of good quality seeds. It all started with one farmer – Mrs. Mattei – who, after finding it difficult to buy maize seed for several years running, decided to get hold of a few cobs of a local variety.



A group member proudly shows the maize and bean seeds he has stored.

Mrs. Mattei obtained a few maize cobs of the local variety known as *kobo* when she was visiting some relatives in Chunya, another district within the same region. In contrast to the hybrid maize, *kobo* maize matures early, is tastier, tolerates pests and diseases better, does not require the excessive use of fertilizers, and its seeds are readily available. More importantly, farmers can use the seed stored after the last season's harvest, and know that the performance or yield will not be affected. Farmers in Bwipa, however, had stopped growing *kobo* as its yields are lower than the hybrids. Taking these cobs home, Mrs. Mattei stored them and then sowed the seeds in her field. Despite the poor rains that season, she was able to harvest enough for her

family, while her neighbours had a poor harvest. They realised, yet again, that hybrid seeds perform badly during poor rainfall seasons.

Forming a group

It was then that the idea of forming a seed conservation group was envisioned, following previous experiences with the formation of farmer groups in the region. As part of its extension services, the government had been promoting farmers' groups and organisations. Farmers in Bwipa decided to form a local group with the objective of preserving the seeds of local crop varieties. They started by setting up a common place where they could store the seeds of the crops grown in the region. Local varieties of maize, beans, finger millet, pumpkin, cucumber and many others, were initially stored in one of the group member's houses, who volunteered to keep the seeds on behalf of the whole group. After several discussion meetings, they decided to use various methods and types of storage structures, from clay pots and gourds to ceiling boards known as *dali*. These methods have been traditionally used in this region, although the introduction of modern gunny bags has made their use less common.

The group decided later that each member would bring seeds from different crops, they would exchange them, and they would each store some seeds. They would meet regularly to reflect on the state of their seed stores and to tell the other members if they knew of seeds from other localities which they could also consider storing. Available seeds would then be distributed among all. Most opted for a *dali* in their houses, constructing a ceiling board made of bamboo sticks, and storing their seeds there. The cooking fire underneath the *dali* releases smoke onto it, preventing the attack of insects and so protecting the seeds. Farmers also use the ashes from the kitchen fires as insect deterrents and seed preservatives. Seeds on these *dalis* are insect-free for as long as long as three years.

Building on achievements

Farmers in Bwipa feel that their seed group is still consolidating. Among the difficulties they have had they mention, for example, that some members have sold or consumed the seed they were storing, in response to particular problems. Discussions are underway as to the possible advantages of entrusting the whole local seeds store to one group member on a rotational basis. This remains to be seen.

However, the results of this group are already visible. Seeds which were stored for several months have already been sown and harvested. Although yields have not been high, especially when compared to the hybrid maize, their advantage lies in a secure harvest in uncertain conditions. Farmers also mention the advantages of greater seed diversity: the more types of seeds stored, the more diverse the production. The increased togetherness which is becoming apparent in the group will greatly assist in future innovativeness and in other ventures. For example, on the basis of their initial results, the group is now planning to embark on a savings and credit scheme, and incorporate other activities. More recently, the group was advised to register formally and join the regional farmers' network, thus being able to exchange their experience with other groups.

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