

## **Nurturing Nutrition in Nairobi, Kenya**

**University of Florida**

**Shannon Regan (United States of America; University of Florida BS, Yale University MEd), Merina Ingram (United States of America; University of Florida BS), Teagan Milford (United States of America; University of Florida BS), Raqib Valli (Republic of Kenya, Yale University MF)**

### **Summary**

#### **Two-sentence summary of your project**

The Nurturing Nutrition in Nairobi project was created to address the nutritional deficiencies and improve dietary diversity of students supported by the Ruiru Rehabilitation Center, a rehab orphanage for youth in Ruiru, Kenya. Another aim of the permaculture farm was to grow valuable crops for sale to ensure sustainability of the farm and to further support the center's financial needs.

### **Project Description**

#### **How did you decide what issue(s) you wanted to address and what approach(es) or strategies you chose to implement in your project?**

This project was the result of a collaboration between Kenyan native, Raqib Valli, and members of the Gainesville-based non-profit, Strong Roots Movement. Upon hearing about the efforts of Strong Roots Movement to address food insecurity among underserved youth in Gainesville, Raqib Valli connected with Shannon Regan in hopes of starting a similar project in his home country.

While Nairobi occurs in a highly favorable region for agriculture, the informal settlements on the cities northern and southern peripheries have been described by the UNHCR as 'some of the most food-insecure places in the world', representing 'some of the 'most pervasive violations of human rights globally'. 54% of the approximately 5 million residents of Nairobi that live in these informal settlements are children (World Bank, 2017). Darky and Kariuki (2013) found that calcium and protein deficiencies are particularly prevalent amongst this demographic, affecting over 80% of children, handicapping children as they attend school, attempt to find work, and generally escape generational cycles of inequity. These considerations prompted us to develop a project related to malnutrition and dietary diversity in Kenya. Because of our combined experience with grassroots efforts, we also knew that community-based efforts were key implementing long-lasting solutions.

#### **Why did you choose your host site to work in? In what ways did local relationships support you or contribute to the project?**

The center we connected with, the Ruiru Rehabilitation Center (RRC), represents a microcosm of the many food security challenges faced by non-governmental institutions aiming to mitigate suffering in Nairobi's informal settlements. RRC has been providing education and vocational training to some of the most disadvantaged children in Nairobi since 1995. Analyses by a student team member as part of a previous project found that inconsistent funding prevents the school from offering its students a regular daily meal, and attendance has fallen as a result, disproportionately impacting girls, with only 46% of students successfully transitioning to secondary school (compared to 84% across Kenya nationwide) (RRC leader, personal communication). There is urgent need to provide ecologically- and economically-sound models for the provision of nutritious food and clean water at RRC and similar schools. Local relationships were vital to the success of this project. We were able to connect with the Ruiru Rehabilitation Center through Raqib's local knowledge. We also partnered with two other local NGOs including Harvesting for Good – East Africa and with Drawing Dreams Initiative. Harvesting for Good has worked alongside our team throughout the length of the project, providing permaculture training and support to the center and connecting with local suppliers. The Drawing Dreams Initiative visited the center over the summer to address gender concerns with respect to food systems and provide reusable menstrual products so the center's girls could be better involved in farm educational activities.

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### **What changes or adjustments did you make to your original plans, and why?**

Our original project included the use of meat products, like chickens, which stemmed from academic research which highlights the nutritional benefits of eggs on childhood development. We later had to switch to an entirely plant-based agricultural scheme at the request of the center, which practices vegetarianism. Additionally, we originally planned to install two water-harvesting tanks until later irrigation estimates showed that an existing tank would be sufficient. This freed up funds to be used to hire an extra gardener and buy cooking items.

Lastly, our initial idea was to build a farm primarily to grow food for consumption at the center. After talks with the center about their financial needs, we then decided to use half of the farm for subsistence and the other half to grow crops that would go to market and provide extra funds for the center. Upon reflection, this enables self-sustainability of the farm and better meets the needs of the Ruiru Rehabilitation Center.

### **Did other fundraising efforts contribute to your project? What were they?**

No other fundraising efforts contributed to this project.

### **Are there opportunities for continuing your work on this issue? If so, please describe.**

Yes, there are more opportunities to continue working with the Ruiru Rehabilitation Center to improve the children's food security and other living standards. The center was welcoming of the Nurturing Nutrition in Nairobi project and has invited more involvement, including work-stays at the center, more farm training, and other funding for infrastructure, education, and employee hiring.

If more opportunities for funding arise, the team would be happy to visit the center and recruit more professional input on the project. In the long-run, there is also the possibility of writing an evaluative paper on the project to more empirically assess the impact of this project on the children's nutrition and on the center's economic welfare.

## **Reflection**

### **How do you define peace?**

Peace is the realization of dignity and well-being for all of the world's people, and the absence of conflicts and social structures that prevent this state of well-being.

### **How does or will your project contribute to peace? Short-term? Long-term?**

In the case of Nurturing Nutrition in Nairobi, we are contributing to peace in Ruiru by addressing food insecurity – which negatively harms nutrition and bodily health, educational outcomes, and can increase poor mental health. Our project will help to alleviate these compounding issues among children in Ruiru by addressing food insecurity in the short term and improving development outcomes in the wider community over time.

### **What did you learn about the dilemmas, challenges, or conflicts that underlie the targeted issues or utilized approaches/strategies?**

Considering the time difference between Ruiru Kenya and Gainesville, Florida, communication was certainly one of our greatest challenges. The time differences were compounded with other demands of

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our time on all sides – our team members had school and work, while our NGO partners had other projects, and the center had to continue regular scheduling. Thankfully, we were able to manage our time to meet frequently and did not encounter a language barrier.

### **Has your project changed the way you think about the world? How has it changed you?**

Working with the Ruiru Rehabilitation Center on this project gave me new perspective about underserved communities in developing nations. Although I knew all the statistics about malnutrition in Kenya, and have even personally experienced food and economic insecurity in my youth and my work with communities in the States, the reality of health and economic disparities in Kenya is much more intense. This experience instilled a greater sense of urgency to address these issues and has reaffirmed my resolve to pursue a career in sustainable agricultural development.

On the positive side, I saw a real sense of community at the Ruiru Rehabilitation Center that I have never experienced before this. The community has a communal culture and work hard to support each other through these hardships – this is something I think that the United States could learn from and it's a quality I hope to build in myself.

### **Personal Statement**

"The resilience of these kids is astonishing. Through this project, we wanted to foster a sense of ownership over their land and health to give them the best chance to live a dignified and fulfilling life."

- Shannon Regan