



MULTI-SECTORAL NUTRITION STRATEGY 2014-2025

Technical Guidance Brief

NUTRITION SENSITIVE AGRICULTURE

BACKGROUND

Agriculture is essential to improve nutrition. Recently the term “nutrition-sensitive agriculture” has emerged as a way to define agriculture investments made with the purpose of improving nutrition. Investments in agriculture demonstrate a positive impact on poverty alleviation, improve food security, and may prevent undernutrition especially since 75 percent of the world’s poor are rural and working in agriculture. For a majority of the rural inhabitants of Feed the Future countries, agriculture is the main livelihood and main source of income. Most of these rural areas are in various stages of transition from subsistence farming to commercial farming. Most of the rural dwellers depend on producing at least some of their food and depend on the market for buying the remainder. Particularly vulnerable households engage in daily labor on other households’ farms. They also depend on agriculture for the income needed for other household expenses that affect normal growth and physical and mental performance, such as health care, water, shelter, school fees, clothing, fuel, and transport. They participate in a complex food system that interacts with many other local, regional, and international systems. However, agriculture - without appropriate thought and planning - will not have a large impact on nutritional status, and consequently good health and well-being.

Table 1: Entry Points for Nutrient-Rich Crops

- Target production of nutrient-rich crops, ideally those that include nutrients lacking in diet
- Include behavior change communication component specifically aimed at consumption of target crops
- Ensure target crop availability in local markets and support consumption education
- Measure outcomes, including intermediate targets such as consumption and market availability

PROGRAMMING PRINCIPLES

Several pathways have been identified showing how nutrition-sensitive agriculture interventions can more directly impact nutrition and food security. Interventions should be designed considering pathways most relevant to the value chain as well as identifying the most relevant underlying causes of undernutrition. Special attention should also be paid to the identified programming principles (see **Table 2**). More information on these pathways is available in [a series of technical briefs](#). The pathways include:

- [Agriculture Income](#) - for food purchase and for health care and education expenditures
- [Food Production](#) - through food prices, own consumption, and processing and storage
- [Women’s Empowerment](#) - through women’s decision-making in the household, women’s time use, the impact on their ability to care for themselves and their children, women’s workload and the impact on maternal energy use, and women’s control of income, participation in markets and resource allocation

In addition to the identified pathways and principles, USAID will start by concentrating efforts on nutrient-rich value chains. Feed the Future value chain sectors that tend to lend themselves to quick wins include horticulture, legumes, aquaculture, and livestock. These are nutrient-rich food sources that include essential nutrients commonly deficient in the diet. Four simple program entry points are outlined in **Table 1**. Because of the potential for income generation, value chain marketing interventions are a great entry point for nutrition messages on the importance of sourcing healthy inputs from the market when they are not available at home. In addition to the quick wins, all agriculture investments can also be made more nutrition-sensitive by analyzing the pathways explained above and following simple programming principles outlined in **Table 2**.

Table 2: Programming Principles

- Incorporate appropriate objectives and indicators into design
- Incorporate nutrition promotion and education
- Diversify production and increase nutrient-dense crops & livestock when this makes economic sense – that is, when not in conflict with obtaining income for that pathway
- Improve quality of processing, storage, and preservation of food
- Expand market access to vulnerable groups and expand markets for nutritious foods
- During project design, assess the local context and address the underlying causes specific to the situation
- Ensure designs work to empower women
- Target the nutritionally vulnerable and improve equity
- Work across sectors, collaborating and coordinating where possible
- Maintain or improve the agricultural natural resource base (i.e. water, soil, air)

**Table 3:
Nutrient-Rich Value Chains**

A commodity is defined as nutrient-rich if it meets any of the following criteria:

1. Is bio-fortified
2. Is a legume, nut, or some seeds such as sesame, sunflower, pumpkin seeds, wheat-germ, or sprouted legume seeds
3. Is an animal-sourced food, including dairy products (milk, yogurt, cheese), fish, eggs, organ meats, meat, flesh foods, and other miscellaneous small animal protein (e.g. grubs, insects)
4. Is a dark yellow or orange-fleshed root or tuber
5. Is a fruit or vegetable that meets the threshold for being a “high source” of one or more micronutrients on a per 100 calorie and per 100 gram basis

MEASURING PROGRESS

Incorporating appropriate objectives and indicators is identified as a key programming principle of nutrition sensitive programs. For programs aiming to affect nutritional status, clear nutrition objectives and appropriate indicators should ideally be included at the design stage. For programs or activities aiming to affect intermediate steps, such as dietary diversity, incorporate indicators and objectives that measure the stated end goal.

Feed the Future has added three new indicators (two population-based and one activity-based) to capture progress toward Feed the Future’s Intermediate Result 6: Increased Access to a Diverse and Quality Diet and to report results under USAID’s new Multi-Sectoral Nutrition Strategy and the nutrition-sensitive agriculture sub-element under the Agriculture Program Area of the Standardized Program

Structure and Definitions. Population-based indicators are: 1) Prevalence of women of reproductive age who consume targeted nutrient-rich value chain commodities, and 2) Prevalence of children 6-23 months of age who consume targeted nutrient-rich value chain commodities. The activity based indicator is: Total quantity of targeted nutrient-rich value chain commodities set aside for home consumption by direct beneficiary producer households. Nutrient-rich value chains are defined in **Table 3**. The new indicators are applicable where missions are implementing nutrition-sensitive value chain activities where the value chain commodity has been selected for nutrition objectives, solely, or, usually, in addition to poverty reduction objectives. As these three new indicators capture only a portion of nutrition-sensitive agriculture activities, USAID is working on guidance for measuring agriculture and nutrition in programs.

Table 4: Illustrated Entry Points For Nutrition-Sensitive Agriculture

Sector	Value Chain Examples	Entry Points for nutrition-sensitive interventions
Roots and Tubers	Orange-Fleshed Sweet Potato	<ul style="list-style-type: none"> Bio-fortified OFSP NOTE: starchy staples (e.g. cassava, white potatoes) are not nutrient-dense as defined in Table 3 Nutrition-sensitive value chain work on starchy staples is still possible, but will entail additional analysis
Legumes	Groundnuts Soybeans Chickpeas	<ul style="list-style-type: none"> Increase availability and consumption Mycotoxin (e.g. aflatoxin) control Soybean as an ingredient in animal food increasing availability of animal sourced protein Processing of soy into flour that can fortify traditional foods
Cash Crops	Coffee Cocoa Beans	<ul style="list-style-type: none"> Groundnuts for home consumption or other nutritious legumes can be planted between seedling Coffee trees for soil conservation (until full shade canopy develops) Sensitize plantation owners who hire day laborers to the importance of paying a living wage so families earn enough for a healthy diet; In contract farming situations advocate for some land allocated for food crops or vegetable garden.
Livestock	Cattle (meat, dairy) Poultry (meat, eggs) Goat (meat, milk, cheese) Sheep (meat, milk, cheese) Camels (meat, milk, cheese) Micro-livestock (e.g. guinea pigs, rabbits)	<ul style="list-style-type: none"> Ensure nutrient value of animal-source foods is understood and encourage consumption Ensure safe handling of manure to avoid contaminating food Promote high standards of hygiene, sanitation, and food safety in handling, preserving and processing milk, meat, cheese, and eggs
Aquaculture	Tilapia	<ul style="list-style-type: none"> Integrate vegetable production around fish pond Promote polyculture that favors home consumption Ensure ponds do not become malaria mosquito breeding sites
Horticulture	Vegetables (e.g. green beans, tomatoes, carrots, kale, snow peas) Fruit (e.g. mango, avocado, citrus, banana, passion fruit)	<ul style="list-style-type: none"> Promote foods that are nutrient-rich Encourage consumption Include a behavior change communication component Vine fruit can have dual purpose to provide shade on trellises over a compost pit Banana patches or other items next to the house are easily tended Agroforestry can include citrus trees or other fruit and nut trees or fodder trees.

ADDITIONAL RESOURCES

Text

[Links](#)