

Some of you have been asking about our Agricultural Development and the Agriculture-Training Program. In January we finally found and hired a qualified young Christian brother by the name of Francis to oversee our agriculture development and training program. Healing Hands of Nashville has been assisting us in this effort, providing technical and some financial assistance. Richard Myers (of Healing Hands) has now made about five trips over to assist us and, in fact, has just arrived with his wife last night in order to assist us in two agriculture workshops over the next two weeks.

Below is a picture of our new banana grove. When finished this grove will contain over 150 banana trees. Although these banana trees will provide some cash revenue for the school, our primary purpose in this effort is to provide a demonstration for training students and church leaders in how to grow bananas.



The three pictures below show other aspects of our agricultural training. Pictured below is the low-tech, drip-irrigation section of our program. Our agriculture training for the students begins with their learning how to dig raised beds and set up the drip-kits (below).





The preparation of raised beds (pictures above and below) involves digging a long ditch about two foot deep, followed by filling the ditch with compost (which provides fertilizer for the vegetables). A layer of dirt is then put on top of the compost in which the seeds are planted (two rows on each side of the raised bed). Straw (dried cut grass) is then placed over the raised bed and two drip lines (plastic hollow water-lines with little holes in it through which the water leaks out) are laid on top along the two rolls of seeds (vegetables). Water is put into a five-gallon bucket (pictured above) and the force of gravity forces the water through the drip-lines and out the tiny holes to water the vegetables. The straw helps keep the water from evaporating too quickly and allows the soil to remain moist.

Pictured below is a more advanced level of drip-irrigation that we have now installed on our campus. Instead of using a mere five gallon bucket, we use a 10,000 liter tank up on top of the hill that feeds hundreds of drip lines. In the picture below you see a 1.5 inch water line (running down the hill from the large tank above) from which all the small drip lines feed the water to the vegetables. Our students are training in how to do both the low-tech and the large-scale drip-irrigation systems. Our hope is that students will learn (and envision) how they can start small and increase their potential production over time. If so, then they not only will be able to provide food for their own families, but also for others who are going hungry (e.g. widows and orphans).



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Because Zambia has a moderate climate, the people of Zambia can grow fruits and vegetables all twelve months of the year, but only if they water the crops during the seven dry months of the year when it doesn't rain at all. Although some Zambians have learned to grow vegetables by watering their gardens by hand with a bucket, the most efficient means to water crops is by using drip-irrigation during the evening hours (which slowly moistens the soil and allows the vegetables to slowly soak in the water). One can also water more fruits and vegetables by using drip-irrigation. The use of sprinkler systems is a not very efficient way to water crops as much of it is absorbed in the air (which is very dry) or wasted watering the weeds as well as the crops.

Pictured below is an example of the final project. Pictured here are rows and rows of cabbages that we will soon harvest and sell in the marketplace. Our students and staff do eat some of our harvest, but the bulk of it is now being sold to raise money to continue our agricultural development at Mapepe and pay our agriculture staff.

– David & Lorie

