

# Training centre provides demonstration plots and research support for sustainable agriculture and agroforestry

Zambia Chongwe and Rufunsa Districts

**The Kasisi Agricultural Training Centre provides research and training support for small-scale farmers working to incorporate and implement more sustainable agricultural practices and engage in agroforestry.**

The Kasisi Agricultural Training Centre provides agricultural training, research, and marketing support to over 10,000 small-scale farmers in the Chongwe and Rufunsa Districts of Zambia. The area has suffered wide-scale deforestation due to a high demand for firewood and charcoal. Furthermore, the intensive use of chemical inputs to agriculture has degraded soils. These issues are further exacerbated by oncoming climate change-induced challenges including drought. Therefore, the Training Centre focuses on teaching and supporting the implementation of land restoration and sustainable agriculture techniques. More specifically, the Training Centre provides demonstration plots used for hands-on learning and research to support farmer testing of sustainable agriculture techniques. For example, the use of crop rotation, intercropping, composting, native seeds, nitrogen-fixing shrubs and cover plants have all been encouraged and supported through the Training Centre's work. These efforts have helped increase the diversity and quantity of food available in the area. Additionally, agroforestry is carried out with the purpose of restoring degraded land, improving soil fertility, and increasing biodiversity. The trees planted not only provide non-timber forest products including fruits such as papayas, mangoes, oranges, and lemons, but also serve as windbreaks and living fences. "Biodiversity fairs" are hosted so that farmers can engage in mutual learning exchanges about various topics including crop diversification, apiculture, and agroforestry techniques. The Training Centre has also created a village saving initiative enabling women to access capital.

## Case effectiveness on

### Climate change

**Mitigation:** Not reported

**Adaptation:** Positive

Impact assessments found that resilience to drought and other climate change related weather fluctuations has increased. Crop yield is also reported to have increased with the maize yield in one particular project area increasing from 1,400 kilograms to 2,400 kilograms in two seasons. In another project site, the amount of food retained for home consumption was found to have increased by 170%.



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Targets poor/disadvantaged  
Conducted at landscape scale

### Intervention type

Food production

### Ecosystem type

Terrestrial production

### Climate change impacts addressed

Loss of food production

Drought

### Instigators

Local NGO or CBO (eg. indigenous)

### Societal challenges

Biodiversity conservation

Climate change adaptation

Disaster risk reduction

Economic and Social development

Rights/empowerment/equality

Food security

### Literature info

Grey literature

Case methodology not reported

### External case resources

Read resource 1

## Ecosystem health

**Ecological effect:** Positive

Monitoring has found that the fertility and structure of local soils has improved and micro-organism biodiversity has increased. The efforts have also reportedly facilitated nutrient cycling and improved water storage in soil. The Training Centre's efforts have been found to have restored tree cover to a badly deforested area.

## Socioeconomics

As a result of increased yields, food security has reportedly improved. Women have reportedly taken on a greater share of leadership positions. Income sources have also reportedly been diversified likely contributing to greater economic stability.