Masaka used to be the food basket of Uganda but it is one of the districts that was torn apart by war and epidemics, leading to a total collapse of the food supply. Between 1979 and 1985, the agricultural production force was further reduced by the migration of men and youth to urban centers in search of employment and quality education. In an effort to restore agricultural production in the district, several NGOs have initiated agricultural development programmes targeted at food security and income generation. Because many men were absent, all efforts were geared towards assisting women to generate on-farm income while balancing their many household and care roles. One such intervention was the introduction of exotic or cross-breed cows for zero grazing.

Introducing the forage chopper to women dairy farmers in Uganda

Technology alone is not enough

Introducing new technologies to improve development is not as simple as it sounds. In Uganda, a zero-grazing programme was initiated to improve the food sovereignty of rural women. By confining animals in a stall within the compound, access to land becomes less of an issue and women can feed them close to home. But women then need to spend energy on growing and processing forage to feed the animals. Introducing a forage chopper was expected to help solve this problem. However, this then set other mechanisms in motion.
Tedious, time-consuming and dangerous

Traditionally, women play a key role in the care of cattle. Even where men are the owners of large livestock, it is the women who perform most of the household labour devoted to the animals. With the introduction of zero-grazing animals, women’s roles within the livestock sector increased, as they were directly targeted for this enterprise.

The zero-grazing livestock production system is labour intensive. Forage processing for the animals requires growing forage just like other seasonal crops, harvesting, transporting it home, chopping it and then feeding it to the animals. These activities have predominantly been carried out by women, often assisted by their children. The high labour demands, coupled with a lack of sufficient land for forage production and forage scarcity for dry season feeding, means that the available forage must be used efficiently. Traditionally, the farmers chop the forage with a *panga* (a machete), cutting it into small pieces that can be easily consumed. This method is tedious, time-consuming, dangerous to the chopper and has a low output. A labour-saving chopping technology was therefore developed by the National Agricultural Research Organisation (NARO) to make this task less arduous: the forage chopper. In 2000, eight forage choppers were distributed to farmers in the project. Other farmers were required to buy the machines but due to their high cost, many opted for alternative technologies such as making local versions of the NARO design with cheaper materials, or re-constructing it and adapting it themselves.

In developing the forage chopper, it was assumed that the technology would save time and labour for the women by reducing chopping drudgery as well as increasing the productivity of their animals through better quality feeds. In this way, women could get more control over their own labour and this would free them for more income-generating activities. A research study examined this assumption and looked at the effectiveness of the forage chopper as a labour-saving technology for the women.

**Saving labour for whom?**

The forage chopper does in fact ease the chopping activity, making it safer and allowing women to get assistance from their family in processing the forage. However, the introduction of one labour-saving technology does not imply that women have control over their saved labour. In male-headed households, it is frequently observed that women spend more time in the fields, assisting the men. On the other hand, men very rarely assist their wives in tasks related to dairy production. Clearly, decisions about technologies have implications for power and social relationships, and the real effects are sometimes opposite to the effects intended by the designers of the technology. Moreover, taking up new technologies is not a simple process. New technologies are often considered to be threatening and challenging, and must be successfully “domesticated” or “tamed” before they can be incorporated into people’s lives.

For the zero-grazing project, the forage chopper had been pre-tested with the farmers during the technology development process before it was disseminated further. Nevertheless, after over three years of using the technology, it emerged that the forage chopper needed to be reconstructed to suit the women’s needs during the “domestication” process. Whereas the original NARO design worked perfectly well from the designers’ point of view, the users found it constraining in design and cost. Women found that it required more time to operate, they needed to adjust the chopper’s height to allow their children to help out with the chopping, and the cost was prohibitive for the subsistence...
Women farmers on food sovereignty: Bangladesh

My name is Shalbali Morang. Our main problem is always the availability of water and this seems to be getting worse. Rains are late and the water level is getting lower. This is what determines whether we harvest enough rice or not. When we don’t, we need to request a loan in order to buy food. Sometimes we sell some of our animals or fish, or I earn money sewing clothes. With that money we go to the market or buy rice from a neighbour.

My husband and I farm 300 decimals (which is slightly more than one hectare) in the village of Dhairpara, in the district of Mymensingh. We are Garo people, so we always share the workload between husband and wife. We are also helped by our three children. We basically grow rice, as do all our neighbours. For a long time, we have been using hybrid seeds, which give higher yields. But these plants need more water and also fertilizer, so in the end they are more expensive to grow. This is one of the main things we learned from the project we are working with, run by Caritas Bangladesh. In this project, seeds of traditional varieties are collected and made available to us all. Last year we obtained 5 kg of seeds from Mr Matindra Mankhin, one of our neighbours and one of the most active participants in this project. Some of the participants are even running their own breeding programme! Mr Mankhin has now seeds of more than 90 different varieties. Even if yields are slightly lower, we are sure to harvest enough. We complement this with the crops from our kitchen garden and with fish from our pond.

Interview and photo: Jorge Chavez-Tafur, editor LEISA Magazine.