

**IFPRI-ILRI Inception Workshop: Impacts of Agricultural Development Programming on Gender Inequalities, Asset Disparities and Rural Livelihoods**

Project Information:

<b>Name of project:</b>	HarvestPlus Reaching End Users Orange-Fleshed Sweet Potato (OFSP) Project
<b>Donor:</b>	HarvestPlus
<b>Implementing organization:</b>	HarvestPlus, International Potato Centre (CIP), Regional Potato and Sweetpotato Improvement Network in Eastern and Central Africa (PRAPACE), Uganda Farming for Food and Development Eastern Uganda (FADEP-EU), Volunteer Efforts for Development Concerns (VEDCO)
<b>M&amp;E organization:</b>	International Food Policy Research Institute (IFPRI), HarvestPlus and CIP
<b>Project start date:</b>	August 2007
<b>Project end date:</b>	Intervention ended August 2009; M&E activities ongoing
<b>Geographic coverage:</b> (countries)	Uganda and Mozambique, but only Uganda is included in ongoing activities
<b>Status of impact assessment</b> (when are/were baselines to be conducted, what quantitative or qualitative assessments have been done, etc.)	The project included a large research component including operations research, monitoring and a quantitative impact evaluation. The quantitative impact evaluation was a randomized controlled trial comparing impact and cost-effectiveness of two intervention modalities of different intensity. Baseline Socioeconomic Survey (SES) and Dietary and Nutrition Survey (DNS) were conducted in Uganda in July-October 2007. Endline SES and DNS were conducted in June-December 2009 around the end of the intervention. A detailed Impact Evaluation Report was completed June 20, 2010. A third Follow-Up survey round is scheduled for July-August, 2011 to measure sustainability and diffusion.
<b>To what extent is the project targeted to women?</b>	The project provided access to OFSP vines to local farmer groups and provided nutrition trainings targeted to women. Many of the farmer groups consisted of all female members. On average, more than 60% of the members of targeted farmer groups were women.
<b>Does this project aim to directly build assets, or would increases in assets be a secondary effect</b> (e.g. project aims to increase incomes, but people might then invest in assets)?	The main objective of the project is to build human capital assets by reducing vitamin A deficiency in children and women of child bearing age. This is done through dissemination of OFSP vines and trainings on farming, nutrition and marketing of OFSP.
<b>What kinds of assets might have observable changes (for men or</b>	(For each type of capital below that you think your project may affect, please mention the kinds of assets that may be

women)?	affected )
• <b>Natural capital (e.g. land, water):</b>	The project may have affected women's control over land and cropping decisions because of the intensive agricultural extension and nutrition trainings.
• <b>Physical capital (e.g. housing, equipment, cell phones):</b>	None.
• <b>Financial capital (savings, credit, remittances):</b>	The project was not expected to have a significant impact on income, but did change the composition of food consumption into healthier diets.
• <b>Social capital (e.g. group membership, connections, either within communities or with outsiders):</b>	The project may have had an effect on social capital within farmer groups and between farmer group members and other local farmers. We have detailed data on this and are currently studying it.
• <b>Human capital (e.g. education, skills, health, nutritional status):</b>	The primary target outcome of the project is improved dietary intake of vitamin A and improved vitamin A status for children and women. The June 2010 impact report shows that the project lead to substantial increases in dietary intake of vitamin A for both target groups. The evidence on the impact on vitamin A status (serum retinol) is so far inconclusive. Nutrition knowledge of adult household members was also improved.
<b>Brief abstract about the project—what is it trying to achieve, what is the strategy being used for integrating gender into project implementation and in M&amp;E/impact evaluation? (max 1 page)</b>	
<p>The Reaching End Users Orange Fleshed Sweet Potato Project disseminated orange-fleshed sweet potato (OFSP) in Uganda and Mozambique from 2006 to 2009. During the course of the fieldwork about 10,000 farm households in Uganda and 14,000 households in Mozambique were reached. This was the first time that a biofortified crop with a visibly different trait (color) had been deployed on such a large scale. Through preintervention (baseline) and post-intervention (endline) surveys, the project assessed OFSP adoption and production and whether adoption resulted in improved vitamin A dietary intakes and serum retinol among young children and their mothers.</p>	
<h4><b>Implementation Strategy</b></h4> <p>The implementation model was built on (paid) extensionists and (unpaid) community volunteers (promoters). In order to compare the cost-effectiveness of alternative dissemination strategies, two dissemination models were randomly allocated across farmer groups, and a randomized control group was include as well. Both intervention models had four primary components:</p> <ul style="list-style-type: none"> <li>(i) developing an OFSP vine distribution system including subsidized vines to households,</li> <li>(ii) providing extension to men and women in farm households on OFSP production practices and marketing opportunities,</li> <li>(iii) providing of nutritional knowledge, in particular about vitamin A deficiency, to women in these same households, and</li> <li>(iv) developing markets for OFSP roots and processed products made from OFSP roots.</li> </ul>	

Both intervention models included the following components in the first year:  
i) training program for extensionist and volunteer promoters , ii) community drama, iii) radio and iv) other area-wide activities such a field event days, training for grandmothers and community leaders, and market promotion events. However, in the less intensive model, only iii) and iv) were continued in the second year to reduce costs. Women were explicitly targeted for nutrition trainings because of their dominant role in affecting child diets and because women play an active role in crop choice in many households in the project area.

### **Findings**

The first round of impact evaluation completed June, 2010, had the following findings for Uganda:  
The project resulted in the following:

- i) A **61 percentage point increase** in the probability of OFSP adoption in Uganda
- ii) An increase in the share of OFSP in total sweet potato area by **44 percentage points** (from a base of 1percent) in Uganda.
- iii) A two-thirds increase to doubling in the intake of OFSP among young children, older children, and women when OFSP is available.
- iv) As a result of iii) a significant increase in total vitamin A intakes was found among young children, older children, and women in both countries. Notably, for children aged 6–35 months, OFSP contributed 52 percent of the total vitamin A intake in Uganda.

### **Gender in the Impact Evaluation**

The role of gender in OFSP adoption decisions and in child dietary intakes is explicitly designed into the impact evaluation, particularly in the 2009 survey round and in the upcoming follow-up survey in 2011.

- The 2009 survey includes a detailed, gender disaggregated assets module, including recall of gender ownership of assets reported in the baseline survey. This makes it feasible to determine the impact of the project on control of assets by women, but also to determine if households with women with larger control over household assets pre-intervention (and a stronger bargaining position) were more likely to adopt OFSP.
- The land modules in the 2007 and 2009 surveys captured which household member were primarily responsible for crop choices on each plot and for providing labor on each plot. Plots controlled by women were significantly more likely to have any kind of sweet potato grown during the baseline survey, suggesting that women may be critical in the decision to switch from traditional white-fleshed varieties to OFSP.
- Preliminary analysis of the 2009 survey data showed that women played a critical role in diffusion of the OFSP vine technology to other households, which is the primary strategy for encouraging new adoption. Nearly 75% of recipients of OFSP vines from project households were women.
- A detailed on-going social networks analysis will determine the role of gender in shaping how social networks encouraged adoption and diffusion.
- The survey round planned for 2011 will further examine the role of gender in promoting diffusion of OFSP vines to farmers living nearby but outside the original project locations.