

**FOUNDATIONS FOR FARMING
CONSERVATION AGRICULTURE TRAINING COURSES**



Our Mike Campbell Foundation trainees proudly display their compost heap made from materials collected from the local environment

Conservation Agriculture, as defined by the **Food and Agriculture Organisation of the United Nations (FAO)**, is receiving growing acceptance internationally as the optimal crop production system, and includes all farming systems which involve simultaneous adherence to the principles of:

1. *Continued minimal soil disturbance* (including NO soil inversion) – to retain root channels and encourage the build-up of soil biota populations and hence soil structure;
2. *Permanent organic soil cover* (either by living crops or by crop or other plant residues) – to diminish the impact of raindrops and reduce water runoff (and consequently soil loss); and
3. *Diversification of crop species growing in sequence and/or associations* (especially crop rotation) – to increase the diversity of food sources and hence soil biota, especially predators, and break pest and disease cycles.

In Zimbabwe, where rainfall is often limited to short intense periods during the summer and heavy thunder storms are common, ploughed land tends to be washed away and only a small amount of the available moisture is retained. Traditional methods of ploughing have also sought to extract from the soil without protecting it.

Our conservation agriculture training emphasizes the principle of zero-tillage to retain the structure of the soil and the importance of covering the soil with a protective layer of mulch, which we teach the trainees to make themselves.

Our five-day training programme comprises:

1. Introduction to our *Foundations for Farming* training
2. Principles of Conservation Farming.
3. Soil and Rainfall.
4. Eating an Elephant (dividing up tasks in terms of people, requirements and timelines)*
5. Making compost with available natural products (cattle manure, hay, vegetable products etc)
6. Beginning the season (specialized conservation agriculture principles for land preparation, composting and planting)
7. Principles of watering
8. After germination.
9. Crop care and weed control (minimized by effective composting)
10. Harvesting
11. Crop rotation
12. Conclusion.

The essentials of the training are:

1. Compost production
2. Land preparation (using specialised no-till methods)
3. Liming and, if necessary, fertilisation (if the soil is depleted)
4. Planting
5. Weed control
6. Thinning
7. Top dress fertilizer (if required/available)
8. Harvesting and storing the harvest
9. Mulching land for next season
10. Retaining and storing seed for the following year

*There's an old saying: "How do you eat an elephant? One bite at a time." During our *Foundations for Farming* training, the trainees are taught how to manage projects like weeding an entire field, which can be overwhelming. However, if they mark off the field in long, narrow strips with string, they will be able to focus weeding on each strip efficiently, within a specified time.

We also encourage group work because it makes these labour-intensive activities more enjoyable and satisfying and trainees respond well to challenges from each other.

When the trainees return to their communities, they are asked to teach what they've learnt to between 5 and 10 people. Teaching the principles reinforces what they've learnt and by teaching others they are able to uplift and inspire their communities. They are also encouraged to teach them the importance of protecting the environment, especially the indigenous trees and forests which are being decimated in Zimbabwe to a very serious degree.

