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Designing Effective Nutrition-Sensitive Agriculture Activities

Facilitator's Guide

USAID
FROM THE AMERICAN PEOPLE

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About USAID Advancing Nutrition

USAID Advancing Nutrition is the Agency's flagship multi-sectoral nutrition project, led by JSI Research & Training Institute, Inc. (JSI), and a diverse group of experienced partners. Launched in September 2018, USAID Advancing Nutrition implements nutrition interventions across sectors and disciplines for USAID and its partners. The project's multi-sectoral approach draws together global nutrition experience to design, implement, and evaluate programs that address the root causes of malnutrition. Committed to using a systems approach, USAID Advancing Nutrition strives to sustain positive outcomes by building local capacity, supporting behavior change and strengthening the enabling environment to save lives, improve health, build resilience, increase economic productivity, and advance development. This project contributes to the goals of the U.S. Government's Feed the Future initiative by striving to sustainably reduce hunger and improve nutrition and resilience.

Disclaimer

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Contents

Acronyms

AOR	agreement officer's representative
BFS	Bureau for Food Security
COP	chief of party
COR	contracting officer's representative
FG	Facilitator's Guide
GFSS	Global Food Security Strategy
MSNS	Multi-sectoral Nutrition Strategy
PMP	performance monitoring plan
M&E	monitoring and evaluation
RFA	request for application
RFP	request for proposal
SBC	social and behavior change
SPRING	Strengthening Partnerships, Results, and Innovations in Nutrition Globally
UNICEF	United Nations Children's Fund

Introduction to Designing Nutrition-Sensitive Agriculture Activities

This document is a facilitator's guide for the Nutrition-Sensitive Agriculture Design Guide Workshop. Paired with two PowerPoint slide decks, it provides detailed instructions for a facilitation team to conduct the 3-day workshop. The workshop is designed to guide activity teams through the process of establishing contextually appropriate, nutrition-sensitive agriculture outcomes, interventions, and indicators. Throughout this guide and in the workshop, the word 'activity' refers to a project. Workshop participants will discuss key outcomes to consider that will ultimately lead to improved nutritional status. They will then develop interventions to contain underlying contributors to malnutrition in the activity's target area.

This participatory process guides teams to examine six activity-level nutrition-sensitive agriculture outcomes and think through specific interventions that fit within their existing scope. Exercises in this workshop focus on actions that are practical and feasible, and that leverage an activity team's existing strengths. The goal is to ensure that agricultural market systems development activities are able to document and explain their contributions to nutrition goals.

Who Should Participate

This workshop is for all who are involved in designing, implementing, monitoring, and managing agriculture-led economic growth activities that aim to increase production, income, resilience, and/or market competitiveness, while also seeking to improve the nutrition of poor and vulnerable households.

For this process to be successful, the right participants need to be in the room, which means identifying and retaining a multi-disciplinary team. Ideally, a nutritionist or a person familiar with the nutrition situation in the activity's target area should participate. Be sure to include activity leaders, such as the activity manager or the chief of party and senior technical staff who will ensure that decisions made in the workshop lead to action and that activity outcomes and interventions are updated to reflect the new thinking of the team. The activity's monitoring and evaluation (M&E) lead, agricultural advisor(s), and anyone involved in conducting assessments or formative research to design a behavior change strategy for the activity should contribute during the workshop. If possible, USAID activity managers should participate so that project leadership on both sides is clear on the opportunities to improve nutrition that exist within the scope, budget, and context of the activity. We recommend a group of 5–20 participants. **The workshop should be conducted with only one activity at a time** to ensure that both workshop preparations and outputs are responsive to the needs and operating contexts of the participants.

When to Use This Workshop

The team participating in this workshop should be in the process of designing or implementing an agriculture or economic growth activity that also intends to make stronger contributions to nutrition. The discussions included in this workshop are most useful after an initial context assessment has been completed and agricultural value chain crops or livestock products have been identified. All activities should be designed based on a solid understanding of the context, needs, and challenges in the activity area. This workshop does not explore approaches for conducting a context assessment, which should be completed before the design process begins. For more information on context assessment, consider the SPRING User Guide to Context Assessment Tools for Linking Agriculture and Nutrition.

There are multiple other points in a program cycle when this workshop can be useful:

- At the design stage by USAID activity and implementing partner program designers to draft or respond to a request for proposal/request for application (RFA/RFP) including development of a results framework that is multi-sectoral and addresses the objectives and intermediate results (IRs) of the U.S. Government's Global Food Security Strategy (GFSS).
- At the Year 1 or Year 2 work plan stage by implementing partners who intend to adjust their interventions, results framework, or performance monitoring plan (PMP) to strengthen nutrition outcomes. This workshop will support identification of additional nutrition-sensitive agriculture outcomes, interventions, and indicators for value chain activities.
- As part of an iterative annual workplanning process by implementing partners when they reassess and modify nutrition-sensitive agriculture interventions and outcomes previously chosen for their selected value chains.
- As part of USAID's activity review when there is opportunity to (re)examine the value chain activity approaches and commodity choices. A comprehensive review may result in an activity that is better aligned with the high-level nutrition objectives of a Mission's Country Development Cooperation Strategy, GFSS Country Plan, or relevant project appraisal documents.

For Activities Beyond Year 2

If you are conducting this workshop at a time other than the initial design stage, some of the language in the presentation will need to be adjusted slightly to reflect the process of revising or adding (as opposed to newly defining) interventions and outcomes. Because such teams may experience challenges thinking of their activities outside their programmatic design, this facilitator's guide includes additional guidance marked in demarcated textboxes like this one.

Who Should Facilitate

Facilitating this workshop requires significant advance preparation, a good understanding of the context in which the activity is working, understanding of the activity objectives and program structure, and knowledge of the technical capacities of the participants. Due to the highly participatory nature of the workshop and extensive small group work, **at least two facilitators are needed**.

Between them, the facilitators should be experienced in leading workshops and have a thorough understanding of general program design, including how to develop results frameworks, activity interventions, and outcomes. The facilitators must have a good understanding of nutrition-sensitive agriculture and ideally a background in agriculture, nutrition, food security, or some combination of these knowledge areas. If possible, we recommend enlisting a third person to support logistics, communications, and notetaking. This will result in better written records during exercises and report outs, and allow for stronger facilitation during small group work.

Estimated Duration

The workshop is expected to take three days, though it could be longer if the facilitators decide to include more introductory or review sessions. When determining the appropriate length of your workshop, ensure that the teams have enough breaks to support the critical thinking that is essential for a workshop of this type. There is a sample agenda in Annex 1 to help you started putting the workshop

together. The facilitation team should plan to adapt it to the specific needs of participants. The content roughly breaks out as follows:

Day 1	Day 2	Day 3
Introduction and background	Step 2: Prioritize nutrition-sensitive agriculture strategies	Step 4: Define monitoring indicators
Step 1: Prioritize nutrition-sensitive agriculture outcomes for your activity	Step 3: Develop interventions	Next steps and wrap-up

Before You Begin

Preparing the Facilitation Team

This guide is designed to help the facilitator visualize the 3-day workshop and clarify key technical points. Our approach centers on detailed talking points that accompany each slide, activity, and discussion.

These talking points are suggestions; as facilitator, you know your context and should adapt plan to resonate with your participants. Replace examples with ones that are locally relevant, introduce ideas that are relevant to your activity, and adapt messages to your context.

Engaging your participants is one of the most important factors of effective learning. As you prepare to facilitate this course, we suggest that you read the guide cover-to-cover to understand the content completely. When you are ready to facilitate, however, be prepared to set aside this guide and speak from a shorter set of notes. This approach gives you the space to create a deeper level of engagement with participants.

Each slide in the PowerPoint decks has a corresponding narrative in this facilitator's guide with key points to make as the facilitation team presents the content. The content directly under each slide title, while not strict script, is in the voice of the facilitator. This guide contains two different types of textboxes:

1. The Facilitator Note box is light orange and contains process notes or "behind the scenes" guidance for the facilitation team. Content in these boxes does not necessarily need to be shared with participants; it is intended to clarify how slide content should be presented.
2. The green boxes labeled "For Activities Beyond Year 2" contain tailored guidance for more seasoned activity teams, because some exercises instructions need to be adjusted to the perspective of teams moving into Year 3 of implementation or beyond.

Keep in mind that the content should be adapted to your context and the particular knowledge and experience level of your participants. **There is one topic in the background section for which facilitation teams must prepare content: an overview of the nutrition challenges in the activity area of interest. Location for this content is flagged with a placeholder in the Background section below.**

Feel free to change the order of concepts presented, choose more context-appropriate images, or adapt the narrative to suit your needs. Additionally, we include examples throughout (including outcomes, strategies, interventions), but you are encouraged to use examples from the region if they would resonate better.

The facilitation team should start preparing for this workshop 2–3 weeks in advance. In addition to reviewing the materials in this guide and the PowerPoint decks, familiarize yourself with the Agriculture-to-Nutrition Pathways, and with GFSS, whose goal is to sustainably reduce global hunger, malnutrition,

and poverty. The facilitation team should be familiar with the activity being discussed, including a review of background documents and the RFA/RFP, work plan, results framework, and performance monitoring plan (PMP). There should be at least one **run through of the exercises in this guide before the workshop** to ensure you are prepared to support participants.

This workshop was developed to align with the objectives of the GFFS:

Objective 1: Inclusive and sustainable agricultural-led economic growth.

Objective 2: Strengthened resilience among people and systems.

Objective 3: A well-nourished population, especially women and children.

The key nutrition-sensitive agriculture outcomes recommended in this workshop here cross over all three GFSS objectives, and should not be limited to fitting under Objective 3.

It is important to make sure that USAID activity counterparts are involved in the process and agree that as a result of completing this design workshop, the activity may determine that changes in nutrition-sensitive agriculture outcomes and short- to medium-term indicators are needed. Having this discussion before the workshop and including USAID staff as workshop participants will increase buy-in and the likelihood that workshop outputs are responsive and specific to the participating activity's results frameworks, work plans, and PMPs.

Preparing the Participants

Before the workshop begins, it may be helpful to ask participants to review their initial context assessments, the RFA/RFP, and their award or proposal. If the project has a results framework, theory of change, work plan, or PMP, ask participants to review them before the workshop and make them available for reference throughout. Common knowledge of the activity scope and structure can help participants identify opportunities for nutrition with existing activity components, components that can be adapted slightly, and/or additions that would not require drastic changes to the activity structure or budget.

Participants should have a basic understanding of key concepts related to nutrition, agriculture, social and behavior change (SBC), and activity design to benefit from this workshop. Hold background orientation and any necessary training in technical subject areas before conducting the Designing Effective Nutrition-Sensitive Agriculture Activities workshop, or designate additional time during the workshop for conducting reviews. Depending on the configuration of the team, it might be helpful to conduct a review of nutrition, agriculture, and/or SBC before to the start of the workshop. Tools for planning for such reviews are in the text box below.

Additional Resources: SPRING's Training Resource Package

The SPRING project created facilitator's guides with slide decks on six other topics that are critical to improving the design of nutrition-sensitive agriculture activities. Available on the USAID Advancing Nutrition website, SPRING's "Training Resource Package" includes the following sessions:

- Strengthening Agriculture-Nutrition Linkages: Why it Matters
- Essential Nutrition Concepts for Nutrition-Sensitive Agriculture Activities
- Essential Concepts in Agriculture and Food Systems
- Agriculture-Nutrition Pathways
- Developing a Seasonal Calendar
- Behavior Change Concepts for Nutrition-Sensitive Agriculture

Most of these sessions should take 1–3 hours to complete, and you should feel free to share them either in advance of your workshop or include them as a part of it if you feel that your participants would benefit from the additional information.

Additionally, you should recommend that your participants read the Agriculture-to-Nutrition Pathways briefs available on the USAID Advancing Nutrition website.

Workshop Objectives

By the end of this workshop, participants will be able to:

- Select nutrition-sensitive agricultural outcomes appropriate to their agricultural market systems development activity.
- Analyze and prioritize potential strategies for reducing malnutrition.
- Develop relevant practices, interventions, and indicators to include in the activity design.
- Outline the next steps for implementation and monitoring.

Workshop Output

During this workshop, participants will work through a series of exercises and build a matrix, one column at a time. By the end of the training, they will have a completed activity design matrix with lists of prioritized nutrition-sensitive agriculture outcomes; prioritized strategies that will help to achieve the selected outcomes; interventions for each of their strategies linked with the practices they support, and indicators that will measure progress toward those interventions. Teams may consider including the final activity design matrix as an annex in a work plan or revisiting it annually to reflect on progress toward identified nutrition-sensitive agriculture outcomes.

A printable copy of the full matrix is included in the annexes (along with printable copies of all of the component pieces for each exercise). This guide recommends using a large piece of flip chart paper (or combining several) to build the matrix by hand on the wall. You can use large-size sticky notes to add items to the columns if you do not want to worry about having to remake the matrix as each group's thinking evolves during the workshop. Another option is to use a laptop to project the matrix and build it digitally. While building the matrix digitally ensures that someone on the team has a soft copy, projecting it during the workshop is not always an option. Whether you choose to build it on the wall or digitally, we recommend identifying one or two individuals to ensure that the complete matrix is captured electronically. Here is what a small version looks like:

Nutrition-sensitive agriculture outcome	Strategy	Practice	Intervention	Indicator

Materials

The following is a complete list of materials and equipment needed for the workshop. All handouts are included at the end of the core content in this facilitator's guide. We list the specific materials and handouts at the beginning of each section of this guide.

- PowerPoint presentations (Deck 1 and Deck 2): Designing Effective Nutrition-Sensitive Agriculture Activities
- Large sticky notes—roughly one pad for every four participants
- Blank flip chart paper, 10–20 full sheets and 10–20 half-sheets

Print one copy of the facilitator's guide (for facilitator's use):

- Six large note cards labeled: 1) Availability; 2) Affordability; 3) Desirability; 4) Environmental & Food Safety; 5) Women's Control of Income; 6) Women's Time & Labor

If the activity has a theory of change or results framework, it is helpful to distribute copies before beginning Step 1. Throughout the workshop, facilitators should freely refer to these documents and ensure that plans made during this workshop fit with the activity scope.

Below is a checklist that includes all handouts required for the workshop in the order they are referenced:

Handout No.	Title	√
1	Key Terms	
2	GFSS Results Framework	
3	Activity Design Matrix	
4	Activity Design Matrix – West Africa Activity Example	
5	Six Key Nutrition-Sensitive Agriculture Activity Outcomes	
6	UNICEF Framework	
7	Teaching One Another	
8	Agriculture-Nutrition Pathways	
9	What, How, Who Matrix	
10	Nutrition-Sensitive Agriculture Strategy Criteria and Examples	
11	Prioritization Criteria	
12	Illustrative Nutrition-Sensitive Agriculture Outcomes, Practices, and Interventions	
13	Post-workshop Action Items	

If the activity has a theory of change or results framework, it is helpful to distribute before starting Step 1. Throughout the workshop, facilitators should freely refer to these documents and ensure that plans made during this workshop fit the activity scope.

Optional Activity Background Documents	√
Theory of Change	
Results Framework	
Work Plan	
PMP	
Key results from context assessments or any other data that has been collected to inform the design or implementation of the participating activity	

CORE CONTENT

Introduction and Background: Ensuring a Common Understanding of Nutrition-Sensitive Agriculture

Estimated time: 2.5 hours

Slide Deck 1, Slides 1–29

Materials and Handouts: Handout 1: Key Terms; Handout 2: GFSS Framework; Handout 3: Activity Design Matrix; Handout 4: Activity Design Matrix – West Africa Example; Handout 5: Six Key Nutrition-Sensitive Agriculture Activity Outcomes; Handout 6: UNICEF Framework; Handout 7: Teaching One Another; Handout 8: Agriculture-Nutrition Pathways; Handout 9: What, How, Who Matrix.

Learning objectives:

By the end of this workshop, participants will be able to:

- Select nutrition-sensitive agriculture outcomes appropriate to their agricultural market systems development activity.
- Analyze and prioritize strategies for reducing malnutrition.
- Develop relevant practices, interventions, and indicators to include in the activity design.
- Outline the next steps for implementation and monitoring.

Slide 1 Designing Effective Nutrition-Sensitive Agriculture Activities

- Thank you each for participating in this workshop
  - We are pleased to convene this group to discuss how we can strengthen or add nutrition components to our agriculture activity.
- You have a packet of handouts that we will be referencing throughout the workshop.
- As we begin, please refer to **Handout 1: Key Terms**, in front on you.

Slide 2 Strengthening Nutrition Results through Agriculture Activities

- Malnutrition is **urgent**, especially for young children and mothers.
  - We must design our agriculture activities explicitly to achieve improved nutrition.
  - 45 percent of deaths in children under the age of 5 are attributable to undernutrition.
  - Malnutrition leads to overall lower IQ, reduced school performance, and later in life, reduced work productivity and earnings.

- Malnutrition has a significant negative economic impact, with countries across Asia and Africa losing 11 percent of gross domestic product every year because of poor nutrition (Black et al. 2013; Horten and Steckel 2013; IFPRI 2016).

- Nutrition is influenced by many different factors:
  - The types and quantity of food one eats.
  - Ability to source diverse food year-round through production or purchase.
  - Health status.
  - Access to clean water.
  - Good caring practices.
- Because agriculture and economic growth activities may only affect a few of these factors, it is challenging to deliver the highest-level nutrition outcomes, such as reductions in stunting among children.[1]
- **ASK:** In your experience, how can agriculture and economic growth activities contribute to better nutrition?
  - Answers may include enabling households and communities to improve diets, and having the resources to obtain health, hygiene, and sanitation services, and support and energy for childcare.

Slide 3 Workshop Objectives

- By the end of this workshop, participants will be able to:
  - Select nutrition-sensitive agriculture outcomes appropriate to their agricultural market systems development activity.
  - Analyze and prioritize potential strategies for reducing malnutrition.
  - Develop relevant practices, interventions, and indicators to include in the activity design.
  - Outline the next steps for implementation and monitoring.

Slide 4 Nutrition-Sensitive Agriculture at USAID

- USAID recognizes the need to invest in multi-sectoral programming to reduce malnutrition.
- USAID has published a "Multi-Sectoral Nutrition Strategy 2014–2025" that aims to decrease chronic malnutrition, measured by stunting, by 20 percent through the U.S. Government's Feed the Future and Global Health initiatives, the Office of Food for Peace development programs, resilience efforts, and other nutrition investments.
- There is growing evidence on how to design and implement nutrition-sensitive agriculture activities. This workshop outlines the essential components for designing nutrition-sensitive agriculture interventions.

[1] According to the World Health Organization, stunting is "the impaired growth and development that children experience from poor nutrition, repeated infection, and inadequate psychosocial stimulation. Children are defined as stunted if their height-for-age is more than 2 standard deviations below the WHO Child Growth Standards median." See http://www.who.int/nutrition/healthygrowthproj_stunted_videos/en/

- The GFSS guides investments by all U.S. federal departments and agencies that contribute to global food security.
- Feed the Future is the U.S. Government's global hunger and food security initiative. The GFSS adopts the integrated approaches to nutrition laid out in USAID's Multi-Sectoral Nutrition Strategy (MSNS) and the U.S. Government's Global Nutrition Coordination Plan.

Slide 5 GFSS Results Framework

- Refer to **Handout 2: the GFSS Results Framework**
- The GFSS guides investments by all U.S. federal departments and agencies that contribute to global food security.
  - The GFSS adopts the integrated approaches to nutrition laid out in the MSNS and the U.S. Government's Global Nutrition Coordination Plan.
- The GFSS Results Framework shows the three overarching objectives of the GFSS:
  - Objective 1: Inclusive and sustainable agriculture-led economic growth.
  - Objective 2: Strengthened resilience among people and systems.
  - Objective 3: A well-nourished population, especially among women and children.
- **ASK:** How do you think the first two objectives and their respective IRs affect nutrition outcomes?
  - Answers should include: productive and profitable agricultural systems, functional markets, employment, risk reduction, mitigation and management, and improved adaptation from shocks and stresses.
- Objective 3 has three intermediate results directly related to nutrition:
  - IR7 Increased consumption of nutritious and safe diets.
  - IR8 Increased use of direct nutrition interventions and services.
  - IR9 More hygienic household community environments.
- **ASK:** Where does your activity fit into this results framework?
  - Take multiple responses; it may fit into the framework in multiple places.

Slide 6 Four Steps for Designing a Nutrition-Sensitive Agriculture Activity

- This activity design workshop is based on four participatory steps built on a common understanding of nutrition-sensitive agriculture:
  1. Prioritize nutrition-sensitive agriculture outcomes for your activity.
  2. Prioritize nutrition-sensitive agriculture strategies.
  3. Develop interventions.
  4. Define monitoring indicators.

- We will spend time pulling it all together and planning next steps to ensure that your work is incorporated into your activity results framework, work plan, and performance monitoring systems.

For Activities Beyond Year 2

Activities more than a year into their work may have a harder time thinking outside their programmatic structure and/or monitoring, evaluation, and learning plan, particularly in Step 4, define monitoring indicators. Remind such teams that this is a brainstorming exercise and the output from the workshop does not contractually bind them to new activities and/or indicators.

Slide 7 Activity Design Matrix

- Refer to **Handout 3: Activity Design Matrix**
- During the rest of this workshop, we will be working to complete this matrix for your activity.
- By the end of the workshop, you will have a completed matrix that you can use to inform your work plan and PMP.
- This matrix can also be mapped to your results framework and other project documents.

Slide 8 Activity Design Matrix – West Africa Example

- Refer to **Handout 4: Activity Design Matrix – West Africa Example**
- Throughout the workshop, we will use and refer to an example activity from West Africa.
  - Example activity is based on strengthening smallholder producer incomes through involvement in one or more of the following value chains: fish, pumpkin, cowpeas, or rice.
- This completed matrix illustrates the 4-step process that we will work through during this workshop
  1. Identifying nutrition-sensitive outcomes
  2. Prioritizing strategies for this activity
  3. Selecting practices and interventions that support the strategy and outcome and are feasible for the activity.
  4. Selecting output and outcome indicators.

Facilitator Note

This example is meant to help teams think through their own activity. Its strategies, practices, and interventions will not be appropriate in every context.

Slide 9 Identifying Nutrition-Sensitive Agriculture Outcomes

- Refer to **Handout 5: Six Key Nutrition-Sensitive Agriculture Activity Outcomes**
- Reductions in stunting are very difficult for agriculture and economic growth programs to achieve because they are not designed to address the immediate causes of malnutrition.
  - We will discuss the difference between immediate causes of malnutrition and underlying and systemic causes. Agriculture and economic growth programs can often address the underlying causes, such as food security.
  - Agriculture interventions are well-placed to contribute to one or more key nutrition-sensitive agriculture outcomes.
  - Six key outcomes guide the design of most activities:[2] improved availability, affordability, desirability of diverse nutrient-rich foods and food safety, and increased women's control of income, and time and energy savings.
  - Using these outcomes, we will identify specific interventions that will benefit both agriculture and nutrition.
  - Not all outcomes will be appropriate for every agriculture activity. For example, if your activity is focused on maize or coffee production with an objective of increasing income, it is unlikely to aim to improve availability of diverse, nutrient-rich foods in local markets.

Facilitator Note

The approach that we will use in this workshop is participatory and asks questions to explore how an agricultural investment can have affect these nutrition-sensitive outcomes, given the specific context and stakeholders involved.

Slide 10 Ensure a Common Understanding of Nutrition-Sensitive Agriculture

- **ASK:** What does "nutrition-sensitive agriculture" mean to you?
  - *Record participants' answers, grouping similar responses as needed and refer to them as appropriate during the following slides.*
- A common understanding of nutrition-sensitive agriculture is needed to plan effective and efficient activities.

Slide 11 UNICEF Framework: Reducing Malnutrition

- Refer to **Handout 6: UNICEF Framework**
- Two immediate causes of malnutrition are identified: inadequate nutrient intake and illness

[2] The six nutrition-sensitive agriculture outcomes were identified by the SPRING project. They are informed by the Landscape Analysis of Activities across 19 Focus Countries and support to agriculture activities in Bangladesh, Ghana, Guatemala, Guinea, India, Kyrgyzstan, Senegal, Sierra Leone, and Zambia.

- Nutrition-specific interventions seek to remove immediate causes of malnutrition

- **ASK:** What would be considered a "nutrition-specific" intervention?
  - Examples: good breastfeeding practices and complementary feeding, micronutrient supplements, etc.

- **ASK:** What do we mean by "nutrition-sensitive" interventions?
  - They address the underlying and systemic causes of malnutrition, such as food security and access to health services.
  - If we are to reduce malnutrition, we MUST target underlying causes.
  - Multiple sectors—not just agriculture—can be "nutrition-sensitive."

- **ASK:** What other sectors can address nutrition-sensitive issues?
  - Nutrition-sensitive agriculture strategies focus on food access and quality, health, water, sanitation, and hygiene (WASH), and/or care.

Slide 12 Vote with Your Feet

Exercise: Vote with Your Feet	
Goal: Identify the differences between nutrition-specific and nutrition-sensitive interventions	Duration: 30 minutes

INSTRUCTIONS

- Ask participants to stand up and gather at the front of the room.
- Tell them there is an imaginary line down the center of the room and one side represents nutrition-specific and the other nutrition-sensitive.
- Call out a sample intervention (see examples below).
- After each example, ask people to stand on the side of the room—nutrition-specific or nutrition-sensitive—that they think the intervention should fall under.
- Ask for a representative from either side to explain why s/he took that stance. Use each example to reinforce the distinction between nutrition-specific and nutrition-sensitive and be sure to clarify participants' misunderstandings if they apply the terms incorrectly.

Example 1: The distribution of water purification tablets.

Answer: Nutrition-specific: the purification tablets respond to an immediate cause of malnutrition: contaminated water. Other WASH interventions, such as promotion of handwashing, would be considered nutrition-sensitive because they pertain to care practices or an underlying cause of malnutrition.

Example 2: An "egg day" at school, during which the nutritional properties of eggs are celebrated with games, songs, and samples of egg dishes.

Answer: Nutrition-sensitive: the promotion of egg consumption would attempt to fill nutrient gaps and increase dietary diversity, but would not directly respond to the immediate causes of malnutrition.

Example 3: Working with agricultural extension agents to promote the use of biofortified maize.

Answer: Nutrition-sensitive: the intervention would increase the availability (and possibly affordability) of maize with an improved nutrition profile.

- When the exercise is complete, thank participants for their efforts and have them take their seats.
- **ASK** a few volunteers to summarize, in a single statement, the difference between nutrition-sensitive and nutrition-specific interventions.

Slide 13 Essential Nutrition Concepts: Objectives

Facilitator Note

This portion of the background section is dedicated to reviewing nutrition fundamentals as well as the nutrition issues in the activity's area of implementation. Facilitators should tailor the content provided here to the team's understanding of nutrition.

To provide details on the nutrition related challenges in the area where the activity operates the facilitator should prepare 2–5 slides with an emphasis on nutritional issues directly related to the activity's scope.

- **ASK:** Why do you think it is important for people planning agricultural activities to understand basic nutrition concepts?
- This session has three objectives:
  - Describe five forms of malnutrition.
  - Analyze the essential needs of infants, children, and mothers, especially during the period from conception to the child's second birthday (or the "first 1,000 days").
  - Identify strategies for interrupting the cycle of malnutrition.
- Please pull out **Handout 7: Teaching One Another**

Facilitator Note

The following 5 slides contain essential nutrition concepts. These slides can be covered using the suggested exercise or can be presented in a plenary format. The exercise is structured to allow participants to teach each other and share a responsibility for their learning. If the exercise is used, please provide a copy of the facilitator notes for the participants.

Slide 14 Teaching One Another

Exercise: Teaching One Another (Slides 15–19)	
Goal: Establish a common understanding of essential nutrition concepts	Duration: 60 minutes

INSTRUCTIONS

- In this activity, we want to give each of you a chance to share what you know and, for some of you, explore some specific nutrition areas.
- Divide participants into 4 small groups.
  - Each group will receive a set of notes that accompany a slide. Each group will have 10 minutes to present this content.
  - As a group, read through the notes and decide how you would like to present your content in an engaging, fun way—you can ask discussion questions, give examples and illustrations from your activity, or conduct a short exercise that helps convey meaning. The slide/s pictured on your handout will be ready for you to use.
  - Ensure that all members of your group have a role to play.
- Each group will be assigned one of the topics below (and the slides that pertain to them). There are more details on each topic in **Handout 7: Teaching One Another**
  - Group 1: Forms of malnutrition (slide 15)
  - Group 2: First 1,000 days (slides 16–17)
  - Group 3: Cycle of malnutrition (slide 18)
  - Group 4: Diverse diets at all stages of life (slide 19)
- Please take 10 minutes to review the training notes for your assigned topic. The facilitators are available to answer any questions.
- Each group will stand and teach the information on its assigned slide(s) to the larger group and discuss any questions that arise.
- After each presentation there will be 5 minutes for questions and discussion.
- Key learning points are detailed in the narratives for slides 15–19, below.

Facilitator Note

The content for the following slides (15–19) contains the key learning points for the Essential Nutrition Concepts. Make sure that groups present to each other using the "Teaching One Another" instructions and mention the key learning points included in this section of the facilitator's guide. Allow participants to be creative in their presentations but listen and correct and contribute if necessary. We recommend using the question and discussion time after each presentation to add any key points that may not have been mentioned.

Key Learning Points for "Teaching One Another" Exercise

Slide 15 Five Forms of Malnutrition (presented by group 1)

- Malnutrition is a general term that includes nutrient deficiencies, undernutrition, and over nutrition.
  - Food insecurity often contributes to malnutrition. However, food security does not guarantee a healthy nutrition status.
- **ASK:** Why might malnutrition exist in a place that is food secure?
- Undernutrition and over nutrition are usually defined by comparing an individual's height, weight, or other measurement with the average height or weight for a healthy population of the same age and sex.
- Five forms of malnutrition:
  - Wasting (acute undernutrition) refers to weight that is too low for an individual's height, and may sometimes be described as thinness. Wasting is what we typically see among communities experiencing famine and families who struggle to get enough food.
  - Stunting (chronic malnutrition) refers to height too low for age, and can also be described as short stature. Stunting can be much harder to see—a stunted child may look healthy, but is noticeably short for his/her age.
  - Underweight refers to weight too low for age. This measure is not recommended as a measure for nutrition programs, as it can include children who are stunted, wasted, or just small for their age.
  - Overweight or obesity refers to weight that is too high compared to an individual's height. It is typically measured using body mass index (BMI), a measurement that compares weight with height and determines a set BMI value. An individual with a BMI greater than 25 is considered overweight, while someone with a BMI greater than 30 is classified as obese.
  - Micronutrient deficiency means that an individual is receiving insufficient amounts of the vitamins and minerals that are essential for growth and health. Globally, iron deficiency, vitamin A deficiency, and iodine deficiency are the most common types of micronutrient malnutrition.

Slide 16 What Reduces Undernutrition? (presented by group 2)

- We have a solid understanding and clear evidence of interventions that mitigate immediate causes of undernutrition. These include:
  - Infant and young child feeding and Essential Nutrition Actions (e.g., breastfeeding, complementary feeding).
  - Providing micronutrients that are most commonly deficient (e.g., iron/folate for pregnant women, vitamin A to young children where contextually appropriate).
  - Integrated management of childhood illness. This community-based approach to manage less-serious childhood illnesses empowers communities to understand and respond to sick children's needs.

- Community management of acute malnutrition. This approach seeks to reduce severe acute malnutrition, or wasting, through the community rather sending the child to a hospital.
- Even if we can scale up these interventions to cover 90 percent of the at-risk population, it would ONLY affect 20 percent of chronic malnutrition (stunting).

- **ASK:** What more is needed?

Slide 17 Reaching Children at the Right Time (presented by group 2)

- The most effective interventions to prevent stunting take place during the window of opportunity: the first 1,000 days of life (conception to 24 months of age). After that point, most of the effects of stunting are irreversible. If we can prevent stunting before 24 months of age, then the child has a much greater chance of succeeding at school and earning a living as an adult.

Slide 18 The Cycle of Malnutrition (presented by group 3)

- Malnutrition can be cyclical. It can start with an undernourished pregnant woman. What are the consequences of being undernourished at this stage? The mother does not get the nutrition her body needs, so very often, we find that:
  - Her infant is also undernourished. What are the consequences here? All too often, that undernourished infant grows up to become …
  - An undernourished child. And the consequences here? This child grows up to become an undernourished adolescent. What are the consequences of being undernourished during adolescence? The adolescent may grow up to become …
  - An undernourished adult woman, who may continue to be undernourished through her own pregnancy. When an undernourished adolescent becomes pregnant, the cycle can be shortened even more:
- The teenage mother and the growing baby compete for nutrients.
- The teenager is at risk for a more difficult labor and higher rates of maternal mortality.
  - We are here to explore the many opportunities to break this cycle at each stage.

Slide 19 A Diverse Healthy Diet at Needed at All Stages of Life (presented by group 4)

- Dietary diversity is one way nutrition-sensitive agriculture can disrupt the cycle of malnutrition. A diverse, healthy diet is critical at all stages of life, and there is a range of intervention options to break the cycle of malnutrition at each stage.
- A diverse diet essentially means eating a diet from a range of sources. The colors of foods on a plate or consumed in a day are a good indicator of whether different food groups represented.
- **ASK:** Based on where this activity operates, what colors would you expect to see on a typical plate? Are some colors more represented than others? What does this say about the diet?

- Families should aim to provide children with foods from four or more food groups each day, and eat a range of healthy foods throughout the week.
  - Animal source foods (e.g., chicken, fish, liver, eggs, milk, milk products).
  - Staples: grains (e.g., maize, rice millet, sorghum); roots and tubers (e.g., cassava, potatoes).
  - Legumes (e.g., beans, lentils, peas, groundnuts); seeds (e.g., sesame).
  - Fruits and vegetables rich in vitamin A (e.g., mango, papaya, passion fruit, oranges, dark green leaves, carrots, sweet potato, pumpkin); and other fruits and vegetables (e.g., banana, pineapple, watermelon, tomatoes, avocado, eggplant, cabbage).
  - Oil and fats (e.g., oil, seeds, margarine, ghee, butter added to vegetables and other foods) will improve the absorption of some vitamins and provide extra energy. Infants need only a very small amount of such fats per day.

Slide 20 Other Important Practices

- Discussions about maternal and child health, and particularly maternal and child nutrition, tend to focus on food quantity and quality—eating the right foods, in the right amounts, at the right time.
- Remember that other essential practices can also contribute to the nutritional status of mothers and children, including:
  - WASH.
  - Food safety.
  - Health and health services.

Slide 21 PLACEHOLDER: Nutrition Situation in Implementation Area

Facilitator Note

In addition to nutrition fundamentals, facilitators should prepare content summarizing the nutrition situation in the implementation area. This overview helps guide later conversations on nutrition issues (such as specific micronutrient deficiencies) and how the activity might realistically contribute to improved nutrition outcomes. As the team works through its activity design matrix, it can consider these major nutrition issues and use them to help prioritize strategies, practices, and interventions.

Slide 22 How Does Agriculture Affect Nutrition?

Facilitator Note

The material on the linkages between agriculture and nutrition is covered in more detail in the Agriculture-to-Nutrition Pathways Session of SPRING's Nutrition-Sensitive Agriculture Training Resource Package. You can expand on this as necessary using these materials or, if participants already have a good background, use the abbreviated version adapted for this workshop in the following slides.

- There are three essential linkages between agriculture and nutrition:
  - Food production.
  - Income.
  - Gender (how women's time and energy are spent and the extent to which women have decision-making power over use of household income).
- Food production: The most obvious link between agriculture and nutrition is the production of nutritious foods.
  - Agriculture can contribute positively to nutrition by making more diverse, nutritious foods available in farmers' households and local markets.
- Income: Household use to purchase food, health services, and hygiene-related goods that are necessary to maintain good health and nutrition.
  - Agricultural and economic growth activities can increase incomes of smallholders and other value chain stakeholders *but can also influence* the decisions that producers make in spending their income.
  - Activities that increase household income are not automatically nutrition-sensitive. Research has frequently shown that increased income alone does not always translate to improved nutrition.[3]
  - Competing priorities may mean that people use added income to purchase things unrelated to health and nutrition.
  - Even if diets improve, there are a range of factors (such as health status and distribution of food) that can minimize or prevent benefits from any improvements in nutrition.
- Seasonality is an important consideration for ensuring both food availability and cash flow. It is important to note that not all household income derives from agriculture-related activities. To promote resilience, we can help households succeed with both on- and off-farm income-earning opportunities.
- Gender: Women are highly engaged in agricultural activities and their use of time and energy can have significant implications for their health and nutritional status and that of their children.

[3] For more on the complex relationship between improved incomes and nutrition, see USAID. 2017. Nutrition-Sensitive Agriculture: Applying the Income Pathway. Multi-sectoral Nutrition Strategy 2014–2025 Technical Guidance Brief. Washington, D.C.: USAID.
SPRING. 2017. Webinar: Does increased income within rural households lead to improved nutrition? Arlington, VA: Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project. https://www.spring-nutrition.org/events/does-increased-income-within-rural-households-lead-improved-nutrition.

- Excessive labor demands have been shown to have a direct negative effect on the health and well-being of newborns and their mothers.
- Women with some control over how household income is spent tend to direct it toward things that improve the nutrition and health of the family.

Slide 23 Agriculture as a Source of Food

- Good nutrition requires every household member to be able to consume enough nutritious food, including a diversity of foods, to ensure adequate calories, protein, and micronutrients.
- This can be a challenge due to seasonality and/or distances to markets.
- **ASK:** What do you think about when you hear "enough nutritious food"?
- **ASK:** How might families get "enough nutritious food" year-round in your area of implementation?
- Take several responses and write them down on a flip chart. To guide discussion, make sure that the group touches on the following points:
  - Safety
  - Variety
  - Quality
  - Quantity

Slide 24 Agriculture as a Source of Income

- A common goal of many programs is to increase household income through agriculture.
- **ASK:** Why is increasing household income insufficient for improving nutrition?
- Take several responses. Ensure that participants consider things such as:
  - Competing priorities
  - Understanding of what constitutes a nutritious diet
  - Availability and accessibility of nutrient-rich foods
  - Access to clean water and sanitation
  - Access to health care
  - Illnesses that may decrease ability to consume or absorb sufficient food or nutrients.
- **ASK:** What can your activity do to ensure that income is used to improve nutrition?
  - Improved year-round income and cash flow can be used for immediate or future household needs to support a healthy diet and life.
  - Income may be used for food or non-food items that improve health, such as medicines, clinic visits, and agricultural supplies.
- To improve nutrition, income must be used to purchase AND consume a diverse diet, which may be challenging where a diversity of nutritious foods, including animal source foods, fruits, and vegetables are not available or affordable in local markets.

- Purchasing power can drive demand:
  - If people begin to demand more diverse, nutritious foods, then the increased demand can support the relationship between agriculture and nutrition in the food market environment.
- Use of income for health and care is also crucial to improved nutrition. These include:
  - Investments in potable water sources and toilets.
  - Preventive care for pregnant or lactating women and young children.
  - Transportation to health facilities and purchase of prescribed medicines and other basic necessities, including soap and handwashing stations, can have a positive impact on nutrition.
- Rural farm households are constantly balancing spending between farm production and marketing investments and the immediate purchases of food, health, and care necessities.

Slide 25 Agriculture as a Means to Women's Empowerment

- Evidence shows that women are more likely to spend additional income on the health and nutrition needs of the household (SPRING 2014a).
- **ASK:** How can your activity maximize women's control of income?
  - Take several responses and write them on a flip chart.
  - Remind the group to think about these answers later when they are working on interventions. If possible have them available or hung on the wall for later in the workshop.
- Women's empowerment is not just about income.
- To improve nutritional status, we must also consider time and energy use, which directly impact:
  - Health of unborn children and infants.
  - Women's ability to care for families.
- When referring to "women's empowerment," remember that it involves all household members, such as the husband, mother-in-law, and any other key decision makers at the household level.
- We've learned that involving each of these key decision makers in programming—both to alleviate the heavy workload that comes with agriculture and to increase women's control of income—leads to much more effective programming and more likely uptake of promoted practices.
- Women's roles in the household (time spent laboring in the fields, caregiving, managing income) are deeply embedded in the fabric of a society, so creating change in this area may take time.
- Additionally, changes that we advocate for women may come with unintended consequences, including increased tensions in the household, less time for children's and self-care, and possibly even domestic violence.

Slide 26 Building the Agriculture-to-Nutrition Story

Exercise: Building the Agriculture-to-Nutrition Story	
Goal: Have participants generate key points on the agriculture-to-nutrition pathway, linking these concepts to their experiences.	Duration: 45 minutes

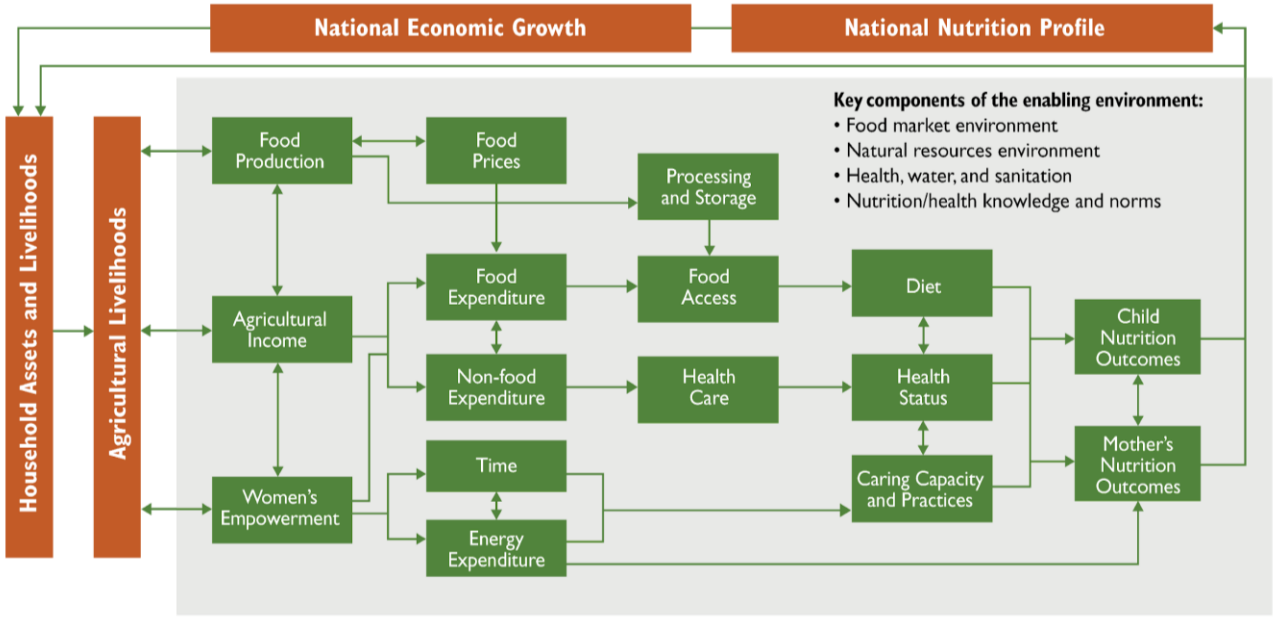
Instructions:

- Explain that in this exercise, we will discuss how agriculture and nutrition are connected. We will start by looking at a set of activities that take place at the household level.
- Imagine a small farm, not far from here, where a family raises crops and livestock.
- Each group will receive a stack of icons that represent activities that take place daily on and around the farm.
- In groups, you will arrange these pages on the wall, with the goal of telling a story about how agriculture and nutrition are linked.
- Some of the icons may be very clear (e.g., handwashing) while others may be interpreted in different ways (e.g., the man and woman with joined hands). Groups should feel free to interpret the images in whatever way makes sense for their story.
- Start with the image of the field/crops and end with the family (see the photo example below). The remaining icons can be arranged in any way that fits your story.
- Divide participants into groups of 5–10. Give each group one set of images and explain that they will have 15 minutes to construct a story.
- Bring the larger group back together. Have a representative from each group explain its pathway. When all groups have presented, open the discussion for comments and questions. Allow participants to ask why other groups made the choices they did.
- **ASK:** Did anyone see the path differently once they saw the other groups' paths? If so, how?
- **ASK:** Having seen the other groups' paths, what, if anything, would you change in your own?
- If possible, relate the stories to the context of this activity.
- The following is an example of how images could be arranged on the wall. Other arrangements are acceptable, as long as participants can explain their thinking.

Slide 27 Agriculture-to-Nutrition Pathways

- Refer to **Handout 8: Agriculture-Nutrition Pathways**
  - On the left side, we have the three main pathways—food production, agricultural income, and women's empowerment.
  - On the far-right side, we have our desired outcomes—better nutrition (and overall health) for children and mothers.
  - The rest of this diagram focuses on how we get from our starting point (agriculture) to our ending point (nutrition).
  - It is important to note that though this diagram has been simplified to make these the agriculture-nutrition linkages clear, these pathways are not always linear. They interact with one another and are also influenced by (and influence) the enabling environment.

Agriculture-to-Nutrition Pathways



Slide 28 The Enabling Environment

- Wrapped around the pathways is the enabling environment, which exerts tremendous influence at every stage. The four components of the enabling environment include:
  - Food market environment
  - Natural resources environment
  - Health, water, and sanitation
  - Nutrition/health knowledge and norms
- **ASK:** What are some examples of how aspects of the enabling environment can influence the pathways?

- Take several responses and be sure that the following examples are raised:
  - Local markets determine what kinds of foods are available for households to purchase. Availability and affordability drive food choices and preferences (food market environment).
  - Lack of rainfall during a growing season determines crop yield available for sale and consumption (natural resources environment).
  - Unsafe food due to contamination during storage or processing can lead to an increase in disease, which is another cause of malnutrition (health, water, and sanitation).
  - Cultural norms related to which foods to feed young children affect feeding and care practices, which can affect household nutritional status (nutrition/health knowledge and norms).
  - Government policies and legal frameworks are a part of all of the components, for example determining what commodities are subsidized in the markets or how natural resources are managed.

Slide 29 Caution: Go Beyond the Production of Nutrient-Rich Commodities

- Note of caution: There is often a misperception that the only way for an agriculture activity to be nutrition-sensitive is if it promotes nutrient-rich crops or includes a home-garden component.
- Remember, there are numerous ways beyond nutrient-rich crop production for an agriculture activity to be nutrition-sensitive, so don't limit your thinking during the activity planning.[4]
- Additionally, even if your activity is promoting nutrient-rich crops, it does not mean you will necessarily see improvements to nutrition. Ultimately, agriculture is only going to take you so far toward improved nutrition, which is why, to ensure that nutritional outcomes are reached and sustained, agriculture activities need to partner with activities that are focused on nutrition-specific and health interventions. For example:
  - Ensure that some of the nutrient-rich crops are set aside for home consumption or remains in the local markets—and direct beneficiaries have the income and knowledge and desire to purchase them. Otherwise a nutritional benefit is an unlikely outcome.
  - Nutritious foods must be produced and consumed in sufficient quantities if they are to contribute to better nutrition.

4 USAID defines a commodity as nutrient-rich if it meets any of the following criteria:
1. It is biofortified.
2. It is a legume, nut, or seed, such as sesame, sunflower, pumpkin seeds, wheat germ, or sprouted legume seeds.
3. It is an animal source food, including dairy products (milk, yogurt, cheese), fish, eggs, organ meats, meat, flesh foods, and other miscellaneous animal protein (e.g. grubs, insects).
4. It is a dark yellow or orange-fleshed root or tuber.
5. It is a fruit or vegetable that meets the threshold for being a "high source" of one or more micronutrients on a per 100-calorie and per 100-gram basis.

See: https://www.usaid.gov/what-we-do/global-health/nutrition/nutrition-sensitive-agriculture-nutrient-rich-value-chains

Slide 30 Key Terms Consensus

- Before we go to Step 1 of our design process, let's review the each of the following terms as I present definitions. It is important that we agree upon definitions as a group, so that as these terms are used throughout the workshop, we understand them in the same way.
- If the definitions presented in the following slides require adjustment, let's do it as a group. Then I will continue to remind you of our agreed-upon understanding of the meaning of these terms as we continue through the workshop.
- These terms are also available on **Handout 1** mentioned at the start of this session.
- Key Terms
  - Nutrition-specific
  - Nutrition-sensitive
  - Food market environment
  - Nutrient-rich value chain
  - Activity outcome
  - Strategy
  - Practice
  - Intervention
  - Output indicator
  - Outcome indicator

End of Introduction and Background

Step 1: Prioritize Nutrition-Sensitive Agriculture Outcomes for Your Activity

Estimated time: 3 hours

Slide Deck 2, Slides: 1–9

Materials and Handouts:

- Handout 5: Six Key Nutrition-Sensitive Agriculture Activity Outcomes
- Handout 4: Activity Design Matrix—West Africa Activity Example
- Handout 9: What, How, Who Matrix
- Flip chart pages with matrix headings, as in the example below (a white board could also be used)

Outcome	Strategy	Practice	Intervention	Indicator

Learning objective: Participants will be able to choose and apply nutrition-sensitive agriculture outcomes that are attainable in the context of their activity, including a discussion about key nutrition challenges in their target area.

Slide 1 Step 1: Prioritize Nutrition-Sensitive Outcomes for Your Activity

Slide 2 What is the Purpose of Your Activity?

- Most agriculture and market systems development activities strive to do one or more of the following:
  - Improve production of target commodities (crops and livestock/poultry)
  - Increase income
  - Sustain, protect, or enhance productive natural resources
  - Engage women and youth to secure their livelihoods
- You must have a clear picture of what and how your activity plans to undertake its agricultural market systems development efforts to achieve the desired outcome(s).
- In this first exercise, you will describe the agricultural market systems development components of your activity with a focus on WHAT agricultural, economic growth, or resilience outcomes you hope to achieve; HOW you plan to achieve these, and WHO will be involved in implementation as well as WHO is targeted to benefit.
- Not all approaches used on an agriculture and market systems development activity will be nutrition-sensitive and that is okay!

- The purpose is not to make all approaches or interventions nutrition-sensitive; just those where there is a clear opportunity.

For Activities Beyond Year 2

For activities that are a year or more into implementation, this exercise may be challenging at first, given existing programmatic structure. The point is not to rethink activity organization but rather to reflect on the pathways and identify entry points for nutrition given the agriculture and/or market interventions. Thinking through the existing activity by what, how, and who will prepare teams for a later step in the workshop.

Slide 3 Example: West Africa Activity

- **ASK:** Will someone please give us a brief reminder of the West Africa example from earlier in the workshop?
- The completed What, How, Who matrix on the slide here breaks down the activity's
  - overarching outcomes (what)
  - the strategies to achieve those outcomes (how)
  - both those who stand to benefit from the outcomes and those who the strategies are likely to involve (who).
- This activity has two major results. You'll see them in the WHAT column: increase production of pumpkin, fish, cowpeas, and rice and increase income.
- **ASK:** Are either of these similar to results on your activity?
- To achieve the results in the WHAT column, the West Africa activity identified strategies in the HOW column: increase the production of the identified commodities (promote good farming practices and introduce of new technologies). To increase income, the strategies were to improve rice storage so it could be sold at higher prices in the off season, process fish by drying with new technology, and increase access to agricultural financing.
- In the WHO column, you'll see the various actors the West Africa activity are beneficiaries, participants, or both.
- A distinct set of actors are listed for each strategy. It is normal for groups like small farmers or agricultural extension agents to appear more than once.
- **ASK:** Are there any questions before we begin Step 1?

Facilitator Note

The West Africa example is used throughout this training; however, we would encourage the facilitator to develop contextually appropriate examples, if possible.

What	How	Who
Increase production of pumpkin, fish, cowpea, and rice	• Promote good farming practices • Introduce new technologies	• Small farmers; co-ops; agricultural extension agents • Agricultural extension agents, small farmers, co-ops, researchers
Increase income	• Improve rice storage to sell at higher prices • Add value to fresh fish using drying technology • Increase access to agricultural financing	• Small farmers, co-ops, input suppliers, buyers • Fisher folk, World Fish, research staff • Microfinance institutions, cooperatives, small farmer groups, women's groups

Slide 4 Describe Your Agricultural Market Systems Development Activity

Exercise: Describing Your Agricultural Market Systems Development Activity	
Goal: Have a common understanding among workshop participants of the agricultural market systems development components of their activity	Duration: 45 minutes Materials: Cards for Headings; **Handout 9: What, How, Who Matrix)** Large sticky notes Copies of activity results framework, theory of change, work plan, PMP, initial context assessments and the RFA/RFP, if applicable

INSTRUCTIONS:

- In plenary, ask the participants to think about their agriculture activity and WHAT their project intends to do.
- As participants call out their agriculture-related results, you or a designated scribe should record them under the heading, "WHAT," at the top of a flip chart paper, on a white board, or on a document that is projected. These are meant to be the big picture results or outcomes of *what the activity is trying to achieve*.
- It is unlikely that there will be more than 3 or 4 expected results. They may include one or more of the four on the previous slide, or participants may come up with some that are not included on that list.
- Project the instruction slide (slide 5) for participants to refer to during the exercise.
- Break into small groups, assigning each group one of the responses on the flip chart under "WHAT."
- Each group should take 20 minutes to discuss and write down "HOW" its activity plans to achieve the result assigned and WHO will benefit from/participate in the work described for each "HOW." This can be completed using note cards or sticky notes, or by simply having each group come up and write the answers on a flip chart at the front.

- Have the group come back to plenary and write answers under "HOW" and "WHO" columns next to the "WHAT" column on the flip chart (or on separate flip charts). Your matrix should look something like the one below.
- Once groups have populated the columns, talk through the points as a large group.
- **ASK:** Is anything missing?
  - If the group would like to add anything, have a scribe or the person suggesting the addition write it on the chart once consensus is achieved.
- **ASK:** Is there anything that should be removed or shifted to another location?
  - If the group agrees, have a scribe or the person suggesting the edit make the change on the chart.

What, How, Who Matrix

What	How	Who

Slide 5 Describe Your Agricultural Market Systems Development Activity

- Refer to **Handout 9: What, How, Who Matrix**
- This slide summarizes instructions for participants; leave it projected as teams begin the activity.

Slide 6 Nutrition Connection

- Refer to **Handout 6: UNICEF Framework**, keeping in mind the nutrition refresher information at the beginning of the workshop
- **ASK:** What are the most significant malnutrition issues in your implementation area?
- **ASK:** What are the key contributors to malnutrition in your implementation area?
  - Remind participants to consider immediate, underlying, and basic causes from the UNICEF Framework that they saw during the Introduction and Background session.
  - Encourage them to provide specific examples from their own experience (facilitator should also be prepared to provide examples, as needed).
  - Write answers on a flip chart.
- Participants should keep these contributors of malnutrition in mind as they start to think through their activity design matrix.

Slide 7 Identifying Nutrition-Sensitive Agriculture Outcomes

- Refer to **Handout 5: Six Key Nutrition-Sensitive Agriculture Outcomes** for details on each outcome.
- **ASK:** Which of the key contributors to malnutrition listed on the flip charts do you think could be minimized through agriculture? Why?
  - Circle or otherwise highlight those that the group selects; it is for these that your activity may want to develop mitigation strategies and interventions.
- To do this, let's first determine what may be possible within the context of your agricultural market systems development plans.
- Earlier we presented 6 nutrition-sensitive agriculture outcomes that your activity may strive to achieve:
- Improved availability of diverse, nutrient-rich foods in local markets
  - Per the production pathway, agriculture activities can be nutrition-sensitive if they are striving to increase production of crops that fill nutrient gaps in the local diet (through sale in local markets and/or home consumption).
  - Other strategies may be used to improve availability of diverse, nutrient-rich foods including: appropriate storage, handling, processing, and packaging that would extend the life (and quality) of these foods in homes and markets.
- Improved affordability of diverse, nutrient-rich foods in local markets
  - Per the income pathway of the agriculture-to-nutrition, an agriculture activity may contribute to the affordability of nutrient-rich foods by improving purchasing power of rural households.
  - However, having increased income does not, in and of itself, ensure that nutrient-rich foods will be purchased.
  - The cost of producing and selling these more perishable commodities requires interventions within the enabling environment components of the agriculture-to-nutrition pathways.
  - For example, the food market environment may support incentives to increase the production of good-quality nutritious foods, thereby helping to bring down prices. And, to build demand for more expensive nutrient-rich foods, an agriculture activity may pursue development of smaller packages or advertise the benefits of consuming a diversity of nutritious foods. As supply of nutrient-rich foods more easily follows demand, including behavior change communication that encourages the purchase of a diversity of nutrient-rich foods as a part of an agriculture activity's efforts to improve farmer incomes may increase supply of these foods in local markets. And, as supplies of foods increase to meet demand with the help of strengthened food and market systems, a reduction in the prices of these foods may also result.
- Improved desirability of diverse, nutrient-rich foods among target consumers, especially economically vulnerable (poor) and households with women who are pregnant or infants under 2 years of age (1,000-day households)
  - While high prices may serve as disincentives to the purchase of nutrient-rich foods, agriculture activities can provide incentives for their purchase by strengthening the food market environment (per the agriculture-to-nutrition pathways) to make

nutrient-rich foods more desirable and appealing. Convenience in preparation and purchase is a key component but may not be the most important desirability characteristic needed to increase the purchase and consumption of these foods. Appearance, quality, taste, texture, and cultural norms all shape what people like to eat. However, agriculture activities, especially those focusing on strengthening food systems for nutrient-rich commodities such as fruits, vegetables, and animal source foods, can consider including social marketing and consumer education campaigns and other behavior change communication strategies to promote the desirability of nutrient-rich foods and overcoming barriers to purchase.

- Improved environmental and food safety
  - Agriculture activities can mitigate harmful effects of toxins (either the result of chemical inputs or naturally occurring contamination such as mycotoxins) in agricultural production or processing—a part of the production to consumption pathway—thereby reducing the risk of disease and contributing to improved health status, which lies at the center of the agriculture-to-nutrition pathways. Similarly, food sold in markets, per the income pathway, must be hygienic and free of pathogens. Handwashing when handling food, wearing protective gear while using pesticides, and keeping animals away from living areas and small children are additional ways that nutrition-sensitive agriculture may support environmental and food safety.
- Increased income control by women and equitable opportunities
  - Many agriculture activities strive to engage women. However, per the women's empowerment pathway of the agriculture-to-nutrition pathways, increasing women's control of income and access to resources is a key nutrition-sensitive outcome relevant to a majority of agriculture development activities. Given the strong cultural norms associated with roles and responsibilities for agriculture and control of income and productive assets, achievement of this nutrition-sensitive agriculture outcome requires strategies that strengthen the enabling environment so that women can invest more resources in the nutritional well-being of themselves and their children.
- Increased time and energy savings for women
  - Saving energy and time for women, especially during pregnancy, can help protect the health and nutritional status of women and their children, which is the second part of the women's empowerment pathway. Agriculture activities can incorporate technologies or labor-saving practices to give women more time for other responsibilities, which often include caring for children. Additionally, as in the case of women's control of income, ensuring an enabling environment within households, communities, and businesses that supports women to limit excessive physical labor during pregnancy is also a key component of this outcome.
- **ASK:** Having reviewed these outcomes, are there any highlighted/circled "key contributors to malnutrition" on the flip charts that we should add or remove? Why?
- Remember that not all outcomes will be possible/logical for one activity. Some outcomes will be more appropriate than others depending on the scope of the activity and the nutrition mandate.

Slide 8 Identify Nutrition-Sensitive Agriculture Outcomes

- Refer to **Handout 3: Activity Design Matrix**. During the remainder of this workshop, we will be working to complete this matrix using your own activity. During this step, we are going to work on identifying your nutrition-sensitive agriculture outcomes, but by the end of the workshop, you will have a completed matrix that you can use to inform your work plan and PMP, and that can be mapped to your results framework and other project documents.

Exercise: Identify Nutrition-Sensitive Agriculture Outcomes

Goal: Identify nutrition-sensitive agriculture outcomes your activity will be able to achieve	Duration: 30 minutes Materials: **Handout 3: Activity Design Matrix**; flip chart paper, and the large sticky notes

INSTRUCTIONS:

- During this exercise, participants will complete the first column of the activity design matrix.
- Think about which of the above nutrition-sensitive agriculture outcomes will make the most sense for your activity.
- Based on WHAT your agriculture and economic growth activity is striving to achieve and the key nutritional problems in your target area, consider which of the six nutrition-sensitive agriculture outcomes might be attainable for your activity.
- We recommend that you select no more than three nutrition-sensitive agriculture outcomes to pursue, as implementation of each will require several strategies and numerous interventions.
- It is possible that more than three outcomes are relevant to your activity. If you don't prioritize them in this step, the activity team can revisit them after this workshop.
- Once you have determined which of the nutrition-sensitive agriculture outcomes are appropriate to your context and activity, insert them into the first column of your activity design matrix, shown below.

Nutrition-sensitive agriculture outcome	Strategy	Practice	Intervention	Indicator

Slide 9 Identify Nutrition-Sensitive Agriculture Outcomes

- This slide summarizes instructions for participants; leave it projected as teams begin the activity.

Facilitator Note

Prioritization of deliverables may lead to debate and lengthy conversation among the activity team. Allow some discussion but be mindful of time. If the conversation drags and it does not seem like the team will reach consensus, narrow outcomes down to two and have a vote.

End of Step 1

Step 2: Prioritize Nutrition-Sensitive Agriculture Strategies

Estimated time: 2–3 hours

Slide Deck 2, Slides: 10–23

Materials and handouts:

- Flip chart paper with the team's completed What, How, Who matrix (hung on wall)
- Flip chart pages of the team's activity design matrix with the priority nutrition-sensitive agriculture outcomes completed, which should now look similar to this example:

Outcome	Strategy	Practice	Intervention	Indicator
• Outcome 1 • Outcome 2 • Outcome 3				

- Handout 10: Nutrition-Sensitive Agriculture Strategies Criteria and Examples
- Handout 11: Prioritization Criteria

Learning objective: Participants will discuss and select strategies that their activity can conduct to meet selected nutrition-sensitive agriculture outcomes. In selecting and prioritizing the strategies, workshop participants will review key assumptions and risks.

Slide 10 Step 2: Prioritize Nutrition-Sensitive Agriculture Strategies

- In this step, we will define and prioritize potential strategies.

Slide 11 Key Terms

- Let's remind ourselves of a few key terms. Who can tell me what the difference is between a strategy and an intervention? *(take several responses from participants)*
- You will recall that during the first session, we discussed both of these terms and agreed on these definitions:
- A strategy is the means or broad approach by which an activity may achieve a stated purpose or desired outcome. Strategies are made up of collections of behavior-centered interventions. Achieving each of the activity's desired nutrition-sensitive agriculture outcomes may require one or more strategies.
- An intervention is a collection of actions that, taken together, will accomplish a planned (nutrition-sensitive agriculture) strategy.

- In other words, one or more interventions are needed to meet a planned strategy and one or more strategies are required to achieve a planned nutrition-sensitive agriculture outcome.

Slide 12 Recap

- In Step 2, we are going to focus on defining one or more strategies that your activity may use to achieve each of the nutrition-sensitive agriculture outcomes you selected in Step 1.
- **It will be important to refer back to your What, How, Who matrix** to ensure the nutrition-sensitive agriculture strategies you devise are not only doable but also complementary to your agriculture and market systems development strategies.
- Before we start, let's review what we have done so far:
- We have reviewed the agriculture and market systems development outcomes (What) and strategies (How) for your activity. As a part of that process, you also identified who will be engaged in the interventions required to pursue those strategies and completed the What, How, Who matrix.
- Your work on the What, How, Who matrix initiated a conversation about how your planned agriculture and market systems development outcomes and strategies might do more to improve nutrition in your target area, which resulted in your team selecting nutrition-sensitive agriculture outcomes that are in line with your activity's goals and that may be able to be addressed within your agriculture-led interventions.

Slide 13 Developing Nutrition-Sensitive Agriculture Strategies

- Now we are going to develop strategies for each of the nutrition-sensitive agriculture outcomes.
- To be nutrition-sensitive, an agricultural strategy must help work toward one of the nutrition-sensitive outcomes. There are a number of criteria you can consider to assess if the strategy is doing this.
- Remember, nutrition-sensitive agriculture strategies are those that address some aspect of **food access, food quality, health, WASH, or care.**

Slide 14 Nutrition-Sensitive Agriculture Strategies Criteria and Examples

- Refer to **Handout 10: Nutrition-Sensitive Agriculture Strategies Criteria**. This handout provides criteria by which you can assess your strategies and determine if they will contribute to nutrition and how you could adjust them to be nutrition-sensitive. The criteria are organized by the six outcomes we reviewed previously (Handout 5).
  - You may discover additional criteria that would enable your strategy to address some aspect of food access, food quality, health, WASH or care.
  - The example strategies, however, are just a small sample of strategies that will contribute to these outcomes.
  - The strategies will be specific to the context in which one is working, the agricultural commodities involved, timeframe, and so forth.

- Let's look at the first example for outcome 1: Improved availability of diverse, nutrient-rich foods in local markets
- One criterion that would indicate that your strategy will improve availability of diverse, nutrient-rich foods in local markets is if it increases the supply of a nutrient-rich food in local markets. Strategies that do this include:
  - Linking dairy farmers to milk collection centers.
  - Promoting inter-cropping and other practices to diversify home production.
- Another criterion for this same outcome is: does your strategy *extend the time period a nutrient- rich food is available in local markets*? Strategies that do this include:
  - Using hermetically sealed bags to store cowpeas.
  - Promoting community warehouse system to safely store commodities closer to market for longer periods of time.
- Note that some strategies will meet more than one criterion and could also be used to support more than one outcome. For example, use of improved preservation practices can contribute to both improved availability (outcome 1) and improved food safety (outcome 4).

Slide 15 Some Strategies May ALREADY be Nutrition-Sensitive

- For example, in our example from West Africa, one of the strategies for *increasing income* is to *add value to fresh fish using drying technology*. While the intention of the strategy is to contribute to fisher folk's incomes by lengthening the amount of time that they will be able to sell the fish, thereby obtaining higher prices over a longer period of time, this strategy can also contribute positively to nutrition by improving the safety of a nutrient-rich food, and making it available in markets to purchase and consume for longer.
- Therefore, this strategy is already a **nutrition-sensitive** agriculture strategy.

Facilitator Note

Prepare an example from the activity context. Some may exist within a dedicated nutrition component of the project.

Slide 16 Some Strategies Can be ADAPTED to be Nutrition-Sensitive

- In our example from West Africa, the activity had two strategies for increasing production of fish, cowpeas, rice, and pumpkin*: promote good farming practices;* and *introduce new production technologies*. The activity determined that these two strategies **could** be adapted to realize the nutrition-sensitive outcome of *improved availability of diverse, nutrient-rich foods in households and local markets*.
- Using the criteria we just discussed, the West Africa team adapted its agricultural development strategy to extend availability of nutrient-rich and safe foods for consumption, as follows: *Build capacity of cooperative members and farmer groups in*

appropriate storage practices for cowpeas and rice. This would enable cowpeas and rice to be stored for longer, and would help ensure that they were stored correctly and stayed safe for consumption. Both of these would improve the availability of cowpeas and rice in households and local markets.

Slide 17 Some New Nutrition-Sensitive Strategies May Need to be ADDED

- To fully achieve your prioritized nutrition-sensitive outcomes, your activity may need to consider new strategies in addition to identifying and adapting those that are already in place.
- In our West Africa example, the team did not have an existing strategy to build consumer demand for nutritious foods, so while it was focused on the supply side of the availability outcome, it was also important to think about ways the activity could increase demand to ultimately improve availability of nutritious foods in local markets. An example of a new strategy is: *Facilitate marketing to build consumer demand for fish and cowpeas.*
- Please look again at **Handout 10** to review criteria for nutrition-sensitive agriculture strategies and examples.

Slide 18 Partnering as a Strategy

- It is not expected that your activity alone has the breadth and resources to minimize every contributor to malnutrition in your target area.
- Think about key linkages, partnerships, and advocacy needs to work with other investments, programs, and plans to reduce malnutrition in your target area.
- **ASK:** What target groups are being reached by others? To improve adoption of what practices? How can you adjust your strategies to more cost-effectively achieve results through partnerships?
- If others are promoting some of the practices you have identified as critical to implementing your strategies, rather than implementing directly, it may be more cost-effective to adjust your strategy and partner with an existing activity or program.
- In situations where partnering is a promising strategy, activity teams should be as specific as possible when naming the activity or organization they want to work with and even describe an engagement strategy with first steps. Thinking through the details a partnership will clarify the concrete steps an activity might take after the workshop.

Slide 19 Identify Nutrition-Sensitive Agriculture Strategies

Exercise: Identify Nutrition-Sensitive Agriculture Strategies	
Goal: Identify nutrition-sensitive strategies that your activity will be able to achieve	Duration: 30 minutes Materials: **Handout 3: Activity Design Matrix**; **Handout 10: Nutrition-Sensitive Agriculture Strategies Criteria and Examples**; flip chart paper or the large sticky notes

INSTRUCTIONS:

- In plenary, review the strategies in the HOW column of your What, How, Who matrix.
- Using the criteria on Handout 11 that we discussed, go through each strategy on the HOW column and determine whether it is or can be made nutrition-sensitive.
- On a piece of flip chart paper, list any of the strategies included in your What, How, Who matrix that are already nutrition-sensitive and indicate which nutrition-sensitive agriculture outcome it supports.
- Re-word any strategies that can be adapted to be nutrition-sensitive and add them to the "Implementation strategy" column of your flip chart. Indicate which nutrition-sensitive agriculture outcome it supports.
- Finally, looking at the criteria and considering the nutrition challenges in your target area and the scope of your activity, add any nutrition-sensitive strategies that you come up with. Make sure to indicate which nutrition-sensitive outcome it supports.

Your flip chart should look like this:

Nutrition-Sensitive Agriculture Outcome	Strategy	Practice	Intervention	Indicator
Outcome 1	Strategy 1			

Slide 20 Identify Nutrition-Sensitive Agriculture Strategies

- This slide summarizes instructions for participants; leave it projected as teams begin the activity.

Slide 21 Recap

- You should now have a full list of nutrition-sensitive agriculture strategies for your activity. These will be composed of:
- Strategies that your agriculture activity included that were **ALREADY** nutrition-sensitive.

- Strategies that your agriculture activity **ADAPTED** to make them more nutrition-sensitive.
- Strategies that your agriculture activity **ADDED** to better achieve nutrition-sensitive outcomes.
- However, you may have too many strategies listed, so we will now prioritize these strategies by checking their feasibility.
- Please pull out **Handout 11: Prioritization Criteria**

Slide 22 Checking the Feasibility of Your Nutrition-Sensitive Agriculture Strategies

- **ASK:** What criteria do our strategies need to meet to be considered "feasible?"
- In plenary, go through each strategy and discuss whether it meets all the criteria listed on the slide (also listed in **Handout 11**).
  - Sustainability and potential for impact
  - Funding available
  - Time available
  - Staff capacity and experience
  - Organization's competitive advantage/expertise
  - Alignment with government priorities
  - Alignment with USAID (donor) priorities
  - Complementarity with other investments in the activity area
  - Opportunity to leverage private sector investment
- If any of the strategies do not/do not YET meet the criteria, consider deleting or flagging them for consideration in a future work plan.

Slide 23 Present Your Strategies—Check Your Work!

- At this time, each small group is asked to present its strategies to the full activity team. As you do this make sure to include:
  - How these strategies considered the original activity design and scope.
  - The nutrition issues in the activity implementation area.
  - How the strategies work toward the identified nutrition-sensitive agriculture outcome.

End of Step 2

Step 3: Develop Practices and Interventions

Estimated time: 3–4 hours

Slide Deck 2, Slides: 24–32

Materials and handouts:

- Handout 12: Illustrative Nutrition-Sensitive Agriculture Outcomes, Practices, and Interventions
- The flip charts with the participants' activity design matrix with the first two columns completed, as in the example below:

Outcome	Strategy	Practice	Intervention	Indicator
• Outcome 1	• Strategy 1.1 • Strategy 1.2 • Strategy 1.3			
• Outcome 2	• Strategy 2.1 • Strategy 2.2 • Strategy 2.3			
• Outcome 3	• Strategy 3.1 • Strategy 3.2 • Strategy 3.3			

Learning objective: Participants will consider a range of practices that their activity should promote to implement the strategies prioritized in Step 2. Using these practices as a starting point, participants will develop a list of interventions that the activity can program into its work plan to achieve each nutrition-sensitive agriculture strategy.

Slide 24 Step 3: Develop Practices and Interventions

- At the end of this step, you will have several nutrition-sensitive agriculture interventions to accompany the strategies you developed in Step 2. As mentioned, this guidance uses a behavior-centered approach to design. Therefore, each intervention will be developed to support the adoption of nutrition-sensitive agriculture practices by key target groups.

Slide 25 Key Terms

- A **practice** is a concrete action that a specific person or group does at a specific time and place**.** Promoting the use of good practices is at the core of our work.
- An **intervention** is an action that, combined with other actions, will accomplish the nutrition-sensitive agriculture strategies.
- Interventions clearly state what will be done and who will be involved as an actor or target recipient. An intervention will in many cases describe the key practices or behaviors that the activity wants a specified organization or individual to adopt.
- Think about the key practices that need to be used—and by whom—to implement your strategies BEFORE you write your interventions.

Slide 26 Adapting Good Agricultural Practices to Support Nutrition

- In agricultural market systems development activities, we often promote the use of good agricultural practices by smallholders. These practices may vary by crop, location or context, market, and resource base.
- To determine what will be done and who needs to be involved, agricultural market systems development activities must determine which practices will have the greatest effect and who needs to adopt them.
- The nutrition-sensitive agriculture strategies you prioritized in Step 2 imply the use of key practices that need to be used by particular target groups. We will share an example of this below. But before we start to write interventions, let's review a few things that we know about targeting.

Slide 27 Targeting: Agriculture vs. Nutrition

- **ASK:** Is there is an inherent tension between agricultural market systems development activities versus those that aim to reduce malnutrition? Why or why not?
  - Agricultural activities tend to target changes for farmer households, value chain actors, or even systems.
  - Nutrition activities tend to target changes for women who are pregnant or lactating and children under two, the groups most vulnerable to undernutrition.
- We must also consider gender roles (e.g., what men can do to ensure nutritional well-being of women and children) and strengthen the environment that will enable women and young children to benefit from planned strategies, thereby achieving intended outcomes. However, women may not need to participate in all aspects of agricultural or nutrition-sensitive agriculture activities to benefit.
- In other words, in some cases the actors and the beneficiaries will be the same, while in other cases they will be different groups.

Slide 28 Identify Practices: West Africa Activity Example

- When we were defining strategies in the last step, we mentioned that a strategy can be thought of as a collection of behavior-centered interventions.
- You will need to identify the nutrition-sensitive agriculture practices or behaviors your activity wants to promote or change first and then develop the range of interventions needed to promote the adoption of those practices.
- For example, let's look at one of the strategies from our West Africa example: *Build capacity of cooperative members and farmer groups in appropriate post-harvest handling and storage practices for both cowpeas and rice.*
  - First, the West Africa team considered which post-harvest handling and storage practices or behaviors for both rice and cowpeas that would have the greatest contribution to nutrition were lacking.
  - Before they could develop interventions, they considered the range of possible post-harvest handling and storage practices by commodity.
- For cowpeas, they determined that poor storage practices were resulting in high levels of loss both in households and markets.

- By promoting improved storage, more cowpeas would be available for longer periods of time for purchase from local markets and consumption from household-level stores.
- There were challenges before the cowpeas even reached storage because farmers were not aware of appropriate sorting techniques and visual cues to inform which beans should be discarded rather than stored.
- Therefore, **cowpea-sorting techniques** were included in the training to mitigate mycotoxin contamination in storage, which would have a positive effect on nutrition as well as on product quality (for sale) and longevity (extending time the time period cowpeas could be consumed or sold and possibly obtaining higher prices).

- For both rice and cowpeas, there were also a lot of challenges with obtaining the appropriate moisture content before storage. It was, therefore, important to focus training on use of **good drying practices** and **recognizing and testing for appropriate moisture content** before storage.

Slide 29 Develop Interventions: West Africa Activity Example

- Once our West Africa team had identified specific practices that could be included under their priority strategies they determined what needed to happen and who needed to play a role to define their interventions. Their discussion resulted in several specific interventions that, taken together, would support each strategy and assist their target actors to use the practices the activity wanted to promote. For the strategy, *build capacity of cooperative members and farmer groups in appropriate post-harvest handling and storage practices for both cowpeas and rice*, these interventions included but were not limited to:
  - Training cowpea growers in good sorting, drying, and moisture testing practices before storage.
  - Training rice growers in good drying and moisture testing practices before storage.
  - Training agricultural extension agents (both government and private sector) to train others in good sorting, drying, and moisture testing practices before storage.
  - Developing pictorial guidance to assist cooperatives, farmers, and agricultural extension agents in continuing to use good sorting, drying, and moisture testing practices before storing cowpeas and/or rice.

  These are just four of the possible interventions that may be required to support behavior change for the practices noted above for both rice and cowpeas. Now it is your turn to try to be as specific as possible about the practices and interventions that will support your prioritized strategies. Remember that you will be developing indicators for your interventions (Step 4), so they must be clear and measurable.

Slide 30 Develop Practices and Interventions

Exercise: Develop Nutrition-Sensitive Agriculture Practices and Interventions	
Goal: Operationalize prioritized strategies	Duration: 2 hours Materials: Flip chart with nutrition-sensitive outcomes and strategies filled in from previous steps, flip chart paper or index cards to add practices and interventions. **Handout 12: Illustrative Nutrition-Sensitive Agriculture Outcomes**, Practices, and Interventions

INSTRUCTIONS:

- Divide participants into small groups.
- Assign one outcome and the related strategies prioritized from Step 2 to each group for discussion.
- Groups should review each strategy, discuss key practices that are desired for each, and develop interventions that will ensure their uptake and use. Keep in mind that *an intervention clearly states what will be done and who will be involved as an actor or target recipient*. There may be more than one intervention for the practice that is desired.
- Participants should use **Handout 12**
  - They have been organized by nutrition-sensitive agriculture outcome and are provided only as examples to help your team start brainstorming.
  - This handout also illustrates intermediate outcomes that are more specific to a given context than the six nutrition-sensitive agriculture outcomes that you selected at the beginning of this process.
  - These more detailed, context-specific outcomes will help you define your outcome indicators in Step 4.
  - If you think a more detailed outcome is appropriate to your activity, this would be a good time to review your selected nutrition-sensitive agriculture outcomes and adjust the wording as needed.
- Each team must agree upon several nutrition-sensitive agriculture interventions that it has the budget, staff, and timeframe to undertake.
- After smaller groups have discussed, each should post its interventions on the wall or give to the note taker for inclusion in the team's full activity design matrix for later use.

Nutrition-Sensitive Agriculture Outcome	Strategy	Practice	Intervention	Indicator
Outcome 1	Strategy 1.1	Practice 1.1	Intervention 1.1	
	Strategy 1.2	Practice 1.2	Intervention 1.2	
Outcome 2	Strategy 2.1	Practice 2.1	Intervention 2.1	
	Strategy 2.2	Practice 2.2	Intervention 2.2	

Slide 31 Develop Nutrition-Sensitive Agriculture Practices and Interventions

- This slide summarizes instructions for participants; leave it projected as teams begin the activity.

Slide 32 Present Your Practices and Interventions—Check Your Work!

- At this time, each small group is asked to present their practices and interventions to the full activity team. As you do this make sure to include:
  - How these interventions lead to the practice.
  - How the practice supports the strategy.
  - How the strategies work toward the identified nutrition-sensitive agriculture outcome.

End of Step 3

Step 4: Define Monitoring Indicators

Estimated time: 2–3 hours

Slide Deck 2, Slides: 33–40

Materials and handouts: Handout 1: Key Terms; Handout 4: Activity Design Matrix – West Africa Activity Example

Learning objective: Participants will define outcome indicators in line with their outcomes and strategies and output indicators for the interventions developed in Step 3. During this step, participants will complete the design matrix and have a chance to review an example of a completed matrix that pulls all four steps of this workshop together.

Slide 33 Step 4: Define Monitoring Indicators

- Now that you have identified the strategies and interventions that you will use to reach your selected nutrition-sensitive agriculture outcomes, you need to think through appropriate indicators.
- Without regular monitoring of your interventions—assisted through the development of appropriate indicators—it is impossible to know whether your interventions are supporting your strategies and whether your strategies are helping you achieve your outcomes. So, let's remind ourselves what is required for good activity monitoring.

Slide 34 Good Monitoring

- Monitoring nutrition-sensitive agriculture is like monitoring any of your other activity outcomes. You need to collect data regularly on your nutrition-sensitive agriculture indicators and adjust approaches and interventions when problems arise. Here is a quick review of the components of good monitoring:
- Undertake regular data collection activities to track implementation progress:
  - Monitor the quantity, quality, and timeliness of activity outputs.
  - Monitor achievement of activity outcomes.
  - Ensure the quality of performance monitoring data collected.
- Data collection typically entails the following tasks:
  - Reviewing performance indicator data and monitoring reports.
  - Conducting or participating in data quality assessments.
  - Conducting site visits.
  - Examining technical reports and deliverables.
  - Meeting with implementing staff and other stakeholders.

Slide 35 Process Monitoring

- It is also important to track *how* activities are being implemented, and your output indicators alone may not give you the full picture.
- **ASK:** Who is familiar with process monitoring?
- Process monitoring focuses on the implementation process and informs questions like:
  - Are the detailed implementation steps being completed as planned?
  - Does implementation vary across activity target areas?
  - Did the activity reach the intended people?
- Process monitoring can be used to determine if activities need to be adjusted to achieve desired outcomes.
- The objective of process monitoring is not to penalize teams that make modifications or do not achieve planned benchmarks, but rather to identify and understand as soon as possible if an intervention is not working because it is not being delivered as intended.
- Process indicators do not guarantee the achievement of outcomes, but can help ensure you are on the right track.
- Process monitoring helps ensure high-quality implementation. The indicators an activity team chooses to use generally do not need to be reported formally.

Slide 36 Process Monitoring Example

- An activity includes an intervention intended to increase joint decision making in households.
- The implementation approach has several steps, starting with training project staff to facilitate conversations that promote 1–2 key practices per meeting with 5–8 households, requiring attendance of 2–3 decision makers from each household each month for 6 months.
- The activity has also determined that each trained facilitator should reach out to each household grouping of decision makers at least once between facilitated discussion sessions.
- Process monitoring should be conducted by the facilitators' supervisors to determine if the monthly meeting are being held, all participants are attending, all materials developed for the facilitators to use are being used, and if each facilitator is meeting with each set of household decision makers between each monthly meeting.
- **ASK:** How might the activity team use the information collected through process monitoring?
- Process monitoring should tell the supervisor if the intervention is being executed as planned by all facilitators.
- It should also help the activity leadership to identify challenges or barriers that might require a modification in their implementation plan or assumptions.
  - For example, process monitoring data might reveal that some household participants are inconsistently attending meetings. The facilitator could ask about this between group meeting visits to identify potential solutions to ensure regular

participation. This may result in an adjustment to the implementation approach to ensure coverage and reach.

Slide 37 Quality Monitoring

- Quality monitoring allays concerns about how planned activities are being conducted and requires the collection and use of data to:
  - Identify gaps between current performance and expectations/requirements to achieve desired outcomes.
  - Introduce modifications, perhaps in response to findings from process monitoring.
  - Assess the effect of modifications on performance.
- **ASK:** How does quality monitoring differ from process monitoring?
  - Quality monitoring differs from but complements process monitoring by asking questions about the quality of implementation. Quality monitoring approaches may be formal evaluations or ad hoc team-based problem solving, targeted performance improvement, or collaborative assessment of performance at the individual or team level.
  - Like process monitoring, quality monitoring requires that key quality standards for performance are identified from the outset. These standards are generally evidence-based in that they would draw from better practice and/or prior implementation experience in the given context.

Slide 38 Key Terms

- This workshop is not intended to build expertise in writing indicators. Hopefully, the M&E advisors for the activity—who have some of this expertise—are participating. However, we do think it is useful to provide a reminder about what indicators are and how they are used, along with definitions of output and outcome indicators.
- An **indicator** is a variable that measures one aspect of a program or project.
- An **output indicator** is a unit of measure to assess the quality and implementation of resulting products, goods, or services at the end of an intervention. Data to inform output indicators are generally collected quarterly, semi-annually, or annually to track progress toward planned benchmarks. However, activities can also incorporate more regular data collection to inform day-to-day management decisions. Activities typically have more flexibility with output indicators and can track a combination of indicators that shows how the activity is progressing toward its intended outcomes.
- An **outcome indicator** measures short- to medium-term effects of the combined outputs from an activity's interventions. Data to inform outcome indicators are generally collected annually or at the mid-term of an activity and often reported in terms of a percentage of targeted groups reached.

Slide 39 Develop Output Indicators: West Africa Activity Example

- Most indicators associated with your interventions will likely be **output** indicators. For example, for the four interventions identified by the West Africa activity team, potential output indicators may be:
  - Number of rice/cowpea growers using improved drying technology.
  - Number of rice/cowpea growers measuring moisture levels for their commodity prior to storage.
  - Number of fish processors meeting food safety standards.
  - Number of agriculture extension agents trained in appropriate post-harvest handling and storage practices for rice and cowpeas.
  - Percentage of agriculture extension agents completing all planned farmer group visits.
- You will notice that these output indicators measure the uptake and use of key promoted practices by the targeted users as well as measure progress toward achievement of specific interventions according to your detailed implementation plan. For example, in our sample project, it was important to know how many agriculture extension agents completed their training because that training extended knowledge to farmer group members. But the process of extending that knowledge was also critical to farmers' use of key practices, so the indicator "Percentage of agriculture extension agents completing all planned farmer group visits," helped activity managers know if their interventions were on track according to set progress measures.

Slide 40 Develop Outcome Indicators: West Africa Activity Example (continued)

- Your outcome indicators will serve as the measures of your original prioritized outcomes (per Step 1 of this guidance).
  - In the example shown in **Handout 4: Activity Design Matrix – West Africa Activity Example**, the activity design team selected *improved availability of diverse nutrient rich foods in households and local markets* as one of its overarching nutrition-sensitive agriculture outcomes.
  - One of its strategies for doing this was to add value to fresh fish using drying technology, thereby extending availability in homes and markets.
  - The activity outcome indicator associated with this strategy was: Percentage increase in volume of dried, packaged fish in local markets.
  - For the fish value chain, this outcome indicator measures the nutrition-sensitive agriculture outcome originally prioritized by the design team.
  - The activity is also increasing production of other nutrient-food commodities—cowpeas and pumpkin—and outcome indicators similar to that for fish may be used for these commodities to contribute to the overall measurement of *Improved availability of diverse nutrient-rich foods in households and local markets.*
- Now, let's develop indicators for achieving your nutrition-sensitive agriculture strategies and interventions.

Slide 41 Define Indicators

Exercise: Define Indicators

Goal: Establish indicators	Duration: 45 minutes Materials: Activity design matrix, flip chart paper

INSTRUCTIONS:

This exercise can either be done in plenary or participants can return to the small groups they worked in to develop interventions.

- Assign 1 outcome to each group for discussion.
- Ask groups to develop 1 or 2 outcome indicators as well as output indicators for the interventions most critical to achieving the strategies and/or outcomes assigned to them. The development of indicators will begin by determining what short- to medium-term outcome indicator(s) best measure their planned strategy and intended outcome. Group discussions will then focus on determining the most critical output indicators for managing implementation toward achievement of their interventions, strategies, and outcomes. It might be helpful to refer back to **Handout 5: Six Key Nutrition-Sensitive Agriculture Activity Outcomes**, which also provides a range of measurable sample outcomes.

For Activities Beyond Year 2

Activities beyond Year 2 may not have the flexibility to propose new outcome indicators. Groups in these situations should brainstorm only output indicators that would assess the progress and quality of the interventions identified in the previous step. For such activities, Step 4 is also an opportunity to discuss process and quality monitoring and what additional information could be collected to inform implementation of activities to be adjusted based on ideas from this workshop. If participants are uncomfortable straying from their established PMPs, remind them that this is a thought exercise and could inform a discussion with their USAID counterparts to introduce new indicators. Most activities do not restrict the number of output, process, or quality indicators.

- Once groups have finished, they will report back in plenary, agree on proposed indicators, and write their final wording on the activity design matrix.

Nutrition-sensitive agriculture outcome	Strategy	Practice	Intervention	Indicator
Outcome 1	Strategy 1.1	Practice 1.1	Intervention 1.1.1 Intervention 1.1.2	Outcome Indicator 1 Output Indicator 1.1
	Strategy 1.2	Practice 1.2	Intervention 1.2.1 Intervention 1.2.2	Output Indicator 1.2
Outcome 2	Strategy 2.1	Practice 2.1	Intervention 2.1.1 Intervention 2.1.2	Outcome Indicator 2 Outcome Indicator 2.1
	Strategy 2.2	Practice 2.2	Intervention 2.2.1 Intervention 2.2.2	Outcome Indicator 2.2

Slide 42 Define Monitoring Indicators

- This slide summarizes instructions for participants; leave it projected as teams begin the activity.

Slide 43 Pulling It All Together: Completed Matrix!

- The exercises we have been working on are progressive and additive. Each has allowed us to build our complete activity design matrix.
- We'll review the completed matrix for your activity and ensure that we all understand and agree on the final outcomes, strategies, interventions, and indicators.
- We will also confirm that each identified indicator links logically to its intended outcome. Does this indicator measure progress toward this outcome?
- Facilitators may want to budget time for teams to type their draft activity design matrix and project it for reflection and discussion.

Nutrition-sensitive agriculture outcome	Strategy	Practice	Intervention	Indicator
Outcome 1	Strategy 1.1	Practice 1.1	Intervention 1.1.1 Intervention 1.1.2	Outcome Indicator 1 Output Indicator 1.1
	Strategy 1.2	Practice 1.2	Intervention 1.2.1 Intervention 1.2.2	Output Indicator 1.2
Outcome 2	Strategy 2.1	Practice 2.1	Intervention 2.1.1 Intervention 2.1.2	Outcome Indicator 2
	Strategy 2.2	Practice 2.2	Intervention 2.2.1 Intervention 2.2.2	Outcome Indicator 2.2

Facilitator Note

We recommend asking participants if they have any remaining concerns or questions because they will be leaving the workshop with the final matrix and the understanding that it can be used to inform a new or revised work plan and PMP.

End of Step 4

Next Steps

Estimated time: 30 minutes

Slide Deck 2, Slides: 44–47

Materials and handout: Handout 13: Post-workshop Action Items

Learning objective: Participants will agree upon a series of steps required to incorporate the information in the activity design matrix into their work plan, results frameworks, and/or PMP depending on their stage of implementation and assigning clear roles, responsibilities, and timelines.

Slide 44 Next Steps

- Before finishing this workshop, discuss how you will integrate your new nutrition-sensitive agriculture outcomes, interventions, and indicators into your activity work plans and monitoring systems. To do this, you will likely need to map the contents of the matrix you completed during this workshop along your activity results framework and include the strategies and interventions within your work plan and interventions within your PMP if possible.

  Additionally, you will need to manage any necessary approvals for activity adjustments by appropriate management staff within your organization, your USAID agreement officer's representative/contracting officer's representative, and any other key stakeholders. Budgeting time for established approval processes will help you think through timelines and roles more specifically.

- It is also important to think through any other tasks that need to happen as a result of our work here. For example, do you need to contact local government officials or representatives at national ministries to update them on activities? Will you need to enlist the support of other partners or coordinate interventions with organizations not represented in this workshop? Are there new resources, tools, trainings that need to be planned to proceed with the outlined interventions?

Slide 45 Outline Post-workshop Action Items

- Please pull out **Handout 13: Post-workshop Action Items**
- We need to ensure that our plans lead to action and implementation of the new nutrition-sensitive interventions. To do this, create a timeline and identify individuals responsible for the next steps. These exercises will take time and your group might choose to do them later, so we have included the exercise below to ensure that there is a solid plan with clear next steps, roles, and a timeline for ensuring that all of the work from this workshop gets incorporated into the activity documents.

Exercise: Outline Post-workshop Action Items	
Goal: Outline next steps to ensure integration of new outcomes and indicators into activity work plan and monitoring systems	Duration: 20 minutes Materials: **Handout 13: Post-workshop Action Items**, flip chart paper

INSTRUCTIONS:

- In plenary, discuss how you plan to incorporate the work you did during this workshop into your results framework, work plan, PMP, and other activity documents. Discuss additional tasks and include ideas about other stakeholders and partners to contact.
- Be sure to identify specific follow-up tasks and the name of a person (or small group) that will be responsible for carrying out each. We also recommend committing to a timeframe for completing each task.
- This list will need to be tailored to the specifics of the activity/organization and relevant management and decision-making structures.
- One of the first items on the list may be to finalize the language in the activity design matrix, which, at the close of the workshop it will likely be in rough draft form. USAID Advancing Nutrition recommends taking time to reflect on the content and adjust or add language to finalize. Should your activity be in a position to link the activity design matrix directly to a work plan, you may need to adjust language so that the formats align. Save the matrix in a readily accessible place so you can refer to it later in implementation.

Post-workshop Action Items

Task	Person responsible	Timeline

Slide 46 Outline Post-workshop Action Items

- This slide summarizes instructions for participants; leave it projected as teams begin the activity.

Slide 47 Thank You!

- You did it! We have now completed the full Designing Nutrition-Sensitive Agriculture Activities workshop. Thank you for all the hard work.
- We hope you are excited to take these plans forward and implement nutrition-sensitive agriculture. We hope you will keep in mind the ways that you can convey what you've learned to the growing community of practice for nutrition-sensitive programming and will document your successes, lessons, and evidence!

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World Health Organization: "Stunting in a Nutshell." http://www.who.int/nutrition/healthygrowthproj_stunted_videos/en/

Additional Resources

FANTA training: "NS program design: where do I start?" https://agrilinks.org/training/nutrition-sensitive-agriculture

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SPRING tool: "Agriculture and Nutrition Context Assessment Tool." https://www.spring-nutrition.org/publications/series/context-assessment-linking-agriculture-and-nutrition

SPRING training: "Accelerating Behavior Change in Nutrition-Sensitive Agriculture." https://www.spring-nutrition.org/publications/training-materials/accelerating-behavior-change-nutrition-sensitive-agriculture

SPRING "Nutrition-Sensitive Agriculture Training Resource Package." https://www.advancingnutrition.org/resources/nutrition-sensitive-agriculture-training-resource-package

USAID E3 Trade Facilitation Monitoring, Evaluation, and Learning Toolkit. http://usaidprojectstarter.org/

USAID Monitoring, Evaluating, and Learning Toolkit Pathways.http://usaidactivitystarter.org/content/monitoring-evaluating-and-learning-toolkit-pathways

USAID Multi-Sectoral Nutrition Strategy 2015-2025. https://www.usaid.gov/nutrition-strategy

USAID Performance Monitoring and Evaluation TIPS: Selecting Performance Indicators. http://pdf.usaid.gov/pdf_docs/Pnadw106.pdf

USAID Technical Guidance Brief: "Nutrition-sensitive agriculture: Nutrient-rich value" https://www.usaid.gov/what-we-do/global-health/nutrition/nutrition-sensitive-agriculture-nutrient-rich-value-chains

Annex 1. Draft Workshop Agenda

Designing Effective Nutrition-Sensitive Agriculture Activities

Workshop Dates

DAY 1

8:30 a.m.–9:00 a.m.	**COFFEE AND REGISTRATION**

9:00–10:00	**Welcome**
	• Welcome extended by the facilitator or other appropriate person such as activity chief of party
	  ○ Brief summary of the intent of the workshop
	• Comments from USAID Mission
	  ○ Interest in the workshop from the perspective of the mission
	• Participants introduce themselves
	  ○ Participants share their expectations for the workshop
	  ○ Facilitator may want to use a fun icebreaker, since participants may not know each other
	• Comments from the facilitator on the space and materials: small tables to facilitate group work; wall space and/or flip charts; large post-it notes at each table; packet with 13 handouts; materials activity teams may have provided such as the RFA/RFP, submitted proposal, previous work plans, results framework, PMP

10:00–10:45	**Introduction to Workshop Objectives** Learning objective: Participants will have an understanding of the workshop objectives and the six nutrition-sensitive outcomes that an agriculture activity may include. • Walk through Day 1 Agenda • First presentation of the activity design matrix– the primary output of the workshop • Review the West Africa Activity Design Matrix to illustrate the completed activity design matrix • **Handout 5: Six Key Nutrition-sensitive Agriculture Activity Outcomes** – background on these outcomes are detailed in a later session
10:45–11:00	**BREAK**
11:00–12:30p.m.	**Introduction and Background:** Ensuring a Common Understanding of Nutrition-Sensitive Agriculture Learning objective: Participants will receive a review of key nutrition-sensitive agriculture concepts, discuss how their activity interfaces with the agriculture-to-

	nutrition pathways, and be introduced to the six nutrition-sensitive outcomes that an agriculture activity may strive to achieve.
12:30–1:30	**LUNCH**
1:30–3:00	**Introduction and Background:** Ensuring a Common Understanding of Nutrition-Sensitive Agriculture (continued)
3:00–3:15	**BREAK**
3:15–4:45	**Step 1:** Prioritize nutrition-sensitive outcomes for your activity Learning objective: Participants will be able to determine which nutrition-sensitive agriculture outcomes are attainable in the context of their agricultural and economic growth activity, including a discussion about key nutrition challenges in their target area. • Exercise: Describe your activity • Exercise: Identify nutrition-sensitive agriculture outcomes • Output: Matrix 1 completed; Column 1 of activity design matrix completed
4:45–5:00	Day 1 Closing • Summary of what was accomplished and learned in Day 1

DAY 2

8:30 a.m.–9:00 a.m.	**COFFEE**

9:00–9:30	**Welcome and review of Day 1**
	• Welcome extended by the facilitator
	  ○ Walk through Day 2 agenda
	• Participants discuss lessons and outputs from Day 1
	  ○ Facilitator may want to use a gallery walk and/or a report back format

9:30–11:00	**STEP 2:** Prioritize nutrition-sensitive agriculture strategies • Learning objective: Participants will discuss a range of strategies that the activity can feasibly pursue to meet its selected nutrition-sensitive agriculture outcomes. Workshop participants will discuss key assumptions and risks. • Exercise: Identify ALREADY nutrition-sensitive agriculture strategies • Exercise: Identify agriculture strategies that can be ADAPTED to be nutrition-sensitive • Exercise: ADDING nutrition-sensitive agriculture strategies • Output: Column 2 of activity design matrix completed
11:00–11:15	**BREAK**
11:15–12:30p.m.	**STEP 2:** Prioritize nutrition-sensitive agriculture strategies (continued)

12:30–1:30	LUNCH
1:30–3:00	**STEP 3:** Develop practices and interventions Learning objective: Participants will consider a range of practices that their activity should promote to realize the strategies prioritized in Step 2. Using these practices as a starting point, participants will then develop a list of interventions that the activity can program into its work plan for achieving each nutrition-sensitive agriculture strategy from Step 2. • Exercise: Develop practices and interventions • Output: Columns 3 and 4 of activity design matrix completed
3:00–3:15	**BREAK**
3:15–4:30	**STEP 3:** Develop practices and interventions (continued)
4:30–5:00	**Closing remarks and preparation for Step 4** • Encourage participants to use this time to ensure that an electronic copy of the draft activity design matrix is up-to-date

DAY 3

8:30 a.m.–9:00 a.m.	COFFEE
9:00–10:30	**STEP 4:** Define monitoring indicators Learning objective: Participants will define outcome indicators in line with their outcomes and strategies and output indicators for the interventions developed in Step 3. • Exercise: Develop practices and interventions • Output: activity design matrix fully completed
10:30–10:45	**BREAK**
10:45–11:45	**STEP 4:** Define monitoring indicators (continued) Learning objective: During the final part of this step, participants will present and discuss the completed activity design matrix, pulling together all four steps of this workshop.
11:45–12:30	**Next Steps** Learning objective: Participants will agree upon a series of steps required to incorporate the information contained in the activity design matrix into their activity work plan, results frameworks, and PMP, assigning clear roles, responsibilities, and timelines. • Exercise: Develop practices and interventions • Output: Post-workshop action items table completed

Handout 1. Key Terms

Nutrition-specific– Approaches that address the immediate causes of malnutrition, such as assistance on breastfeeding and complementary feeding, micronutrient supplements, and community-based approaches for the management of malnutrition.

Nutrition-sensitive– Approaches that address the underlying causes of malnutrition—problems such as food security and access to health services.

Food market environment– a favorable food market environment is one in which nutritious foods are desirable and appealing to target consumers. Desirability and appeal of nutritious foods are also associated with convenience (i.e., demand for more nutritious foods is supported when time-savings in home food preparation can also be realized).

Nutrient-rich value chain– USAID defines a commodity as nutrient-rich if it meets any of the following criteria: 1) it is biofortified; 2) is a legume, nut, or seed, such as sesame, sunflower, pumpkin seeds, wheat germ, or sprouted legume; 3) is an animal source food, including dairy products (milk, yogurt, cheese), fish, eggs, organ meats, meat, flesh foods, and other miscellaneous animal protein (e.g. grubs, insects); 4) is a dark yellow or orange-fleshed root or tuber; 5) is a fruit or vegetable that meets the threshold for being a "high source" of one or more micronutrients on a per 100 calorie and per 100 gram basis.

Activity outcome– The short- and medium-term effects of the combined outputs that the activity achieves.

Strategy– The means or broad approach by which an activity may achieve a stated purpose or desired outcome. Strategies are made up of collections of behavior-centered interventions.

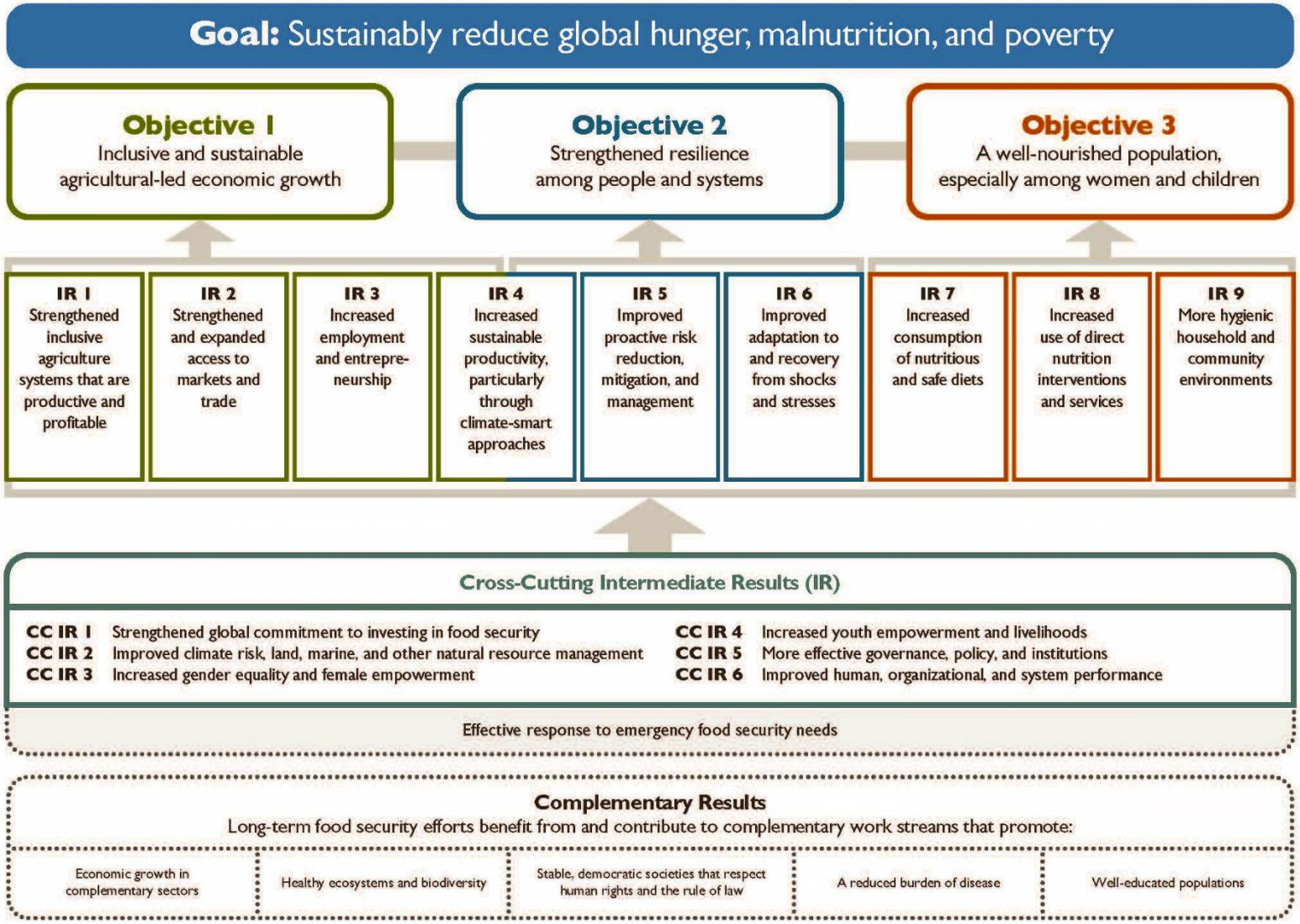
Practice– A concrete action that a specific person or group does at a specific time and place. Promoting the use of good practices is at the core of our work.

Intervention– A collection of actions that, taken together, will accomplish the nutrition-sensitive agriculture solutions. They state what will be done, who will be involved as an actor or target recipient, and describe key practices or behaviors that the activity wants a specified organization or individual to adopt.

Output indicator– A unit of measure to assess resulting products, goods, or services at the end of an intervention. Data to inform output indicators are generally collected semi-annually or annually to track progress toward quantitative benchmarks.

Outcome indicator– Measures short- to medium-term effects of the combined outputs from an activity's interventions. Data to inform outcome indicators are generally collected annually or at the mid-term of an activity and are often reported in terms of a percentage of targeted groups reached.

Handout 2. GFSS Results Framework



Source: USAID 2014

Handout 3. Activity Design Matrix

Nutrition-sensitive agriculture outcome	Strategy	Practice	Intervention	Indicator

Handout 4. Activity Design Matrix– West Africa Activity Example

Nutrition-sensitive agriculture outcome	Strategy	Practice	Intervention	Indicator
1. Improved availability of diverse, nutrient-rich foods in households and local markets	1.1 Add value to fresh fish using drying technology (thereby extending availability of fish in homes and markets)	1.1. Use improved fish-drying technology 1.2 Use established food safety standards 1.3 Use hermetically sealed packaging	1.1.Train local fisher folk in use of improved dryers 1.2 Train local and national food processors in food safety standards 1.3 Facilitate linkages between fisher folk and packaging suppliers 1.4 Facilitate access to financing so fisher folk can share the cost of technologies	Outcome Indicator: Percentage increase in volume of dried, packaged fish in local markets Output Indicators: 1.1 Number of local fisher folk trained in drying technology 1.2 Number of fish processors meeting food safety standards 1.3 Number of fisher folk using improved packaging 1.4 Number of fisher folk receiving credit (disaggregated by gender and age)

Handout 5. Six Key Nutrition-Sensitive Agriculture Activity Outcomes

The SPRING Project identified **six** key nutrition-sensitive agriculture outcomes that may be achieved by market systems development activities. These activity outcomes are based on our work with Feed the Future implementers and the activities we have supported in Bangladesh, Ghana, Guinea, Kyrgyz Republic, Rwanda, Senegal, and Sierra Leone, and guide the design process for developing measureable **nutrition-sensitive agriculture indicators** for your activity.[5]

1. Improved availability of diverse, nutrient-rich foods in local markets

As suggested by the literature (Herforth and Ahmed 2015; Global Panel on Agriculture and Food Systems for Nutrition 2016), a favorable food market environment for nutrition strives to ensure that sufficient quantities of nutritious foods are available year-round in local markets. In some communities, adequate amounts of staple foods to meet caloric demand year-round may not be available within households or in local markets due to poor production and storage practices or poor infrastructure inhibiting distribution. Further, fruits and vegetables are not often available to meet nutrient needs; pulse availability has decreased as a proportion of caloric intake; and animal source foods are infrequently available (affordable and not at risk of spoilage) in appropriate quantities, or not available at all. The 2017 Global Nutrition report describes healthy diets as those containing wholegrains, fruits and vegetables, legumes, nuts, fish, moderate amounts of dairy, and small amounts of meat (Development Initiatives 2017).

2. Improved affordability of diverse, nutrient-rich foods in local markets

Favorable food market environments also ensure that nutritious foods are affordable in local markets for target consumers. In many low- to middle-income countries, fruits, vegetables, and many animal source foods are too expensive for the populations targeted by development programming. For example, SPRING's 2016 literature review revealed that in Niger, the average household spends 71.53 percent of its income on food, and this money does not buy a high-quality diet: the majority of food expenditures go toward staple foods, and few households buy nutrient-dense foods such as meat, fruits, and vegetables. Nongovernmental organizations and for-profit companies alike can help increase the production of good-quality nutritious foods, thereby helping to bring down prices. They can also develop new ways of making those products available, such as in smaller packages, so that individuals can afford to purchase them. Additionally, there are actions governments can take, like supporting initiatives for fortifying crops and increasing access to these products by strengthening market systems and subsidies for vulnerable populations. Governments can also support cooperatives and marketing groups and encourage trade of more nutritious food commodities (USAID 2016). Further, actors within the food system—whether from the public or private sector—should make food that helps to fill specific nutrient gaps (especially protein and micronutrients) affordable to target populations.

3. Improved desirability of diverse, nutrient-rich foods among target consumers, especially poor and vulnerable households

Using Herforth and Ahmed's (2015) definition, a favorable food market environment is one in which nutritious foods are desirable and appeal to target consumers.[6] Desirability is driven by taste and external factors such as cultural norms, traditions, advertising, marketing, and food status and quality.

[5] Incorporating explicit nutrition objectives and indicators into activity design is one of the 10 key programming principles of nutrition-sensitive agriculture. See this SPRING publication for more details: Understanding and Applying Primary Pathways and Principles.

[6] Desirability and appeal of nutritious foods are also associated with convenience (i.e., demand for more nutritious foods is supported when time-savings in home food preparation can also be realized).

While individuals' food choices are frequently driven by existing norms and traditions—what families have eaten for generations—we also know that they can be influenced by consumer education campaigns and social marketing. This is evidenced by the exponential growth of the organic food industry in the United States, which reached sales of $43.3 billion in 2015, and the trend of marketing traditional African vegetables based on nutrition and heritage qualities, changing the common and long-held view of them as "poor man's food" (Herforth and Ahmed 2015). We have included convenience as a component of desirability, since foods that save preparation time are also generally more desirable to consumers. When consumers are pressed for time, as many are around the globe today, convenience can outweigh cost, even in low-income settings.

4. Improved environmental and food safety

Mitigating harmful effects of toxins (either the result of chemical inputs or naturally occurring contamination such as mycotoxins) in agricultural production or processing reduces the risk of disease, which in turn can reduce rates of malnutrition. Similarly, food sold in markets must be hygienic and free of pathogens. Handwashing when handling food, wearing protective gear while using pesticides, and keeping animals away from living areas and small children are some ways that nutrition-sensitive agriculture may support environmental and food safety.

5. Increased time and energy savings for women

Women spend a lot of their time on agricultural activities, including planting, irrigating, weeding, harvesting, processing, transporting, and marketing agricultural commodities. This, along with daily responsibilities for caring for their homes and families, can deplete women's energy and the lessen time that they have available for caring for themselves and their children, which can diminish family nutritional status. Additionally, failing to meet the extra energy and micronutrient requirements of pregnant and lactating mothers negatively affects both mothers' and children's nutritional outcomes. Therefore, any time and energy savings within the range of agricultural livelihood tasks done by women can improve maternal and child nutrition. Time and energy savings tend to come through women having greater access to productive resources and agriculture services, use of new technologies, and increased joint decision-making and workload (childcare, household tasks, farming activities) sharing within the household and community.

6. Increased income control by and equitable opportunities for women

Research shows that women are more likely to spend income on food, health, and education than their male counterparts, with benefits for the health and nutrition of families and children (UNICEF 2011; Smith et al. 2003).[7] Therefore, increasing women's control of agricultural income improves nutrition. At the same time and depending on context, women might spend more on their children in the short-term for food, health, and care, whereas men might invest in livelihoods, which could raise overall household income, leaving more resources available to cover these expenditures (McKenzie 2012). Therefore, in addition to supporting women to earn income, nutrition-sensitive agriculture activities should enhance women's decision-making roles in determining how household income is spent and support men to make positive decisions for nutrition (Ruel and Alderman 2013; Smith et al. 2003).

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[7] Note, however, that this is not in *every* context—exploration of cash voucher programs did not find any differences between transfers received by fathers and those received by mothers. For more on the role of gender in nutrition-sensitive agriculture, see https://www.usaid.gov/sites/default/files/documents/1864/gender-sensitive-ag-tech-guidance-brief-edit-508.pdf

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Smith, Lisa C., Usha Ramakrishnan, Aida Ndiaye, Lawrence Haddad, and Reynaldo Martell. 2003. *The Importance of Women's Status for Child Nutrition in Developing Countries. IFPRI Research Report 131.* Washington, DC: IFPRI.

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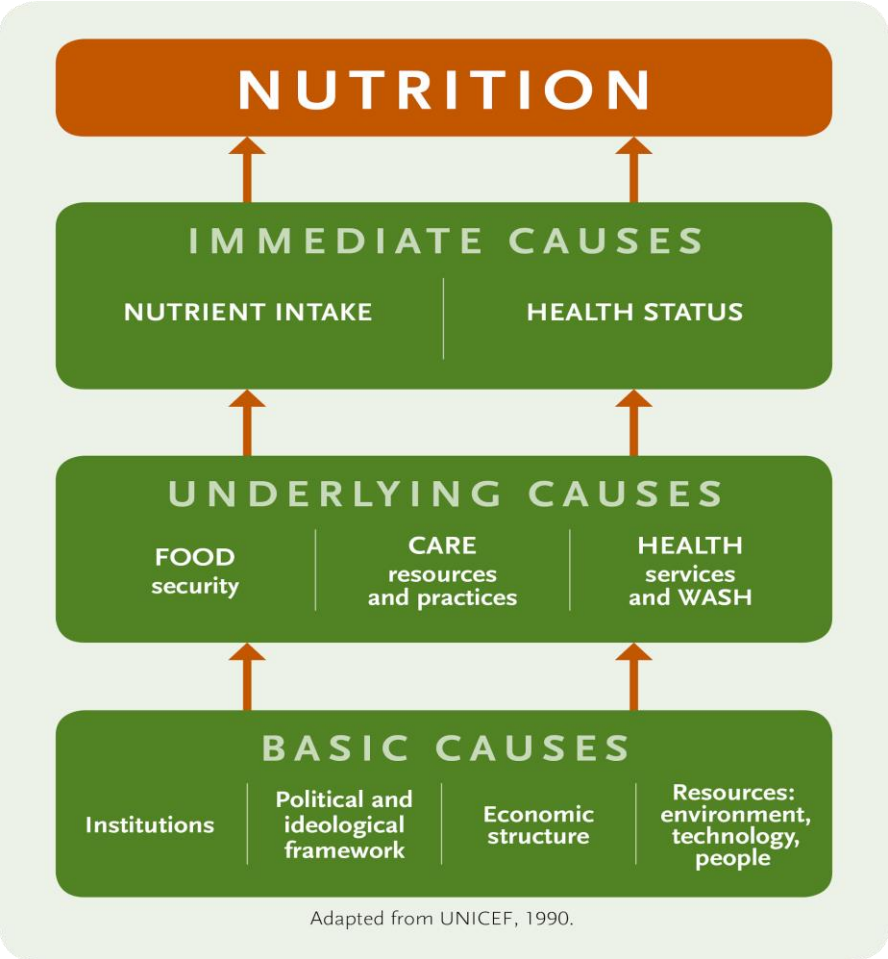
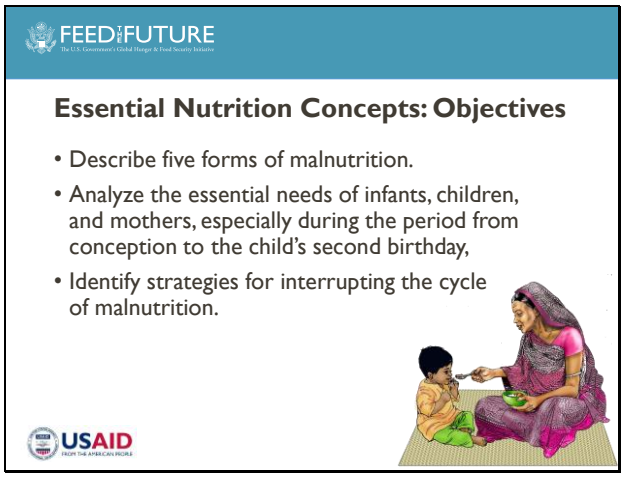
Handout 6. UNICEF Framework

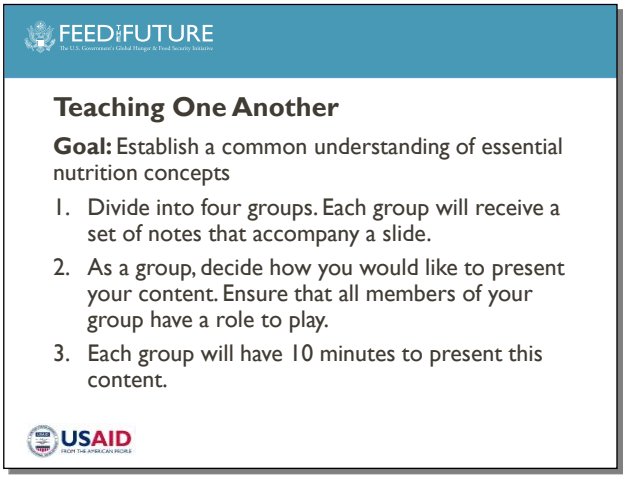


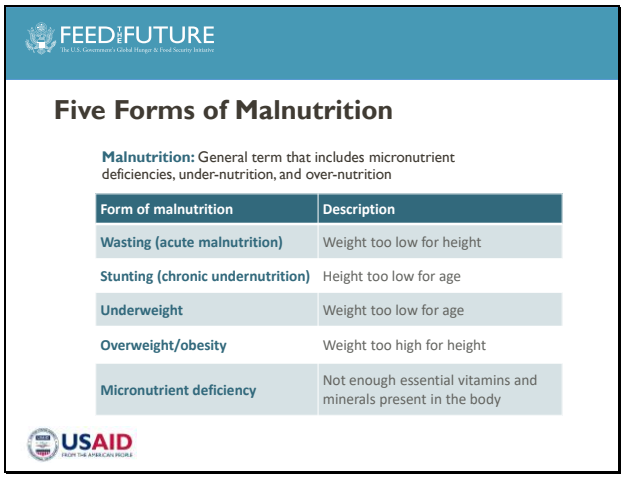
Source: United Nations Children's Fund (UNICEF). 1990. *Strategy for Improved Nutrition of Children and Women in Developing Countries: A UNICEF Policy Review*. New York: UNICEF.

Handout 7. Teaching One Another

Five forms of malnutrition







- Malnutrition is a general term that includes nutrient deficiencies, undernutrition, and over nutrition.
  - Food insecurity often contributes to malnutrition. However, food security does not guarantee a healthy nutrition status.
- **ASK:** Why might malnutrition still exist in a place that is food-secure?
- Undernutrition and over nutrition are usually defined by comparing an individual's height, weight, or other measurement with the average height or weight for a healthy population of the same age and sex.
- Five forms of malnutrition:
  - Wasting (acute undernutrition) refers to weight that is too low for an individual's height, and may sometimes be described as thinness. Wasting is what we typically see among communities experiencing famine and among families who struggle to get enough food.

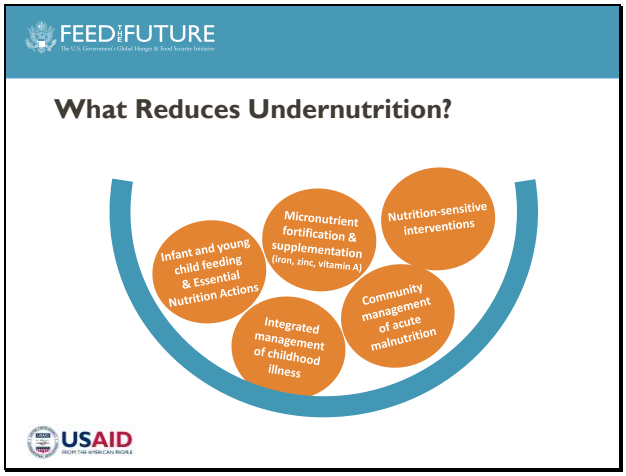
— Stunting (chronic malnutrition) refers to height too low for age, and can also be described as short stature. Stunting can be much harder to see—a stunted child may look healthy, but is noticeably short for his/her age.

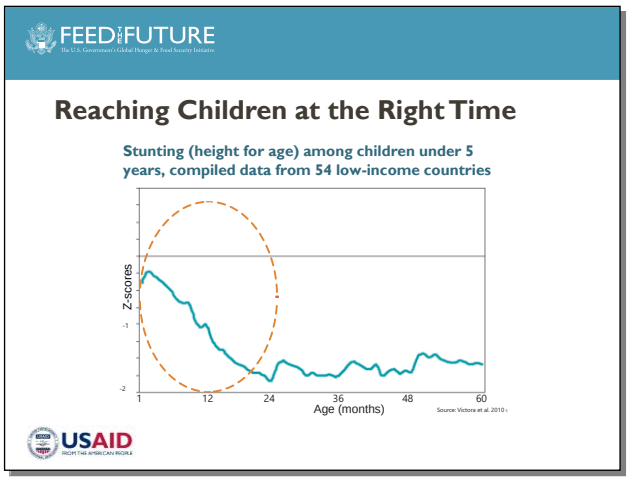
— Underweight refers to weight too low for age. This measure is not recommended as a measure for nutrition programs, as it can include children who are stunted, wasted, or just small for their age.

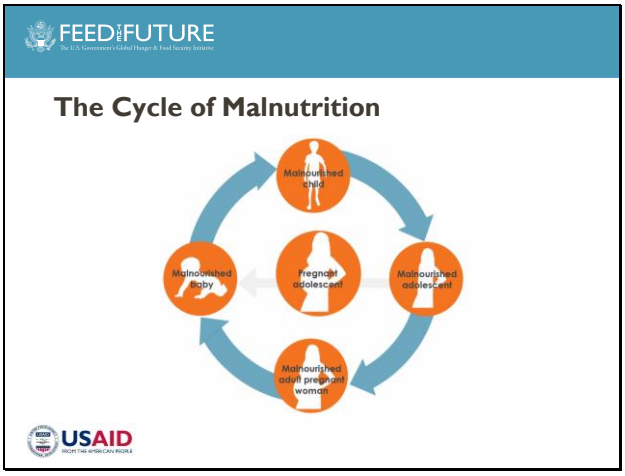
— Overweight or obesity refers to weight that is too high compared to an individual's height. It is typically measured using body mass index (BMI), a measurement that compares weight with height and determines a set BMI value. An individual with a BMI greater than 25 is considered overweight, while someone with a BMI greater than 30 is classified as obese.

— Micronutrient deficiency means that an individual is receiving insufficient amounts of the vitamins and minerals that are essential for growth and health. Globally, iron deficiency, vitamin A deficiency, and iodine deficiency are the most common types of micronutrient malnutrition.

What reduces undernutrition?







- We have a solid understanding and clear evidence base of interventions that address immediate causes of undernutrition.
- Interventions that address the immediate causes of undernutrition include:
  - Infant and young child feeding and Essential Nutrition Actions (e.g., breastfeeding, complementary feeding).
  - Providing micronutrients that are most commonly deficient (e.g., iron/folate for pregnant women, vitamin A to young children where contextually appropriate).
  - Integrated management of childhood illness. This community-based approach to managing less-serious childhood illnesses empowers communities to understand and respond to sick children's needs.
  - Community management of acute malnutrition seeks to mitigate severe acute malnutrition or wasting through the community instead of sending children to a hospital.

  Even if we can scale up these interventions to cover 90 percent of the at-risk population, it would ONLY affect 20 percent of chronic malnutrition (stunting).
- **ASK:** What more is needed?

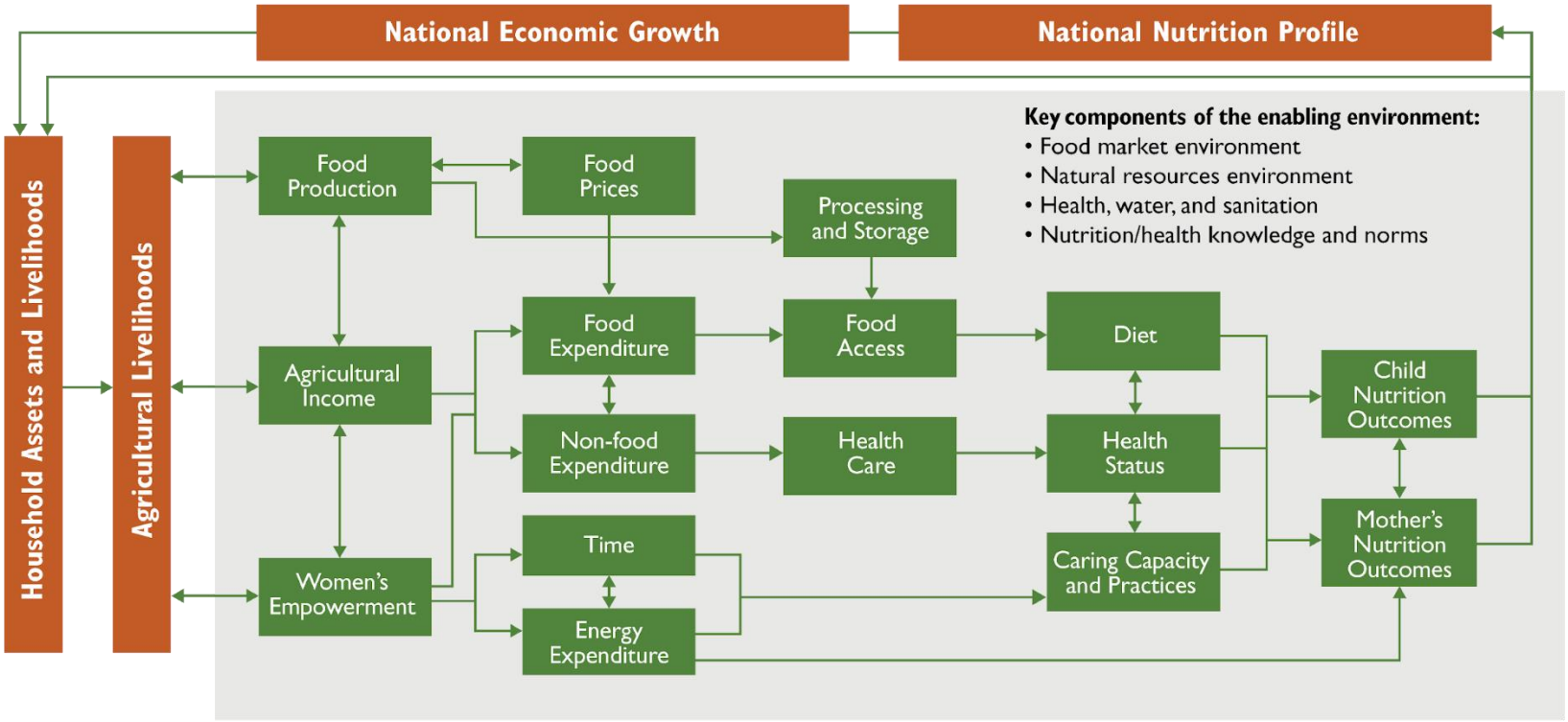
Reaching children at the right time

- The most effective interventions to prevent stunting take place during the window of opportunity: the first 1,000 days of life (conception to 24 months of age). After that point, most of the effects of stunting are irreversible. If we can prevent stunting before 24 months of age, then the child has a much greater chance of succeeding at school and earning a living as an adult.

Handout 8. What, How, Who Matrix

What	How	Who

Handout 9. Agriculture-Nutrition Pathways



Sources: Headey, D., Chiu, A., and Kadiyala, S. (2011). *Agriculture's role in the Indian enigma: Help or hindrance to the undernutrition crisis?* IFPRI discussion paper 01085. Washington, DC: IFPRI; Kadiyala S, Harris J, Headey D, Yosef S, Gillespie S., 2014. "Agriculture and nutrition in India: mapping evidence to pathways." *Ann N Y Acad Sci*1331:43–56.

Handout 10. Nutrition-Sensitive Agriculture Strategy Criteria and Examples

Outcome	Strategy criteria	Example strategy
Improved availability of diverse, nutrient-rich foods in local markets	Increase the supply of a nutrient-rich food in local markets	Link dairy farmers to milk collection centers
		Promote inter-cropping and other practices to diversify home production
	Extend the time period a nutrient-rich food is available in local markets	Improve storage methods to lengthen shelf life
		Promote community warehouse systems to safely store commodities closer to market for longer periods of time
Improved affordability of diverse, nutrient-rich foods in local markets	Reduce prices for nutrient-rich foods	Increase safe storage options to avoid price spikes during off-season
		Package foods to sell in smaller quantities
	Increase purchasing power of target beneficiaries	Promote savings and lending opportunities to improve year-round cash flow
		Promote cost-savings for inputs through use of organic or low-input farming practices
Improved desirability of diverse, nutrient-rich foods among target consumers, especially poor and vulnerable households	Build demand for nutrient-rich foods	Market the health benefit of consuming high-iron beans or other nutrient-rich foods
		Conduct advertising campaigns within local markets to introduce and promote consumption of nutrient-rich foods
	Increase convenience of nutrient-rich foods	Dry and preserve fruit and vegetables so they have longer shelf-life
		Encourage packaging of especially perishable nutrient-rich foods in smaller quantities to reduce waste and improve ease of preparation
Improved environmental and food safety	Avoid or mitigate harm to human health	Use protective clothing when applying pesticides, herbicides, and fertilizers
		Conduct regular aflatoxin testing of stored commodities
	Maintain nutrient quality and food safety over a longer period of time	Promote use of proper storage techniques such as PIC bags for aflatoxin control in cowpeas
		Use refrigerated transport for meat and dairy products

Outcome	Strategy criteria	Example strategy
Increased time and energy savings for women	Decrease time and labor demands, especially for women	Use labor saving technologies, such as threshing machines for cowpeas
		Promote labor rotation scheme
		Use water management systems and small-scale irrigation
	Ensure equitable access to agricultural services and resources by women, men, and youth	Recruit women extension workers to deliver assistance at convenient times and locations and in a culturally appropriate manner
		Target financial services and products to women farmers
Increased income control by and equitable opportunities for women	Support or improve joint decision-making on use of household assets and income	Provide budgeting and business planning training for husbands and wives (or other adult household members)
		Include joint decision-making for use of household assets and income as part of a social and behavior change communication strategy
	Direct income earning and employment opportunities to women	Promote development or expansion of value chains for women-controlled crops (e.g., groundnuts)
		Organize cooperatives or collection points for women small-scale producers

Handout 11. Prioritization Criteria

1. Feasibility, sustainability, and potential for impact
2. Funding available
3. Time available
4. Staff capacity and experience
5. Organization's competitive advantage/expertise
6. Alignment with government priorities
7. Alignment with USAID (donor) priorities
8. Complementarity with other investments in the activity area
9. Opportunity to leverage private sector involvement

Handout 12. Illustrative Nutrition-Sensitive Agriculture Outcomes, Practices, and Interventions

Participants should read these examples of interventions to help them think about nutrition-sensitive agriculture practices that are appropriate for their activities. This handout also illustrates intermediate outcomes that are more specific to a given context than the six outcome indicators they selected from at the beginning of this process. These more detailed, context-specific outcomes will help them define outcome indicators, which they will do in Step 4. If they think a more detailed outcome is appropriate to their activity, this is good time to review selected nutrition-sensitive agriculture outcomes and adjust the wording, as needed.

Illustrative activity-focused nutrition-sensitive agriculture outcome	Illustrative nutrition-sensitive agriculture practice	Illustrative nutrition-sensitive agriculture intervention
Improved availability of diverse, nutrient-rich foods in local markets		
Increased availability of a variety of micronutrients and animal source foods for household consumption	Crop rotation that includes a legume or pulse	Develop information, education, and communication materials that illustrate the benefits of including a legume or pulse in the seasonal crop rotation
	Inter-crop beans and maize	Train farmers on inter-cropping methods
	Integrate vegetable and duck production into fish-pond management systems	Train farmers on how and when to plant vegetables around their fish ponds
	Use animal manure for compost production or direct fertilization of homestead gardens	Train farmers in composting using animal manure
Improved year-round access to a diverse diet	Use seasonal calendars to plan food and cash needs throughout the year	Train agricultural extension agents to make a seasonal calendar
	Use irrigation for year-round homestead food production	Install drip irrigation systems in household gardens
	Contract buyers to provide high-quality seed for a diversity of vegetable, fruit, and biofortified crops	Connect contract buyers with high-quality seeds to sell
Reduced loss of nutrients in nutrient-rich foods	Keep fruits and vegetables in shaded or cooled environments immediately after harvest	Promote use of solar refrigerators among horticultural crop farmer groups
	Use appropriate technology to process nutrient-rich foods	Research appropriate technology to promote with farming households and cooperatives

Illustrative activity-focused nutrition-sensitive agriculture outcome	Illustrative nutrition-sensitive agriculture practice	Illustrative nutrition-sensitive agriculture intervention
Improved affordability of diverse, nutrient-rich foods in local markets		
Increased priority for spending on food, health, and similar needs of agricultural group or family members	Plan for on-going and emergency health costs as part of agricultural group (e.g., farmer cooperatives, processing groups, income-generating groups) or household budgets	Train agricultural groups and household members in budgeting methods
	Farmer group members purchase nutrient-rich foods during regular/weekly shopping outings	Establish a public–private coalition of stakeholders to plan timing and information points for an information campaign on the importance of consuming a healthy diet
Improved year-round access to a diverse diet	Sell a variety of nutrient-rich foods to local markets	Undertake market research to determine nutrient-rich food gaps in local market before crop planning
	Men, women, or farmer groups purchase a diversity of animal source foods, vegetables, fruit, and biofortified products	Conduct market research in local markets to identify seasonal gaps and food groups that are unaffordable
	Purchase diverse nutrient-rich foods to complement foods that are produced and stored for later consumption	Train household members who are responsible for food purchase about the importance of purchasing and consuming diverse diets
	Input suppliers and contract buyers provide high-quality seed and other inputs for a diversity of vegetable, fruit, and biofortified crops	Connect input suppliers and contract buyers with high-quality seed and input sources
	Make nutrient-rich crops and commodities accessible to more economically vulnerable households	Advocate with private sector to package nutrient-rich foods in smaller purchase or portion sizes
	Set aside some portion of nutrient-rich foods produced on-farm for consumption before selling	Train household members in the importance of setting aside some portion of foods for household consumption
Increased capacity to meet needs for health, child care, or unplanned emergencies	Help individuals save money through participation in community savings schemes	Create savings groups in target communities
	Cooperatives provide group child-care services	Assist cooperatives in setting up child-care services for their members

Illustrative activity-focused nutrition-sensitive agriculture outcome	Illustrative nutrition-sensitive agriculture practice	Illustrative nutrition-sensitive agriculture intervention
	Farmers share labor or cost of labor through rotating or pooling scheme	Create farmers groups and establish labor rotating or pooling approaches with them
	Farmers purchase crop or livestock insurance	Connect livestock insurance companies with target communities
Improved desirability of diverse, nutrient-rich foods among target consumers, especially poor and vulnerable households		
Increase year-round access to a diverse diet	Process and package nutrient-rich foods to extend shelf life or make more affordable	Introduce fish or vegetable drying technologies and train processors in their use.
	Include signage and other communications modalities in markets highlighting nutrient content of healthy foods	Conduct promotional campaign to increase interest in purchasing nutrient-rich foods.
Improved environmental and food safety		
Increased knowledge of safe practices	Vendors communicate the risks and appropriate handling and storage guidelines for agrochemicals, as well as promote concepts of integrated pest management	Provide community vendors with materials for properly handling and storing agrochemicals and train them to teach farmers
Decreased risk of illness due to ingestion of or exposure to contaminants	Deliver milk to collection center within three hours of milking	Build additional milk collection centers near target communities
	Crops dried to within acceptable moisture content range before storage	Train farmers to test for acceptable moisture levels
	Foods stored at home checked regularly for mold, insect infestation, and spoilage and discarded promptly, if found	Teach household members responsible for food preparation to check for mold, spoilage, or infestation
	Maintain adequate moisture content in stored legumes and grains to reduce risk of toxins	Train farmers to check moisture content of legumes and grains
	Wash hands after applying chemicals to crops or handling/giving medications to animals	Install tippy taps near fields and in central community locations
	Pen animals to keep them separate from indoor and outdoor family living spaces	Train animal-owning households to build pens

Illustrative activity-focused nutrition-sensitive agriculture outcome	Illustrative nutrition-sensitive agriculture practice	Illustrative nutrition-sensitive agriculture intervention
	Wear gloves while working with livestock	Work with small market vendors to ensure that they stock proper gloves
Increased time and energy savings for women		
Increased time available for feeding and caring for family	Farmers and agricultural laborers use a range of appropriate technologies that save time on a variety of agricultural tasks	Introduce mechanized hand grinders for groundnut processing.
	Divide agricultural and household labor responsibilities equitably among family members.	Train household members in division of labor
Decreased energy expenditure required by pregnant and lactating women	Men and women have access to tractors or other labor-saving technologies at peak demand periods, such as land preparation, planting, and weeding	Connect tractor and technology suppliers with local communities to create plans for increasing access to men and women during peak seasons
	Adjust work hours for pregnant and lactating women	Facilitate development of family leave policies among agriculture industry employers
	Input suppliers stock agricultural equipment that is designed for use by women (e.g., lightweight hand tractors)	Connect input suppliers with equipment providers who sell equipment that is easier for women to use
Increased income control by and equitable opportunities for women		
Increased access to and control over income by women	Men and women make joint spending decisions	Conduct radio plays to promote the benefits of joint decision-making within households
	Agricultural inputs and services are offered at times when women can access them	Connect with input and service providers to arrange for them to offer services when women can access them
	Input suppliers sell quantities of seeds, fertilizer, and other inputs that women can afford	Work with input suppliers in local markets to ensure they sell products in quantities that women can afford
	Women participate in community savings and insurance schemes	Create community savings groups for women (or connect women to existing groups)
	Families investing in better access to safe water sources, point-of-use water treatment, or safe water storage	Tailored marketing for improved water

Handout 13: Post-workshop Action Items

Task	Person responsible	Timeline

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