

# Stories from the Field

**Alessandra Grasso, a US Borlaug Fellow, has spent the past 5 months in Busia County, Kenya working with local farmer groups to raise awareness of the value of biodiversity for food and nutrition.**

**Here, in the third of a series of stories from the field, Alessandra shares her experience of the school gardens, which have become a safe learning space where pupils can observe and practice new climate-smart methods and technologies to sustainably grow local, nutritious and healthy foods.**

School gardens that supply or complement school feeding programmes have been identified as best practices for mobilizing biodiversity and improving dietary diversity in school children by the Biodiversity for Food and Nutrition (BFN) Project. In Kenya, these practices are especially important to provide nutritious meals to growing children and adolescents, who may otherwise go hungry until the following school day.

In Busia County, Kenya, the BFN Project is working with the Department of Education, along with a local community-based organization Sustainable Income Generating Investment (SINGI) and the Departments of Agriculture and Health, to establish garden demonstration plots at seven primary and secondary schools.

Teachers from the selected schools took part in Training of Trainers (ToTs) workshops, where they learned the importance and practice of school gardening to improve child and adolescent nutrition. The newly trained staff were then able to take their own unique approach to introduce and implement the BFN garden at their schools.

Now equipped with local trainers, schools in Busia's seven Sub-Counties broke ground and planted various local vegetables, such as spider plant, amaranth, vine spinach, jute mallow, slender leaf, black nightshade, and African kales, as well as fruit trees such as avocado, jackfruit, and passion fruit.



*Photo: Alessandra Grasso*

Currently, about 300 pupils are involved in preparing, planting, maintaining, and harvesting their school garden, simultaneously learning about sustainable agricultural practices, climate-smart technologies and methods, and the nutritional value of diverse, locally available foods.

Given the diversity of Busia's landscapes, cultures, and food, as well as assets and challenges, each school is taking its own approach to adopting the practice of gardening.

For instance, Burumba Secondary School partnered with a neighbour to gain access to more fertile land for cultivation. The determination, commitment, and creativity of students, teachers and staff drives the progress and success of their gardens.



*Photo: Alessandra Grasso*

A BFN garden behind classrooms at Burumba Secondary School in Matayos Sub-County displaying keyhole, multi-storey, and raised-bed gardens.

In Samia Sub-County, Malanga Primary students and staff have been harvesting and eating seasonal vegetables from their garden just one and a half months after the rains started.

The school principal is leading the efforts to establish a school garden by engaging parents, pupils and staff in the process of procuring seed, preparing garden beds, planting, maintaining, and harvesting nutritious vegetables.

At Amagoro Primary School in Teso North Sub-County, an enterprising young teacher trained by the BFN project engaged parents, students, and staff to work in the school's new garden.

Harvest from the garden is being sold to community members, particularly parents of the students, and profits are being used to buy additional garden inputs and to pay school fees for the most hard-working students.

The garden has grown two-fold in just three months, and will hopefully soon provide enough produce to start a fully-fledged school meal programme and to sell to the wider community.



Photo: Alessandra Grasso

Pupils from Malanga Primary School in Samia Sub-County preparing a garden bed to plant local vegetables.



Our BFN "Training of Trainers: A Guide to Gardening Technologies" outlines strategies for successful garden construction according to location and available resources and materials.

## From the Source



Joseph Willy Ouma (front centre), the head teacher at Malanga Primary School in Samia Sub-County, shares, in an interview with Alessandra, how he has rallied teachers, students, and parents to start a school garden after attending a BFN training workshop in December 2014.

*"Fortunately we are not limited by space, but we face many challenges in this area such as drought, floods, poor irrigation and rocky soils. We depend fully on rain water which is sometimes unreliable. Currently we are growing many local vegetables that my grandparents used to plant and eat, such as spider plant (saka), cowpeas (ekhubi), slender leaves (omuto), pigweed (emboka), pumpkin (esebebe), black nightshade (esuga), amaranthus (edodo) and spinach. Students are already harvesting and eating these foods in our school feeding programme. These kinds of vegetables not only provide food but also provide medicinal value to our bodies. The garden is patronized by Madam Hazel Apondi, Mr Calvince Owino and Madam Monica Obeko. We received vegetable seeds from the BFN project and we sourced additional seeds from the community. Additionally, the National Bank of Kenya has promised to provide tree seedlings to improve on our environment. Our immediate future plan is to plant local food crops, like millet, sorghum, cassava, and sweet potatoes, among others, which we hope will be able to sustain our school feeding programme".*



Busia County is prone to long periods of drought and has inadequate or nonexistent irrigation systems. Therefore, preservation of leafy vegetables is an important activity that can enhance household food security.



Photo: Alessandra Grasso

A student tending to the garden at Amagoro Primary School in Teso North Sub-County.

In Bunyala Sub-County, St. Anne's Girls Secondary School started not only harvesting, but also drying and preserving leafy vegetables, using traditional methods. Drying adds value to leafy vegetables, since it lengthens shelf-life while preserving their nutritional value. Trained staff from all seven project-supported schools are emphasizing the nutritional value of traditional leafy vegetables, including the BFN garden at Igera Primary School in Nambale Sub-County that displays a diversity of leafy vegetables and highlights their nutritional value on plant labels.

### Our Partners

The GEF 'Mainstreaming biodiversity for nutrition and health' initiative is led by Brazil, Kenya, Sri Lanka and Turkey and coordinated by Bioversity International, with implementation support from the United Nations Environment Programme (UNEP) and the Food and Agriculture Organization of the United Nations (FAO) and additional support from the CGIAR Research Program on Agriculture for Nutrition and Health.

An additional and significant attribute of the BFN school gardens is the provision of a safe learning space where pupils can observe and practice new climate-smart methods and technologies to sustainably grow healthy foods.

The BFN Project plans to further develop the initiative to integrate general nutrition education, cooking classes, and value-addition into garden activities.



Photo: Alessandra Grasso

Students at Igera Primary School in Nambale Sub-County have labelled each plant in their garden to raise awareness of the nutritional value of traditional vegetables.

Only one season into the project, the schools and pupils are already aware of the nutritional value of biodiversity and are determined to share their knowledge and experience with their families and the broader community to enhance the nutrition and well-being of Busia County.