

EFFECTIVE INTEGRATION OF NUTRITION INTO EXTENSION AND ADVISORY SERVICES AND MAINSTREAMING NUTRITION INTO AGRICULTURE

CASE STUDIES NOTES: UGANDA

The “Secure Livelihoods for South Sudanese Refugees and Host Communities in West Nile region, Uganda”, also referred to as the Migration Project, is implemented in Uganda with settlements with the largest number of refugees -Rhino Camp (Arua district) and Bidibidi (Yumbe district), by two local NGOs -Agency for Accelerated Rural Development (AFARD) and PALM Corps- in partnership with Horizont3000.

Implementation period	January 2020- December 2022
Budget	EUR 556,050
Funding Source	Austrian Development Agency, (90%) Bruder und Schwester in Not Innsbruck (BSI) and Caritas Kärnten (10%)
Geographical location of the project	North Western Uganda, West Nile Region
Project Location	Rhino Camp in Arua, Bidibidi Refugee Settlement in Yumbe district
Refugee Population (Dec 2020)	121,580 in Rhino Camp Settlement, 232,697 in Bidibidi
Projected Population	Western Nile Region: 3.2 million; Arua: 770,600; Yumbe: 699,300
Characteristics of the Population 2020	85% rural, more than 50% below 18 years
Poverty level	35% in extreme poverty (below USD 1.25/ person/day
Life expectancy in the Western Nile Region	52 years
Literacy rates	66 %
Target / Beneficiary group	1,125 households (67% female headed) in refugee settlements and in host communities, with an average of 7 people per household (7,595 indirect beneficiaries).

The intervention targeted both the host community and refugees and aimed to bridge the gap between rehabilitation and development by mitigating the effects of relief aid on the development process of West Nile Region. The expected results were 1) improved nutrition status of 750 targeted households (60% female headed) in refugees and host communities, 2) profitable sustainable agriculture practiced by 750 households (67% female headed) in refugees and host communities. The expected outcome is that refugees and host communities have secure livelihoods and contribute to sustainable development within the resettlement areas.

The project followed the guidelines provided by a comprehensive assessment of refugees and host communities carried out in December 2020. The assessment was funded by UNHCR Government departments and agencies; technical support was provided by the Uganda Bureau of Statistics, (UBOS) Ministry of Health, Office of Prime Minister, WFP, and

UNICEF. In addition, a local sharing event was held for implementing institutions to exchange experiences.

The assessment reported that the West Nile region had an estimated 3.2 million people and was the second poorest region in Uganda; the region hosted 58% of the refugees and asylum seekers in the country. The nutritional status among refugee population is poor or medium. Stunting or chronic malnutrition is at 12.9%, and 60% households eat only two non-nutritious meals a day. The mean monthly household consumption per capita is a dismal \$0.04 per person per day. While 48% of children in West Nile region are deprived of food, 16% of children in refugee hosting districts eat less than two meals daily (AFARD website).

Refugees mainly depend on World Food Programme (WFP) food ratio, which is insufficient in both quantity and quality for healthy living. Aggravating factors include low productivity of subsistence farming, limited access to small land surface, limited income with which to buy food from the market, limited awareness of nutrition, poor sanitation and hygiene practices, and high population growth rates. There is high consumption of plant-based diets among refugees, and low consumption of foods rich in vitamin C which renders most of the dietary non-haem iron unavailable for body use. Most mothers did not know how to prepare nutritious meals from the available food. Vitamin A supplementation coverage has been reducing; and there is an increased incidence of childhood illnesses like diarrhea and measles.

There is a favorable policy context related to nutrition (box 1), with positive outcomes. In particular, the district and some sub county local governments are involved in supervising and monitoring projects being implemented, there is a system for coordinating, disseminating agricultural information and weather forecasts; there is continuous training of extensionists and a good link between research and extension; some farmers are organized in production and marketing cooperatives, partners have drilled

Box 1. Policies related to nutrition in Uganda.

- Uganda Food and Nutrition Policy (2003) to promote the nutritional status of the people of Uganda through multi-sectoral and coordinated interventions that focus on food security, improved nutrition and increased incomes.
- National Objectives and Directive Principles of State Policy XXII on Food security and nutrition (Uganda, 1995) to encourage people to grow and store adequate food, establish national food reserves, and encourage and promote proper nutrition through mass education and other appropriate means in order to build a healthy State.
- Uganda Vision 2040 and the National Development Plan II (NPA, 2020) to enhance market access and value addition of farm products.
- Strategies and actions to promote integration of food and nutrition programming into water, sanitation and hygiene (WASH).
- Agricultural Sector Strategic Plan (2015-2020) to ensure provision of quality food and nutrition services to the people through a multi-sectoral program involving at least four key sectors of health, agriculture, education, and gender, labor, and social development.
- National Agriculture Policy 2013, to achieve food and nutrition security and improve household incomes through coordinated interventions that focus on enhancing sustainable agricultural productivity and value addition, providing employment opportunities, and promoting domestic and international trade. Three of the six specific objectives are directly relevant to nutrition: 1) ensure household and national food and nutrition security for all Ugandans, 2) increase incomes of farming households from crops, livestock, fisheries and all other agriculture related activities, and 3) promote specialization in strategic, profitable and viable enterprises and value addition through agro-zoning.

water for easy access to refugees and host communities; and there are public-private sector partnerships for promoting agricultural production.

Still, there is not enough food is produced for household consumption, storage & processing, poor management of national food reserve system; inadequate budget allocation from national level to implement agricultural policies; skilled agricultural extension staff are often not well motivated due to poor remuneration; and some agricultural research technologies and innovations are not easily adopted, because they are expensive, labor intensive, or inappropriate for specific locations.

Implementation

The following 4 climate smart and nutrition-sensitive agriculture practices and community led total sanitation (CLTS) approach was used to implement interventions:

- 1) Promote growing of high yielding drought resistant varieties of cassava, sesame, and bio fortified beans for food, for income generation, train households on postharvest handling, how to prepare nutritious food and preserve some for use during the time of scarcity.
- 2) Integrate local poultry, piggery, fruits, and green vegetables through kitchen gardening; provide the agro inputs and agricultural advisory services.
- 3) Improve on poor sanitation hygiene due to open defecation by building pit latrines, drying racks for utensils and introduce hand washing stands using tippy taps in all participating homesteads.
- 4) Promote green villages through tree planting (for woodlot, construction) apiculture, and use of energy saving technologies.

Thirty farmer's field schools of 25 members each were established, which included learning sites and facilitators. In addition, training was provided regarding climate smart agricultural practices, basic food processing and safe nutrition practices; youth was trained in small business (tailoring, salon and hair dressing, bakery, motor vehicle mechanics, carpentry, retail business of assorted goods); agro-savings in Village Savings and Loans Association (VSLA) were organized, cooperatives, business-to-business linkages and community-based volunteers were recruited (technical advisors, farmers and community members).

Trainings offered included kitchen gardening (production of green leafy vegetables to improve nutrition, diet diversification and for income diversification), seed saving technologies (conserving agricultural biodiversity and traditional knowledge), cooking demonstrations, food preservation and storage (vegetable driers), poultry management. There were also some services provided (timely community wide vaccination for poultry) and provision of inputs and equipment, such as high yielding and drought resistant crops' seeds, tools, vegetable driers, animal traction, among others.

Some innovative elements in the products, processes and forms of organization put in place included: advocacy with Local Government for bylaws and ordinances; mediation with the host communities to allow access to a bigger piece of land for refugees to grow more

food; working in partnership with local government departments ensured a smooth transition and continued support to community groups; developing of an app (iKnowFarm on Google Play) that provides online information about agro-input dealers, extension, markets and agricultural products, accessible in three languages of English, Lugbara, and Arabic; and use of appropriate technology- like solar pumps for irrigating vegetables in dry season.

Results and discussion

The nutrition status of targeted households improved in refugees and host communities from 2020-2021. High scores of meal frequency from 2020-2021 resulted from increased food production and as part of the COVID-19 response emphasized frequent eating of nutritious food of different varieties. Nutrition status dropped in mid-2022 due to the further cut (by 50%) in food ration by WFP, the rising prices of food items due to the country's inflation and drought that destroyed most of the first season crops hence less vegetables for home consumption.

Kitchen gardens were present in 75,2% of the households. In turn, household adoption of profitable sustainable agricultural practices increased in the period 2020-2021 (up to 90,1%) but dropped in 2022 (64,2%). However, the percentage of households practicing better food preparation, preservation, and storage increased up to 98,2%.

Women's average income from economic activities in refugee and host communities increased by 523% from January to December 2020 and by 131% in 2021 although it dropped by 22.4% in July 2022. This corroborates the policy of MAAIF that attaining food and nutrition security should go hand in hand with sustaining regular income flows (MAAIF, 2016). The increased expenditure on food is linked to cut of 50% in food ration by WFP and high inflation rates in Uganda.

The project has also promoted peaceful settlements for refugees and host communities where natural resources are conserved and shared.

Conclusions

In this case, a favorable policy environment is observed that promotes food security and nutrition by providing nationally relevant strategies, promoting participation and support from local governments, and facilitating space for implementers to exchange experiences. However, an additional effort should be made to facilitated action on the ground, such as appropriate budget allocation and multi-level and multisectoral approach.

Regular income is therefore critical to sustain food and nutrition security. When there is a regular income at household level, the frequency and nutritive value of meals consumed per day increases and prevalence of malnutrition decreases.

The average household income and nutritional practices varied in tandem with seasonality and crop yields. To address extreme weather patterns and poor yields, drought resistant,

quick maturing crop varieties are recommended to build resilience of refugees and host communities. Appropriate technologies for irrigation are recommended.

Where food security heavily relies on food donors and there is social instability, demands and conflicts over the use natural resources increase. Interventions benefit from continuous advocacy efforts and promotion of peaceful, social relationships between social groups through regular dialogues.

Limited access to land by women is a great concern and worse for refugee women. Owing to the small plots of land for production, high uptake of horticulture is a short-term coping strategy. Additionally, poultry and piggery are good diversification for efficient optimization of small size of land for refugees. These enterprises also offer high short-term returns.

Reducing food insecurity malnutrition calls for strong advocacy, social mobilization, and ample communication for social behavioral change. Practical sessions at learning sites promoted adoption of agricultural practices but also sanitation and hygiene practices when integrated to the trainings. Farmers understand the link between agriculture, nutrition at the household level, health, sanitation hygiene, economic empowerment, and environment.

Working in partnership with local government departmental staff can ensure a smooth transition and continued support to community groups. Skilled, knowledgeable extension advisory services are required in relevant sectors of health, agriculture, environment, sanitation, hygiene, community, and social development, to promote nutrition-sensitive interventions. There is need for continuous capacity building of the existing and upcoming extension staff but also local volunteers, including farmers but also village health teams, technicians, neighbors, and others, to sustain the activities after project funding has ended.

This case study note was developed under the actions of the GFRAS Nutrition Working Group. Two cases, from Chile, South America, and Uganda, Africa, were studied within the framework of this initiative. These cases contribute with strategies, activities and lessons learned in terms of food systems, multisectoral approach, empowerment of women and development of capacities in nutrition-sensitive extension, providing the possibility to be adapted to other contexts in these target regions.

GFRAS is the Global Forum for Rural Advisory Services. GFRAS is made up of various stakeholders worldwide who have an interest and role in rural advisory services (RAS). The mission of this forum is to provide advocacy and leadership by RAS stakeholders on pluralistic, demand-driven advisory services. The vision is to promote sustainable growth and reduce poverty.

Global Forum for Rural Advisory Services (GFRAS)
Eschikon 28, 8315 Lindau, Switzerland
Tel. 0041 (0)52 354 97 64 • info@g-fras.org • www.g-fras.org