

## Why African vegetable production and consumption have to be increased

Vegetable production in sub-Saharan Africa has been almost static for over 40 years and annual vegetable consumption is less than 40 kg per capita compared to the recommended minimum of 73 kg - amongst the lowest in the world. A key constraint is that there is widespread reliance on old varieties or imported seeds which are often poorly adapted to local conditions.

Adequate seed supplies of adapted varieties could make all the difference. Smallholder farmers need access to high quality seed of adapted vegetables at affordable prices, and the local seed sector is their main source of supply. Vegetables are a major source of income and job creation and our best source of micronutrients, and expanding vegetable production and consumption should start with improving the seed supply. This can be the trigger for improving rural development and nutrition.



Commercially important vegetables like tomato and onion are major sources of income for farmers. Popular indigenous vegetables are also important sources of micronutrients and in the case of the leafy indigenous vegetables they are also a major source of vitamins and protein for the poor.

The nine year vBSS program aims to increase vegetable production, marketing and consumption to foster rural development, reduce poverty and improve the livelihoods and nutrition of poor women and children in particular.



## The Innovation Platform: Where ideas meet practice

The Innovation Platform is a public-private partnership within the vBSS program that aims to develop and release new and improved vegetable varieties, promote seed production and commercialization, and increase vegetable consumption in each of the four hub countries and neighboring spoke countries. Platform members advise the Regional Breeding Units (RBUs) on breeding strategies, review progress reports, offer guidance for adjusting work plans and shaping strategies, and assist in the coordination of activities with national agricultural research and extension systems (NARES), regulatory agencies, and the private sector to facilitate and accelerate the variety release process. It is expected that in the future, members will turn their attention to downstream value chain activities, such as improving vegetable production systems, marketing, consumption, and nutrition.

## Baseline surveys track progress

Baseline surveys provide data for monitoring and evaluation of the vBSS program. The surveys, which took place from April to August 2008, covered four hub countries and assembled information from 23 spoke countries. Information was

collected through a review of available literature; discussions with over 50 stakeholders in public, private and NGO sectors; and formal surveys in three countries involving over 1000 farmers in vBSS target agroecological zones; the formal surveys were supported by participatory farmer focus group discussions in four countries.

The baseline report offers an excellent overview of the status of the seed systems in sub-Saharan Africa and the institutional framework that addresses these systems. It covers issues related to seed improvement, matters related to seed health and plant protection and quarantine procedures, and specifics on seed systems in each of the hub countries. There are four separate hub country reports, each of which includes information on their respective spokes and results of the formal surveys. The detailed results of the formal surveys are also presented separately. Each hub country report includes specific details not included in the synthesis report and can be used independently.

## Field days promote improved vegetable technology

A field day was organized in Ghana in August 2008 at the Crop Research Station of Kumasi-Kwadaso in collaboration with the Technical College of Agriculture and the Export

Marketing and Quality Awareness Project, a national program to promote Ghana's vegetable exports. More than 50 participants from the Vegetable Producer & Exporter Association, the Seed Association, and second-year extension students of the Technical College of Agriculture participated. AVRDC - The World Vegetable Center's hot pepper lines, tomato lines, okra, and African eggplant lines were grown in demonstration plots under different management systems: low pressure drip irrigation, ridging, and plastic mulching.

In the last two years, the Crop Research Institute of Ghana has identified and selected improved the Center's breeding lines of pepper (4 lines) and tomato (3 lines), as well as high-potential cultivars of eggplant and okra. vBSS collaborated with the organization during the field day to promote improved vegetable production technologies developed by AVRDC- The World Vegetable Center and NARES partners.

Farmers appreciated the performance of 4 pepper lines and 2 African eggplant lines from the Center. Seed multiplication plots for the superior germplasm have been established to increase seed for a variety release test.

## The aims of the vBSS program

The project is developing varieties of both commercially important crops such as tomato, chili, sweet pepper, onion and cabbage as well as African indigenous vegetables with:

- pest and disease resistance
- tolerance to drought and heat stress
- low requirements for pesticides and fertilizers
- high economic yield
- good consumer appeal
- high micronutrient content

The program has established Regional Breeding Units (RBUs) to produce and distribute vegetable varieties for the four agro-ecological zones of sub-Saharan Africa. Located in Tanzania, Madagascar, Cameroon and Mali, these RBUs are developing varieties for the warm arid, warm humid, cool tropical highlands and higher latitude zones and strengthen regional vegetable breeding and seed systems. Engaging public-private partnerships and stakeholders from non-governmental



organizations (NGOs), these RBUs are the regional "hubs" to reach out to neighboring "spoke" countries to train, supply and strengthen their local seed sectors. Each RBU is independent but will work in cooperation with the others. Once an improved variety is identified, certified and released by its host country it will be available for marketing by local seed companies, and testing at the other RBUs. Successful varieties will be spread from hub countries to their neighbors and through the other hubs to appropriate climatic zones in the whole of sub-Saharan Africa.

## About the project

The project was officially launched in 2007. Key project staff members are:

Program Manager: Jan Helsen  
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Regional Center for Africa, Arusha, Tanzania

Liaison Officer for Tanzania / Program Research Manager: Rémi Nono-Womdim  
AVRDC - The World Vegetable Center  
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Liaison Officer for Madagascar: Benjamin Rakotoarisoa  
Madagascar Ministry of Agriculture

Liaison Officer for Mali: Ekow Akyeampong  
AVRDC - The World Vegetable Center  
Samanko, Mali

Liaison Officer for Cameroon: Christophe Kouame  
AVRDC - The World Vegetable Center  
Nkolbisson, Yaoundé, Cameroon

## National Partners

Following RBU stakeholder planning workshops, NARES and seed regulatory bodies have been selected in Tanzania, Madagascar, Mali and Cameroon, and the criteria for partnerships with private seed companies have been developed. The seed health and marketing support activities are hosted at the Regional Center for Africa in Arusha, Tanzania.

## Funding

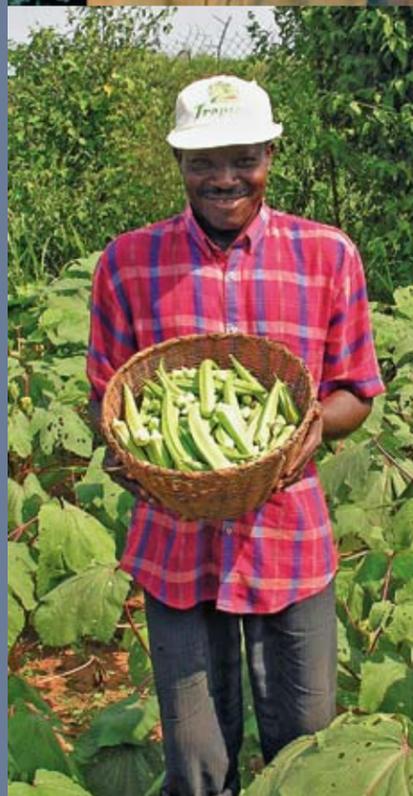
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