



# Nutrition-sensitive extension

## **Global Forum for Rural Advisory Services (GFRAS)**

Part of the *New Extensionist Learning Kit*

# Why nutrition in agriculture?

- Malnutrition is a big problem worldwide, affecting individuals, households and society.
- It has been estimated that better nutrition could improve the economic growth of many countries
- Rural advisory services help households make informed production, marketing and spending decisions and, thus, play a role in making safe and nutritious foods more available, affordable and accessible.

# Module overview

## Study Unit 1:

What is nutrition?

- The basics of nutrition.
- Nutrition for all: Who needs what?
- Motivating people to make health choices.

## Study Unit 2:

Ways that agriculture can impact nutrition

- Understand food systems.
- Pathways between agriculture and nutrition.

## Study Unit 3:

Actions that extensionists can take to improve nutrition

- Nutrition-sensitive rural advisory services.

## Study Unit 4:

Establishing partnerships across sectors for better nutrition

- Partnerships and collaboration.



## Study Unit 1

# What is nutrition?

# Study unit 1

## Outcomes

- Describe ways that food affects your own life, both socially and physically.
- Explain how different foods help us stay healthy.
- Identify ways that nutrition and agriculture depend on each other.



## Session 1.1

# The basics of nutrition

# Activity 1.1: Personal reflection

- Turn to Activity 1.1 in the workbook (page 2)
- Take about five minutes to respond to the first three questions about the foods and drinks you consumed yesterday.
- After completing the activity, we will discuss the types of food you ate and your reasons for eating these foods.

# The basics of nutrition

- Nutrition is the study of:
  - what happens to nutrients in the body
  - how people can get the right types of food for good health and growth
- For your body to function, you need to eat a healthy diet
- A healthy diet:
  - meets a person's daily nutritional requirements
  - Has the correct balance of macronutrients and micronutrients



## Micronutrients

Needed in smaller amounts

Produce substances required for growth and health

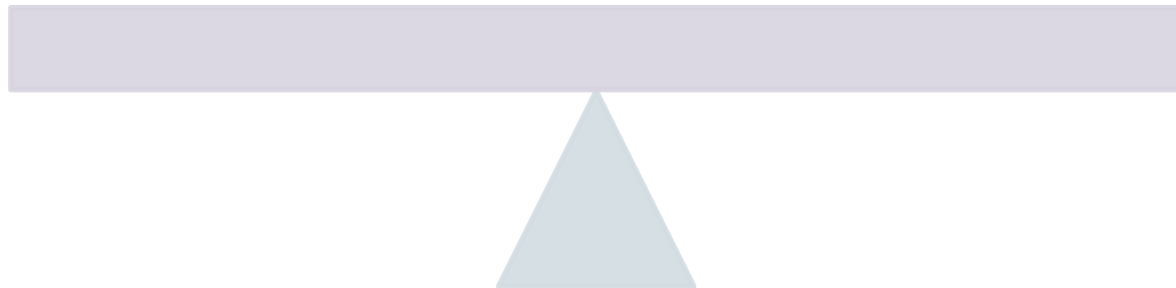
Include vitamins and minerals

## Macronutrients

Needed in larger amounts

Provide energy for the body

Include carbohydrates, proteins, fats and oils



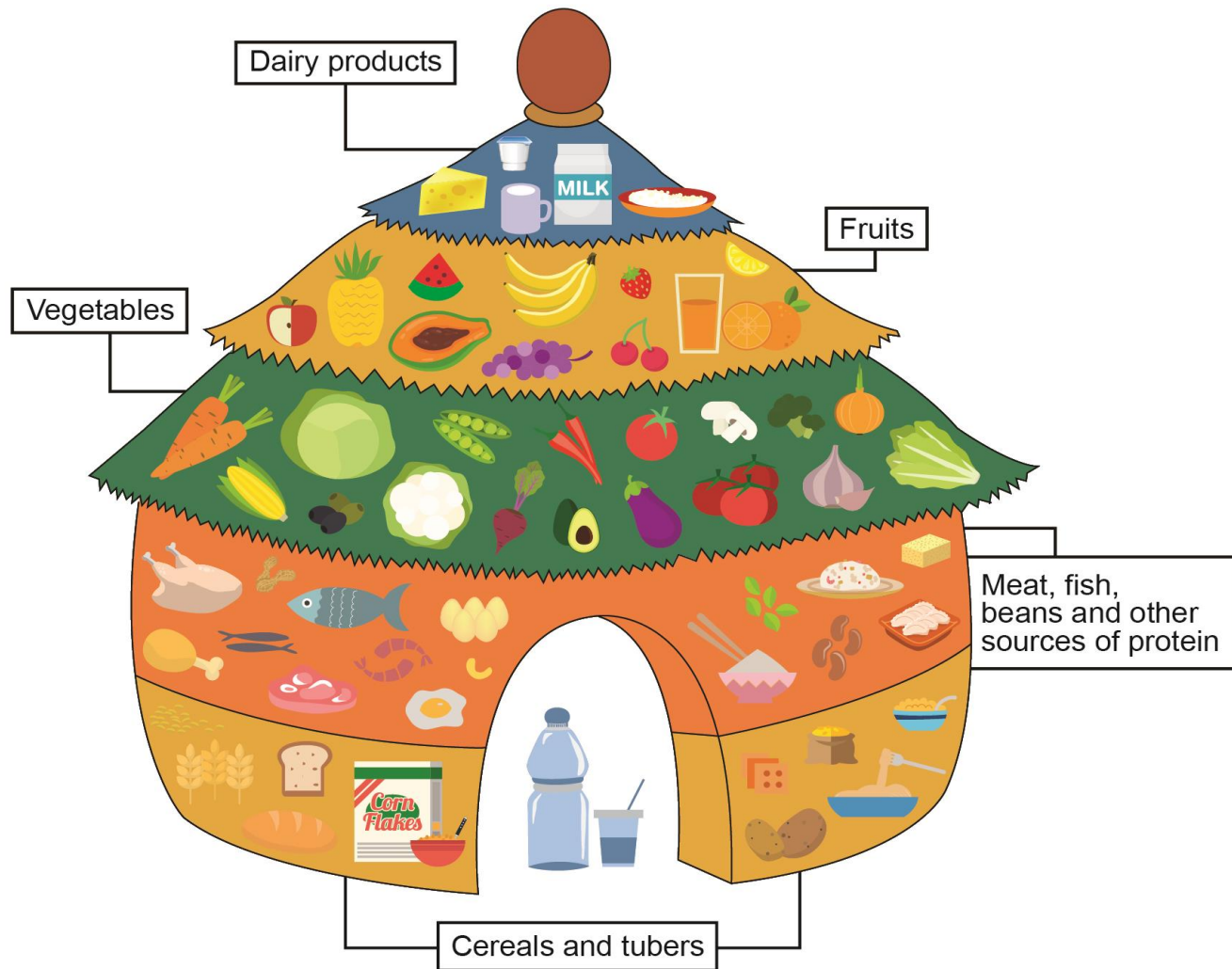
<b>Food group</b>	<b>Examples</b>	<b>Importance</b>
Staples	Maize, bread, tortilla, rice, porridge	Provides energy for the body to move, breathe and perform daily activities (cook, work in the fields, etc.).
Fats	Vegetable oil, butter	Provides the body with energy and protects the organs (heart, liver, skin).
Fruits	Papayas, mangoes, bananas, avocados	Helps protect the body from diseases and illnesses.
Vegetables	Pumpkins, potatoes, leafy greens, tomatoes	Helps protect the body from diseases and illnesses
Legumes	Cowpeas, kidney beans, lima beans, black beans	Helps strengthen the muscles, repairs wounds and protects against heart disease and diabetes
Meat and eggs	Chicken, beef, mutton, organ meats, eggs	Helps strengthen the muscles and repairs wounds
Dairy	Milk, yoghurt, cheese	Helps strengthen bones

*Credit: Dr. Jeanette Andrade*

# Food-based dietary guidelines

- Provide science-based recommendations about the quantity, quality and diversity of foods that should be consumed.
- Depend on a person's size, activity level and factors that make some people require more nutrients than others.
- Different countries have developed **food-based dietary guidelines** that reflect the foods that are locally available and culturally preferred.

# Food guides



# Discussion

How does your diet compare to the recommended diet in the Benin food guide?



## Session 1.2

# Nutrition for all: Who needs what?

# Nutritional needs

- Malnutrition occurs when a person eats too much or too little food (and nutrients) or is unable to use the nutrients in the food they eat.
- Nutritional needs are determined by:
  - Age.
  - Body make-up and size.
  - Activity level.
  - Physical state.

# Nutritional status

Nutritional status is the physical state of a person that is a result of the relationship between how many nutrients that individual takes in, their nutritional requirements and the body's ability to digest, absorb and use these nutrients.

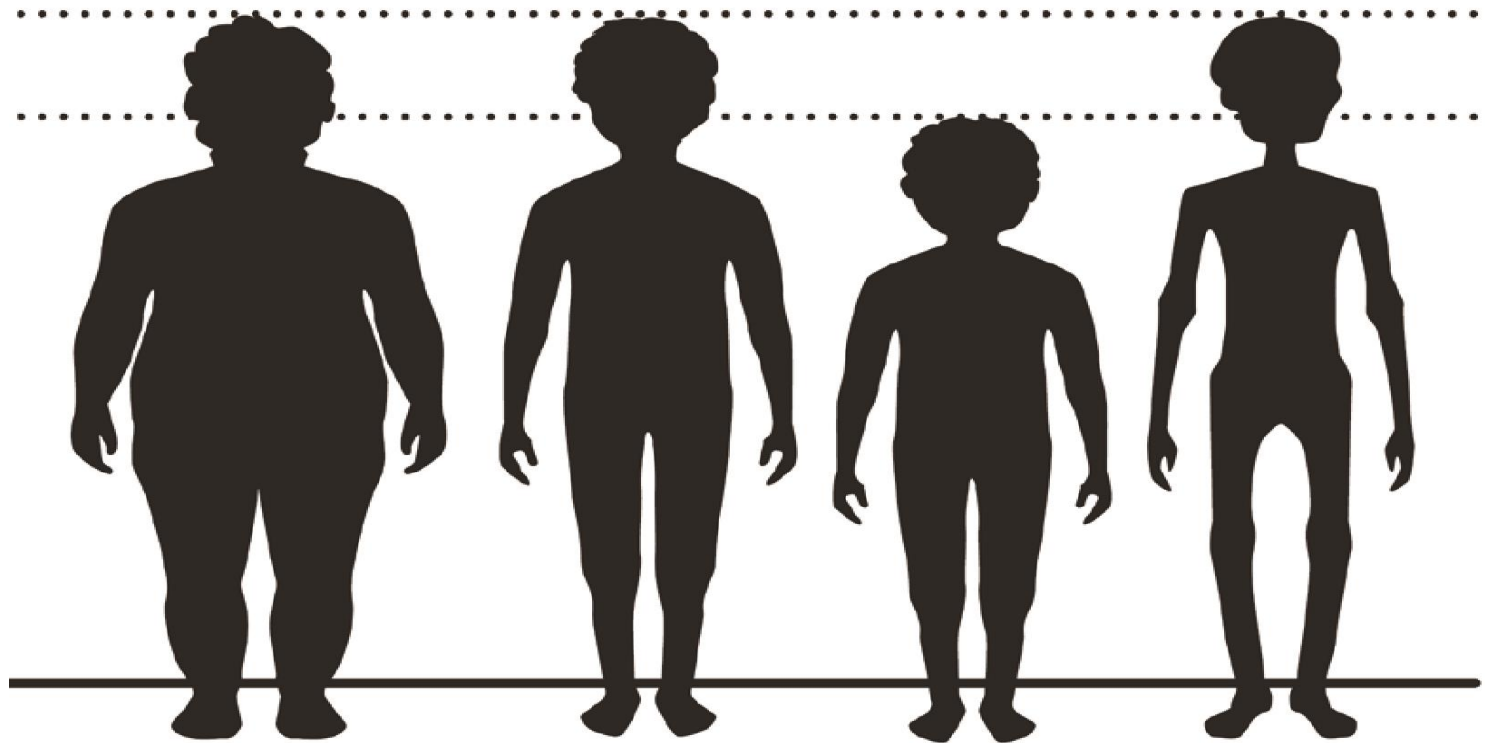


# Who is vulnerable to poor nutrition?

- Women of reproductive age.
- Infants.
- Young children.
- Sick and elderly.
- Poor households.

**1,000 most critical days** is the period from pregnancy to a child's second birthday. This period is the window of opportunity in which good nutrition sets children on a path for strong growth and healthy, productive futures.

# Nutritional status indicators



# Hidden hunger

- “Hidden hunger” refers to micronutrient malnutrition; sometimes it is visible, but often it is not.
  - A moderate to severe lack of one or more important micronutrients.
- Anaemia, caused by inadequate iron, B12 or folate intake, can range from mild to severe.
  - In mild cases, someone may have less energy to work.
  - In severe cases, anaemia can lead to maternal death and delayed development in babies and children.



## Session 1.3

# Motivating people to make healthy choices

# Making better food choices

- There are several methods for influencing people's food choices:
  - Nutrition education.
  - Social and behaviour change communication.
  - Social marketing.
  
- People will be more likely to change their food behaviours:
  - When they are supported by their social networks; and
  - When they have greater agency.

# Factors affecting food choice

Food availability	Accessibility	Affordability	Desirability	Convenience
Many people will only choose food that is already available in their local markets	Most people tend to choose food that is easy to get at a manageable distance from their home or work	The price of food is a very important factor for food choice, especially in poor and subsistence communities	Social and cultural backgrounds play an important role in what food a person will want to eat or not	If a certain type of food is not easy to get or difficult to prepare, most people will rather choose a convenient alternative

# Making better food choices

- Tips that will help you to change unhealthy food habits in your community:
  - Use simple language.
  - Focus on short- term benefits.
  - Give only the essential information.
  - Talk in a natural and friendly tone.
  - Always treat people with respect.
  - Always check whether your audience has understood your message.

# Activity 1.4: Helping people make better food choices

- Turn to Activity 1.4 (page 8) in the workbook
- Working with 2-3 colleagues, respond to the questions:
  1. Indicate the quality of the sample extension messages.
  2. Translate complicated terms into simple language.
  3. Draft your own message for agricultural labourers.

We will discuss your responses briefly in the larger group.





## Study Unit 2

# Ways that agriculture can impact nutrition

# Study Unit 2: Ways that agriculture can impact nutrition

## Outcomes

- Define a food system.
- Describe your role in the food system.
- Explain how nutrition is affected by the way a food system functions.
- Apply basic gender analysis.



## Session 2.1

# Understanding food systems

# Discussion

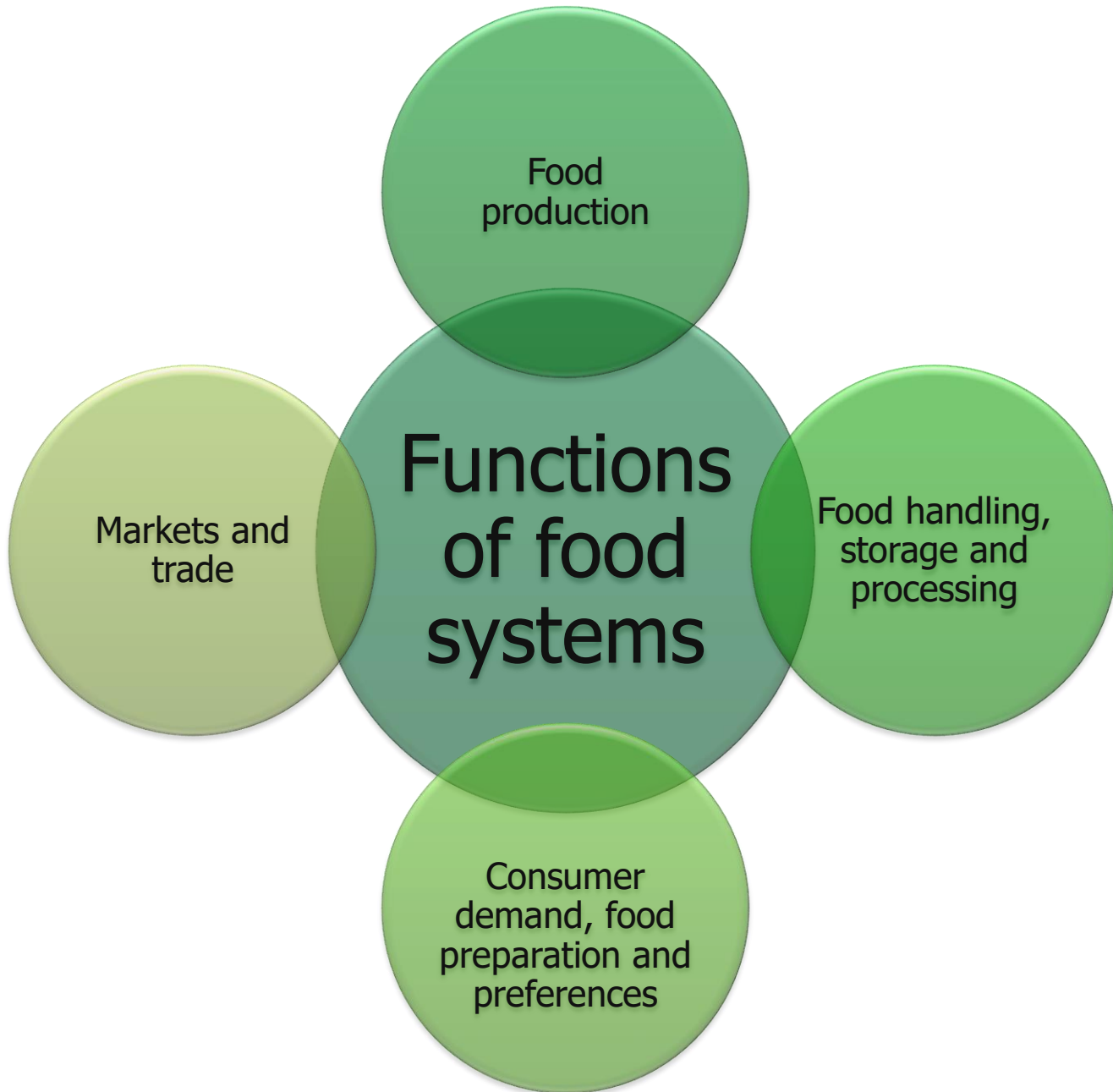
What is a food system?

# What is a food system?

The people, institutions and processes by which agricultural products are produced, processed and brought to consumers.

# Food systems influence food choices

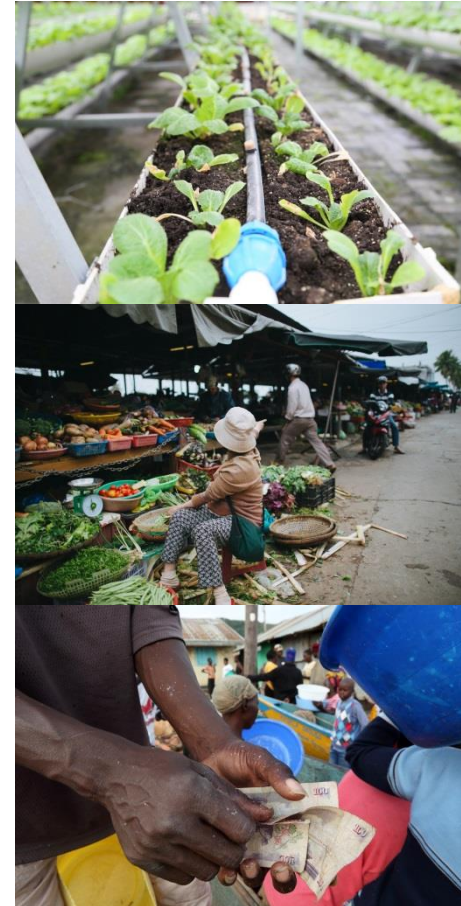




# Impact of food systems

## Food production

- Determines how available and diverse food is.
- Farmers who use good agricultural practices can:
  - Produce safe, nutritious food.
  - While protecting natural resources.

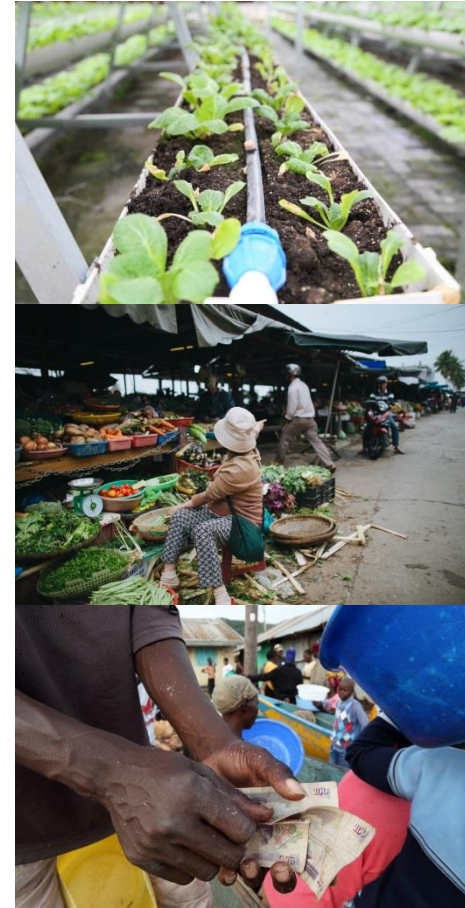




# Impact of food systems

## Food handling, storage & processing

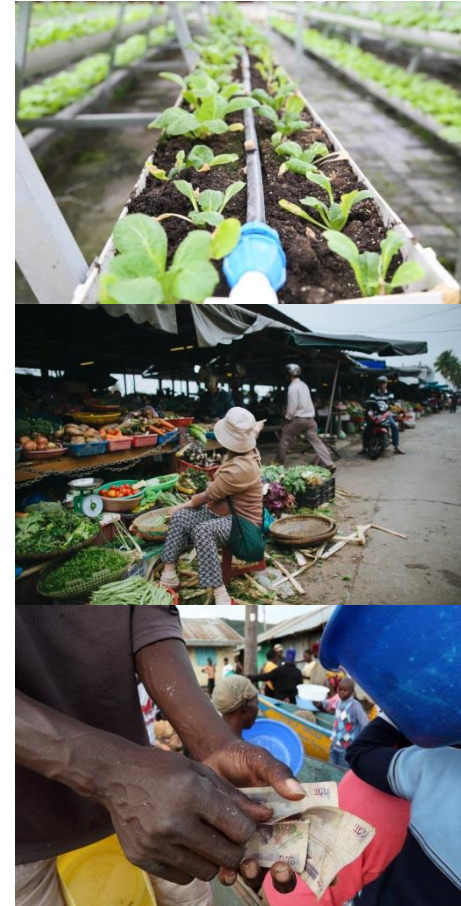
- Helps to preserve the quality of food, limit food losses, support stable food supply and prices.
- Proper handling, storage and processing of food can affect:
  - Shelf-life.
  - Safety.
  - Nutrient content.
  - Taste.



# Impact of food systems

## Markets & trade

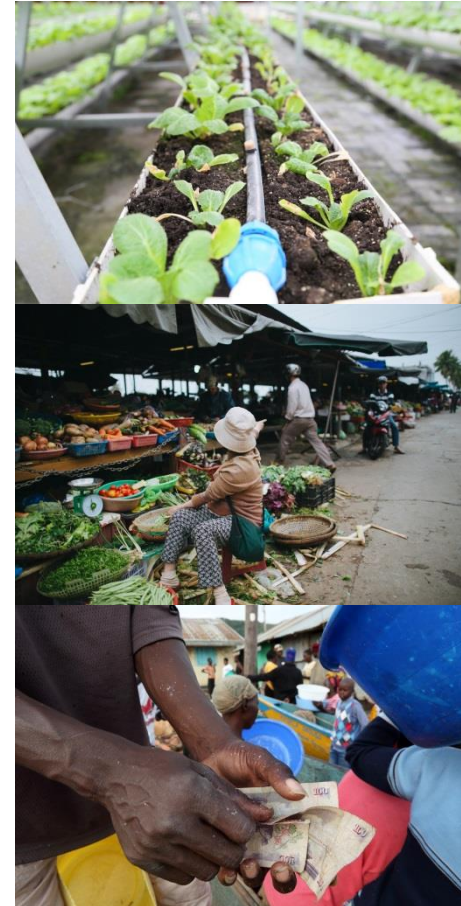
- Makes diverse food more accessible.
- Good transportation networks within countries and across borders take products from the farm to the consumer.



# Impact of food systems

## Consumer demand, food preparation & preferences

- Drives decisions on the foods that are produced, processed and traded in markets.
- Sometimes based on cultural beliefs and gender norms.



# Activity 2.1: Understanding food systems

- Independently, read the story about the Otieno family, then work in groups of 3-5 to:
  - Identify the factors related to each function of the food system.
  - Describe how these factors influence the family's diet and nutrition.

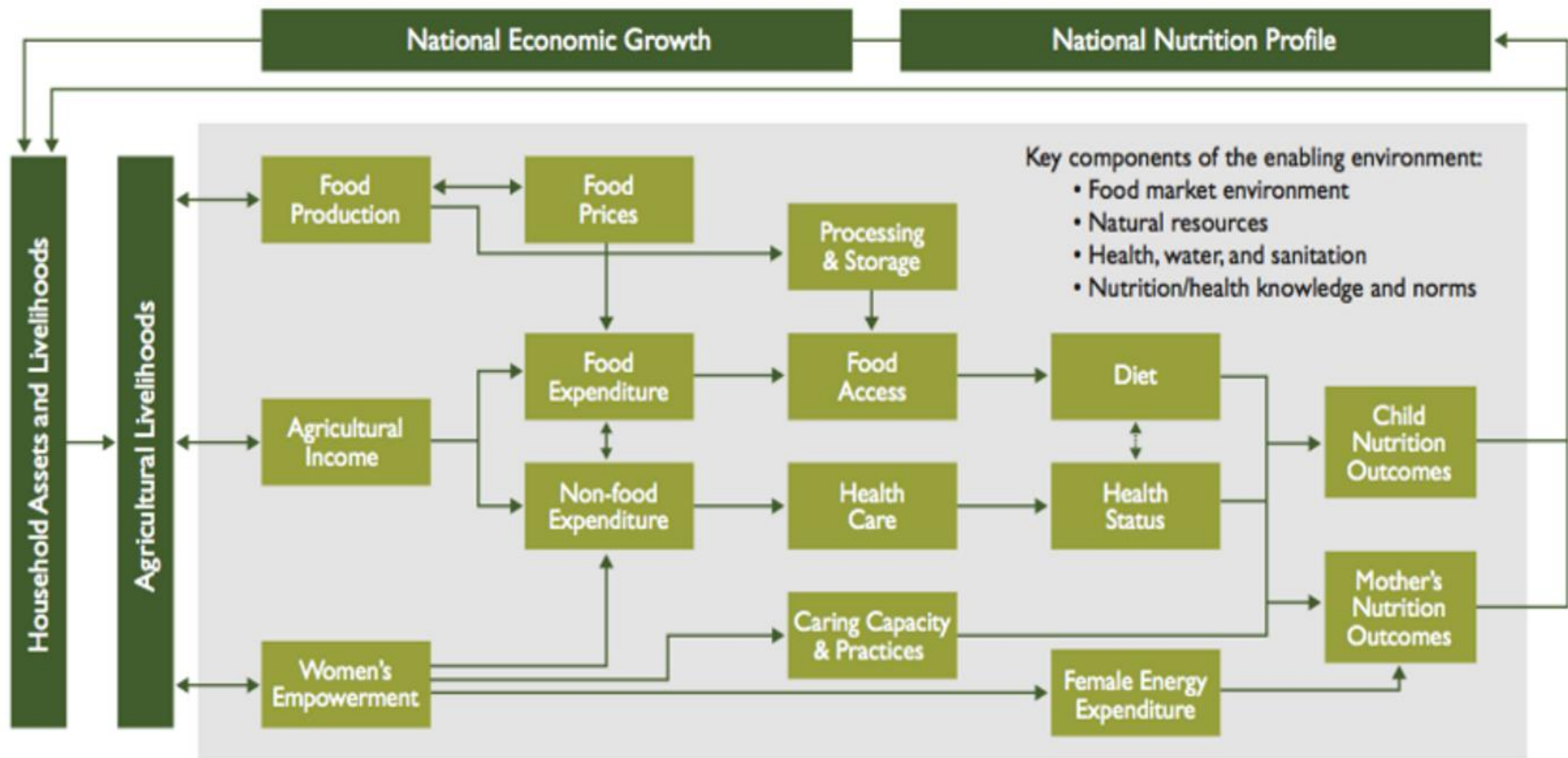
We will briefly discuss your observations after the small group work.



## Session 2.2

# Pathways between agriculture and nutrition

# Agriculture-nutrition pathways



Credit: Herforth and Harris, 2014

# Food production pathway

- Supports consumption, income and local food availability.
- Diversity of production supports dietary diversity.
- Production diversity is also good for agriculture.
  - Good agricultural practices reduce soil erosion, increase organic matter, boost yields.
  - Poor production diversity weakens natural systems.



# Agriculture income pathway

- Agriculture offers a reliable and sustainable source of income for rural households. Income used for:
  - Food purchases
  - Non-food purchases
- Reliable and sustainable income helps rural households access:
  - Nutritious and stable diets
  - Better health care
  - Education





# Woman's empowerment pathway

- Women's empowerment influences:
  - Use of income.
  - Ability to care for families.
  - Women's energy expenditure.
- Women who are empowered have:
  - More decision-making power.
  - Better access to, and control over, resources.
  - More control over time and labour allocation.



# Women's role in nutrition

- Women play a central role in household care and nutrition.
- Women usually use additional cash income for nutritious foods and health care needs.
- When women and men make household agricultural decisions together
  - Labour, income, gender equality and household nutrition greatly improve.



# Activity 2.2: Gender roles in agriculture

- With a group of 3-5 colleagues, respond to the three questions on pages 20-21 in the workbook:
  - Describe the activities – from land preparation to marketing – for one selected crop, then discuss whether men or women are responsible for these activities.
  - Is there a difference in how men and women obtain permission to gain access to land, labour and capital they use in agricultural activities?
  - How do these gendered activities affect nutrition within the household?



## Study Unit 3

# Actions that extensionists can take to improve nutrition

# Study Unit 3

## Outcomes

- Describe the various actions that RAS can take to improve nutrition.
- Carry out appropriate nutrition-sensitive actions in the situation where you work.
- Identify agricultural activities that can make nutrition worse and find alternatives.



## Session 3.1

# Nutrition-sensitive rural advisory services

# Nutrition-sensitive agriculture

- Seeks to maximise agriculture's contribution to nutrition.
- Focuses on:
  - Production of a variety of affordable, nutritious, culturally appropriate and safe foods.
  - Production of quality foods in sufficient quantities to meet the nutritional needs of a community.
  - Produce these foods in an environmentally sustainable manner



# Nutrition-sensitive actions

## Ask yourself two questions:

- Does the action increase availability of, and access to, diverse food?
- Does the action increase households' resources for accessing healthcare and nutritious foods?



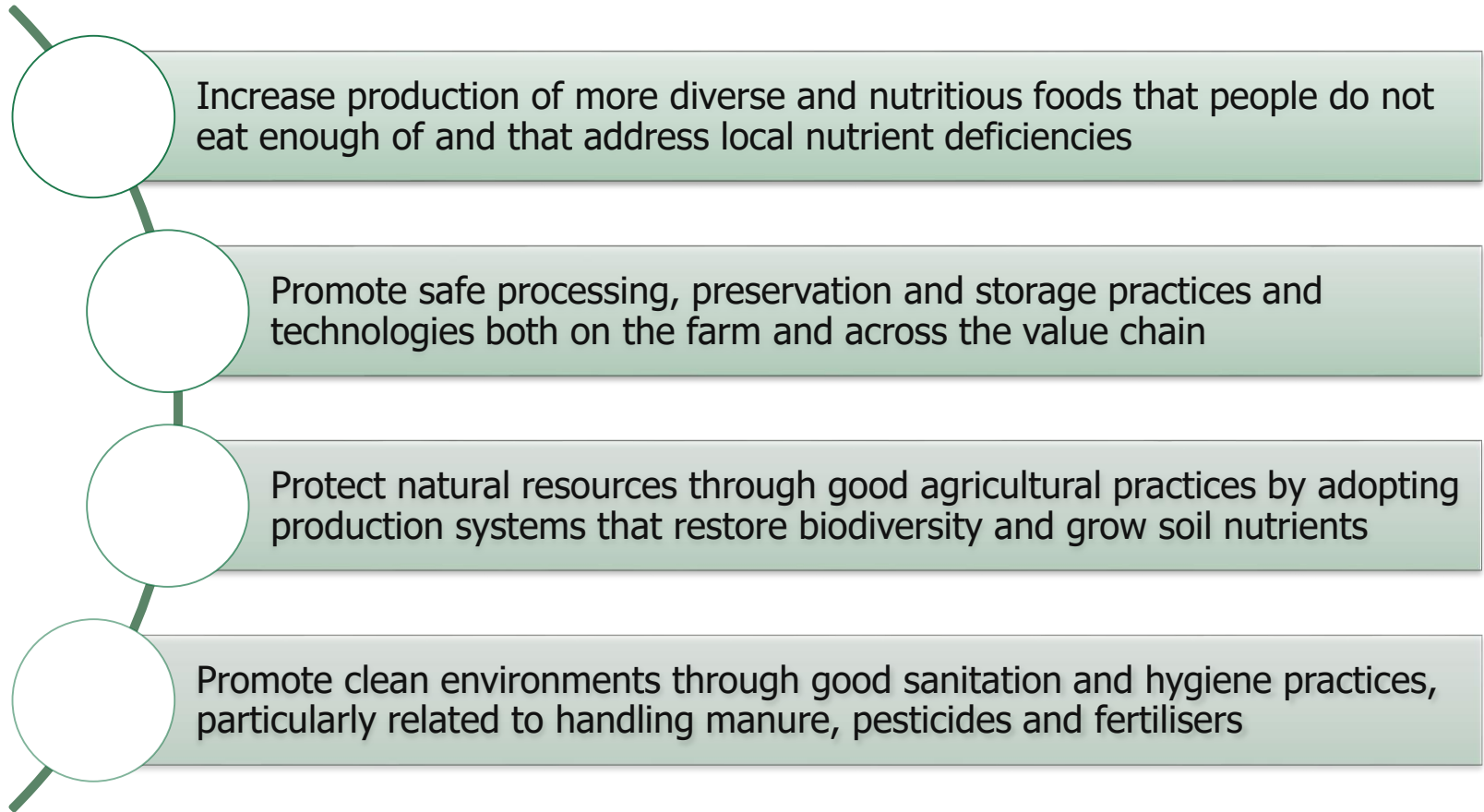


# Activity 3.1: List of tasks

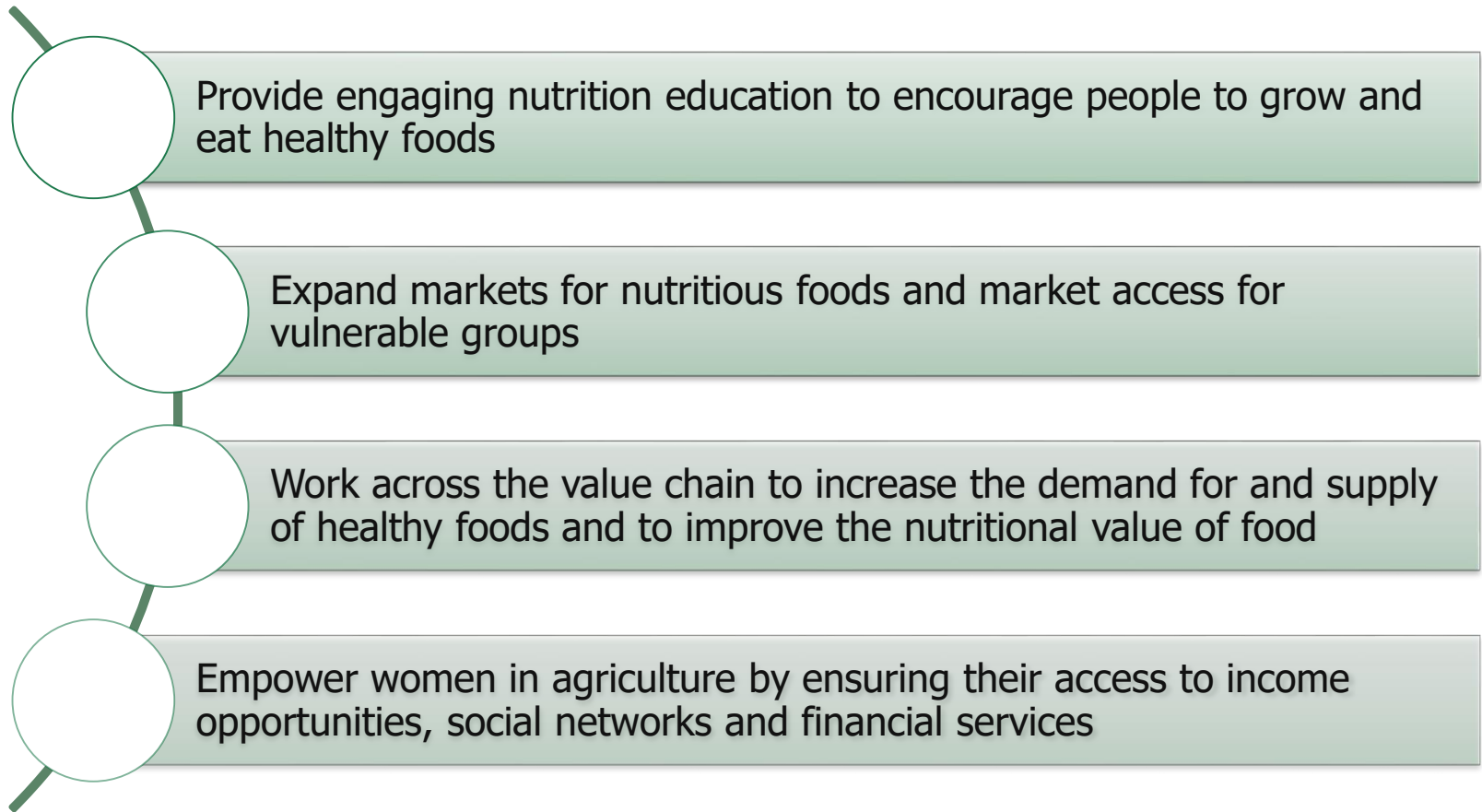
- Turn to Activity 3.1 (page 25) in the workbook.
- On your own:
  - List the tasks that are essential to your role as an extension agent.
  - Identify one task and describe how you could change the way you perform this activity.

After this short activity, we will review nutrition-sensitive agricultural actions.

# Nutrition-sensitive RAS



# Nutrition-sensitive RAS



# Activity 3.2: Ways to improve nutrition

- Turn to Activity 3.2 on page 26 in the workbook.
- Use the space provided beneath the scenario to:
  - Identify how the agricultural interventions support improved nutritional status.
  - Propose ways in which you could further strengthen the interventions for greater nutrition impact.

# Needs are not the same

**Across households and communities, needs will differ.**

Before designing and targeting nutrition-sensitive interventions:

- Understand the agricultural system, food system and nutrition situation. For example:
  - What is the natural resources environment?
  - What are the cultural norms?
  - Are health services available?



## Study Unit 4

# Establishing partnerships for better nutrition

# Study Unit 4

## Outcomes

- Discuss how extensionists' contribution to nutrition complements the work others are doing to improve health and nutrition.
- Negotiate with partners working in your community in order to join forces to improve rural households' nutrition.



## Session 4.1

# Partnerships and collaborations



# Partnerships & collaboration

- Many different organisations interact with farming households.
- When the actions of different sectors are coordinated, they can have more impact than when organisations are not familiar with each other's work.

# Partnership & Collaboration

- Challenges for collaboration
  - It can be hard to find time to meet with partners from different sectors
  - Coordination isn't part of your assigned duties
  - The language one sector uses to describe problems and solutions are unfamiliar to people from another sector

# Activity 4.1: Reflection on partners and collaborators

- Turn to Activity 4.1 (page 36) in the workbook.
- On your own:
  - List the individuals, groups and organisations in the area where you work that interact with the community.
  - Describe whether the relationship with this partner or collaborator is either positive or negative for you.

# Successful negotiation skills

- Effective negotiation skills can improve good and bad relationships
- Negotiating requires that you clearly communicate your needs and listen respectfully to others' needs



# Basics of negotiation



Clearly state what you need and what you feel the communities need

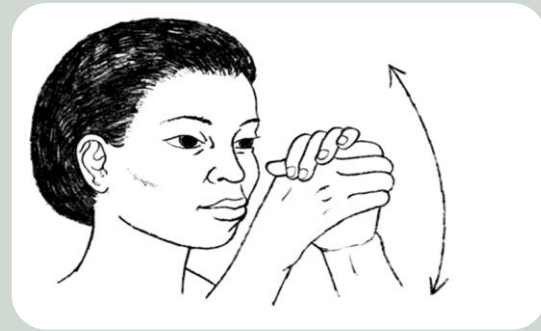


Listen to and understand the needs of the potential partner or collaborator

# Basics of negotiation



Use repetition to stay closely focused on your needs and the needs of communities and don't get side-tracked



Finalise the agreement only when you are sure it will enable you and the communities to get what they really need

# Activity 4.1 (cont.)

- Using the principles of negotiation:
  - Think about what the other group wants or needs and what you want or need.
  - State how you would approach one organisation or person with whom you have a difficult relationship.

# Activity 4.2: Negotiation skills

- Turn Activity 4.2 (page 38) in the workbook.
- Write down the following information:
  - Think about a group or organisation with which you might want to collaborate.
  - Use the principles of negotiation to clearly state what you want from the proposed relationship.
- Then, with a partner, role play how you will approach the relationship.



# Activity 4.3: Action Plan

- Turn to Activity 4.3 on page 39 in the workbook.
- Respond to the following questions:
  - Which of your current activities already contributes to nutrition?
  - Which activities could be shifted slightly so that they contribute more to nutrition?
  - Are there activities that may be impeding nutrition?
- List 2-3 things you could do to change the way you work in order to support better household nutrition.
- Be prepared to share some of your proposed actions.

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