

# The Feed the Future Rwanda Orange-fleshed Sweetpotato (OFSP) for Income and Nutrition Activity

By the end of the third year, the project has directly reached 207,267 households with OFSP and other 144,105 households indirectly in partnership with the Government of Rwanda and other partners. Decentralized vine multipliers (DVMs) have sold vines worth US \$411,529. Farmers have sold sweetpotato roots worth US \$114,250. It is estimated that the beneficiaries reached by the project have produced and consumed 14,296 tons of OFSP roots.

## What is the Problem?

Significant investment in Rwanda's agricultural sector has played an important role in the rapid and sustained economic growth which the nation has witnessed in recent years. This growth has benefited millions of smallholder farmers and contributed to the steadily declining poverty rate throughout the country. Despite these advances, however, the incidence of poverty remains stubbornly high. This is especially true of rural areas, where 24% of the population – classified as “ultra-poor” – have difficulties meeting their basic needs. Moreover, malnutrition remains widespread and it is estimated that 39% of children under the age of five are deficient in vitamin A and the stunting rate is still 38% national average. Therefore, a comprehensive response is thus required to address rural poverty and malnutrition challenges. Approaches that combine interventions from a range of agricultural, economic, health, infrastructure, and social service sectors are key if Rwanda is to make further progress. Nutrition-oriented agricultural development can make significant contributions given the pivotal role of agriculture as the main source of food and income for the rural households estimated to be 70% of the total population. This is critical, since ensuring household food and nutrition security remains a priority for the Government of Rwanda.

## What did we want to achieve?

Feed the Future Rwanda Orange-fleshed Sweetpotato (OFSP) for Income and Nutrition Activity has been a three-year project (October 2015 – September 2018) financed by USAID and implemented by the International Potato Center (CIP). The project goals were to reach 200,000 households and 245,000 children under 5 years in ten districts of Rwanda. The project was to



Fig. 1 A vine multiplier and his wife after harvesting vines (Credit H. Rutherford)

contribute to inclusive agricultural sector growth, income generation and improved nutritional status of women and children through the promotion of OFSP production and consumption. Local implementing partners, working closely with local authorities, community health workers and agricultural extension staff selected beneficiary households with children under five years old or pregnant woman as part of the project interventions. CIP with its partners strengthened OFSP vine multiplication, distribution, and demonstrations. As part of the “pull” strategy, the project engaged in nutrition education and counseling campaigns. Therefore, the project strengthened sector-wide human and institutional capacity for nutrition-sensitive and market-oriented agricultural development. It also fostered linkages with the health and nutrition sector at national and local levels. The project increased the demand for OFSP through public awareness campaigns and technical support to food processors to include OFSP as an ingredient in their existing and new products.

## Where did we work?

The project activities were implemented in the Feed the Future zones of influence in ten targeted districts in Rwanda. These are Gatsibo, Bugesera, Burera, Musanze, Rubavu, Ngororero, Rutsiro, Karongi, Nyamagabe, and Nyaruguru.

### What did the project achieve?

By August 2018, the project had reached 207,267 households directly with OFSP vines, nutrition and agronomic messages. Through partnerships the project also reached additional 144,105 households indirectly in partnership with the Government of Rwanda and other partners. Therefore, a total of 351,372 new households in three years have started growing OFSP. With an average household size of 5 members of the households, the project has therefore reached at least 1.7 million individuals out of the 12.2 million persons in Rwanda. That is about 14% of the total population. The estimated area covered under OFSP due to the project intervention is 1,580 hectares. The project established 41 Decentralized Vine Multipliers (DVMs) in 10 districts. These DVMs sold vines worth US \$411,529.36. The root producers sold sweetpotato roots worth US \$114,250. Households consumed approximately 14,296 tons of OFSP roots (Fig. 2). A total of 162 partners and other USAID funded projects' agronomists were trained on OFSP agronomic practices. Additionally, 21 processors working with the project and other USAID funded projects were trained on how to process different products using OFSP puree (Doughnuts, Cakes, Breads and Biscuit). Six of them have already started incorporating OFSP in their normal baked products.

The project also reached 247,497 children via nutrition trainings and counselling for their caregivers (Fig. 3). This has been possible through the training of 454 community health workers (CHWs) and other nutritionists on nutrition sensitive programming and key concepts on mother and infant and young child nutrition (MIYCN). The trained CHWs have been training beneficiaries through groups. However, some selected households were visited at home for more intensive nutrition counseling. Results from the indicators survey shows that 97.5% of the households used OFSP roots for home consumption and the average quantity of use was 42 Kgs per year. Thirty-eight percent of the households gave on average 25 kgs to their neighbors or friends. Delivery of improved varieties shows that yields increased dramatically from 5-7t/ha to average of 17 t/ha with Gihingamukungu giving 21 t/ha



Fig. 2 A young child eating balanced diet during the cooking demonstration in Nyamagabe District (Credit B. Jean Paul)



Fig. 3 Cooking demonstration in Nyaruguru District (Credit F. Umwari)



Fig. 4 Farmer satisfied with the root size from her OFSP variety (Credit N. Christine)

(Fig. 4). The project organized sensory consumer testing of the roots and Kabode was the most preferred variety compared to other varieties with a score of 7.06 out of a 9-point hedonic scale where 9 was the best score.

CIP participated in the 1000 days campaign which was done together with the Maternal and Child Health week (MCH week) organized by the Ministry of Health (MoH). CIP was leading a partnership of HarvestPlus, FXB/Global communities, MoH and the local government staff in Burera district. The main activities carried out during the MCH week were: Distribution of vitamin A supplement and deworming tablets to children; messages on family planning, 1000 days window of opportunity, and water and sanitation. At these events, cooking demonstrations were conducted and biofortified OFSP vines were distributed. Table 1 and 2 below show different achievements in Burera District during the MCH week:

Table 1 Nutrition-specific activities

District	Acute Malnutrition screening		Stunting screening		# people who received messages on 1000 days campaign		# children who received Vitamin A capsule	
	Target	Covered	Target	Covered	Target	Covered	Target	Covered
Burera (CIP)	45,087	43,734	45,087	43,734	47,212	47,212	47,066	45,654
Nyamagabe	22,913	19,399			4,724		2,773	2,043

Table 2 Nutrition-sensitive activities

District	# children dewormed		# women who received family planning methods (any)		# households received bio-fortified crops/vines	
	Target	Covered	Target	Covered	Target	Covered
Burera (CIP)	168,413	154,514	25,878		OFSP vines: 300	338
Nyamagabe	8,847	12,872			Hi-iron beans: 200	200

### Key Partners

Ministry of Agriculture; Rwanda Agriculture Board (RAB); Local Governments: Gatsibo, Bugesera, Burera, Musanze, Rubavu, Ngororero, Rutsiro, Karongi, Nyamagabe and Nyaruguru District; DERN, OSPECCA, UNICOOPAGI, IMBARAGA, and YWCA.

### Other Partners

Ministry of Health, HarvestPlus, Caritas, CRS, AEE and FXB Rwanda.

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