



Photo: HATUTAN

Training on Nutrition Sensitive Agriculture (NSA) & School Feeding



care



MERCY
CORPS



WaterAid

The original NSA training
curriculum is also supported by:



TOMAK
To'os ba Moris D'ak

Australian
Aid 



Session 1: Introduction to the training

Session summary

- Agenda
- Introduction
- General expectations
- Presentation
- Pre-test

Introductions

Ball throwing game:

- Name
- Where are you from?
- Where do you live?
- Your favorite food and the reason

Training expectations

1. Facilitator distributes colored cards to the participants
2. Participants write down their expectations from the NSA training
3. Facilitator collects the participants' expectations and places them on the wall of flipchart

NSA training objectives

- To increase the knowledge and ability of agriculture extension workers to implement NSA in their municipalities.
- To strengthen the partnership between relevant partners including MAF, MoH, MEYS and other implementing organizations.
- To connect school feeding to NSA to assure that nutritious locally grown foods are part of the school meal.
- To ensure agriculture extension workers can implement NSA well.
- To consider gender and social inclusion as an important part of NSA implementation.

After the training, participants will be able to:

- Describe the approaches, benefits and challenges of NSA.
- Create an NSA assessment plan for their village.
- Confidently provide NSA trainings to farmer groups.
- Utilize the nutritious crops extension tools to speak to families about growing nutritious crops.
- Use the nutritious crops extension tools to advocate for nutritious foods as part of the school meal.
- Practice basic facilitation skills.

National Council for Food Security, Sovereignty and Nutrition in Timor-Leste (KONSSANTIL)

- Inter-sectoral body to coordinate between ministries and support them in their sectoral role to strengthen food security and nutrition.
- Seeks to stop hunger in Timor-Leste and promotes local produce.
- MAF: (1) strengthens food security (increase production and productivity), (2) develops commodities based on local potential, (3) improves coordination between ministries and between local authorities and extension workers
- MEYS: Establish food-based nutrition education for students, teachers, administrators and school feeding programs.
- MoH: Supports and promotes appropriate feeding practices



Session 2: What is NSA?

What is NSA?



Introduction to Nutrition-Sensitive Agriculture (NSA)

- NSA is an approach that looks to strengthen the contribution of agriculture to nutrition.
- Focuses on the benefits of a variety of foods, the nutritional value from food, food being good for health and productivity, as well as rural livelihoods (FAO).
- NSA is an approach that seeks to address the underlying causes of malnutrition.

Aim of NSA

To ensure food production through agriculture and contributes to increased consumption of nutritious food and access to markets.



Difference between nutrition-specific and nutrition-sensitive

Nutrition-specific

Responds directly to malnutrition. Nutritional care for women and children.

Example: Breastfeeding and child feeding, (Plumpy Nut and food supplements, ORS for diarrhoea)



Nutrition-sensitive

Supports factors that are relevant to nutrition status



Why should agriculture care about nutrition?

- Can help families to plant more nutritious crops
- Increase profits to buy nutritious food
- Improve food security
- Natural resource sustainability
- Consider women farmers' time and contribution



Just agriculture or NSA?



Which of the following are NSA activities?

- Activities that increase profits from agricultural production in the market.
- Supporting farmers to choose to plant crops that are nutritious in order to consume them.
- Integrated training with commercial horticulture production groups and natural resource management groups.
- Chicken vaccination campaign that explains the importance of vaccination and the nutritional benefits of eggs.
- Distributing food supplements to children with malnutrition.
- Storing nuts to last throughout the year (preserving a source of protein).
- Helping farmers to plant crops that can be sold to schools and using the profits to buy nutritious food.

Which of the following are NSA activities?

- Activities that increase profits from agricultural production in the market. **No**
- Supporting farmers to choose to plant crops that are nutritious in order to consume them. **Yes**
- Integrated training with commercial horticulture production groups and natural resource management groups. **No**
- Chicken vaccination campaign that explains the importance of vaccination and the nutritional benefits of eggs. **Yes**
- Distributing food supplements to children with malnutrition. **No**
- Storing nuts to last throughout the year (preserving a source of protein). **Yes**
- Helping farmers to plant crops that can be sold to schools and using the profits to buy nutritious food. **Yes**

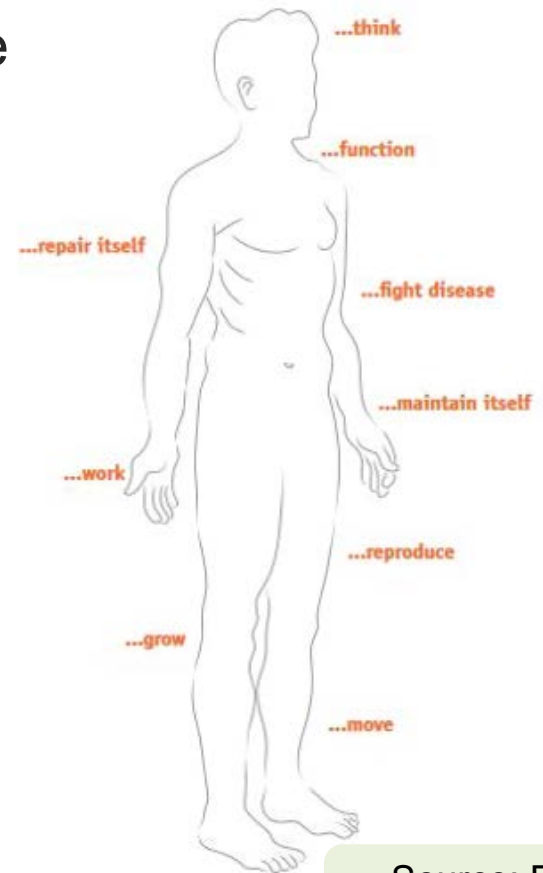
Why is agriculture important for nutrition?

Nutritious food gives our body the energy and substances to . .

- Agriculture provides food that can improve nutrition, and nutrition provides nutrients for good health to farmers.

What are the benefits of good nutrition?

- More strength, increased productivity.
- Strong body: blood and bones.
- Good memory, good capacity to learn, clear thinking and ideas.
- Increased immunity to protect against illnesses.



Source: FAO
Healthy Harvest

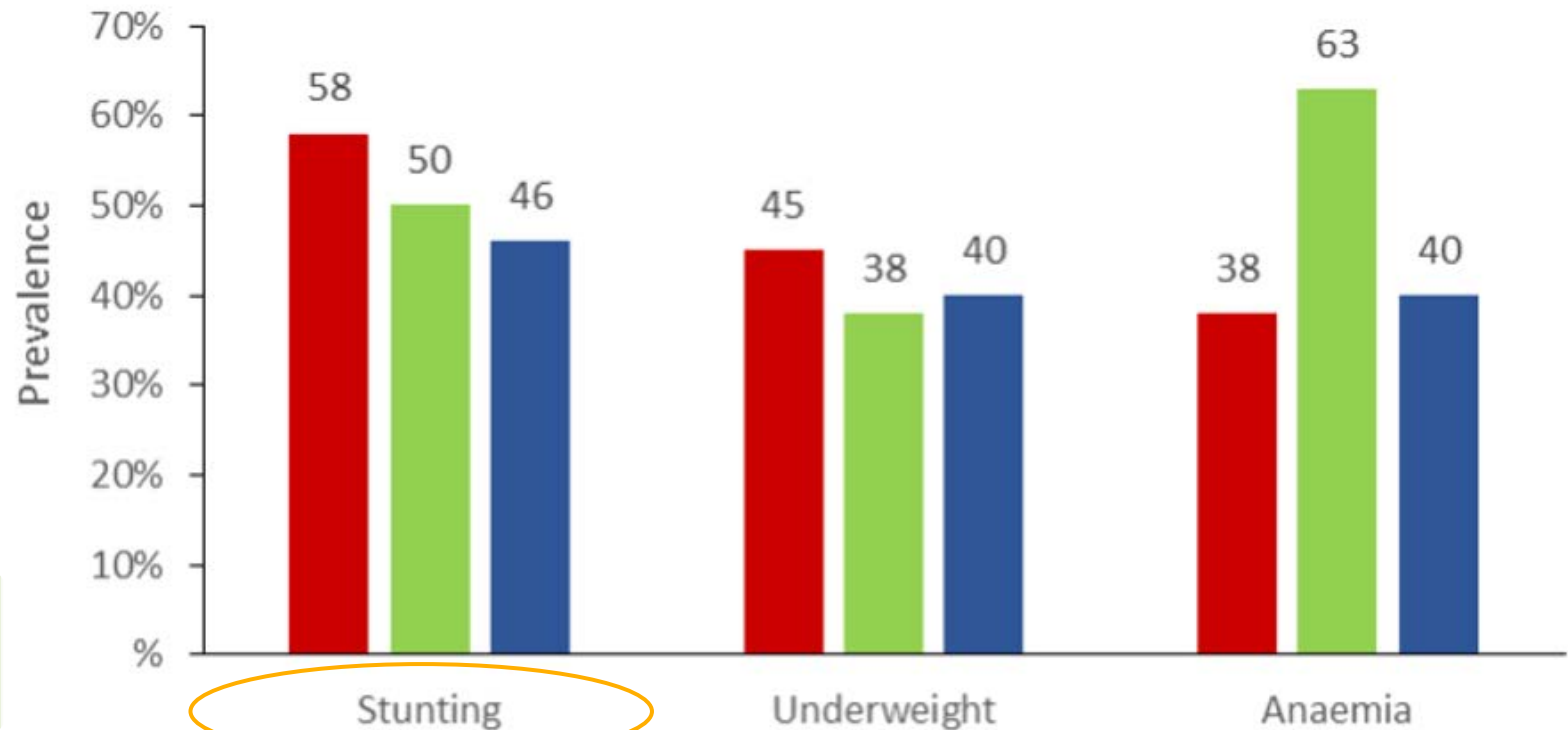


Session 3: Nutrition Context in Timor-Leste

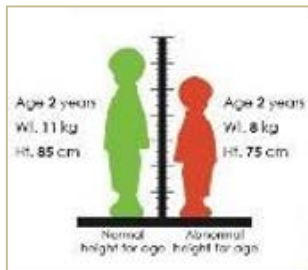
Case study: Two girls

- Split into 3 groups.
- Discuss the story for 15 minutes.
- Each group presents the results of their discussion.

Nutritional status of children under 5 years*



Source:
DFAT
(2015)

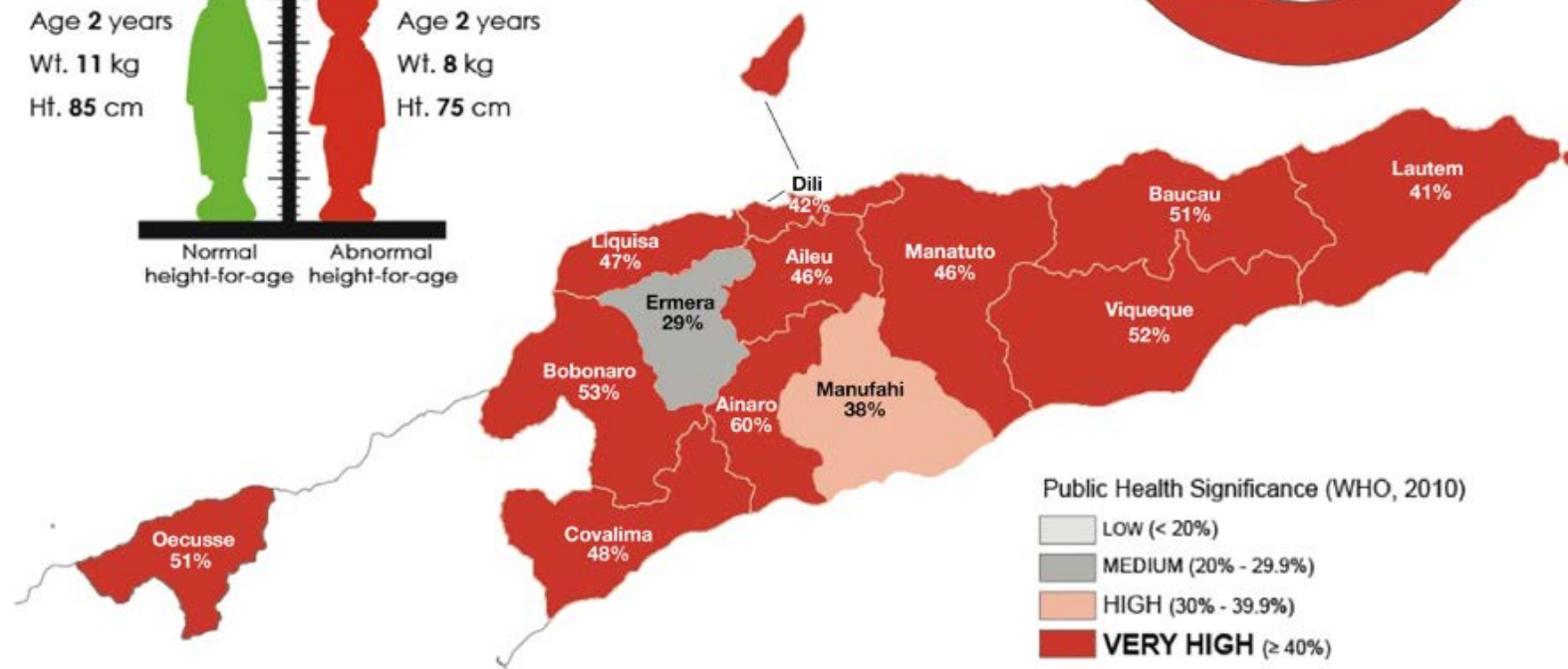
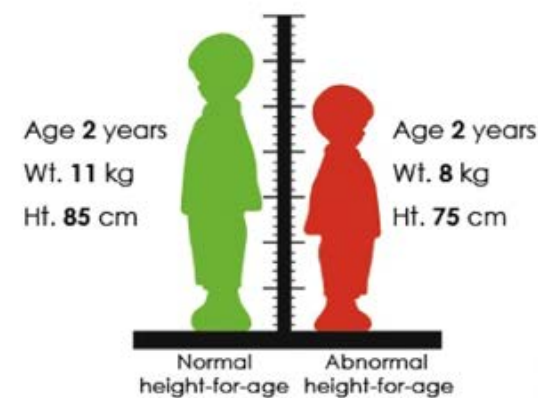
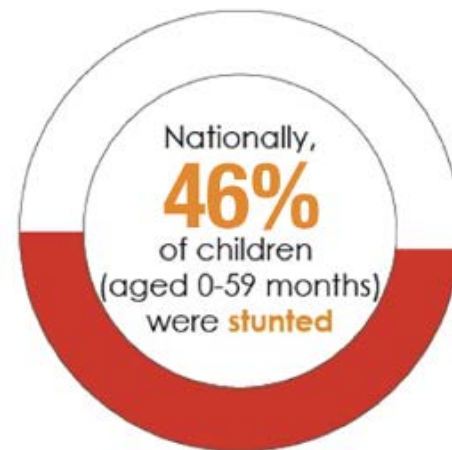


■ TLDHS (2010) ■ TLFNS (2013) ■ TLDHS (2016)

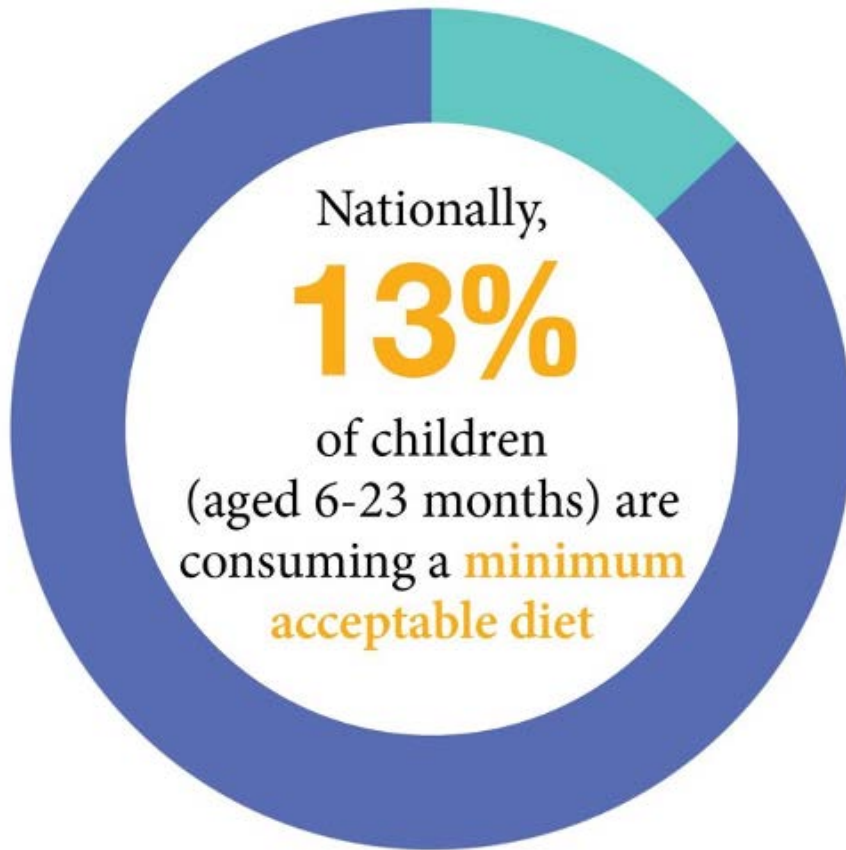
*Anaemia measured in children 6-59 months

Malnutrition among children in Timor-Leste (aged 0 – 59 months)

Prevalence of
STUNTING¹
in children (aged 0 - 59 months)
in **2016**



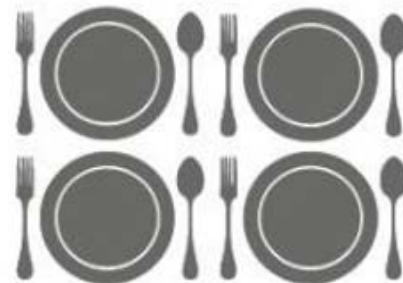
Contributing factors: Diet



*Data from the Timor-Leste Demographic & Health Survey (2016)

Percentage of children (6-23 months) consuming a **MINIMUM ACCEPTABLE DIET** in 2016

MEAL FREQUENCY



DIVERSITY



+

Source: DFAT
(2015)



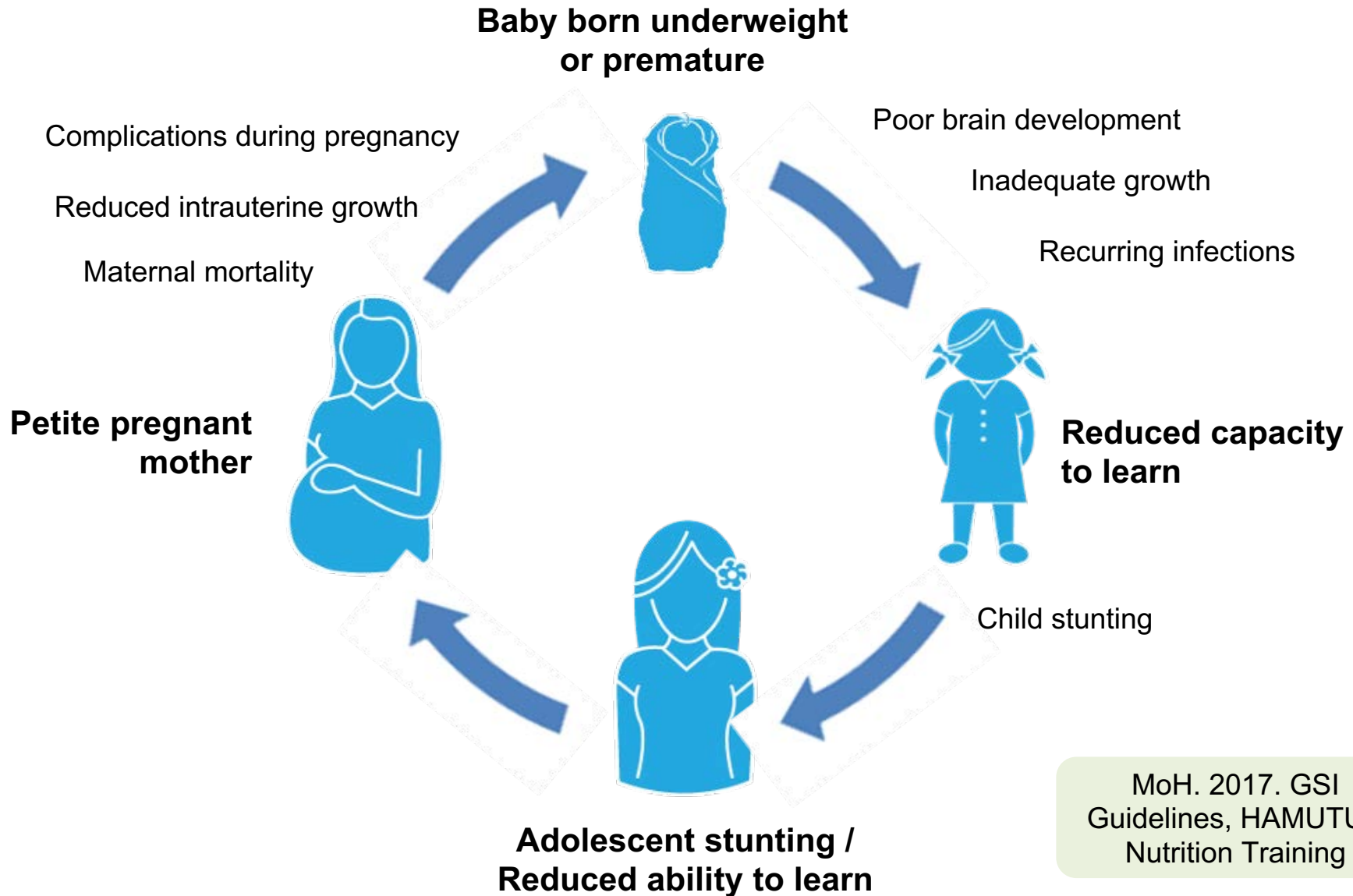
Photo: TOMAK

Session 4: Malnutrition

Activity: Intergenerational cycle of malnutrition

1. Split into 4 groups.
2. Each group draws an image of a baby, child, adolescent girl and an adult woman.
3. Each group gives a name to their image.
4. Each group responds to the question “Why do we need good nutrition?”
5. 15 minutes.

Intergenerational cycle of under-nutrition



What is malnutrition?

Mal – inadequate
food

Nutrition -
nourishment

Malnutrition is a situation that occurs when a person has insufficient consumption or diversity of food or too much food (obesity) or illness.

Nutrition = food + health

Impact of malnutrition

Brains of two children:

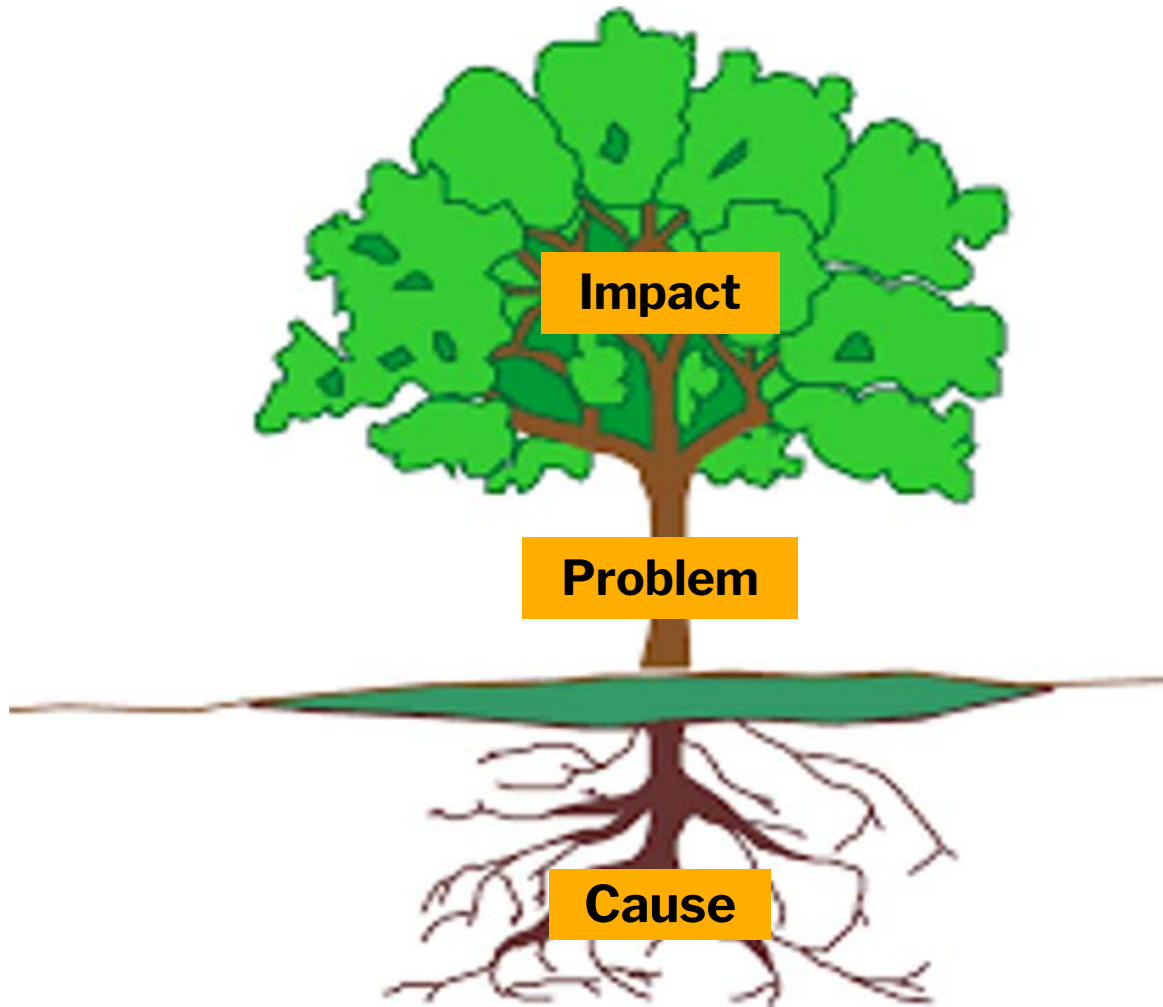


Source: World Bank, Jan 2018

- Delayed mental and physical growth
- Recurring illnesses
- Increase in unemployment
- High mortality
- Pregnant women with malnutrition may have underweight babies, weighing less than 2.5kg

Problem tree

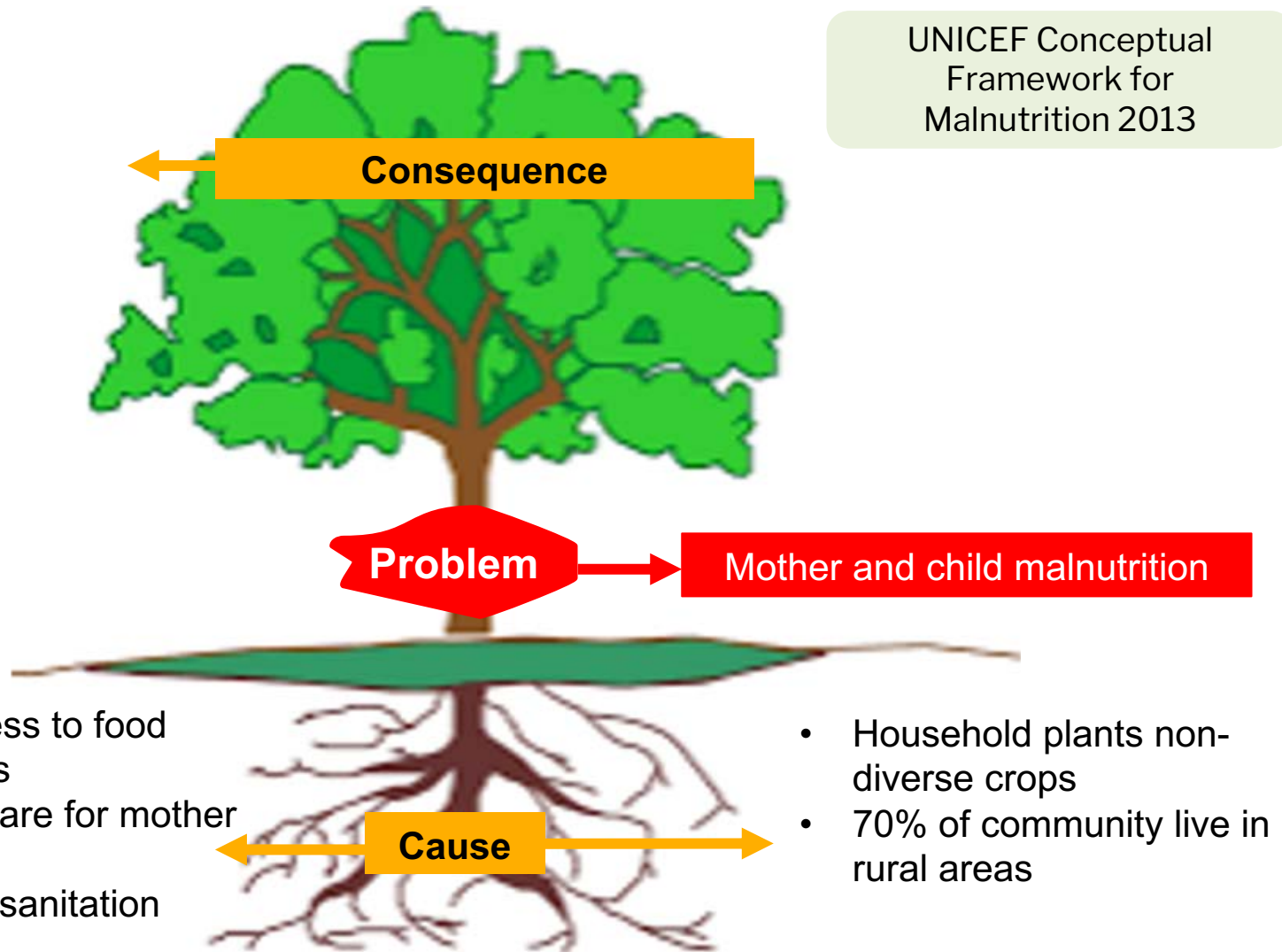
Analyzing the causes of and impact of malnutrition in Timor-Leste



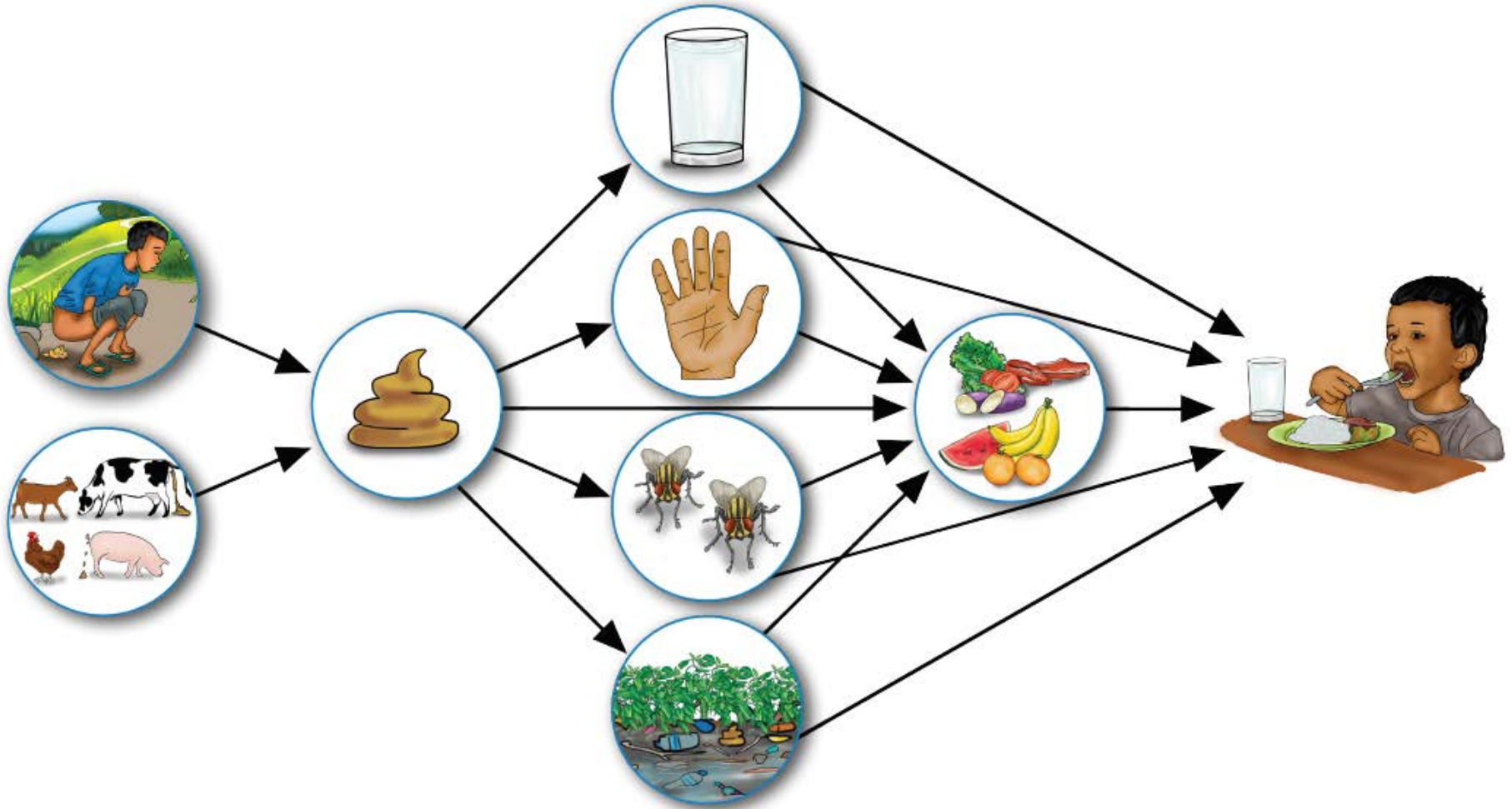
- What makes a tree's roots strong?
- How does a tree become strong?
- Which parts of the tree can you see?
- Which parts can't you see?
- Why are the roots important?

Problem tree

UNICEF Conceptual Framework for Malnutrition 2013



Don't forget! There are many contributing factors



Sanitation and Nutrition: Video





Photo: TOMAK

Session 5: Nutrition

Activity: Who is the priority for nutrition?

- Split participants into 3 groups.
- Facilitator explains the 'true or false' activity to the participants.
- Participants look and discuss the statements to provide a response.
- Participants present the results of their discussion.
- 15 Minutes.

True or false?

No.	Statement	Answer
1	A mother with malnutrition has a higher possibility of an underweight baby.	
2	The quantity and variety of food needed by pregnant women is the same as they need to consume before pregnancy.	
3	Breastfeeding mothers need a lot of food for their own health and nutrition status so the baby can develop well.	
4	Many children have delayed mental and physical development after the age of two.	
5	Nutrition begins from the pregnant mother to the 2 year old child, this is a critical stage of development and growth for the child.	

True or false?

No.	Statement	Answer
1	A mother with malnutrition has a higher possibility of an underweight baby.	<i>True</i>
2	The quantity and variation of food needed by pregnant women is the same as they need to consume before pregnancy.	<i>False</i>
3	Breastfeeding mothers need a lot of food for their own health and nutrition status so the baby can develop well.	<i>True</i>
4	Many children have delayed mental and physical development after the age of two.	<i>True</i>
5	Nutrition begins from the pregnant mother to the 2 year old child, this is a critical stage of development and growth for the child.	<i>True</i>

Activity: 3 food groups

- Split participants into 3 groups.
- Each group selects images of foods that have been prepared beforehand by the facilitator.
- Each group discusses and identifies which group each food belongs to: 1) carbohydrates 2) protein or 3) vitamins and minerals. The images should be placed on the banner/poster showing the 3 food groups.
- Facilitator and other group members observe the presentation of each group.
- Facilitator provides a conclusion.

How many food groups are there?



MoH
Flipchart:
'Nutrisaun
ba Família'

Nutrients

What do you see in the photo?



Source: www.sarabackmo.com/companion-planting-corn-and-tomatoes_majs_tackodling

What is happening (or will happen)?

How many types of nutrients are there?

Macronutrients

We need a large amount of these because they provide energy, growth and help maintain a healthy body.

Micronutrients

We need only a small amount of these but they are still very important to maintain good health.

Source:
HAMUTUK,
Nutrition
Training,
2016

Type of nutrients in food

Macronutrients

- Protein
- Carbohydrates
- Fats

Micronutrients

- Vitamins
- Minerals

Source:
HAMUTUK,
Nutrition
Training
2016

Micronutrient- Vitamin A

- Prevents illness, helps the body fight various infections.
- Most important for proper growth and reproduction.
- When Vitamin A is deficient: can cause poor sight (eye function)



Micronutrient - Iron

- Is in blood and together with protein, strengthens blood.
- Iron deficiency: Delays brain development and increases risk of maternal and child mortality, causes anaemia.



Micronutrient- Zinc

- Heals wounds, prevents illness and infections, helps growth, strengthens bones and helps brain function.



Nutrition for families



- All family members need to eat a diverse range of foods.
- Food diversity is important for health and development.
- There is no one food that can provide all nutrients.
- Eat foods from the three food groups: carbohydrates, protein, and vitamins and minerals.

Source: MoH Flipchart:
'Nutrisaun ba Familia'

Benefits of breast milk

1. Provides everything a baby needs during the first 6 months
2. Acts like the first immunization for babies and is full of all the nutrients a baby needs.
3. Easy and ready to provide to baby at any time (free).
4. Breastfeeding can strengthen the relationship between mother and child.
5. Develops a baby's body.

MoH recommends continued breastfeeding until a child is 2 years or older.



Source: MoH 2017. Mother Support Group Guide

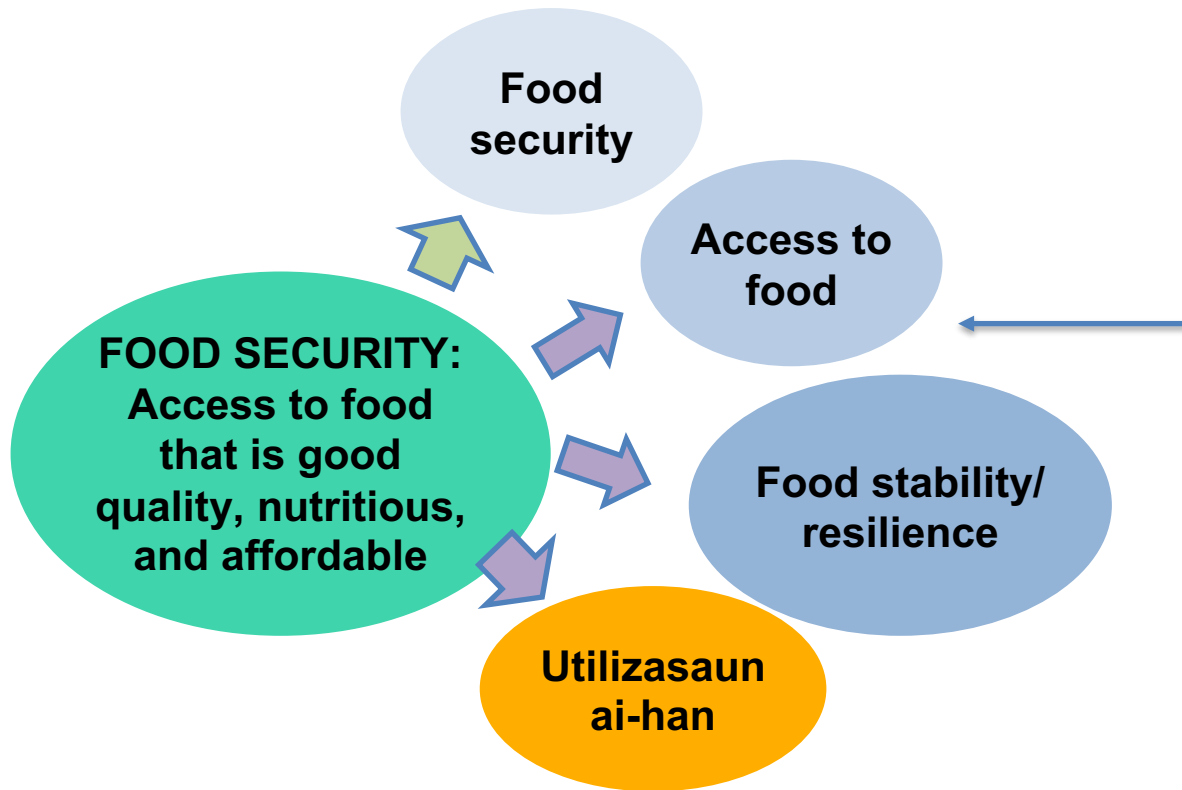


Photo: HIAM Health

Session 6: Agriculture for Nutrition

Food Security

Access by all people at all times to enough food for an active, healthy life” (*World Food Security Conference, 1996*)



MAP extension worker
with farmer

Security: Enough food with sufficient and consistent diversity (NSA)

Access: Ability of households and individuals to access nutritious food (NSA)

Stability: Ability to protect and preserve food in non-productive times (NSA)

Utilisation: Use/consumption of nutritious foods (behaviour change)

Activity: Seasonal calendar

1. Split participants into 3 groups.
2. Each group will receive a calendar from the facilitator to discuss.
3. Each groups marks climate/rainfall periods within a year on the sample calendar; a little rain, rainy season, heavy rain, dry season, windy, lots of water, enough water, and no water.
4. Each group presents their results for group discussion.

Example seasonal calendar

Season	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
A little rain												
Rainy season												
Heavy rain												
Dry season												
Windy												
Lots of water												
Enough water												
No water												
Climate change												

Activity: Calendar for planting different types of crops

1. Split participants into 3 groups
2. Each group receives a calendar from the facilitator for discussion.
3. Each group marks the time to plant different crops throughout the year in the example calendar including; rice, maize, peanuts, onions, beans, vegetables, fruits, cassava and sweet potato.
4. Each group presents their results to the group for discussion.

Example calendar for planting different types of crops and harvest/availability

Crop type	JAN	FEB	MAR	APR	MAY	JUNE	JUL	AUG	SEPT	OCT	NOV	DEC
Rice - plant		X	X	X	X							
Rice – Harvest/available						✓	✓					
Peanut – Plant	X	X	X									X
Peanut– Harvest /available				✓	✓	✓						
Carrot – Plant												
Carrot – Harvest/available												
Other?												

For each step who leads? Women or men?

Rice	M	F	MF
Seed selection			
Land preparation I			
Establish seedlings			
Land preparation II			
Grading			
Planting			
Replanting			
Weeding			
Fertilisation			
Managing pests and disease			
Harvest (cutting, threshing, cleaning)			
Post-harvest (preparing for transport, transport, drying, storage)			

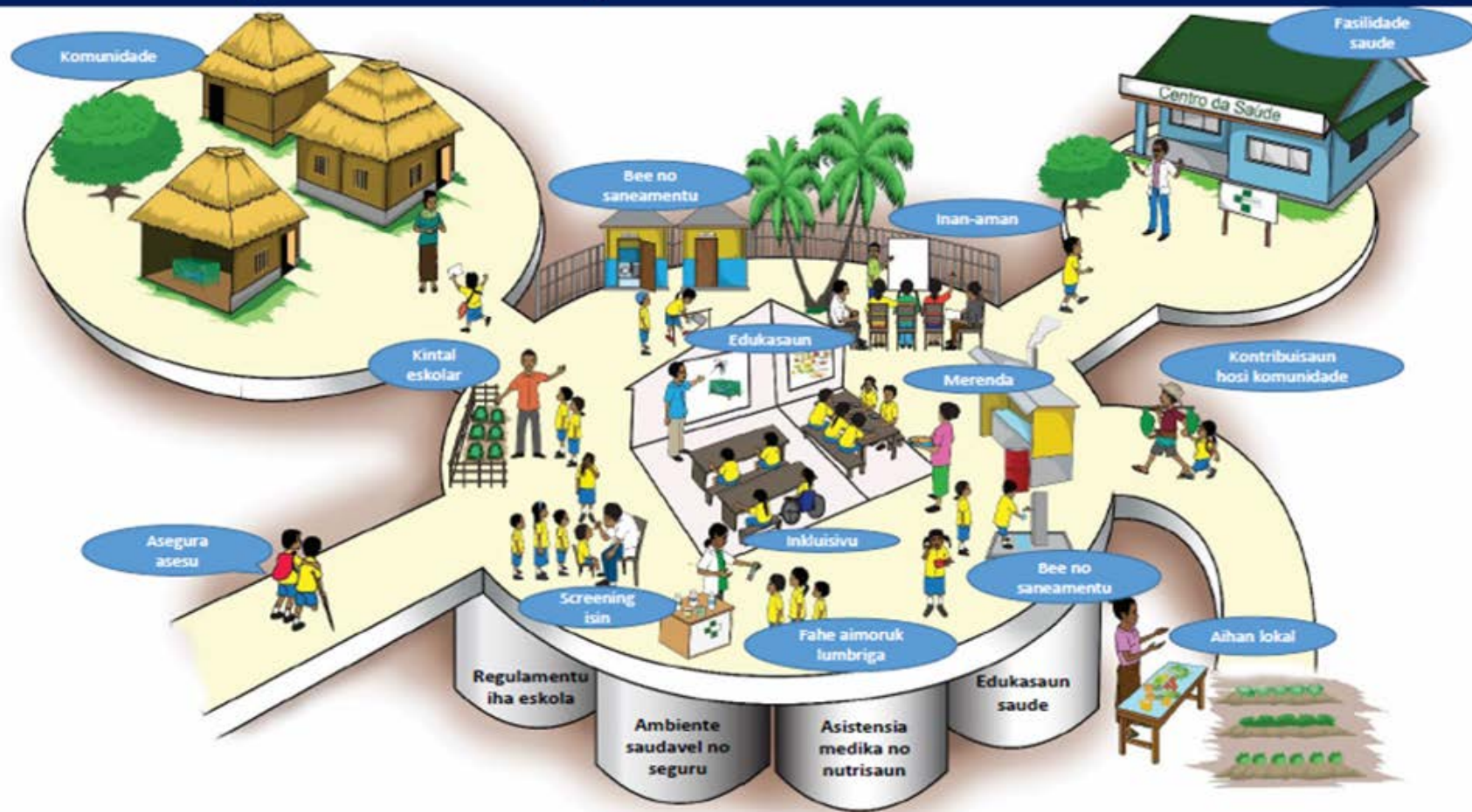


Photo: HATUTAN

Session 7: Agriculture and School Feeding

Vision: Agriculture and School Feeding

Komponente Importante ba Saúde Eskolar



FRESH=Foka Recursu ba Efectivu Saúde Eskolar



What is school feeding?

Objectives of the proposed School Meal Program:

- Provide nutritious food to students during the learning process.
- Support the improvement of nutritional status for students.
- Contribute to smallholder income, creating opportunities and community participation.



What is school feeding?

Key Components

Current:

(Programa Merenda Eskolar)

- \$ 0.25 per child per day
- Service provider (cook) coordinate with local farmers
- School cooks are the buyers (contracts not required)
- Set menu
- Rice supplied by government
- Parent Teacher Association ensures School Feeding complies with rules in manual

Proposed Revisions:

(Programa Refeisaun Eskolar)

- \$0.50 per child per day
- 80% of school meal to be procured locally from farmers
- Contracts with farmer groups – cooks are the buyers
- Flexible menus based on season and availability – meals must include all 3 food groups
- No Gov't provided rice
- Parent Teacher Associations ensure school meal complies with rules in manual

**This is in the process of discussion in the Parliament*

Activity: Impact of a School Meal

- Split participants into 4 groups.
- Facilitator asks 2 groups to discuss question 1 and 2 groups to discuss question 2.
- Participants discuss the statements to provide a response.
- Participants present the results of their discussion
- 15 Minutes

Activity: Impact of a School Meal

1. How can the school feeding program support local farmers?
2. How can a school meal impact child nutrition?



How can a school meal support local farmers?

- Buying local food from farmers creates stable markets.
- The school meal can help boost agricultural production.
- Can increase household incomes.
- Supports the economy when schools buy foods from local farmers.
- Farmers are often parents to school children, helping break the cycle of hunger and poverty.

How a school meal can impact child nutrition

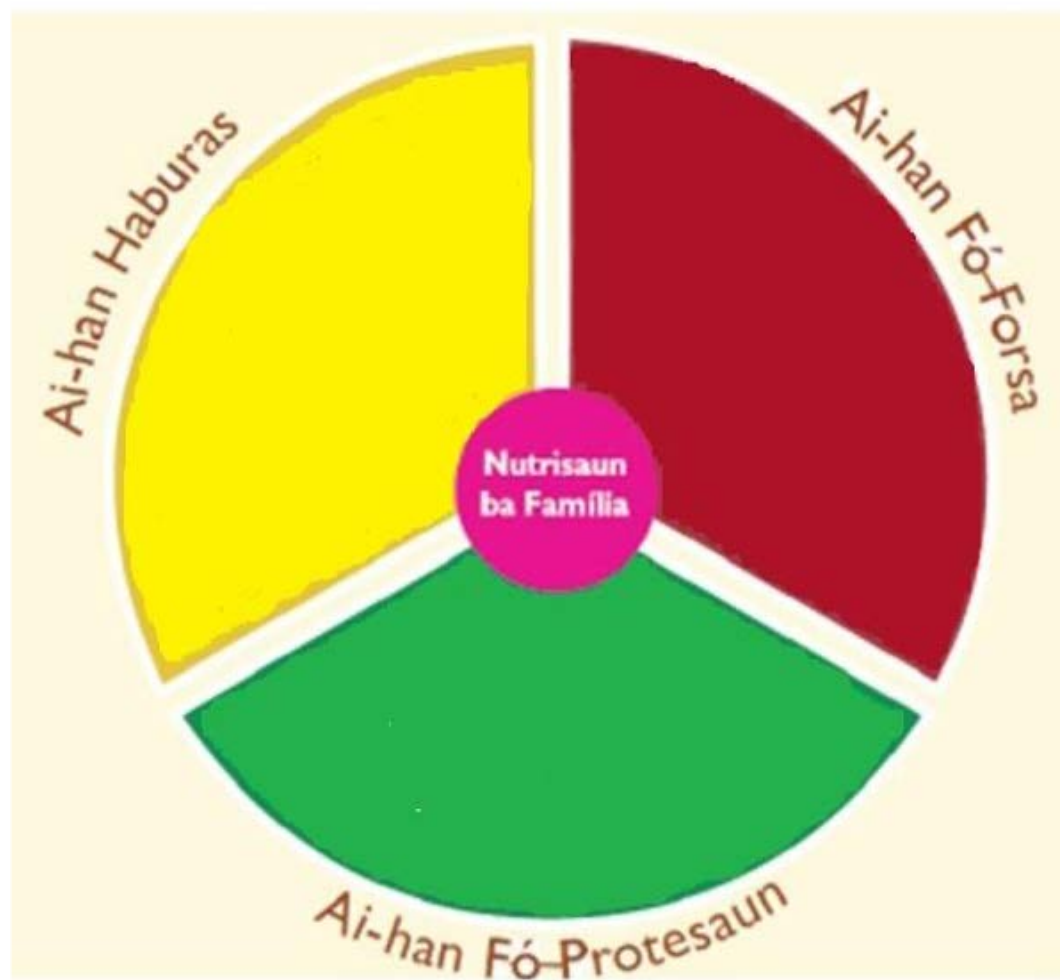
School feeding goes beyond the plate of food and produces a high return in:

- Adequate growth and development of a child
- Protecting a child's' health (less sickness)
- Positive impact on student enrollment, attendance and completing school
- Sets children on a path to healthier diets for their entire life
- Improves learning scores
- Improves attentiveness
- Improves enrollment of girls



Reference: The Impacts of School Feeding Programs, WFP. November, 2019.

Individual activity: Identify foods for school feeding



Activity: Identify foods for school feeding

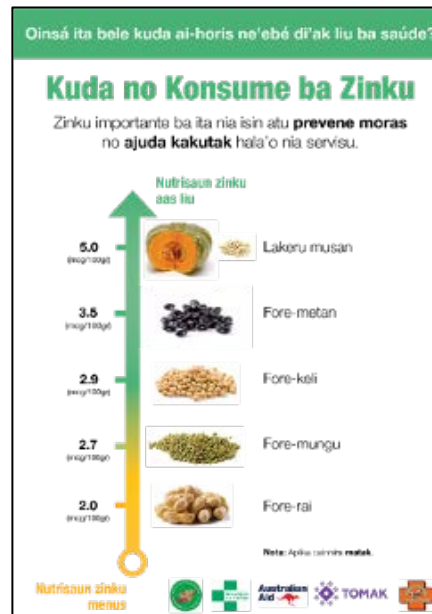
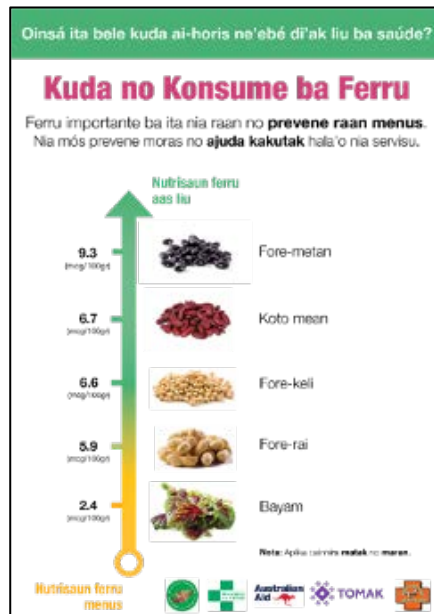
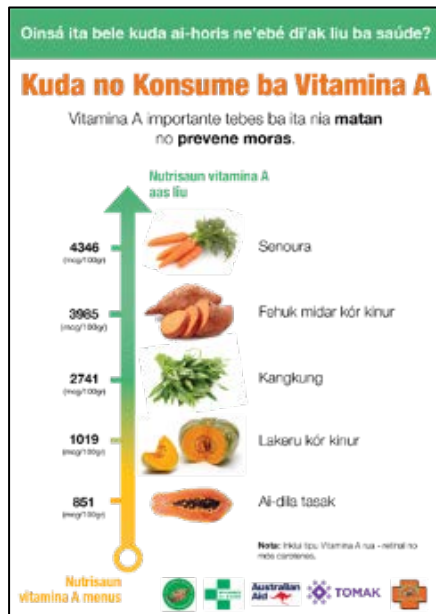
1. Facilitator distributes a handout to each participant to draw a plate according to the three food groups: carbohydrates, protein, and vitamins and minerals
2. Each participant identifies foods that are available for school feeding according to the 3 food groups.
3. Which food groups are limited in the community and why are they not available? In which months? *(do not include crops/animals that are rarely eaten)*
4. Which of these food groups do you see most often in the school meal? Which food groups are missing? Why?
5. What can an extension workers do to help ensure nutritious foods are part of the family meal and school meal?
6. Split into groups and discuss in small groups.

Respond: Identify Meals for School Feeding

1. Farmers produce a variety crops from the 3 food groups.
2. Food is available seasonally with different types of food available throughout the year. We can promote all those foods. If a food is out of season, we can promote another food from the same food group.
3. In the school feeding program, we mostly see carbohydrate foods. Protein foods are slightly reduced because they can be difficult to access or expensive compared to carbohydrates.
4. Agricultural extension workers can encourage farmers to produce nutritious crops that schools need. Extension workers can influence farmers to produce more nutritious food from the 3 food groups.

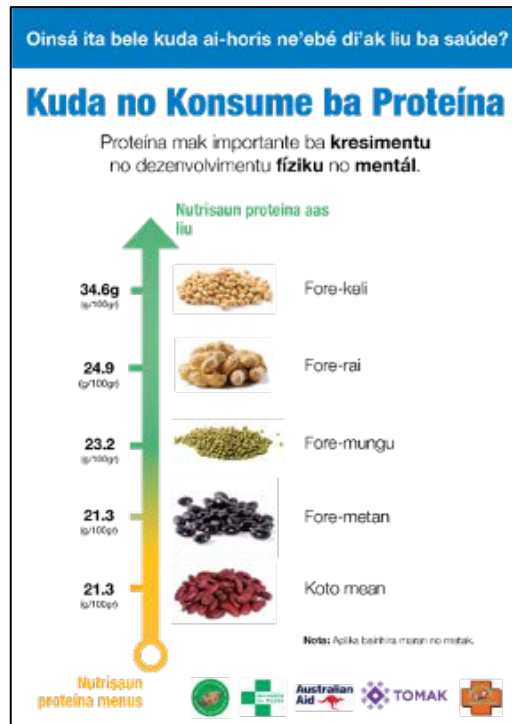
Nutritious crops

- This nutritious crops tool can be used to hold discussions with farmers about crops which have the micronutrients Vitamin A, Iron, and Zinc.
- The school feeding program is under revision. The new School Feeding Program will be looking to add these foods as part of the school meal.



Nutritious crops

- This nutritious crops tool can be used to hold discussions with farmers about crops that are high in protein.



Oinsá ita bele kuda ai-horis ne'ebé d'ak liu ba saúde?

Pontu sira ba diskusaun

- Saida mak Ita-Boot haree iha poster ida ne'e?
- Saida mak Ita-Boot hanoin bainhira foti desizaun atu kuda ai-horis ida?
- Husi foto sira ne'e fini ne'ebé mak Ita-Boot baibain kuda?
- Oinsá proteina (ka ai-han haburas) bele ajuda to'os-na'in sira? Inan isin rua? Labarik ki'ik sira?
- Oinsá ho Ita-Boot nia hanoin atu kuda ai-horis ne'ebé d'ak liu ba saúde?

Proteína husi animál

Ita bele mós hetan **proteína barak** husi manu-tolun, ikan no na'an. Maibé dalaruma ita laina asesu ka oportunidade atu han ai-han sira ne'e. Entaun, importante atu hetan proteina liuhusi fonte seluk, hanesan fore no koto hodi bele hetan proteina beibeik.

Referênsia: Database ASEAN Non-be Konsumo Agri-han 2014

- These tools can be used to support schools and farmers to determine the most nutrient rich foods in each of the 3 food groups.



Photo: TOMAK

Session 8: Behaviour Change: Is It Easy?

What do you think about the following statements: true or false?*

1. Women in rural areas lack information which is why they feed only plain rice porridge to their children.
2. It's better if a farmer keeps some of their harvest for consumption before selling it.
3. To resolve the problem of taboo foods we have to teach farmers so that they start eating them.

*For discussion only. No need to show as either true or false.

Activity: My own behaviour

- Participants each fill out the handout about a behaviour they have tried to change.
- Don't use an example from work. Use a personal example.
- 15 Minutes.

Activity: My own behaviour

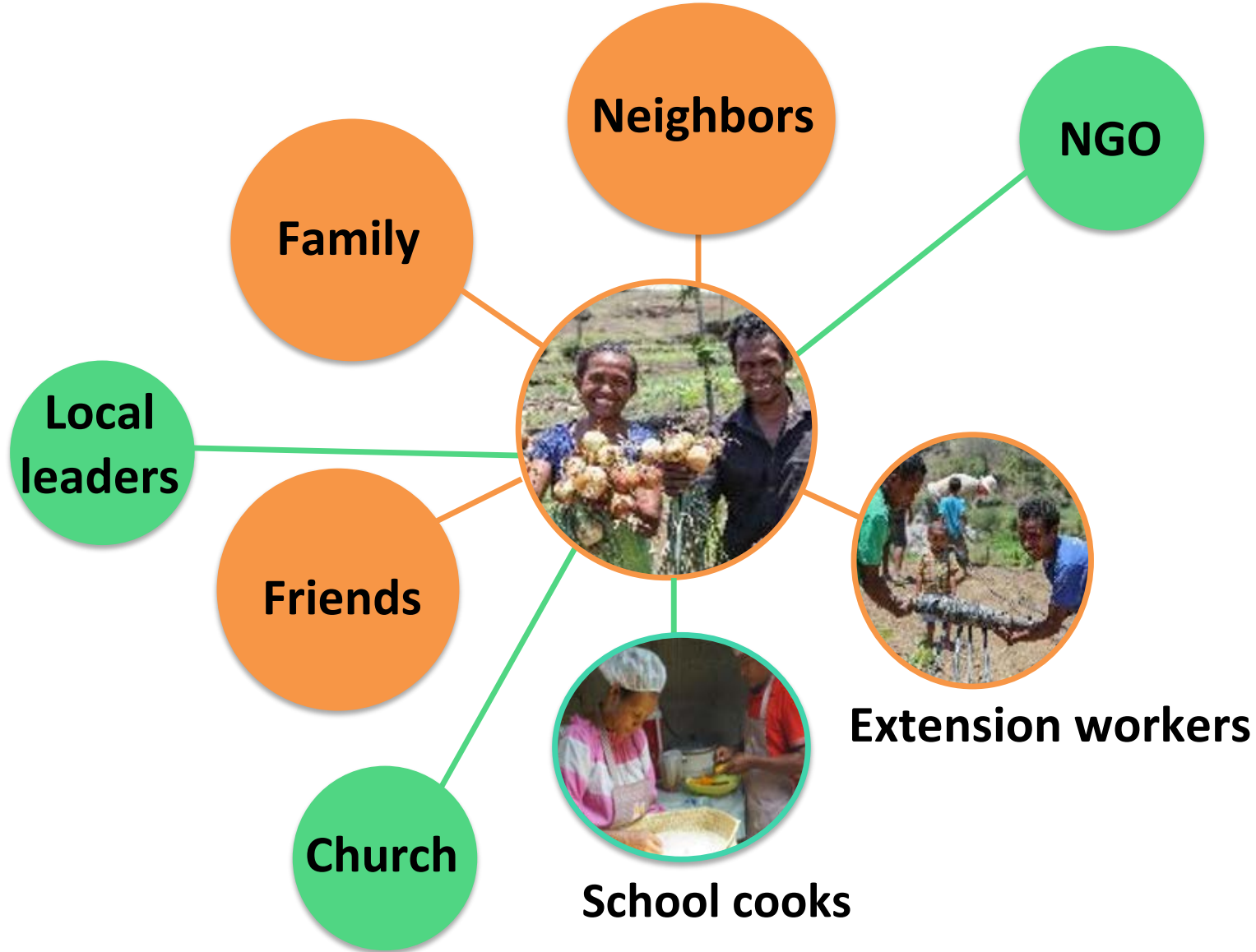
Describe a behaviour that you have already tried to change:

1. What motivated you to try and change this behaviour?
2. What are the benefits if you can successfully change the behaviour?
3. What steps did you take to change the behaviour?
4. What made changing the behaviour difficult?
5. What made changing the behaviour easy?
6. Were you successful? If successful, how long did it take?

Factors that influence behaviour



Who should we focus on?



What practices do we want to promote through NSA?

- Farmers plant nutritious crops for their family to eat and if there is excess, it can be sold to schools.
- Farmers keep some of their produce for their family to eat.
- Farmers use their money to buy foods that are nutritious for their family to eat.
- Farmers initiate conversations with their spouse regarding crop selection, use of harvested crops and use of income from crops.





Photo: TOMAK

Session 9: Gender considerations in NSA

What's the difference between sex and gender?

- **Sex is generally determined by our bodies** – a person being male or female from birth.
- **Gender is a social construct** – this depends on many things including history, economics, culture, and is always changing

**A healthy family gets only one egg
from their chicken. Who eats it?**



Taboo/banned foods

- What are the taboo foods in your municipality and village?
- Who is usually banned from eating it?
- Who decides what is taboo?
- Brainstorm: What can you do to promote discussions about taboo foods? What can support change?

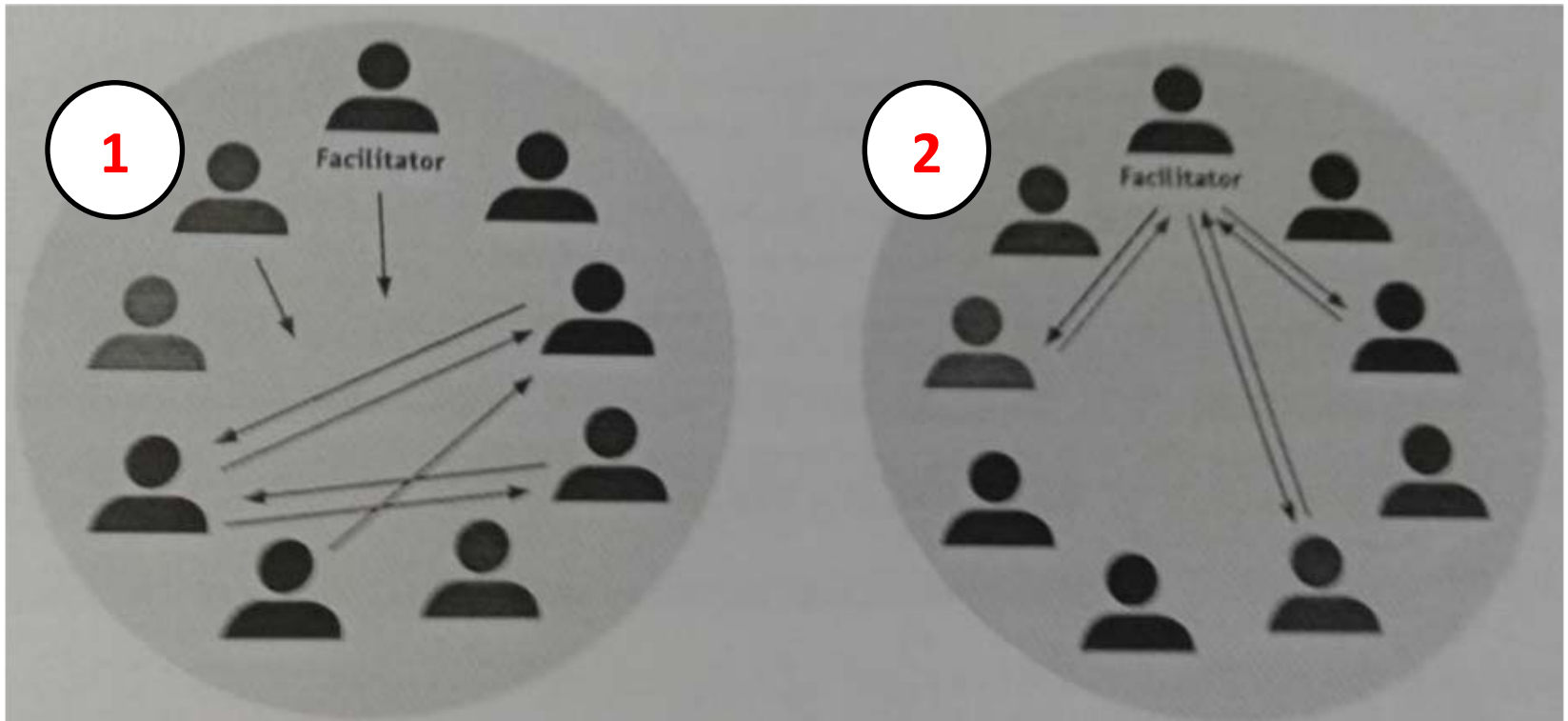




Photo: TOMAK

Session 10: Facilitation

What do you see in this image?



Source: CARE Farmer Field
Business School

What is facilitation?

- Support people to find ideas to support themselves.
- Is a way to help other people to understand and make plans to achieve a collective objective.
- The process of how you do something without speaking but through action.
- A key part of guiding activities.

Source: CARE Farmer Field
Business School

How to Use the NSA Flipbook

- **Objective:** Farmers will understand the link between agriculture and nutrition and plant nutritious crops.
- **User of the Flipbook:** Agriculture extension workers and NGO program officers working in agriculture
- **Who is the Audience:** Rural farmers (both male and female)
- **Time:** 90 minutes - 2 hours
- **Icons:**



- The flipbook picture remains visible to the audience while you look at the talking points on the back side of the picture pages.

Let's watch a demonstration

Facilitator makes a demonstration

- After watching the demo of page 0 - 4, you will break into groups and practice facilitating the flipbook.



Let's practice



Your Turn to Practice (small groups)

1. Break into small groups 3-4 people.
2. Each group will be assigned a section of the flipbook.
3. You will have 45 minutes to practice your assigned section of the NSA flipbook.
4. After the group practice we will come back together as a big group to work through teach backs.

Don't forget

- * Follow what is written in the flipbook. You don't need to add or change the words. The facilitator will interrupt if words were changed to give feedback.
- * After the first facilitator, you don't need to introduce yourself.
- * The pictures at the front are linked to the messages in the back. The facilitator needs to link the messages with the pictures.

Facilitation practice/ Teach Backs

1. Each group will teach back the pages they were assigned.
2. Trainers will use the checklist to give feedback.
3. Continue to show other clips from the video to see how the flipbook was presented to farmers.
4. After analyzing the teach backs - breakout into small groups again to continue to practice.

Analyse the teach back

- ☐ Let the community lead
- ☐ You can't force or make them do something
- ☐ Listen and encourage rather than teach
- ☐ Involve everyone (men and women)
- ☐ Encourage different ideas from everyone (men and women)
- ☐ Believe in the ability of the community
- ☐ Have patience and don't rush
- ☐ Ask questions to confirm the community's understanding



Photo: TOMAK

Session 11: Implementation and Next Step

Mercy Corps/HATUTAN and MAP Formal Agreement

Key Components

- Submit monthly report
- \$20 per month for 2 activities

Activities

1. School Garden

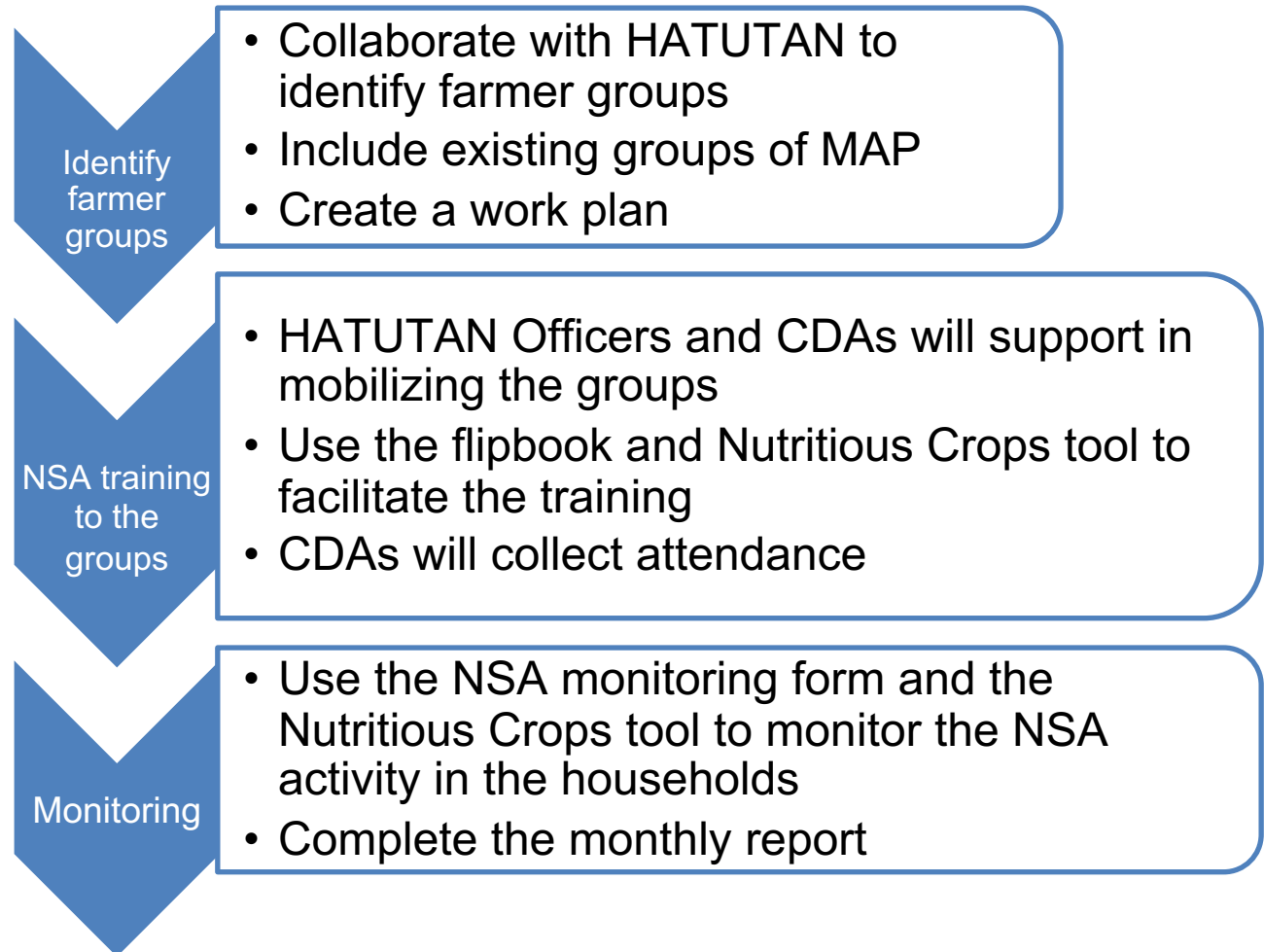
- Participate in socialization and TOT events
- Mobilizing School Garden activity
- Conduct training based on School Garden Manual

2. Nutrition-Sensitive Agriculture

- Flipbook facilitation
- Monitoring with the nutritious crop tools

Revision for Individual Activity

- Back to villages to train farmer groups on NSA



Process and next steps

1. HATUTAN will support identifying farmer groups in your area.
2. Make a work plan for when you will facilitate the NSA Flipbook with the farmer groups.
3. HATUTAN will connect you to Community Development Agents who will mobilize the farmer groups.
4. Facilitate the flipbook training.
5. Complete the monthly reporting template.
6. Use the NSA monitoring tool to check-in with farmers after the NSA flipbook (2 months and 5 months after the training).

Activity Work Plan Form

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	23	24
25	26	27	28	29
30	31			

Let's Practice: Complete the Monthly Report



Relatório Atividade Mensal

Fulan : _____

Naran : _____

Munisípiu: _____

<u>Atividade fulan kotuk</u>	<u>Naran eskola no numeru ID/ MAP, Grupo ARIS</u>	<u>Tarietu</u>	<u>Númeru partisipasaun no titulu (manorin, APP, Administradór, estudante nst)</u>	<u>Naran no asinatura husi representante administradór Eskola/ MAP</u>	
<u>Atende enkontru iha nivel Munisípiu kona-ba atividade to'os eskolár no ASN</u>					
<u>Sosializasaun Atividade to'os eskolár</u>					
<u>➤ Treinamentu no estabelesementu to'os eskolar</u>					

Let's Practice: Report Template

Activities:

1. Went to E.B.F. Eluli to make dry compost.
2. NSA Training to VSLA Group Fitun in Vatuboro
3. You did a monitoring visit with 2 VSLA members of VSLA Group (Haburas and Hader) – Maria and Anthony
 - You experienced that some group members were busy with other activities and were not available to meet.

Plan for next month:

1. Return to E.B.F. Eluli to train students to make garden beds.
2. Monitor 5 group members of Fitun group

Post-test



Photo: TOMAK

Thank You!!



The original NSA training curriculum is supported by:

