

## 32 Burundi

### Community seed banks and the Welthungerhilfe programme in Kirundo

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#### **Purpose and evolution**

The Welthungerhilfe programme in the province of Kirundo in northern Burundi was concerned about the availability of seeds during the planting season. Farmers lost many seeds because of poor storage at the household level, theft was also common and some farmers tended to sell their seeds when faced with a cash shortage. The result was that many families did not have anything left from their own harvest and had to count on external sources of new seeds to plant. Building on an existing seed multiplication programme and personal experience, Welthungerhilfe's project leader and country director initiated the establishment of seed banks. The dual-purpose structures are used as storage facilities during harvest, but mainly as seed banks. Part of the harvest is stored to ensure there is enough for the next planting season, and usually a portion is sold to traders. The stores are called *Ikigega rusangi* in Kirundo, which means community granaries (Plate 22).

Welthungerhilfe developed the plan for construction of the storage facilities and a training programme for their management. This plan and approach later inspired other organizations (the Alliance 2015 Partner of Welthungerhilfe Concern International, the Belgian Technical Cooperation and the European Union's support programme in Burundi, Programme Post-Conflict de Développement Rural) to invest in seed banks as well. Several seed banks have been built, and the local government is starting a support programme for them. At first, fewer than 50 farmers participated in each seed bank, and only a few crops were stored. However, numbers have increased significantly: now, 300–1,000 farmers are involved at each of 14 seed banks, which are still being used as initially planned and designed. Recently, seed banks have been formally registered at the level of a notary.

Construction of an equipped 15m by 10m seed bank and a 10m by 10m germination storage area currently costs about 20,000 Euros (EUR; about US\$27,740). These funds were provided by the Welthungerhilfe project with co-financing from Germany's Federal Ministry for Economic Cooperation. Operation and maintenance costs are estimated at 5 per cent of the value of stored seeds or about EUR 1,000 per season for each seed bank. Seed

banks are currently functioning without further direct financial support from Welthungerhilfe.

All members pay a one-time subscription fee. This fee differs from seed bank to seed bank, ranging from 1,000 to 5,000 Burundi francs (about US\$0.65–3.23). Seed bank members must contribute 5 per cent of the quantity of seed they store, and this is sold by the management committee to cover operating costs. Welthungerhilfe's administrative and monitoring costs are not paid by the community.

## **Functions and activities**

The seed banks store both food and seeds to ensure food security and make seed available for the next season. Another aim is to guarantee proper conservation and protection against theft. The seed banks store beans, maize, rice, potatoes, sorghum, onions and cassava. Potatoes and onions have been newly introduced to the region, and special storage areas have been built for those two crops.

The seed banks have an important indirect impact: they contribute to regulating seed and food prices for smallholder farmers. This became particularly apparent in 2011 when local government prohibited the sale of staple food crops to traders to ensure that farmers conserved their crops for personal use and kept a minimum reserve of seeds. This had a major impact on the seed banks; they experienced a 40 per cent increase in use in 2011, which was sustained in the following years. The 14 seed banks currently store about 500–700Mt.

All seeds come from local crops. Farmers store some of their harvest in the seed banks to ensure that they have seeds for the next planting season. The banks play a very important role in the communities' food and seed production systems. Over time, more seeds have become available as crop yields have increased. The quality of seeds has improved compared with those stored at the individual level; for example, the rate of weevil infestation has decreased considerably as proper fumigation is carried out at the banks.

The seed banks also have a teaching function: farmers come together at the seed bank facilities and exchange experiences. A challenge remains in terms of maintaining good management of the stored products and the facilities.

## **Support**

In the beginning, the communities received financial and technical assistance to build the seed banks. The management team received training in management and operation of the facilities, fumigation materials, basic furniture and stationery, administrative training and grants for income-generating activities. After the seed banks were established, support was reduced to monitoring visits and refresher training courses. Welthungerhilfe staff provide further capacity-building support as follow up and fund improvements to the structures as new developments occur in the region.

At the moment, the seed banks maintain informal contacts and exchange experience mainly among themselves, as farmers have limited opportunities to communicate beyond their own communities. However, Welthungerhilfe has created links with regional organizations and crop research institutes. Recognition of the seed banks at the national level is a result of their connection with Welthungerhilfe. The Burundian government has taken the first steps towards supporting the organization of farmers into cooperatives by putting in place the necessary laws and regulations, and this has had an impact on the seed banks (see below). At the moment, there is no formal relation with the national gene bank.

## **Management and collaboration**

All seed bank members are smallholder farmers, who have access to the facilities in their location. No distinction is made between women and men. In Burundi, there are no specific roles for women and men in agriculture. In some cases, husband and wife work together in the field; in other cases, only the woman works in the field. Size of the land is an important factor: when the holding is less than 0.8ha, which is the case for 20 per cent of the farmers in Kirundo, the woman of the family usually works the land and the man works elsewhere, e.g. as a daily labourer for large landowners or as a small trader on a bicycle. Burundian society is progressing, and more attention is being paid to gender issues.

Withdrawing stored food and seeds from seed banks is based on a code of conduct consisting of rules defined by the members themselves when the seed bank is first established. At some seed banks, members opted for a requirement that both husband and wife be present when a withdrawal is made or, at least, written authorization of the absent spouse. This rule was a solution to the locally widespread practice of polygamy. Men with two or more wives (usually two, of which one is unofficial) often withdrew the harvest of the older wife to give to the younger one. There were also allegations that men would remove goods to sell for money to buy drinks, without the knowledge of their wives.

The seed banks contain both stockpiles belonging to individual members and stockpiles per crop designated for the overall management of the seed bank. Records of the stored material are kept by an elected committee.

Under the guidance of an elected management committee, members carry out daily operations with backup from Welthungerhilfe staff. Members use word of mouth to keep informed and to organize regular meetings. The challenge of dealing with embezzlement and mistrust among members and management has affected some of the community seed banks. Currently, all banks are officially registered as cooperatives, and this 'official character' is expected to contribute to improving governance by the management teams. Welthungerhilfe continues to advocate policies and laws that will make the seed system more supportive of smallholder farmers. It recently asked the ministry in charge of cooperatives to recognize the management structures of the seed banks, as Welthungerhilfe had been involved in their setup and training of the management committees.

Welthungerhilfe cooperated with the Institut des Sciences Agronomiques du Burundi (ISABU) on trials of various varieties of potatoes, which eventually resulted in the choice of one variety that was then promoted in the region by providing plants to farmers who would grow and multiply them. Currently, some farmers still produce potatoes although in small quantities. The seed banks were designed with a second storage area especially devoted to germination of potato seeds; however, the dryers are mainly used to dry onions produced through another Welthungerhilfe project. With ISABU involvement, Welthungerhilfe supported continuation of the potato production activity by linking some of the farmers who had been propagating the plants with private farmers in other provinces who were already advanced in the production of potato seeds.

The International Crops Research Institute for the Semi-Arid Tropics, based in Nairobi, provided the Welthungerhilfe programme with improved seeds of groundnut, pigeon pea and *Elusine* (grass species), which are better adapted to dry spells and have short growing cycles. Field trials were conducted by Welthungerhilfe, and the seed banks were used to store seeds. Currently, some farmers are producing the groundnut variety.

The Celian Zonal Research Centre is a research institute based in Tanzania for the introduction and promotion of yam, another drought-resistant crop that has shown encouraging results during field trials. This crop is not well known in the Kirundo, although more and more farmers are growing it. The produce is not stored in our seed banks, even though there is no special need for protected storage for this type of plant. According to our agronomist, yam has much more potential in this region than potatoes.

Welthungerhilfe has also cooperated with the Food and Agriculture Organization (FAO), ISABU and the Catholic Relief Service in the introduction of plants resistant to cassava disease (mainly mosaic virus) in the region.

## Policy and legal environment

The Direction Provinciale d'Agriculture et Élevage (DPAE) in Kirundo provided assistance to the Welthungerhilfe programme in terms of sensitization of farmers regarding the establishment of community seed banks. It also helped during the establishment of the seed bank management committees. In all its projects, Welthungerhilfe collaborates closely with DPAE field personnel: agricultural extension workers, of whom there is one per 'hill', the smallest administrative unit in Burundi; and agronomists, of whom there is one per 'commune'.

The new Burundian national agriculture policy (Plan national d'investissement agricole, 2012–2017) highlights the importance of the agricultural sector and smallholder farmers in Burundi in ensuring food security and reducing poverty. Support to farmer cooperatives is one way to improve agricultural productivity and improve the flow of food to markets. Seed banks could benefit from this support. To date, Kirundo has one of the only approved provincial investment plans for the agricultural sector. Construction and

support for seed banks are part of this plan and the budget is earmarked at EUR 1.875 million (EUR 125,000 for each of the 15 units); this amounts to 2.7 per cent of the total agricultural investment budget for Kirundo.

At present, people at all Welthungerhilfe-built seed banks have had training in how to set up a registered cooperative or at least a registered association, e.g. training on the constitution, membership, benefits, rights and obligations. All units have already submitted a plan for their particular structure and have introduced written regulations endorsed by a notary. They are now waiting for government approval of their registration. Welthungerhilfe has been cooperating closely with the Burundian Ministère du Développement Communal in the establishment of seed banks and the training of their members to become an officially registered cooperative.

### **Achievements and prospects**

In general, as a result of the seed banks, crop diversity has increased; potatoes and onions, which are new to the region, are now grown. The banks' facilities and the seed multiplication programme make seed available all year round. The food supply for member households has increased, as has the quality of food. Although we have not made precise calculations, the income of member households has likely increased as a result of the efforts of the community seed banks. Involvement of the cooperative movement at the provincial level is likely to further strengthen the banks. The new Burundian agricultural investment plan gives us hope that investments in agriculture will increase. The national plan focusses on boosting small farmers' capacity to ensure national food security. In this context, further investments in capacity building among farmers, in agricultural infrastructure and in building a network could lead to a national (or even international) system of seed banks – although not in the short term.