



Three Kids Who are Changing the World

By Kristof Nordin

The necessities of life come from nature. If we think about the things that are essential for human beings to live—nutritious foods, clean water, fresh air, building materials, fuel, fibers, even natural medicines—all of these things come from the environment. The type of environment that we surround ourselves with will often have a direct impact on the quality of our lives. If our air and water become polluted, it will have a negative impact on our health. If we only plant one or two types of crops in our field, it becomes difficult to provide our bodies with all the nutrients we need to grow and stay healthy. And if we allow practices that deplete our surroundings, we end up creating “environmental poverty.”

In Malawi, a small country in southern Africa, the majority of the people are subsistence farmers, meaning that if they don't grow it...they don't eat. In the past, Malawi's environment was vibrant and full of diversity. The elders had access to hundreds of different plants and animal foods that could be found in the forests, lakes, fields, and streams. When 'conventional' agriculture began to take over, it discouraged the use of all of this natural wealth and instead promoted the clearing away of this diversity to plant only a handful of crops. Now, many of the natural areas have been—and continue to be—converted exclusively to the planting of corn (maize). This has led to many problems such as malnutrition, deforestation, erosion, floods, and droughts.

Corn originated in Central America and was only brought to Africa a few hundred years ago. Since it is not adapted for growing in African climates, many years of research, time, and money have had to be spent on the development of new varieties of corn that are better suited to the African growing conditions. All the while, traditional crops are being ignored, forgotten, and even stigmatized. Traditional crops, such as millets and sorghums, that began in Africa have had thousands of years to adapt to the continent's growing conditions. They are often drought resistant, pest resistant, and able to withstand fluctuations in climate, eliminating the need for 'improved' varieties developed by researchers. Despite all of these benefits, in countries like Malawi, traditional crops are now only grown in a handful of isolated areas and, if they are being eaten, it is often as a last resort because these foods are now generally considered to be “poor people's food.”

Malawi is located in the tropics, which means that foods should be growing and available throughout the entire twelve months of the year. There is not a single time of the year that is too hot or too cold for plants to grow. When a person looks at the harvest seasons of traditional foods, one finds that there is something to be found in every season: hot, dry, wet, cold. By taking advantage of nature's diversity and natural harvest times, nutritious foods become available on a daily basis without the need for additional labor or expensive irrigation systems.

Three Malawian boys have recently discovered this incredible secret! Meet Hardwell, Howard, and Junior. The three of them live in a small village in Malawi known as Chitedze and they are all in form-three of secondary school (the equivalent of being juniors in an American high

school). They have realized how important it is to plant a diversity of food crops and they have begun to transform their own homes to make sure that their families have access to year-round food security. They have also realized the importance that taking care of the environment and planting diverse foods can play in contributing to the improvement of their country's health, nutrition, and future.

Let's take a tour of their homes:

This is Howard's house. He lives with five brothers, one sister, and his two parents. At his house there is a well that was dug by hand and provides water for many people in the community. Due to Howard's efforts to harvest rainwater into his soil and not allow for any runoff, this year (2011) is the first year since their family moved into their house 9 years ago that their well has not run dry. This means that his family and others in the community



can actually see their water table rising as Howard's efforts to protect his environment are paying off. He has also designed his family's back yard to allow for any water that is being used during the washing of dishes, clothes, or while cooking to be recycled through small garden beds that provide his family with over 20 different types of foods (including fruits, vegetables, staples, fats, and legumes).



Junior lives with his grandmother, who is a retired school teacher. Along with Junior, there are six kids living together in his house. Junior has taken the initiative to design his family's bathing area so that all of the runoff grey water is absorbed by water-loving plants. He has chosen to plant bananas, coco yams, and sugar cane. In just over two years he and his family have eaten almost 10 huge bunches of bananas just by using his resources wisely. These plants that he has chosen absorb the water very quickly, so there is never stagnant water or mosquitoes breeding in his bathing area...a very important consideration in countries like Malawi that have problems with malaria.



Hardwell lives with his mother, father, and four sisters. He has recently moved out of his house to attend a boarding school where he lives with many other students. He has already begun to establish gardens around his new school and to teach his fellow students about the importance of protecting Malawi's natural resources. Before he left for school, he helped his family establish several gardens near their house. One of his favorite gardens is pictured here at the base of the family's mango tree. It is a very common practice for Malawian families to sweep the soil bare around their houses, thinking that this keeps the area clean and free from pests. What happens instead is that these families often end up creating mud in the rainy season, dust in the dry

season, and in the process sweep away all of the nutrients that the soil needs for plants and trees to grow strong and healthy. Hardwell's mango tree had failed to give his family any fruit for several years due to the depletion of the soil nutrients caused by all of this over-sweeping, but when he began to take care of the soil around the tree and plant foods that also help to feed the soil (like beans and other nitrogen-fixers) his mango began to give fruit again! Now, Hardwell's family not only eats mangos, but also almost 25 other foods just from the small area around this tree...all from a small area that used to yield nothing! He has even used the tree itself to support foods that like to climb, like passion fruits, beans, and air potatoes. This is called "stacking food" and allows for the best use of space within a small amount of land.

These three boys represent the future of Malawi, and they have just recently received their internationally-recognized Certificate in Permaculture Design. This means that they will be able to apply their skills and knowledge, even professionally, long into the future. They are proud to be Malawian and are not ashamed to be planting, growing and eating Malawian foods. Many people consider the use of ancient knowledge to be 'backwards,' but Howard, Hardwell, and Junior can attest to the fact that there is nothing 'backwards' in being *wise*. They have learned that when we begin to apply the wisdom of our ancestors to modern life, it is *only* then that we can begin to achieve true 'progress and development.'

Kristof Nordin has been living and working on community development issues in Malawi, Africa for over 14 years. He has a degree in Social Work with an emphasis in Community Organizing. His wife, Stacia, is a Registered Dietician and has been working to combine sustainable agriculture practices with improved nutrition. He and his wife are both holders of Diplomas in Permaculture Design from the Permaculture Institute in Australia. Together they have an eight year old daughter, Khalidwe, who was born and raised in Malawi. For more information on their projects, visit their website at www.neverendingfood.org.