



# FEED THE FUTURE

The U.S. Government's Global Hunger & Food Security Initiative

## Integrating Gender and Nutrition within Agricultural Extension Services



## Competency Framework

for Integrating Gender and Nutrition within  
Agricultural Extension Services

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*This material was produced as part of the United States Agency for International Development (USAID) and US Government Feed the Future project “Integrating Gender and Nutrition within Extension and Advisory Services” (INGENAES), Leader with Associates Cooperative Agreement No. AID-OAA-LA-14-00008. [www.ingenaes.illinois.edu](http://www.ingenaes.illinois.edu). The United States Agency for International Development is the leading American government agency building social and economic prosperity together with the government and people of Zambia. The work was made possible by the generous support of the American people through USAID. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States government*

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## Introduction

The INGENAES capacity development activities are intended to build gender-responsive, nutrition-sensitive skills among organizations providing agricultural extension services (AES). The objectives are to enable these organizations to identify and equip staff with the appropriate skills to deliver services that lead to improved gender- and nutrition-related outcomes; and to establish a set of gender-responsive, nutrition-sensitive AES practices that substantially and effectively strengthen gender equity and improve nutrition outcomes.

What types of skills, attitudes, and behaviors (SAB)<sup>1</sup> are necessary to enable institutions to deliver gender- and nutrition-informed services?

The SABs needed at the individual level require a supportive environment that enables individual extension workers to employ the SABs. Such a supportive environment consists of technically correct training, supportive supervision, and appropriate incentives to encourage SAB deployment by staff.

### What is a COMPETENCY?

A competency is a skill, attitude, or behavior that enables an individual to do his/her job more effectively in order to contribute to the mission of the organization to which s/he belongs. A competency is, therefore, a characteristic embodied by individuals within an organization that is clearly linked to the ends the organization seeks to achieve.

### What is a COMPETENCY FRAMEWORK?

A competency framework lists skills, attitudes, and behaviors and describes what they look like in practice. In so doing it specifies options for how a given competency might be embodied and suggests ways to train and support individual workers to manifest them in their day to day work.

### What is meant by GENDER?

A concept referring to the social identity and roles associated with being a man or a woman that are usually learned through early socialization and reinforced by social norms.

### What is meant by NUTRITION?

The process of nourishing/being nourished, by which a living organism acquires and assimilates food and uses it for growth, maintenance, and repair.

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<sup>1</sup> Many educational materials intend to develop learners' knowledge, attitudes and practices. Knowledge, however, often does not translate into action. This competency framework instead focuses on skills, attitudes, and behaviors, which are more likely to ultimately lead to change.

**This framework has four major sections:**

- I. Critical Competencies for Adult Learning
- II. General Principles for Client-Driven and Equitable Extension and Advisory Services
- III. Gender-focused Competencies for Extension and Advisory Services
- IV. Nutrition-focused Competencies for Extension and Advisory Services

In addition to highlighting what trained professionals should be able to do as individuals, the competency framework complements the Institutional Review and Planning Framework that builds the practices and policies needed to support gender-responsive, nutrition-sensitive program delivery at the organizational level. It also complements recommendations included in: [The New Extensionist: Core Competencies for Individuals](#), developed by the Global Forum for Rural Advisory Services (GFRAS, 2015), but is more specific to gender and nutrition.

For the purposes of this framework, we rely on the definitions of gender and nutrition included in the box. Further definitions are available in appendix I. Note that biological sex is not equated with gender, the latter being a social construct. Diets, or the types and combinations of foods typically consumed by individuals and groups, are a key determinant of nutrition outcomes. Behaviors are observable actions, and when grouped together, they define an individual’s food practices related to meal preparation, food hygiene, healthy eating, child feeding, etc. Diets and food **practices** are considered to be vital components of nutrition, as the term is used this framework.

**The purpose of this competency framework is threefold:**

1. It lays out a comprehensive list of skills, attitudes, and behaviors (SABs) to enable frontline agricultural extension workers to engage in relevant, gender-responsive, nutrition-focused programming as part of their routine extension activities. The framework is written to explore differing “levels of engagement” (levels of complexity) around which workers could potentially engage farming households for a given topic. These “levels of engagement” demonstrate that any competency can be practiced at less and more complex levels. For example, competencies related to “diversify production” could focus on a continuum of actions between describing more nutritious crops, to actually improving access to seeds and markets, the former being less complex and less resource intensive and the latter more complex and more resource intensive—but arguably more impactful.

**Why Competencies?**

“Defining which competencies are necessary for success in your organization can help you do the following:

- Ensure that your people demonstrate sufficient expertise.
- Recruit and select new staff more effectively.
- Evaluate performance more effectively.
- Identify skill and competency gaps more efficiently.
- Provide more customized training and professional development.
- Plan sufficiently for succession.
- Make change management processes work more efficiently.”

[www.mindtools.com/pages/article/newISS\\_91.htm](http://www.mindtools.com/pages/article/newISS_91.htm)

2. As a result, the competency framework acts as a menu of options for organizations to determine the level of engagement at which they are able to support frontline extension staff. It also enables them to select among the various topics to decide which areas/competencies/desired impacts they will focus on. Thus, they can use the framework to select topical areas as well as the depth with which they expect field staff to engage farming households and other value chain actors for each one they select.

3. Finally, the competency framework is laid out to suggest, for each topic and level of engagement, training session objectives. It is a training design tool that focuses on what exactly will be done within a structured learning environment—the “Learning” column, which offers examples of how extension staff can “Transfer”, or try out, the learning in their work with opportunities for reflection. Training session attendees can plan for and commit to these “Transfer” or integration actions during a training workshop, but they take place in the field after the training. The “Impact” column gives organizations an aid to determine outcomes that could ideally result from focusing on a given competency, assisting in their selection of topics, how they train staff, and how they measure progress.

The content included here is by no means exhaustive, but instead is illustrative of competencies that may need to be further refined to address the assets and challenges related both to the AES workforce and the gender and nutrition situation that are confronted in a specific context. Data do not yet exist to answer the questions of whether and how AES can affect nutrition. Given this gap, the nutrition-related competencies described here build on conceptual work (see reference to Fanzo et al. in Appendix I), where AES can principally support increased production and supply of nutritious foods, and are less well situated than colleagues in the health sector to affect the demand for and consumption of these foods.

**Prospective users** of this framework include: Non-governmental organizations, government agencies, universities, research institutions, farmer based organizations, private for profit input or service providers.

Adult learning competencies provide a foundation for establishing learning situations conducive to facilitation, learning, and assimilation of new information, attitudes, and skills.

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
<b>I Critical Competencies for Adult Learning</b>				
<b>Respect</b>	Demonstrates respect in locally- appropriate ways in all interactions	Define what respect looks like and practice specific actions with men and women.	Commit to at least two specific actions to be mindful of in interactions with stakeholders over the coming month.	<ul style="list-style-type: none"> <li>- When implemented, these principles will change how members of the institution interact with each other.</li> <li>- They will create mutual accountability among extension agents and establish them as co-learners with community members.</li> <li>- This shift in power will lead to more honesty about community needs and help agents identify vulnerabilities within the community.</li> <li>- They will contribute to gender sensitive programming by demonstrating a commitment to honoring all members of the community.</li> </ul>
<b>Affirmation</b>	Provides frequent and substantive praise in all interactions	Explain the importance of receiving affirmation in work and life.	Keep note of using substantive affirmation and the results. Share results with colleagues.	
<b>Dialogue</b> (Questioning and Listening)	Practices dialogue by focusing on asking open questions and actively listening	Distinguish open and closed questions and practice the former.  Identify elements of active listening and use them.	Commit to learning something new from each community by practicing open questioning and listening.  Discuss with colleagues what it means to be a learner with community members.	
<b>Relevance</b> (Engagement and Immediacy)	Connects content to be shared to community members' experiences and needs	Describe a personal learning that was relevant and examined what made it so.  Decide on concrete actions to connect key content to people's personal needs.	Facilitate a community discussion connecting a key piece of content to an expressed community need in a way that included broad community participation.	

<b>Competency domains</b>	<b>Description of specific competencies within the domain</b>	<b>Learning</b>	<b>Transfer</b>	<b>Impact</b>
			Analyze how the discussion went.	- Dialogue- based supervision approaches will support the successful application of these competencies.
<b>Safety</b>	Promotes safety for all participants	Discuss why safety is important and who is likely to feel unsafe in community interactions and why.	Practice ways to help a reticent/fearful community members participate in discussions.	

AES staff who are proficient in the competencies described in this section are better equipped to effectively engage rural households in ways that help them reflect on their needs and assets, identify and work toward priorities that benefit all members of the household. These competencies apply both to nutrition education and the promotion of healthier food systems, and to gender sensitization and equity between men and women.

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
<b>II General Principles for Client-Driven and Equitable Extension and Advisory Services</b>				
Equitable, gender responsive services	Recognizes the different expectations and beliefs that people have about men and women, what they do and how they interact	Define sex (male and female) and gender.	Commit to respecting gender differences through actions that are inclusive of men and women’s roles and responsibilities.	- By recognizing differences, more targeted efforts can be made
	Recognizes specific ways that men and women make important contributions to agriculture and that these vary by geographic locations and production systems	Analyze gender- specific actions in food production, their seasonal characteristics and discussed how these realities create stress and increase risks for participants.	Facilitate a community conversation about the specific actions of men and women and how the division of labor creates different challenges for men and women.	<ul style="list-style-type: none"> <li>- By raising the issue of differing roles the organization begins to think about women and men more deliberately and considers specific ways to meet needs of both</li> <li>- Community members learn to value the difficulties men and women face in producing enough food for the family</li> </ul>



Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
	Recognizes that gendered differences in agricultural production require specific information	Describe when men and women require different information.  Discuss how to meet their different needs.	Commit to open listening with clients and created opportunities to meet expressed needs of male and female farmers.	- The information needs of all community members are met
	Recognizes that gendered differences in access and control impact agricultural production	Identify who has access and control of the resources needed to be productive.	Share information with men and women in the community to address resource constraints.	- Identify and realize the additional community resources needed for men and women to produce enough food for the family.
Communication strategies tailored to different clients	Is able to identify communication mechanisms that will reach, be understood by, and be useful to both men and women farmers	Describe why specific communication mechanisms may or may not be accessible and appropriate for men or women farmers in their area.  Identify strategies for adapting to differing levels of literacy, language fluency, access to technology, access to gender-specific “spaces,” etc.	Utilize communication mechanisms that benefit both men and women farmers.  Discuss nutrition needs and concepts in ways that are relevant to farmers’ lived experience.	- Men and women farmers receive extension services in ways they can easily understand and with content relevant to the agricultural activities they engage in
Effective group work	Identifies formal vs. informal groups in the community, who are the group members, how	Identify which groups have written or unwritten rules and whether the groups limit membership to the elite, to	Discuss with colleagues how to work with the different types of groups.	Membership in community groups is comprised of women and men of a variety of ages and social classes.

<b>Competency domains</b>	<b>Description of specific competencies within the domain</b>	<b>Learning</b>	<b>Transfer</b>	<b>Impact</b>
	they joined the group, and whether anyone is excluded	Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)	Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.	Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.
	Promotes gender-responsive meetings: understands when they ought to be held, where, what time, who is invited and how the announcements are made	men only, to certain castes, and who can be leaders.  Explain why attending a meeting is not the same as participating and being a leader.  Identify ways to encourage participation and leadership by those who normally are absent or silent.	Negotiate with leaders of diverse groups to establish working relationships that meet the needs of each party.  Discuss with community and colleagues how to make meetings accessible to everyone in the community as appropriate.	Previously underrepresented groups actively participate in meetings and benefit from the information and market access they provide.
Power and positionality	Is able to identify the power dynamics at play in the communities	Analyze who has power over, power with, power to and power within.  Distinguish between visible power and hidden power to ensure inclusive extension services are delivered.	Facilitate discussions about power with community to identify ways to improve extension programs.  Discuss with colleagues how to meet the needs of farmers regardless of the power dynamics.	Power becomes more equitably distributed as a community identifies how its development is impeded by inequitable power dynamics.
	Is able to identify where individuals fit in the communities	Identify and describe important aspects of identity such as gender, race, class and age.	Facilitate discussions with communities about inclusive extension programs and discuss with colleagues how to reach all farmer clients.	

<b>Competency domains</b>	<b>Description of specific competencies within the domain</b>	<b>Learning</b>	<b>Transfer</b>	<b>Impact</b>
Inclusive and equitable farmer-based organizations	<p>Supports farmer-based organizations to be responsive to women’s and men’s needs</p> <p>Knows options for structuring by-laws, rules, and organizational principles to support inclusion and equity</p>	<p>Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)</p> <p>Describe the importance of inclusion and equity for effective groups and associations.</p> <p>Demonstrate how to structure inclusive and equitable by-laws and other formal rules.</p>	<p>Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.</p> <p>Assist members and leaders of associations and groups understand principles of inclusion and equity.</p> <p>Work with members and/or leaders of associations to develop inclusive and equitable by-laws, etc.</p>	<p>Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.</p> <p>Increased membership and diverse perspectives strengthen farmer-based organizations</p>
	<p>Is able to orient farmer-based organizations to be member-oriented</p>	<p>Describe the importance of and challenges with delivering gender-responsive services.</p> <p>Develop examples of how organizations can be structured and operate to respond to member needs.</p>	<p>Assist members and leaders of associations and groups in understanding the importance of delivering gender-responsive services.</p> <p>Work with members and/or leaders of associations to structure information gathering and design of service delivery mechanisms.</p>	<p>Men and women members of farmer-based organizations receive services that meet their needs</p>

The competencies in Section III describe both the characteristics of gender-responsive extension and advisory systems as well as the abilities of a gender-sensitive extensionist who, in his or her work, is aware that differences in men’s and women’s needs, abilities, and endowments cannot be taken for granted, but require analysis and implementation to ensure that extension and advisory services will reach and benefit all farmers.

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
<b>III Gender-Focused Competencies for Extension and Advisory Services</b>				
Gender analysis	<p>Understands basic gender analysis</p> <p>Is able to apply principles for integrating gender analysis</p>	<p>Identify and describe gendered roles and division of labor in a household, on the farm, in processing, marketing, and in the community at large.</p>	<p>Discuss with colleagues how to target interventions to meet the specific needs of men and women farmers.</p> <p>Develop targeted interventions.</p> <p>Share information with the appropriate members of the community (to target the gender-specific roles) on how to improve production of various crops and livestock.</p>	<p>Targeted interventions reach appropriate farmers who are then more productive</p>
Gender-responsive agricultural technologies and practices	<p>Understands the key issues related to gender, extension and advisory services, and agricultural technologies as noted earlier, e.g., gendered differences in production, access and control of resources including information</p>	<p>Describe the key gender issues related to EAS and agricultural technology design, use, and dissemination.</p> <p>Identify the role of extension and advisory services in improving women’s access to and use of agricultural technologies.</p>	<p>Share information about different technologies to both men and women farmers and entrepreneurs.</p> <p>Facilitate group discussions between men and women farmers and entrepreneurs about different technologies.</p>	<p>Technology dissemination accounts for both men’s and women’s use and access, ensuring the technology is used appropriately</p>

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
	and technology, participation in groups, etc.			
	<p>Is able to apply principles for integrating gender analysis into technology design and dissemination processes</p> <p>Tailors information about technologies to different target groups</p>	<p>Identify and describe gender-based constraints related to the design, use, or dissemination of agricultural technologies.</p>	<p>Tailor information about how to access and use different technologies to men and women based on men’s and women’s different roles and responsibilities in the value chain.</p> <p>Work with men and women farmers and entrepreneurs to match available technologies with identified and preferences.</p>	<p>Farmers are using technologies that enhance women’s productivity, reduce time spent on labor-intensive activities, and provide other benefits</p>
	<p>Channels information about women’s needs to other actors involved in technology design, use, and dissemination</p> <p>Is able to identify opportunities for improving women’s access to and use of agricultural technologies</p>	<p>Identify specific actions to ensure the design of agricultural technologies meets women’s needs.</p> <p>Identify specific actions to improve women’s access to and use of agricultural technologies.</p>	<p>Engage in discussions with agricultural researchers, input suppliers, and/or technology designers about the needs of women farmers for input into new technologies.</p> <p>Provide information about technology to women farmers.</p> <p>Facilitate relationships between women farmers and credit institutions, input suppliers, and other technology service providers.</p>	<p>AES organizations communicate women’s needs and preferences to actors involved in the design manufacturing, and dissemination of technologies</p> <p>AES organizations assist women in accessing the services necessary to adopt the technology</p>

<b>Competency domains</b>	<b>Description of specific competencies within the domain</b>	<b>Learning</b>	<b>Transfer</b>	<b>Impact</b>
	<p>Promotes agricultural technologies that benefit men and women</p> <p>Is able to identify opportunities for improving how women and men can benefit from agricultural technologies</p>	<p>Identify technologies and practices that can meet men’s and women’s specific needs and preferences.</p> <p>Describe or demonstrate the benefits of specific technologies to men and women based on their agricultural responsibilities and to adapt to changing climatic conditions.</p>	<p>Provide tailored information to both men and women about the benefits of using specific agricultural technologies or practices (e.g., labor saving technologies, food quality and safety, nutrition, enhanced productivity, increased income).</p>	<p>AES organizations identify and deliver technologies that enhance women’s productivity, reduce time spent on labor-intensive activities, and provide other benefits</p> <p>AES staff help men and women realize the benefits of adopting technologies or practices</p>
<p>Inclusive, market-oriented EAS</p>	<p>Understands the key issues related to gender, extension and advisory services, and value chains development and operations</p>	<p>Describe key gender issues related to EAS and value chain operations and development</p> <p>Identify the role of extension and advisory services in improving women’s participation, performance in, and benefits from value chain development.</p>	<p>Share information about how to improve production, processing, and marketing of targeted value chains to men and women farmers and entrepreneurs.</p> <p>Tailor information about targeted value chains to men and women based on men’s and women’s different roles and responsibilities in the chain.</p>	<p>Agricultural value chain interventions are demand-driven, tailored, and benefit men and women equitably</p> <p>Men and women’s participation in value chain processes increase community access to markets</p>
	<p>Is able to identify opportunities for men and women farmers and entrepreneurs to participate within</p>	<p>Map actors and their roles along a value chain.</p>	<p>Provide information to both men and women farmers and rural entrepreneurs that enhance their abilities to join and participate in value chains.</p>	

<b>Competency domains</b>	<b>Description of specific competencies within the domain</b>	<b>Learning</b>	<b>Transfer</b>	<b>Impact</b>
	<p>different agricultural value chains and in different positions</p> <p>Is able to apply principles for integrating gender analysis into agricultural value chain development processes</p>	<p>Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)</p> <p>Identify where men and women participate in different roles in a specific value chain.</p>	<p>Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.</p>	<p>Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.</p>
	<p>Understands men’s and women’s specific challenges to participating in and benefitting from value chain development</p> <p>Can identify challenges facing women or men to participating in or benefitting from value chain development activities based on their different roles and responsibilities in value chains</p>	<p>Identify and describe gender-based constraints at different nodes of the agricultural value chain, for example time- or mobility-related constraints, limited ownership or access to agricultural resources, limited participation in producer groups, etc.</p>	<p>Lead farmer groups in activities to understand differences in men and women members’ ability to participate in collective marketing.</p> <p>Facilitate group discussions with men and women farmers and entrepreneurs about their knowledge of and participation in targeted value chain.</p> <p>Facilitate interviews with men, women farmers and entrepreneurs about their knowledge of and participation in targeted value chains.</p>	
	<p>Promotes opportunities for men and women farmers and entrepreneurs to</p>	<p>Identify specific actions to improve men’s and women’s</p>	<p>Provide differentiated support to men and women farmers (when needed) in adopting new techniques to improve production</p>	<p>Improved understanding of both men and women of their mutual contributions</p>

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
	<p>improve participation in agricultural value chain</p> <p>Is able to identify opportunities for improving men’s and women’s participation and performance in agricultural value chains</p>	<p>participation and performance in agricultural value chains.</p>	<p>in value chain, making market connections for targeted value chain, and connecting to input suppliers to improve production in specific value chains.</p>	<p>and capabilities in value chain operations</p> <p>AES providers strengthen efforts to reach both men and women with relevant technical and market information, both to associations and to individuals</p> <p>Women’s participation in agricultural value chains is increased and their share of benefits enhanced</p>
	<p>Is able to identify opportunities for improving how women and men can benefit from value chains</p> <p>Promotes mechanisms for men and women to benefit from agricultural value chains</p>	<p>List specific actions to improve how men and women benefit from agricultural value chains.</p>	<p>Provide information to both men and women farmers and rural entrepreneurs that enhance their abilities to benefit from targeted agricultural value chains, e.g., labor saving technologies, market linkages, credit facilities, access to improved inputs.</p> <p>Provide information to men and women farmers about how to manage contracts, credit opportunities, and different</p>	<p>Households work together as “family farm enterprises” with shared benefits</p> <p>Women’s participation in agricultural value chains is increased and their share of benefits enhanced</p>



<b>Competency domains</b>	<b>Description of specific competencies within the domain</b>	<b>Learning</b>	<b>Transfer</b>	<b>Impact</b>
			<p>mechanisms for receiving payments.</p> <p>Provide information to men and women farmers about inclusive household budgeting techniques.</p>	
<p>Women’s empowerment and gender transformative approaches (GTA)</p>	<p>Is able to describe and implement gender-transformative approaches and activities (knowledge and skills)</p>	<p>Identify and challenge underlying gender norms that inhibit women’s equitable participation and ability to benefit from agricultural activities.</p> <p>Facilitate processes that encourage others to identify and challenge gender norms that negatively impact both men and women farmers.</p>	<p>Incorporate GTAs into agricultural programming.</p>	<p>Men and women farmers have a greater understanding of how gender roles inhibit their full participation in and ability to benefit from their agricultural activities, and take actions to challenge and change these gender roles</p>

AES influence the production decisions of farming households, which can impact their own eating and nutrition as well as the availability of nutritious foods in the larger food system. By building on the competencies described in parts I-III, AES can support households in making decisions that will improve their health and livelihoods, and contribute to a healthier food system.

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
<b>IV Nutrition-Focused Competencies for Extension and Advisory Services</b>				
Importance of nutrition	Is convinced that nutrition is important, and motivated to take action at personal, family/community, and professional levels (attitude/perspective)	<p>Observe and analyze how nutrition contributes to good and bad health outcomes in personal, family, community experiences.</p> <p>Describe nutrition actions that lead to positive health outcomes.</p>	<p>Listen and learn about farming households' understanding of nutrition and the nutrition challenges they face.</p> <p>Motivate farming households and value chain actors to identify how nutrition affects them.</p> <p>Share opportunities to act on conviction.</p>	Agents and community members are motivated to act to improve nutrition because they believe it is important to them
Production diversity (as economically and agro-ecologically appropriate)	<p>Can identify context-appropriate trees, crops and livestock that can meet nutrition needs of specific/targeted communities and households</p> <p>Can provide examples of farm products (including cultivated and wild plants, animal-source</p>	<p>Identify fruits, crops, meat/fish that can be grown/raised in the local context that can meet specific nutrient deficiencies of targeted population using basic food groups related to dietary deficiencies.</p> <p>Describe technically and economically complementary</p>	<p>Discuss fruits, crops, animals/fish appropriate for local production with farmers, linking them to meeting specific nutritional requirements.</p> <p>Promote production packages to farmers while discussing the nutrition and</p>	<p>Farmers produce more foods that meet specific nutritional needs and requirements</p> <p>Farmers have greater knowledge of complementarity of</p>

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
	foods, and fish) which contribute to improved dietary diversity, and are appropriate for the market context	tree, crop and livestock farming combinations that have the potential to meet specific nutritional needs of the target population.	market benefits and tradeoffs of the foods.  Outline benefits and costs of diversifying production in terms of both nutrition/health and market sales to farmers.  Engage other value chain actors (input dealers, market sellers, food distributors, etc.) to develop economic opportunities for greater diversity.	diverse tree, crop and livestock production  Farmer and household members consume more diverse foods from own production.  Markets demand more diverse, nutrient- dense foods  Farmers gain additional income from the sale of nutrient-dense foods
Diversity of diets (from both household production & market access)	Can identify why and promote a diversity of foods that contribute to health and nutrition  Understands the nutritional value of specific foods and food groups, and the importance of consuming a variety of foods	Name food groups (~6- 9 depending on local FBDG), and constituent local foods for each group  Describe specific contribution foods make to health, growth, etc.  Explain the value of fresh produce to a diverse diet and list key micronutrients	Recommend production practices that supports dietary diversity and nutrition needs of targeted population.  Engage value chain actors to improve market pull and access to diverse foods.	Individual dietary diversity is increased  Marketplace access to diverse foods is increased (measured by cost and availability of multiple nutrient- dense products)

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
		Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)	Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.	Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.
Year-round access to diverse, nutritious foods	<p>Understands the relationship between seasonal food availability, fluctuations in income, food and nutrition security, and health</p> <p>Can engage communities in planning for better food access to nutritious foods</p>	<p>Describe why food &amp; nutrition security means consuming foods from all the food groups, all year round.</p> <p>Identify food groups likely to be unavailable at certain times in the year.</p> <p>Utilize seasonal calendars, and analyze and apply findings to address gaps.</p> <p>Plan how to implement tools among farmers, others.</p>	<p>Share information about food groups, and representative locally-produced/available foods.</p> <p>Facilitate farmers' consideration of how food &amp; nutrition security means consuming all the food groups, all year round.</p> <p>Develop a seasonal calendar with a farmer group, and a plan to address gaps.</p> <p>Serve as a conduit to information and needed inputs to support farmers in attaining year- round food &amp; nutrition security.</p>	<p>Reduced experience of seasonal variations in food availability, hunger and food insecurity</p> <p>Improved year- round access to constituent foods from each of the food groups</p> <p>Reduced incidence of poor nutrition outcomes (micronutrient deficiency, child stunting, underweight, etc.)</p> <p>Increased prosperity with limited seasonal fluctuations.</p>
Nutrition for all	Is sensitized to people's different nutrition needs, determined by sex, age, activity level, health status, pregnancy and lactation.	Explain how nutrition requirements vary across the life course, and by physical state (e.g. pregnancy, lactation, sickness).	When interacting with households with potentially vulnerable members (such as pregnant and/or lactating	Individual, household, and community-level knowledge of who is most vulnerable to poor nutrition is increased

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
	Is able to identify and address the needs of the most nutritionally vulnerable	<p>Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)</p> <p>Describe how some groups of people, typically women, children, and disadvantaged groups, are more vulnerable to poor nutrition due to biological needs and socioeconomic reasons.</p> <p>Identify local groups of people who may be more vulnerable to poor nutrition.</p> <p>Demonstrate effective ways to dialogue with farmers about the nutritional needs of the vulnerable in their households.</p>	<p>Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.</p> <p>women, infants, and young children, HIV+ members) initiates dialogue about unique nutritional needs.</p> <p>Facilitate farmers' examination of opportunities to improve nutrition of vulnerable persons within a household.</p> <p>Demonstrate effective engagement of vulnerable through interactions with diverse farmers.</p> <p>Support the efforts of colleagues (health, education sector) working to improve nutrition and food security, as well as those working to dismantle systems leading to inequity.</p>	<p>Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.</p> <p>Households, communities, and leaders identify and implement activities to prioritize the nutrition of the vulnerable</p> <p>Inequities in nutrition outcomes are reduced, such that the nutrition status of low-income households, women, children, etc. will be similar to that of those with greater privilege who live in a similar locale</p>
Nutrition-friendly agricultural practices	Can identify and promote practices that improve soil health: intercropping, crop rotation, applying organic	Describe characteristics of good quality soil.	Demonstrate how to implement key practices that improve soil quality:	Better crop resilience (to pests, drought, etc.)

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
	materials, using limited tillage methods	<p>Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)</p> <p>Describe practices that contribute to good quality soil.</p> <p>Illustrate connections between soil health, crop nutrient content, and human and livestock health</p>	<p>Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.</p> <ul style="list-style-type: none"> <li>• Intercropping</li> <li>• Composting</li> <li>• Crop rotation</li> <li>• Minimum tillage</li> </ul>	<p>Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.</p> <p>Improved micronutrient content of resulting food products</p> <p>Higher yields</p> <p>Higher income from sales</p> <p>Improved food security, micronutrient status among those consuming harvest</p>
Responsible agrochemical use	<p>Knowledge of integrated pest management (IPM) options – understands there can be a range of (sometimes non-chemical) options to control any given pest</p> <p>Improvements in product choice, agrochemical preparation and application practices, timing of application, and consumption of treated produce</p>	<p>Explain the viable alternatives to spraying or agrochemical use:</p> <ul style="list-style-type: none"> <li>• the different types of agrochemical products and their safety classifications;</li> <li>• which products are appropriate for what use;</li> <li>• how to safely apply agrochemicals;</li> <li>• why product contamination is important and why safety periods are required between application,</li> </ul>	<p>Elucidates meaning of product labeling</p> <p>Disseminates IPM options for control of major pests (insects, weeds, pests and diseases);</p> <p>Delay field re-entry and consumption of treated product.</p>	<p>Farmers use an appropriate range of practices (including as viable and appropriate non- chemical) to control pests</p> <p>Pesticide contamination and worker exposure are reduced and support better health and nutrition outcomes</p>

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
		handling and safe consumption.		
Gender-responsive agricultural labor practices	<p>Identifies the health- and nutrition- related problems that result from inappropriate labor practices for perinatal &amp; lactating women</p> <p>Can promote alternative activities and practices based on biological limitations and gender-related tasks</p> <p><i>*Note: Gender- responsive negotiation skills are essential to promoting to alternative practices</i></p>	<p>Describe the risks of having perinatal women (pregnancy and through 40 days postpartum) perform heavy labor (ex. prenatal: increased risk of premature labor and consequent risks to mother, baby; postpartum: risk of anemia).</p> <p>Evaluate local practices related to postpartum rest, encourages women, labor managers to observe these practices.</p> <p>Articulate the benefits of allowing lactating women to take breaks to express milk, breastfeed their babies (and conversely, the risks of not doing so).</p> <p>Demonstrate an activity to explore gender-determined labor commitments (e.g. daily activity clocks).</p>	<p>Assist farmers and labor supervisors in evaluating the benefits of providing perinatal leave/reprieve (e.g. economic: a few extra hours of labor vs. losing an employee to permanent disability).</p> <p>Lead farmer groups in activities that explore distribution of labor.</p> <p>Promote alternatives: e.g. distributions of labor that allow perinatal women to rest or do lighter work, gender- responsive technologies that reduce workload.</p>	<p>Fewer women conduct heavy labor during perinatal period</p> <p>Breaks and other breastfeeding-friendly options (e.g. bringing baby to field where feasible) are provided to lactating women</p> <p>Better birth outcomes</p> <p>Reductions in postpartum anemia</p> <p>Reductions in mastitis</p> <p>Improved breastfeeding outcomes</p> <p>Improved child growth and development, and maternal health</p>

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
<p>Reducing postharvest losses for home consumption and for markets</p>	<p>Describes the basic causes of post- harvest losses at during harvest, storage, and preparation at home</p> <p>Lists, understands, describes, and discusses simple, low- cost techniques/ technologies that minimize post- harvest losses</p> <p>Analyzes and evaluates techniques/technologies at home that are more appropriate for minimizing post-harvest losses</p> <p>Applies techniques/ technologies that minimize post- harvest losses and maximize storability of foods</p>	<p>Identify and explain the basic causes of post-harvest losses in households and farms, focusing on highly nutritious foods most vulnerable to food losses (e.g. fruits, vegetables, animal-source foods).</p> <p>Describe and explain low- cost techniques/technologies used to minimize post- harvest losses of traditional produce (e.g., cold boxes, picking times, washing).</p> <p>Demonstrate improved/new food preparation techniques to make a common dish (i.e. complementary food from steamed vegetable and fruit).</p> <p>Demonstrate how to build or implement techniques/ technologies aimed at reducing post-harvest losses at homes.</p> <p>Evaluate with peers the different dishes based on flavor</p>	<p>Facilitate small group discussions and demonstrations of low-cost post-harvest techniques.</p> <p>Observe the implementation of practices (e.g., new storage, washing/handling, picking times, abundance/diversity of food) and discuss with household members (e.g., issues with implementation).</p> <p>Demonstrate food preservation activities.</p>	<p>Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.</p> <p>Nutritious foods are more abundant and available for longer periods</p> <p>Household income is increased from sales of surplus quality produce</p> <p>Fresh produce and animal-source foods are more available for home consumption and in markets</p> <p>Food preparation techniques that maximize desirability and minimize nutrient losses increase the amount of nutritious foods available to household members for longer periods (prepared food spoils slowly)</p> <p>Fresh produce is more available for community consumption</p>



Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
		<p>Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)</p>	<p>Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.</p>	<p>Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.</p>
<p>Better agricultural practices for better Water, Sanitation, and Hygiene (WASH)</p>	<p>Encourages people of the importance of adopting agricultural practices that reduce the risk of infection</p>	<p>and preferences, and proposes new recipes.</p> <p>Identify local resources to adapt/create techniques/ technologies aimed at reducing post-harvest losses.</p> <p>Explain the contribution of infection and illness, and diarrhea in particular, to poor nutrition.</p> <p>Name specific practices that can contribute to improved health and nutrition.</p>	<p>Explain to peers, farmers, others how diarrhea and other relevant sicknesses can be avoided when appropriate agricultural, sanitation, and hygiene practices are followed (e.g. sanitary defecation, handwashing among agricultural laborers).</p>	<p>Consumption of nutritious foods enables health maintenance and potentiates individual's physical, cognitive, and mental abilities</p> <p>Decreased burden of infectious disease and illness associated with farming practices (e.g. zoonotic, water-borne disease)</p> <p>Improved nutrient absorption leads to better health</p>
<p>Hygiene in food preparation, caregiving</p>	<p>Reinforces “Essential Hygiene Actions” (EHA), paying particular attention to interactions between agriculture, hygiene and health, and nutrition</p>	<p>List and explain the EHA:</p> <ul style="list-style-type: none"> <li>• keeping the environment clean;</li> <li>• hand washing with soap at critical points: before preparing, eating food; after using latrine; after interacting with animals, manure;</li> </ul>	<p>Model the EHA in daily life, and when conducting work.</p> <p>Discuss open defecation, handwashing, access to clean drinking water in clean containers while in the field, and other -</p>	<p>Improved communication about hygiene issues (taboos reduced)</p> <p>Improved practices (better handwashing, etc.)</p>

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
		<p>Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)</p> <ul style="list-style-type: none"> <li>• keeping food, water and storage containers clean.</li> </ul> <p>Explain the connections between the EHA and agricultural activities.</p>	<p>Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.</p> <p>potentially taboo - topics with farmers.</p> <p>Support farmers in identifying, adopting improved practices.</p> <p>Collaborate, where available, with WASH/Health sector colleagues in training, establishing handwashing stations in the field.</p>	<p>Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.</p> <p>Reduced rates of diarrheal disease</p>
Irrigation and Multiple Use Water Services (MUS)	<p>Recognizes the importance of access to safe, accessible, and adequate water for both domestic and agricultural purposes</p> <p>Is able to help reduce the risk of vector-borne and fecal-oral diseases and illnesses resulting from certain irrigation practices</p>	<p>Describe the risks of using untreated wastewater for irrigation (e.g. fecal- oral contamination).</p> <p>Explain how certain (e.g. flood) irrigation practices can increase vector-borne disease.</p> <p>Relate/Explain how concepts of community-managed MUS relate to gender equity.</p> <p>Describe preventive measures to reduce risk of associated</p>	<p>Explore, with farmers, the incidence of diarrhea, malaria, etc. in a community.</p> <p>Facilitate discussions about links between irrigation &amp; illness.</p> <p>Involve farmers in accessing preventive measures.</p> <p>Link farmers to existing MUS where they exist, supports their</p>	<p>Reductions in diarrheal disease, especially among young children</p> <p>Reductions in malaria and other vector- borne diseases</p> <p>Improvements in child appetite (due to reduced burden of disease, including environmental enteric dysfunction &amp; inflammation)</p>

Competency domains	Description of specific competencies within the domain	Learning	Transfer	Impact
		Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)	Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.	Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.
Livestock management, clean water, sanitation and hygiene	Communicates the disease risks posed by specific livestock and practices in a given locale (if known), and promotes alternative actions and preventive measures	illness (use of mosquito nets, etc.).  Explain the interactions between livestock production, water quality, and infectious disease.  Explain appropriate practices such as removal, storage of animal waste.	development where not yet existent.  Model improved practices at own household.  Advocate for thoughtful location of livestock (e.g., removed from drinking water, children’s play areas).	Improvements in child growth, health
Market Orientation	Is able to identify marketing opportunities for nutritious products that will be affordable for many consumers  Analyzes market opportunities for nutrition-sensitive value chains  Estimates capital required and return on investment for investments in nutrition-sensitive value chains	Can conduct a step by step market analysis that includes: <ul style="list-style-type: none"> <li>• gathering data on consumer interest and demand for crop/product in question,</li> <li>• assessing marketing structure and points for possible sale,</li> <li>• exploring alternate marketing options.</li> </ul>	Assist Farmer Based Organizations and Marketing Associations in analyzing demand for highly nutritious crops and products, such as legumes, poultry and eggs, meat, fresh and processed vegetables and fruit, nuts, etc.  Promotes marketing of products which can improve nutrition through diversified diets and increased consumption of	Increased availability of nutrient-dense foods in community, local and regional markets  Increased household income that can be spent on consuming more nutritious, diverse foods and/or investment towards better health outcomes (e.g., latrines, concrete instead of dirt flooring, hand washing stations, soap)

<b>Competency domains</b>	<b>Description of specific competencies within the domain</b>	<b>Learning</b> Changes in skills, attitudes and behaviors that happen during a learning event and are assessed following the training (achievement-based objectives)	<b>Transfer</b> Examples of specific, expected actions that will be practiced with farming households and value chain actors. These transfer points form the basis for supportive supervision.	<b>Impact</b> Longer-term or ultimate changes that will occur within the organization or community as a result of practicing this competency.
			nutrients commonly deficient in local diets  Motivates farming households to use increased income to purchase nutritious foods	

## Appendix: Combined Glossary of Terms

### A Glossary of Terms Related to Integrating Nutrition into Agricultural Extension Services

*This glossary contains concepts and terms commonly used by health and nutrition practitioners, but they may not be familiar to agricultural experts. The glossary is a living reference document for the INGENAES consortium members to facilitate cross-sectoral work on agriculture, nutrition and gender; terms can be added as the need develops. The definitions included in the glossary are sourced mostly from international and other organizations working in health and nutrition, only relying on sources such as Wikipedia when simplicity is the overriding objective.*

#### Key Concepts

*The following concepts are becoming more frequently used among those working in the nexus of agriculture and nutrition. Sources for these definitions are provided in the text and reference section.*

<b>Nutrition-Sensitive Approaches</b> address the underlying and systemic causes of malnutrition.” (USAID 2014).	<b>Nutrition-Specific Interventions</b> address the immediate determinants of malnutrition (USAID 2014).
Interventions or programmes that address the underlying determinants of fetal and child nutrition and development—food security; adequate caregiving resources at the maternal, household and community levels; and access to health services and a safe and hygienic environment—and incorporate specific nutrition goals and actions. Nutrition-sensitive programmes can serve as delivery platforms for nutrition-specific interventions, potentially increasing their scale, coverage, and effectiveness. Examples: agriculture and food security; early child development; women's empowerment; social safety nets; and water, sanitation, and hygiene. (Ruel and Alderman) (SPRING)	Interventions or programmes that address the immediate determinants of fetal and child nutrition and development—adequate food and nutrient intake, feeding, caregiving and parenting practices, and low burden of infectious diseases. (Ruel and Alderman) (SPRING).

#### Definitions of commonly-used nutrition-related terms for non-technical users

**Acute Malnutrition.** Measurement of undernutrition. Reflects a recent and severe process that has led to substantial weight loss, usually associated with caloric deprivation and/or disease. Acute malnutrition can take on three forms: wasting (see definition below), bipedal pitting edema and edematous wasting, and includes moderate acute malnutrition (MAM) and severe acute malnutrition (SAM).

**Biofortification.** Biofortification is the process of breeding food crops that are rich in micronutrients, such as vitamin A, zinc, and iron. These crops “biofortify” themselves by loading higher levels of minerals and vitamins in their seeds and roots while they are growing. When eaten, they can provide essential micronutrients to improve nutrition and public health.

**Body Mass Index (BMI).** A method to quantify the **amount of solid tissue mass (muscle, fat, and bone)** in an individual, and then categorize that person as *underweight, normal weight, overweight, or obese* based on that value. For Adults (20 years and above) It is calculated by dividing weight in kilograms by height in meters squared. Both high and low indexes are associated with poor health. The normal range for a health adult is 18.5 to 24.9. A BMI below 18.5 is considered underweight, while one above 25-30 is considered overweight. A BMI greater than 30 is considered obese, and one greater than

40 is morbidly obese. BMI is an inexpensive and easy-to-perform method of screening for weight categories that may lead to health problems. BMI Formula:  $\text{Weight (lb)} / [\text{height (in)}]^2 \times 703$  or for metric measurements  $\{\text{weight (kg)} / [\text{height (m)}]^2\}$ .

**Complementary Feeding.** The transition from exclusive breastfeeding to complementary feeding – typically covers the period from 6–24 months of age. This is a critical period of growth during which nutrient deficiencies and illnesses contribute globally to higher rates of undernutrition among children under five years of age. The SUN Movement aligns with the World Health Organization (WHO) recommendation that infants should be exclusively breastfed for the first six months of life to achieve optimal growth, development and health. Thereafter, infants should receive nutritionally adequate and safe complementary foods, while continuing to breastfeed for up to two years or more.

**Dietary Diversity.** Dietary diversity is a measure of the number of individual foods or food groups consumed in a given time period.

**Dietary Diversity Score (DDS).** Dietary Diversity Score (DDS). The DDS can be scored on a household or individual basis. Household dietary diversity is defined as the number of unique food groups consumed by household members over a given period. The HDDS has been validated to be a useful approach for measuring household food access, particularly when resources for undertaking such measurement are scarce.

**Edematous wasting.** When a child suffers from wasting and bipedal edema at the same time.

**Essential Nutrition Actions (ENA).** In 1999, the WHO, in collaboration with UNICEF and the USAID Basic Support for Institutionalizing Child Survival (BASICS) project, proposed effective, feasible, available and affordable interventions targeting the first 1000 days of life. These essential actions protect, promote and support priority nutrition outcomes: exclusive breastfeeding for six months; adequate complementary feeding starting at six months with continued breastfeeding for two years; appropriate nutritional care of sick and malnourished children; adequate intake of vitamin A for women and children; adequate intake of iron for women and children; and adequate intake of iodine by all members of the household. These interventions work best when combined with interventions to reduce infections, such as water, sanitation and hygiene.

**Exclusive Breastfeeding.** Breast milk contains all the nutrients an infant needs in the first six months of life. It protects against common childhood diseases such as diarrhea and pneumonia, and may also have longer-term benefits such as lowering mean blood pressure and cholesterol, and reducing the prevalence of obesity and type-2 diabetes. The SUN Movement aligns with the WHO recommendation on exclusive breastfeeding whereby infants receive only breast milk, no other liquids or solids– not even water – for the first six months of life, to achieve optimal growth, development and health.

**First Thousand Days or 1,000 day window (1000 days).** The first thousand days refers to the time from pregnancy to a child's second birthday, and is considered the most significant period in which malnutrition can have irreversible negative impact on children's health and development.

**Food Fortification.** The addition of one or more essential nutrients to a food, whether or not it is normally contained in the food, for the purpose of preventing or correcting a demonstrated deficiency of one or more nutrients in the population or specific population groups. (Codex Alimentarius). The process of adding micronutrients, or restoring those lost during processing, to food products.

**Food diversification** (see Dietary Diversity)

**Food security.** A commonly used definition was developed at the 1996 World Food Summit: Access by all people at all times to sufficient, safe and nutritious food needed for a healthy and active life, encompassing access, availability, utilization and stability.

**Global Acute Malnutrition (GAM).** A measurement of undernutrition. The total proportion of children aged between 6 and 59 months in a given population who have **moderate or severe acute malnutrition**, plus. (The word 'global' has no geographic meaning.) When the GAM rate is equal to or greater than 15 percent of the population, then the nutrition situation is defined as 'critical' by WHO. In emergency situations, the nutritional status of children between 6 and 59 months old is also used as a proxy to assess the health of the whole population.

**Incidence.** Incidence is the number of newly diagnosed cases of a disease. An incidence rate is the number of new cases of a disease divided by the number of persons at risk for the disease. If, over the course of one year, five women are diagnosed with breast cancer, out of a total female study population of 200 (who do not have breast cancer at the beginning of the study period), then we would say the incidence of breast cancer in this population was 0.025 (or 2,500 per 100,000 women-years of study). (See also Prevalence).

**Infant and Young Child Feeding (IYCF).** Term used to describe the feeding of infants (less than 12 months old and young children (12–23 months old). IYCF programs focus on the protection, promotion and support of exclusive breastfeeding for the first six months; timely introduction of complementary feeding and continued breastfeeding for two years and beyond.

**Kwashiorker.** Severe form of acute malnutrition characterized by bilateral edema.

**Lancet Series on Maternal and Child Undernutrition, 2008, 2013.** The well-respected peer-reviewed British medical journal published two sets of articles demonstrating the devastating and largely irreversible impact of malnutrition on young children (from pregnancy to a child's second birthday). The authors identified cost-effective, evidence-based nutrition interventions to prevent undernutrition during the critical 1,000-day window.

**Low Birth Weight.** Weight at birth less than 2,500 grams (88.18 ounces).

**Malnutrition.** A condition resulting from a dietary imbalance. This result from inadequate nutrients for growth and maintenance or an inability fully utilize nutrients due to illness. It can also refer to an overconsumption of nutrients and can include overweight and obesity.

**Marasmus:** Severe form of acute malnutrition characterized by wasting of body tissues – marasmic children are extremely thin.

**Micronutrients:** Essential vitamins and minerals required in miniscule amounts by the body throughout the lifecycle.

**Moderate Acute (Underweight) Malnutrition (MAM).** A life-threatening condition, moderate acute malnutrition (MAM) is defined by a weight-for-height index of between -2 and -3 z-scores (or standard deviations) below the international standard or by a mid-upper arm circumference (MUAC) between 115 mm and 125 mm. If MAM is not addressed, it may progress towards severe acute malnutrition (severe wasting and/or oedema). MAM is also associated with a high number of nutrition-related deaths.

**Moderate (underweight) malnutrition (MM).** A measurement of undernutrition that refers to a weight-for-age index of between -2 and -2 z-scores (or standard deviations) below the median of the WHO child growth standards. A composite indicator, it can be due to a low weight-for-height (wasting) or a low height-for-age (stunting) or to a combination of both. Underweight affects many children in poor countries. Children with moderate underweight have an increased risk of mortality, and underweight is

associated with a high number of nutrition-related deaths. If some of these moderately malnourished children do not receive adequate support, they may progress towards severe acute malnutrition (severe wasting and/or oedema) or severe stunting (height-for-age less than -3 z-scores), which are both life-threatening conditions.

**Morbidity.** Morbidity is another term for illness. A person can have several co-morbidities simultaneously. So, morbidities can range from Alzheimer's disease to cancer to traumatic brain injury. Morbidities are NOT deaths.

**Nutrient Dense.** Foods with a high micronutrient and/or protein content per calorie. Relates to proportion of nutrients in foods. High fat foods can be considered nutrient dense as well, but a more commonly used definition refers to micronutrients and protein.

**Nutrition, Assessment, Counseling and Support (NACS).** The NACS approach aims to improve the nutritional status of individuals and populations by integrating nutrition into policies, programs, and the health service delivery infrastructure. NACS projects strengthen the capacity of facility- and community-based health care providers to deliver nutrition-specific services while linking clients to nutrition-sensitive interventions provided by the health, agriculture, food security, social protection, education, and rural development sectors. The interventions involve assessment methodologies, counseling approaches, and support such as therapeutic or complementary foods, supplements, etc.

**Oral Rehydration Therapy (ORT).** ORT is a fluid replacement strategy used to prevent or treat dehydration that is most commonly caused by diarrhea. It involves drinking water with modest amounts of sugar and salt added, while continuing to eat. When diarrhea is severe or long-lasting, the therapy also includes supplemental zinc. Caretakers are taught the signs of dehydration and/or worsening dehydration. The World Health Organization and UNICEF specify indications, preparations and procedures for ORT.

**Prevalence.** A measurement of the extent of disease in a population. Prevalence is a measure of disease that allows us to determine a person's likelihood of having a disease. The proportion of a population with a given condition.

**Ready-to-use therapeutic foods (RUTF) and Ready-to-use supplementary foods.** RUTFs are specialized ready-to-eat, portable, shelf-stable products, available as pastes, spreads or biscuits that are used in a prescribed manner to treat children with severe acute malnutrition. Ready-to-use supplementary foods are meant to supplement diet to treat moderate acute (underweight) malnutrition. There are efforts to harmonize these types of ready-to-use foods.

**Scaling Up Nutrition Movement (SUN).** The SUN collaborative process began in 2009 with the development of the Scale Up Nutrition Framework. It has evolved into a Movement that is both stimulated and reinforced by political interest in nutrition among leaders of national governments and development partners. SUN is a global push for action and investment to improve maternal and child nutrition based on evidence that shows that proper nutrition during the 1000 days between a woman's pregnancy and her child's second birthday gives children a healthy start at life and that poor nutrition during this period leads to irreversible consequences such as stunted growth and impaired cognitive development.

**Severe Acute Malnutrition (SAM).** Very low weight for height Z-score or MUAC, or the presence of nutritional edema. WHO and UNICEF recommend the use of a cut-off for weight-for-height of below -3 SD of the WHO standards to children as having SAM or a MUAC of less than 115 mm. This is an immediately life threatening condition if left untreated.

**Social Behavior change communication (SBCC)** has been defined in the field of health as the strategic use of communication to promote positive health outcomes, based on proven theories and models of behavior change. SBCC employs a systematic process beginning with formative research and behavior



analysis, followed by communication planning, implementation, and monitoring and evaluation. Audiences are carefully segmented, messages and materials are pre-tested, and both mass media and interpersonal channels are used to achieve defined behavioral objectives. SBCC is being increasingly applied to other sectors such as agriculture (reference needed for Citations)

**Social Behavior Change Communication Programs (SBCCP).** Social Behavior Change Communication programs are designed to encourage behaviors that will improve health status and related long-term outcomes. Previously known as Information- Education-Communication (IEC), the change in name implies a switch from materials production to strategically designed programs that influence behavior.

BCC programs include a wide range of interventions that fall into three broad categories:

- Mass media (radio, television, billboards, print material, the internet)
- Interpersonal communication (client-provider interaction, group presentations)
- Community mobilization

**Stunting.** Low height-for-age measurement used an indicator of chronic malnutrition, calculated by comparing the height-for-age of a child with a reference population of well-nourished and healthy children ( $> -2$  SD).

**Supplementation.** Supplementation refers to the provision of added nutrients in pharmaceutical form (such as capsules, tablets or syrups) rather than in food.

**Thousand Days (see First Thousand Days)**

**Undernutrition.** An insufficient intake and/or inadequate absorption of energy, protein or micronutrients that in turn leads to nutritional deficiency.

**Water, Sanitation and Hygiene (WASH).** WASH, used in international development programs, refers to "Water, Sanitation and Hygiene." WASH activities include the provision of safe water for drinking, washing and domestic activities, the safe removal of waste (toilets and waste disposal) and health promotion activities to encourage protective hygiene behavioral practices amongst the affected population. Access to safe water, adequate sanitation, and proper hygiene education can reduce illness and death, and also impact poverty reduction and socioeconomic development.

**Wasting (see Severe Acute Malnutrition).** Reflects a recent and severe process that has led to substantial weight loss, usually associated with caloric deprivation and/or disease. Wasting ( $> -3$  SD) is calculated by comparing the weight-for-height of a child with a reference population of well-nourished and healthy children or by measuring the mid-upper arm circumference of less than 115 mm.

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## **Glossary of Terms Relating to Gender**

Gender concepts and terminology have changed over time. These definitions are adapted and revised from a number of sources and represent current usage. The references at the end of this Glossary provide more examples of definitions.

**Gender:** A concept referring to the social identity and roles associated with being a man or a woman that are usually learned through early socialization and reinforced by social norms. In some countries, additional gender categories are recognized [e.g. transgender]. The constellation of characteristics linked to men and/or women may change over time and place. The concept of gender includes the recognition that the social categories of man and woman are often defined in relationship to each other. To refer to people's gender roles or categories, use the terms "man/men" and "woman/women." For example, a "woman" may be responsible (a social role) for preparing the morning meal each day.

Policy makers and development practitioners sometimes interpret “gender” as referring only to women or as a women’s issue. This is incorrect, as the concept of gender encompasses everyone, affecting all opportunities and life-choices.

*(Listed in alphabetical order)*

**Constructive men’s engagement:** An approach to achieving **gender equality** that consciously and constructively includes men as clients, participants, supportive partners, and agents of change.

**Gender analysis:** Gender analysis is a process of using socio-economic methodologies to systematically identify and interpret the consequences of gender differences, disparities, and relationships. It takes into account different roles, responsibilities, rights, services, opportunities, and resources of men and women and the legal and institutional context in which they operate to better understand human development outcomes. It examines the relative status of men and women, and the causes and consequences of inequality by collecting sex-disaggregated data and other qualitative and quantitative information on gender issues, including access to and control over assets (tangible and intangible), as well as beliefs, practices, and legal frameworks, and analyzing that data. An examination of **gender disparities**, differences, and relationships cannot be isolated from the broader social context.

In development work, gender analysis is used to identify constraints and opportunities in specific contexts and timeframes [see gender-based constraint], and across different social and institutional locations (e.g., between partners or within primary relationships, households, the community, civil society, and government organizations and institutions). This can help to identify pathways for changing relations of power between women and men to better achieve development objectives. There are many methodologies available for conducting gender analyses.

**Gender-accommodating:** when project design, implementation, and evaluation approaches adjust to or compensate for gender differences, norms, and inequities by being sensitive to the different roles and identities of men and women, but in ways which do not change the status quo.

**Gender aware:** The recognition that gender identities and roles influence the opportunities of men and women in society.

**Gender-based constraint:** Restrictions on men’s or women’s access to resources or opportunities that are based on their gender roles or responsibilities. The term encompasses both the measurable inequalities that are revealed by sex-disaggregated data collection and gender analysis as well as the processes that contribute to a specific condition of gender inequality.

**Gender-based violence (GBV):** Distinguishes violence that targets individuals or groups of individuals on the basis of their gender identity and includes any act which results in (or is likely to result in) physical, sexual, or psychological harm. Examples of GBV include, rape, torture, mutilation, sexual slavery, forced impregnation, and murder, as well as the threat of doing any of these acts.

**Gender blind:** The lack of understanding by a person, policy, or institution that gender identities and roles influence the opportunities of men and women in society.

**Gender disparity or Gender gap:** Measurable differences in the relative conditions between men and women, especially (but not only) as they relate to the ability to engage in economic or political opportunities, e.g., illiteracy rates, level of education reached, levels of ownership of productive assets such as land or access to finance, or ability to participate in politics (see also gender equality).

**Gender equality:** The ability of both men and women to have equal opportunities and life chances. This may require changes in the lives of both men and women, and a comprehensive understanding of what

measures should be taken to assure equality of opportunity. Since **gender roles** change over time, development programming can have an impact on gender equality, either supporting it or inhibiting it.

**Gender equity:** Equity involves fairness in representation, participation, and benefits afforded to men and women. It recognizes that in order to achieve equality a “leveling of the playing field” must first be done to compensate for gender gaps and the legacy of discrimination. This usually involves a focus on women, because women are typically in a disadvantaged position within society.

**Gender indicators:** An indicator is a measure. Gender indicators (or gender-related or gender-sensitive indicators) measure changes in specific conditions of men and women or on the level of disparity between them. The indicator may be constructed to show either an absolute measure, for example, the increase in income of a relationship between women and men, for example, a change in women’s income as a percentage of men’s income.

The table below shows an example measuring a positive change in income for both men and women as a result of a project. Women have increased their income from 100 to 200 units, an increase of 100%. Men increased their incomes from 200 to 300 units, an increase of 50%. Women have more money than they did before the intervention and the gender gap has decreased from 50% to 33%, but the gender gap remains since women still have only 66.6% of men’s income.

	At baseline	At endline	% increase
Women’s income	100 units	200 units	100%
Men’s income	200 units	300 units	50%

**Gender integration or mainstreaming:** These terms tend to be used interchangeably. They both designate methods and institutional arrangements necessary for achieving **gender equality**. This involves taking account of gender implications in all programs, policies, and resource allocations, as well as addressing inequalities in organizational procedures and administrative and financial operations.

**Gender responsive:** Being aware of how gender identities and roles influence the opportunities of men and women in society and designing activities and policies that are structured and operate to demonstrate a commitment to gender equality. This mean ensuring that women are among the participants and beneficiaries, whether as the extension agents hired, the farmers reached, or the scientists trained. It also means ensuring that both men and women have the appropriate training and skills to understand and support women farmers, extension agents, employees, and entrepreneurs.

**Gender relations:** A type of social relations between men and women which are defined and reinforced by social institutions. They include the routine ways in which men and women interact with each other: in sexual relationships, friendships, workplaces, and different sectors of the economy. Gender relations are socially determined, culturally based, and historically specific. They are mediated by other identities including ethnicity, religion, class, and age. Gender relations are shaped and reinforced by cultural, political, and economic institutions including the household, legal and governance structures, markets, and religion. Gender relations are dynamic and change over time.

**Gender roles:** The socially defined tasks, responsibilities, and behaviors that are considered appropriate for men and women. These are context-specific and can change over time through individual choices or as a result of social and/or political changes emerging from changed opportunities (more education, different economic environment) or times of social upheaval (during disasters, in war, and in post-conflict situations). For example, the introduction of new technology or services can alter the on-farm division of labor, shifting some tasks from women to men or vice versa.

**Gender targets:** Targets establish how projects measure success. Gender targets are goals that are expected to be reached either to improve women's and women's conditions relative to an earlier level OR to improve their situations relative to each other [see Gender indicators].

**Gender-transformative:** Where both men and women are helped as more gender-equitable relationships are promoted. A transformative approach identifies ways of engaging men and women to examine, question, and change institutions and norms that perpetuate inequalities.

**Sex:** The biological categories of "male" and "female" and does not change across cultures or over time. Intersex is a term to describe people who have sexual characteristics related to both males and females.

**Sex-disaggregated data:** The collection of data according to physical attributes of the individual. Disaggregating data by sex (i.e., in categories of males and females) permits valid cross-country comparisons since sex categories are the same from one country to another.

**Violence against Women (VAW):** Any act of GBV that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty in either public or private life.

**Women's (and Girl's) Empowerment:** A social process which enhances women's and girls' capacity to act independently (self-determination), control assets, and make choices and decisions about all aspects of one's life. Through women's empowerment unequal power relations are transformed, and women gain greater equality with men. At the government level this includes the extension of all fundamental social, economic, and political rights to women. At the individual level, this includes processes by which women gain confidence to express and defend their rights, and greater self-esteem and control over their own lives. The participation and acceptance of men in changing their own roles and supporting change among women is essential for achieving women's empowerment (see constructive engagement of men].

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