

# Global Food Security Strategy Technical Guidance Objective 3: A Well-Nourished Population, Especially Women and Children

This is one of 18 technical guidance documents for implementing the U.S. Government's Global Food Security Strategy. The entire set of documents can be found at <a href="https://www.feedthefuture.gov">www.feedthefuture.gov</a> and <a href="https://www.agrilinks.org">www.agrilinks.org</a>.

#### Introduction

Nutrition is integral to achieving and sustaining food security, as reflected in the Global Food Security Act of 2016. The corresponding U.S. Government's Global Food Security Strategy (GFSS) adopts the integrated approaches to nutrition laid out in USAID's Multi-Sectoral Nutrition Strategy (MSNS)<sup>1</sup> and the USG Global Nutrition Coordination Plan (GNCP).<sup>2</sup> This guidance document is meant to help missions design new and follow-on integrated programming that incorporates nutrition objectives and technical approaches to optimize nutrition outcomes. Building on the USG's long-standing experience with nutrition programming, this guide describes the best practices in nutrition programming in the context of the comprehensive approach called for in the GFSS, clarifies concepts, recommends programming principles, and provides links to technical resources for nutrition.

The GFSS Results Framework reflects a multi-sectoral nutrition approach to achieve Objective 3: A wellnourished population, especially among women and children. Objective 3 specifically targets women and children under five, with an emphasis on the 1,000 day window of opportunity from pregnancy to a child's second birthday, which is critical for optimum physical and cognitive development. As illustrated in Figure 1, Objective 3 is achieved through three intermediate results (IRs 7-9). Optimal nutrition outcomes are often only achieved when nutrition-specific interventions (IR8) and nutrition-sensitive interventions (IR7 and IR9) are designed in close collaboration and coordination with each other; all three intermediate results are necessary and important. Additional guidance for nutrition was developed under the MSNS and can be found in the references.<sup>3</sup> It should be consulted as appropriate.

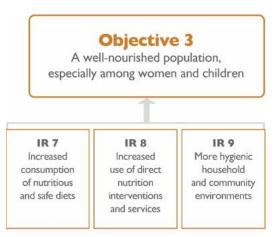


Figure 1: Objective 3 and Intermediate Results from the GFSS Results Framework

## Terminology and Context <sup>4</sup>

A common understanding of the following terminology and context is important when designing and implementing nutrition activities. Nutritional status is determined by three broad factors:

- 1) Food: access to sufficient, safe, nutritious, and diverse food to support a healthy, active life.
- 2) *Health:* including (a) the environment in terms of pathogens, pollutants, and contaminants; water security and watersheds; sanitation; and healthy and intact ecosystems; (b) access to health services; and (c) individual health and ability to utilize nutrients consumed.
- 3) *Care:* infant and young child feeding and care practices (especially for early child development) and care for women.

**Dietary Diversity:** The number of different types of foods or food groups consumed over a given period of time.

*Malnutrition:* A condition resulting when people's diets do not provide adequate nutrients or if they are unable to fully utilize the food they eat due to illness; consists of both under- (insufficiency) and over- (excess) nutrition.

*Nutrition:* The science of foods and the nutrients and other substances they contain, and their actions within the body. A broader definition includes the social, economic, cultural, and psychological implications of food and eating.

*Nutrition-sensitive interventions:* Interventions that address the *underlying determinants of malnutrition*. (i.e., WASH, food safety, nutrition-sensitive agriculture, etc.)

*Nutrition-specific interventions:* Interventions that address the *immediate causes of malnutrition*. (i.e., breastfeeding promotion, micronutrient supplementation, management of acute malnutrition, etc.)

**Stunting:** Inadequate (low) length/height-for-age, resulting from **chronic malnutrition**. Stunting reflects suboptimal food and nutrient intakes and utilization, insufficient preventive health care and unhygienic environments, poor maternal nutrition, and inappropriate infant and young child feeding and care during the most critical periods of growth and development in early life.

*Wasting:* Low weight-for-height. Wasting is usually the result of a recent, acute deprivation and/or illness, and is strongly linked to mortality. It is one of two major types of **acute malnutrition**.

**WASH:** Water, sanitation, and hygiene.

**Context:** Nutrition in relation to other GFSS Objectives:

- **GFSS Objective 1** (inclusive and sustainable agricultural-led economic growth)<sup>5</sup> Agricultural interventions designed to increase productivity and incomes can also contribute to making safe, nutritious, high-quality foods (e.g., animal-source foods, fruits/vegetables/nuts, legumes) more affordable and available to low-income consumers in both rural and urban settings. Policy<sup>6</sup> implementation is needed to promote healthy food choices (e.g., mass campaigns, nutrition labeling, regulating food marketing, etc.), strong public food safety and quality standards (which support food fortification that addresses specific population-based micronutrient deficiencies), and access by the poor to nutritious foods. Extension services can contribute to improved nutrition through promotion of sustainable production and consumption of nutrient dense foods, animal source foods<sup>7</sup> (particularly dairy, eggs, fish farmed and wild<sup>8</sup>), and a variety of non-staples that may include indigenous foods.
- **GFSS Objective 2** (strengthened resilience among people and systems)<sup>9</sup> Areas where crises that result in repeat, large-scale humanitarian emergencies are often accompanied by persistently high wasting rates (often in excess of 15-20 percent) even in good seasons and years. Understanding the drivers of persistently high wasting rates will be critical to the design of effective nutrition programming. Nutrition-specific and WASH interventions should be operationalized jointly with agriculture- and resilience- programming wherever possible to maximize nutrition gains. <sup>10</sup> Overall cross cutting themes (gender, youth, natural resource management, governance/policy, etc.) that address the enabling environment need inclusion to promote a comprehensive, sustainable, and resilient nutrition program.

### **Designing Interventions**

Nutrition programming approaches are complex and varied, as multiple factors affect human nutrition. Thus there is no single prescriptive approach to programming for nutrition; approaches must be tailored to reflect local context (we recommend seeking nutrition expertise; Mission or Washington-based experts are ready to assist you!). When designing programs, data<sup>11</sup> suggest that key past drivers and priorities for reducing child undernutrition include: safe water access, sanitation, women's education, gender equality, quality diets, and the quantity and quality of affordable foods available in local markets, as well as income growth and governance. A variety of principles and factors should be taken into account when designing interventions, including, but not limited to:

- 1. Context Assessment.<sup>12</sup> Understanding the nutrition context in a country or zone of influence (ZoI) can help guide the make-up and implementation of programming. Sources may include a Nutrition and Food Security Analysis (e.g., Cost of Diet, <sup>13</sup> Optifood, <sup>14</sup> etc.), geographical context, population density, demographics, literacy, maternal/child morbidity and mortality causes, conflict, political/social/economic stability, traditions/customs/culture when preparing or consuming food, water security (quantity and quality), soil health, etc. Other factors to consider when assessing the context include:
  - a. **Host country support/commitment to nutrition.**<sup>15</sup> This includes financial commitment in a country's national plan, plus other sector policies that strengthen or do no harm to improving nutrition outcomes; support for multi-sectoral strategies to improve nutrition within national, regional, and local government structures; and strengthening capacity in human resources and institutions to improve nutrition through improved management of the food and agriculture sector, supported with adequate financing.
  - b. **Other USAID and USG programs that support nutrition.** For a few examples, please see USAID Nutrition Projects, <sup>16</sup> USAID Food Assistance Programs, <sup>17</sup> USDA-FAS, <sup>18</sup> and MCC Food Security and Nutrition Projects. <sup>19</sup>
  - c. Common nutrition indicators to provide country "status." These can be found in various surveys: The Demographic and Health Surveys (DHS) Programs; 20 Standardized Monitoring and Assessment of Relief and Transitions (SMART) Surveys; and Multiple Indicator Cluster Survey (MICS). 22 Set and monitor realistic nutrition indicator targets. Monitor dietary consumption and access to safe, diverse, and nutritious foods. The data can include food prices of diverse foods and dietary consumption indicators for vulnerable groups.
- 2. Evidenced-based, nutrition-specific, and nutrition-sensitive interventions need to be simultaneously programmed. Per the Lancet Series on Maternal and Child Nutrition in 2008<sup>23</sup> and 2013,<sup>24</sup> the implementation of 10 nutrition-specific interventions at 90 percent coverage decreases stunting by only 20 percent. Failure to include nutrition-specific interventions along with nutrition-sensitive interventions will likely undermine the potential for positive impact on nutrition outcomes, as neither *nutrition-specific nor nutrition-sensitive interventions alone will eliminate malnutrition*.
- 3. Improvements in WASH practices and water resource management can positively affect nutritional outcomes by addressing both immediate and underlying causes of malnutrition. Lack of sanitation, in particular, is strongly correlated with acute malnutrition and stunting. Diarrheal disease reduces the absorption of nutrients by the gut. However, even in the absence of diarrhea, a contaminated environment can lead to environmental enteropathy, which reduces utilization of essential nutrients. WASH interventions such as improved drinking water supply,

access to sanitation facilities and handwashing at critical times can reduce the pathogen load observed in environments.

- **4.** Addressing nutrition can be complex and require a nutrition expert for design, as interventions are context specific. When in doubt, contact a nutrition expert for help!
- 5. Improved nutrition may be achieved if nutritious foods are sustainably produced and consumed. Examples of a few nutrition-sensitive agriculture interventions are listed below:
  - a. Household food production can be critically important to the diets and nutrition of individuals in smallholder farmer households. Food production can affect the type, quantity, and seasonality of food available in the household for consumption. At the same time, production may also influence the availability and prices of diverse food in local markets.
  - b. Processing and storage can affect the shelf life, safety, and nutrient content of foods in positive or negative ways for nutrition and health. These market interventions may be private and/or public sector led and should identify key stakeholders and possible areas for partnership.
  - c. Nutrition may be improved if agricultural livelihoods guarantee a reliable and sustainable income that is used to purchase nutritious food as well as to obtain health care, education, shelter, fuel, and other basic necessities required for a healthy, productive life.
  - d. Agriculture has a unique role in ensuring access to and availability of diverse, nutritious food; it is key to improving dietary diversity. At the same time, agricultural development projects should avoid causing unintentional harm to public health (e.g., by increasing exposure to toxic chemicals, polluting or contaminating potable water or streams, or reducing the flow of sufficient water quantity and quality to maintain fisheries and aquatic foods critical for nutrition) and should support the care of children and families (e.g., by reducing demands on women's use of time and energy). Addressing food availability and food access is important but may have less of an impact on nutritional status if other underlying causes of malnutrition related to health or care, such as poor sanitation, inadequate care practices, or lack of access to quality health services are not addressed.
- 6. Improving dietary diversity is key, especially nutrient rich foods and a good source of protein, particularly animal source foods. Protein calorie balance is critical to growth and development. Plus recent evidence suggests protein-rich animal source foods, especially dairy, have a combination of nutrients important for growth.
- 7. All activities addressing improved nutrition should include social and behavior change. The strong evidence base that links the adoption of optimal maternal, infant, and young child feeding and care practices to reductions in malnutrition—across all socioeconomic strata—supports the utility of integrating nutrition-focused social and behavior change (SBC) into agriculture development activities.
- 8. It is important that interventions consider food sources produced outside the ZoI<sup>25</sup> but on which communities are dependent for optimal nutrition. In order to maximize the potential for diet diversity, food sources should not be limited to only those produced in the ZoI. Key integrated-nutrition programming under Feed the Future's Zone of Influence targets availability, access, utilization and stability, <sup>26</sup> plus affordability and other components of access and availability, such as the local market infrastructure and the food system components that surround households.
- 9. Gender equality and women's empowerment are important for improving nutrition outcomes. Engaging both women and men in practices to promote nutrition, including positive nutrition behaviors and more equitable roles in caregiving, workloads, and decision-making over

household and community resources improves nutrition.

**10. Improving hygiene** — Many agricultural interventions have the potential to enhance nutrition and incomes, but if incorrectly adopted and managed, can actually harm nutritional status. This is especially true of higher-value, higher-quality food value chains (animal-source foods, horticulture), where both biological and chemical contaminants can be hazardous both in the producer household and across the value chain to consumers.

#### 11. Food and agricultural policies can have a better impact on nutrition if they:

- a. Increase incentives (and decrease disincentives) for stable availability, affordability, access, and consumption of diverse, nutritious, and safe foods (e.g. horticulture, legumes, livestock, and fish) through environmentally sustainable production, trade, and distribution.
- b. Include measures that protect and empower the poor and women, such as social safety nets that allow people to access nutritious food during shocks or seasonal times when income and food stores are low; land tenure rights; equitable access to productive resources; and market access for vulnerable producers (including information and infrastructure). Recognizing that a majority of the poor are women, ensure equitable access to all of the above for women.

The USAID Multi-Sectoral Nutrition Strategy Conceptual Framework below highlights all the points above in support of the GFSS Objective 3 IRs 7, 8, and 9. It shows how adequate dietary intake, closely linked to IR 7, and low disease burden, closely linked to IRs 8 and 9, are necessary for achieving optimal nutrition. It stresses the multifaceted basic and underlying determinants for successful nutrition and ultimately health, human development and growth, educational, and economic outcomes. This Framework provides a greater emphasis on the *enabling environment* than ever before and is similar to the GFSS Results Framework's cross-cutting intermediate results. The multi-sectoral nutrition-specific and nutrition-sensitive interventions and services on the right of the framework show the critical illustrative actions to achieve optimal nutrition. This framework has guided the development of the GFSS Results Framework Objective 3 and should serve as a tool for coordinated, multidisciplinary nutrition programming.

#### FIGURE 2: USAID MULTI-SECTORAL NUTRITION CONCEPTUAL FRAMEWORK Adapted from UNICEF, 201315 and Black et al., 20132 ILLUSTRATIVE EXAMPLES Agriculture Production/Income Generation ♥ Morbidity & Mortality for Dietary Diversity ↑ Cognitive, Motor, and Socio-Emotional Development ♣ School Performance and Learning Capacity Food Processing ▲ Adult Stature **♦** Obesity ▲ Work Capacity/Productivity · Postharvest Storage Food Fortification Targeted Livelihood Activities · Risk Mitigation Interventions · Social Protection and Safety Nets Biofortification . Early, Exclusive, and Continued Breastfeeding · Appropriate Complementary Feeding ADEQUATE DIETARY INTAKE LOW DISEASE BURDEN · Feeding During Illness Dietary Diversity for Pregnant and Lactating Women and Children Maternal Supplementation Appropriate maternal and Sustainable household Access to effective Healthy Caregiver Support and Protection infant and young child · Early Child Care and Development food security health services environment feeding and care Treatment of Acute Malnutrition Micronutrient Supplementation or Fortification Availability Access to Nutrition Management of Diseases Adequate Access Appropriate of sufficient sufficient Stability of essential Appropriate Prevention and Treatment of Infectious time, space, education to safe safe and safe and and health and hygiene and support and water and nutritious nutritious resilience nutrition practices · Family Planning and Reproductive Health sanitation for care knowledge services foods foods Deworming in Children · Nutrition Assessment and Counseling · Safe Water Sources Nutrition Enabling Environment Sanitation Facilities · Hand Washing with Soap · Clean Family Living Environment Gender equality, women's empowerment, and girls' education Safe Food Handling Country commitment and capacity, leadership, financial resources for nutrition, knowledge Human Resources for Nutrition Gender Sensitive Interventions Participation and Transparency Systems: Quality Improvement/ Quality Figure 2: The USAID Multi-Sectoral Nutrition Conceptual Framework, adapted from UNICEF, Assurance, Management, Financial, and the 2013 Lancet Series on Maternal and Child Nutrition, depicts a causal pathway to optimal Logistics, Monitoring and Evaluation, nutrition.

In addition to the USAID MSN Conceptual Framework, another important framework, by the SPRING project, for enhancing food security is depicted here: <a href="https://www.spring-nutrition.org/publications/briefs/understanding-and-applying-primary-pathways-and-principles">https://www.spring-nutrition.org/publications/briefs/understanding-and-applying-primary-pathways-and-principles</a>. <sup>27</sup> It highlights the pathways from agriculture to nutrition, which are not always linear, as interactions occur between them. In general, they can be divided into three main routes at the bousehold level: 1) food.

highlights the pathways from agriculture to nutrition, which are not always linear, as interactions occur between them. In general, they can be divided into three main routes at the household level: 1) food production or collection, which can affect the food available for household consumption as well the price of diverse foods; 2) agricultural income for expenditure on food and non-food items; and 3) women's empowerment, which affects income for food and non-food expenditures, women's caring capacity and practices, and female energy expenditure. Acting on all of these routes is the *enabling environment* for nutrition.

#### **Coordination and Collaboration**

The USG developed a Global Nutrition Coordination Plan<sup>2</sup> to enhance the impact of the many diverse nutrition investments across the U.S. Government through better communication, collaboration, and linking research to program implementation. Examples of how this has been done are available through the Operationalizing Multi-sectoral Coordination and Collaboration for Improved Nutrition brief.<sup>28</sup>

For additional information on this GFSS technical guidance document, contact <a href="mailto:ftfguidance@usaid.gov">ftfguidance@usaid.gov</a>.

#### References

<sup>&</sup>lt;sup>1</sup> USAID Multi-Sectoral Nutrition Strategy 2014-2025. <a href="https://www.usaid.gov/nutrition-strategy">https://www.usaid.gov/nutrition-strategy</a>

<sup>&</sup>lt;sup>2</sup> US Government Global Nutrition Coordination Plan 2016-2021. <a href="https://www.usaid.gov/what-we-do/global-health/nutrition/usgplan">https://www.usaid.gov/what-we-do/global-health/nutrition/usgplan</a>

<sup>&</sup>lt;sup>3</sup> In addition to this guidance, USAID Nutrition Technical Guidance briefs are available here: <a href="https://www.usaid.gov/what-we-do/global-health/nutrition/technical-areas">https://www.usaid.gov/what-we-do/global-health/nutrition/technical-areas</a>

<sup>&</sup>lt;sup>4</sup> Adapted from the definitions published in the USAID Multi-sectoral Nutrition Strategy 2014-2025. Additional definitions also available here: <a href="https://www.usaid.gov/nutrition-strategy">https://www.usaid.gov/nutrition-strategy</a>

 $<sup>^5\</sup> GFSS\ Technical\ Guidance\ for\ Objective\ 1:\ Inclusive\ and\ Sustainable\ Agricultural-Led\ Economic\ Growth\ \underline{https://feedthefuture.gov/lp/guidance-and-tools-global-food-security-programs}$ 

<sup>&</sup>lt;sup>6</sup> GFSS Technical Guidance for Policy Programming <a href="https://feedthefuture.gov/lp/guidance-and-tools-global-food-security-programs">https://feedthefuture.gov/lp/guidance-and-tools-global-food-security-programs</a>

<sup>&</sup>lt;sup>7</sup> GFSS Technical Guidance for Livestock https://feedthefuture.gov/lp/guidance-and-tools-global-food-security-programs

<sup>&</sup>lt;sup>8</sup> "Fish" includes wild caught fish and farmed fish, as well as fish products.

<sup>&</sup>lt;sup>9</sup> GFSS Technical Guidance for Objective 2: Strengthened Resilience Among People and Systems https://feedthefuture.gov/lp/guidance-and-tools-global-food-security-programs

<sup>&</sup>lt;sup>10</sup> WASH and Nutrition-Water Development Strategy and Multi-Sectoral Nutrition Strategy Implementation Brief: https://www.usaid.gov/what-we-do/global-health/nutrition/water-and-development-strategy-and-multi-sectoral-nutrition

<sup>&</sup>lt;sup>11</sup> Smith and Haddad. 2015. *Reducing Child Undernutrition: Past Drivers and Priorities for a Post-MDG Era*. http://www.sciencedirect.com/science/article/pii/S0305750X14003726

<sup>&</sup>lt;sup>12</sup> SPRING Agriculture and Nutrition Context Assessment Tool Locator: <a href="https://www.spring-nutrition.org/publications/tools/context-assessment-tool-locator">https://www.spring-nutrition.org/publications/tools/context-assessment-tool-locator</a>

<sup>&</sup>lt;sup>13</sup> Cost of Diet Tool V2: <a href="http://www.heacod.net/countries/reports/cotd-software-version-2-2016">http://www.heacod.net/countries/reports/cotd-software-version-2-2016</a>

<sup>&</sup>lt;sup>14</sup> Optifood Tool: https://www.spring-nutrition.org/publications/tool-summaries/optifood

<sup>&</sup>lt;sup>15</sup> Scaling Up Nutrition (SUN) Countries: http://scalingupnutrition.org/sun-countries/about-sun-countries/

<sup>&</sup>lt;sup>16</sup> USAID Nutrition Projects: https://www.usaid.gov/what-we-do/global-health/nutrition/country-map

<sup>&</sup>lt;sup>17</sup> USAID Food Assistance Programs: <a href="https://www.usaid.gov/what-we-do/agriculture-and-food-security/food-assistance/programs">https://www.usaid.gov/what-we-do/agriculture-and-food-security/food-assistance/programs</a>

<sup>&</sup>lt;sup>18</sup> USDA Foreign Agriculture Service (FAS) International Food Assistance Programs:

https://www.fsa.usda.gov/Internet/FSA File/fas assist factsheet.pdf

<sup>&</sup>lt;sup>19</sup> MCC Food Security and Nutrition Projects: https://www.mcc.gov/resources/doc/global-food-security-implementation-plan

<sup>&</sup>lt;sup>20</sup> The Demographic and Health Survey (DHS) Program: <a href="http://dhsprogram.com/publications/index.cfm">http://dhsprogram.com/publications/index.cfm</a>

<sup>&</sup>lt;sup>21</sup> Standardized Monitoring and Assessment of Relief and Transitions (SMART) Surveys: http://smartmethodology.org/about-

- smart/
  22 Multiple Indicator Cluster Survey (MICS): https://www.unicef.org/statistics/index 24302.html
  23 Lancet Series on Maternal and Child Undernutrition 2008: http://www.thelancet.com/series/maternal-and-child-undernutrition
  2013 http://www.thelancet.com/series/maternal-and-child-nutrition
- <sup>25</sup> Zone of Influence (ZoI) is the targeted geographical zone of food security investments through Feed the Future.
- <sup>26</sup> The Four Pillars of Food Security are accessibility, availability, utilization and stability.
- <sup>27</sup> SPRING. Improving Nutrition Through Agriculture Technical Series Briefs. Accessed from: https://www.spring-
- nutrition.org/publications/series/improving-nutrition-through-agriculture-technical-brief-series

  28 Operationalizing Multi-sectoral Coordination and Collaboration for Improved Nutrition: <a href="https://www.spring-nutrition-through-agriculture-technical-brief-series">https://www.spring-nutrition-through-agriculture-technical-brief-series</a> nutrition.org/publications/briefs/operationalizing-multi-sectoral-coordination-and-collaboration-improved