

Using conservation farming to improve food security in Zambia



Photo: Geoff Crawford/Tearfund

Tearfund's partner, the Evangelical Fellowship of Zambia (EFZ) identified three districts where help was needed to improve food security in 2002. A needs assessment showed that the lack of food in the area was caused mainly by the farming practices used.

The assessment also showed that some farmers in the area had managed to have a successful harvest in spite of drought conditions. This was due to their knowledge and practice of conservation farming methods over a long period of time. These farming methods aim to conserve soil and water while at the same time providing a sustainable livelihood for the farmer.

The food security programme

EFZ worked alongside village committees to design a food security programme. This programme targeted more than 2,000 households. One of the key parts of the programme was the promotion of conservation farming in place of the conventional farming methods that were being widely used.

Working with the government

Due to the proven benefits of conservation farming (see section below) the Government of Zambia had already been promoting the technology across the country. EFZ decided to work alongside the Ministry of Agriculture and the Conservation Farming Unit to distribute information about conservation farming to the households targeted by the programme. Each farmer was also provided with seed and fertiliser.

Training

Community meetings were held in which the programme was explained to the target households. Later on, workshops about conservation farming were carried out to train people to become trainers at community level. These trainers were expected to train individual farmer households through village-based workshops. Farmers were encouraged to form and join co-operatives.

Benefits

After the harvest the households realised that the fields farmed, using conservation methods, had yielded more than those farmed more conventionally. Other surveys confirmed that conservation farming produced on average 1.5 tonnes more maize per hectare than conventional farming. In addition, the techniques used in conservation farming meant that less fertiliser was needed.

Learning points

The knowledge and experience of conservation farming is increasing in Zambia, and gradually more households are adopting the techniques. EFZ's review found the following:

- The use of even just one or two conservation farming techniques is beneficial. Farmers give themselves a chance to test the benefits and gain confidence before using more.
- Some farmers decided to introduce conservation farming methods to only one of their fields. This meant that they could compare the results with those of conventional farming techniques. They usually found that conservation farming techniques brought higher yields.
- Success related to conservation farming will vary between regions, between crops and over time. This is mainly due to changes in weather patterns.
- Many of the benefits of conservation farming will occur gradually. It is worth investing in conservation methods, but it will probably take time to see the full benefits.