



Farmer Nutrition School Session Guide



ESSENTIAL NUTRITION ACTIONS, ESSENTIAL HYGIENE ACTIONS, and HOMESTEAD FOOD PRODUCTION

May 2014

DISCLAIMER

This session guide is made possible by the generous support of the American people through the U.S. Agency for International Development (USAID) under the terms of the Cooperative Agreement AID-OAA-A-11-00031, (SPRING) managed by JSI Research & Training Institute, Inc. (JSI). The contents are the responsibility of JSI, and do not necessarily reflect the views of USAID or the United States Government.

ABOUT SPRING

The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) project is a five-year USAID-funded Cooperative Agreement to strengthen global and country efforts to scale up high-impact nutrition practices and policies and improve maternal and child nutrition outcomes. The project is managed by JSI Research & Training Institute, Inc., with partners Helen Keller International, The Manoff Group, Save the Children, and the International Food Policy Research Institute.

RECOMMENDED CITATION

SPRING/Bangladesh, 2015. Farmer Nutrition School Session Guide on Essential Nutrition Actions, Essential Hygiene Actions, and Homestead Food Production. The Strengthening Partnerships, Results, and Innovations in Nutrition Globally (SPRING) Project. Arlington, VA

ACKNOWLEDGMENTS

We would like to acknowledge that the Farmer Nutrition School Session Guide on Essential Nutrition Actions, Essential Hygiene Actions, and Homestead Food Production would not have been possible without the effort and contributions of many institutions and individuals. The development of the Farmer Nutrition School Guide in Bangladesh was initiated by the SPRING project who worked in close collaboration with the Government of the People's Republic of Bangladesh (GoB) through the Ministry of Health and Family Welfare and the Ministry of Agriculture. Additional support was provided by the USAID-funded WASHplus project, the Institute of Public Health and Nutrition (IPHN), the Bill & Melinda Gates Foundation funded Alive & Thrive project, and the USAID-funded Nobo Jibon project.

These materials were also adapted from training materials developed in Bangladesh by Helen Keller International and Save the Children, as well as the Regional Fisheries and Livestock Development Component (RFLDC), a DANIDA-GoB implemented project.

SPRING

JSI Research & Training Institute, Inc. 1616 Fort Myer Drive 16th Floor Arlington, VA 22209 USA Phone: 703-528-7474 Fax: 703-528-7480 Email: <u>info@spring-nutrition.org</u> Internet: <u>www.spring-nutrition.org</u>

COVER PHOTO CREDITS: SPRING/Bangladesh

TABLE OF CONTENTS

Acronyms	v
Preface	vi
Introduction	viii
Module 1: Vegetable Gardening	1
Session 1: Homestead Space Planning and Vegetable Bed and Pit Preparation	2
Session 2: Sowing seeds and planting seedlings in the bed and pit	
Session 3: Crop Cultivation Operations, Soil Health Management, and Compost/Manure Preparation	21
Session 4: Integrated Pest Management (IPM)	
Session 5: Seed Production, Collection and Storage	
Session 6: Essential Nutrition Actions and Essential Hygiene Actions	
Module 2: Native Chicken Rearing	53
Session 1: Basic Techniques for Local Chicken Rearing	
Session 2: Improved Housing and Laying Hen Management	61
Session 3: Broody Hen Management	71
Session 4: Chick Rearing Management	
Session 5: Health Management and Egg or Meat Consumption	
Session 6: Essential Nutrition Actions and Essential Hygiene Actions	100
Module 3: Pond Fish Culture	106
Session 1: Understanding Pond and Improved Fish Culture Techniques	107
Session 2: Preparing the Pond for Fish Stocking	
Session 3: Fingerling Transportation and Stocking	
Session 4: Supplementary Feeding, Pond Fertilization and Liming	
Session 5: Health and Growth Management and Fish Harvesting	147
Session 6: Essential Nutrition Actions and Essential Hygiene Actions	156

LIST OF ACRONYMS

EHA	Essential Hygiene Actions
ENA	Essential Nutrition Actions
FMA	Farm Management Analysis
FNS	Farmer Nutrition Schools
GoB	Government of the People's Republic of Bangladesh
HFP	Homestead Food Production
IPHN	Institute of Public Health Nutrition
IPM	Integrated Pest Management
PLW	pregnant and lactating women
RFLDC	Regional Fisheries and Livestock Development Component
USAID	United States Agency for International Development

PREFACE

The Essential Nutrition Actions (ENA) framework delivers a set of evidence-based interventions to improve nutritional status during the critical 1,000 days from pregnancy through the first two years, targeting pregnant and lactating women and their young children. The framework defines the right action to be taken by the right person at the right time in the life cycle. This session guide provides a set of tools to be used at the community level to help translate this framework more effectively, by identifying and making the most of contacts within this system to promote and support improved nutrition practices.

The ENA framework promotes a "nutrition through the life cycle" approach, addressing adolescent and women's nutrition during pregnancy and lactation, optimal breastfeeding and complementary feeding practices, nutritional care of sick and malnourished children, and the control of anemia, vitamin A and iodine deficiencies.

The Essential Hygiene Actions (EHA) delivers a set of evidence-based practices for food hygiene and handwashing, and addresses the need for a simple water source (tippy tap) around the cooking area. The actions include: promotion of safe drinking water (such as chlorine dispensers at water points), handwashing at five critical occasions (after defecation, after cleaning a child who has defecated, before preparing food, before feeding a child, and before eating), safe disposal of feces, safe storage and handling of food, use of latrines and promotion of open defecation-free communities, and creating barriers between toddlers, soiled environments and animal feces.

Implementing ENA/EHA in the agricultural sector provides several opportunities to promote specific nutrition actions for families, particularly for mothers and fathers with children under two years:

- agricultural extension agents, farmer networks and farmer nutrition schools; and
- agricultural platforms such as agriculture production input provision, veterinarians, and financial services and markets.

The Farmer Nutrition School (FNS) is a community forum to teach and mentor household members to improve the production and consumption of high-quality diets rich in micronutrients for pregnant and lactating women and children ages 6-24 months. The focus of the community intervention is Homestead Food Production (HFP) for the promotion of nutrient-dense vegetables such as sweet gourd, bottle gourd, knolkhol, radish, red amaranth, stem amaranth, kangkong, Indian spinach, okra, bitter gourd, tomato, papaya, ash gourd, country bean, and yard long bean, as well as the promotion of animal source foods (fish, poultry, and eggs).

The FNS integrates agricultural extension and adult participatory learning to enhance the capacity of households to make well-informed crop management decisions. Usually the sessions continue throughout a cropping season and give each participant a chance to observe and demonstrate their knowledge through improved agronomic practices in their own fields.

The FNS methodology was originally developed in conjunction with the Integrated Pest Management (IPM) program with the objective of helping farmers understand the ecological interactions in their crop production system, and to enable them to manage these interactions by making use of the natural resilience of the system and limiting the disturbing influence of outside factors. The FNS started with rice in order to promote the use of biological and integrated pest management as an alternative to chemical control, but has gradually been applied to other crops, livestock, fisheries, non-agricultural production, general livelihood issues and environmental management. In SPRING/Bangladesh, the curriculum of agricultural FNS has broadened to include ENA/EHA in gardening, poultry and fish production sessions.

For maximum nutritional impact on vulnerable groups, gender considerations must be elucidated at each step. Similarly, the environmental, socio-cultural and enabling factors in each setting must be taken into consideration. SPRING has divided this guide into three modules: vegetable gardening, native chicken rearing and pond fish culture.

INTRODUCTION

Agricultural officers and DANIDA agricultural experts were involved in developing and field-testing this manual, which is a project of the GoB agricultural departments. This guide was developed to help community members (both women and men) and community groups start and improve their technical understanding in the following areas:

- 1. **Vegetable farming**, by improving the method of selecting sites, species and crops, preparation of beds and planting pits for planting vegetables, and through successful farm management;
- 2. **Rearing local chickens** through improved semi-scavenging methods applying the techniques of using the improved *hazol* (brooding nest), early separation of chicks from the broody hen, using two to four layers of hygienic poultry shed and rearing chicks in cages or the multi-layer poultry shed, and ensuring balanced feeding and bio-security;
- 3. **Fish farming** in homestead base ponds using semi-intensive composite carp culture techniques incorporating the small indigenous species, which have high nutritional values.

This guide incorporates ENA and EHA in each session to encourage families to adopt improved practices in health and nutrition as well as HFP, when they have pregnant women and/or children less than two years of age (the first 1,000 days). The guide was developed by SPRING/Bangladesh and has been used since 2012 as part of the implementation work being done in Bangladesh.

OBJECTIVES

By the end of all FNS training sessions, participants will be able to:

- Understand key elements to improve vegetable farming, rear local chickens and manage fish farming;
- Understand how to improve nutrition and hygiene practices in their households; and
- Practice all the steps of HFP: vegetable farming, rearing local chickens and/or managing fish farming.

PARTICIPANTS

These FNS sessions are suitable for all types of community members. For SPRING, the modules/sessions are tailored to households with pregnant and lactating women and children less than two years of age.

Module 1: Vegetable Gardening

SESSION 1: HOMESTEAD SPACE PLANNING AND VEGETABLE BED AND PIT PREPARATION

SESSION SUMMARY

Session Goal:

To develop the knowledge and skills of the participants, motivating them to maximize the use of their available homestead space and to prepare enough beds and pits to grow diverse and nutritious vegetables throughout the year.

Session Objectives:

At the end of the session, participants will be able to:

- understand the importance of vegetable and nutritional value:
- select the appropriate sites for vegetable gardening;
- make a proper plan to grow diverse vegetables throughout the year;
- select the appropriate seasonal crops and the right species;
- establish the appropriate planting beds and pits for better production;
- properly use organic fertilizer for preparation of planting beds and pits; and
- discuss women's nutrition during pregnancy.

Duration: 2.00 – 2.5 hours

Venue: Courtyard of a FNS household, preferably near a vegetable garden.

Conducting the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, and ice breakers
- Discuss the goal and objectives of the session
- Discuss the adoption of today's topics, timetable, and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. If this is not the first session (i.e. FNS has been started with another module), summarize the lessons learned previously. Ask the following questions to create a learning environment and prepare participants for today's session:

- How are you and your family?
- How are HFP and other activities going?
- What was discussed/done in the last session (if this is the second session)?
- Were you able to use the learning and experiences from last session?
- Who is the leader of the day? What is her role?
- What will be discussed today? What are the main topics, goals, and objectives of this session?

- Ensure that the seating arrangement is in a U-shape and that the participants and facilitator are comfortable.
- Welcome and greet the participants and formally initiate the session.
- Ask about the wellbeing of the participants and their families in order to create a lively learning environment where all participants are encouraged to participate in the session.
- If this is not the first session, ask the day leader of the last session to help summarize the topics discussed previously.
- If this is not the first session, assess the adoption rate and reasons for non-adoption, if any. Don't give too much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader. Explain her role and explain that she will facilitate the session.
- Ask the day leader to present the program schedule, including the session goals and objectives. These should be written on poster paper ahead of time by the Union Facilitator/FNS Facilitator.

TOPIC 2: INTRODUCTION TO DIET FOR PREGNANT WOMEN

Agenda Items:

- Importance of a diversified diet for pregnant women
- Importance of iron supplementation during pregnancy
- Importance of using iodized salt for pregnant women and all family members

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers, and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- Should a pregnant woman eat as often as a woman who is not pregnant? Why?
- Which types of foods should a pregnant woman eat?
 - Tell participants that they should prepare their meals with diversified foods that are available in their homestead, from both plant and animal sources. Demonstrate the different kinds of vegetables, fishes, and pulses from their own production.
- Why is it good for pregnant women and babies to eat a variety of vegetables?
 - Ask the group whether they cultivate vegetables, especially the nutritious vegetables, in their homestead.
 - Tell them that today we will learn how to cultivate a variety of vegetables and get plant protein throughout the year.
- Why is iron supplementation necessary for pregnant women? Why should all pregnant women take supplements?
 - Remind participants that women can also get iron from foods like eggs and liver as well as plant sources like aroid, aroid leaf, aroid offset, banana inflorences, fig etc. which the women can easily grow at their homestead.
- Why should pregnant women go to their health facilities for an antenatal checkup? How frequently?
- Why and how should families use iodized salt?
- Where is iodized salt available? How can it be preserved?
 - Explain the sources of iodine, the methods of cooking and preservation, and how it can help improve women's nutrition during pregnancy and lactation.

- Before conducting the sub-session on this topic, make sure you have the knowledge and skills provided by **Practices 1, 2, and 3** and **Flash Cards** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: IMPORTANCE OF VEGETABLE, NUTRITIONAL VALUE, AND SEASON WISE VEGETABLE SELECTION AND CULTIVATION

Issue to be discussed and/or activity to be performed:

- Importance of different types of vegetable and nutritional value (Name of vegetable rich in Vitamin A, C, Fe)
- Name of vegetable which grow in winter
- Name of vegetable which grow in summer
- Name of vegetable which grow in year round

Duration: 15 minutes

Inputs/Materials: pictures, poster, marker etc.

Training Method: participatory discussion, questions and answers

Discussion with Participants:

[Ask participants the below questions to assess their knowledge and skill levels in comparison to the desired levels and to lead the discussion to conclude with correct messages/answers]

- Why do we eat vegetables?
- Which types of vegetables are rich in vitamin A?
- Which types of vegetables are rich in vitamin C?
- Which types of vegetables are rich in iron?
- How much vegetables should be consumed per day a lactating mother and pregnant woman?
- Which types of vegetables are growing in your area during winter and summer season?
- Which types of vegetables can be cultivated year round?

- Before conducting the sub-session on this topic, you need to properly learn **topic 3 of session 1 in the vegetable gardening handbook to** have sound knowledge and skills.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 4: HOMESTEAD SPACE PLANNING OR SUITABLE AREA SELECTION FOR VEGETABLE CULTIVATION

Issue to be discussed and/or activity to be performed:

- Selection of appropriate sites including types of soil suitable for vegetable farming;
- Proper space planning to ensure maximum use of the homestead space;
- Characteristics of various species and selection of appropriate species.

Duration: 15 minutes

Training Method: Small group inspection in homestead area and open discussion

Discussion with Participants:

[Ask participants the below questions to assess their knowledge and skill levels in comparison to the desired levels and to lead the discussion to conclude with correct messages/answers]

- Which type of vegetables can be cultivated in sunny places?
- What types of vegetables can be cultivated in shady places?
- What types of vegetable can be cultivated damp places?
- Among hybrid, local and high yield species, which is the best and why?

- Before conducting the sub-session on this topic, you need to properly learn **topic 4 of session 1 in the vegetable gardening handbook to** have sound knowledge and skills.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 5: PLANTATION PIT PREPARATION

Issue to be discussed and/or activity to be performed:

- Method of preparation of planting pit and
- Use of organic fertilizer in preparation of planting pit.

Duration: 15 minutes

Inputs/Materials: spade, rope, pictures, poster, marker, compost, etc.

Training Method: Practical session, participatory discussion, questions and answers

Discussion with Participants:

[Ask participants the below questions to assess their knowledge and skill levels in comparison to the desired levels and to lead the discussion to conclude with correct messages/answers]

- What are planting pits and which types of vegetables can be grown in them?
- How can we make an ideal planting pit and what is its importance?
- What should be the distance between two planting pits?
- Do you use any fertilizer in pits? If yes, which type of fertilizer and what amount?

- Before conducting the sub-session on this topic, you need to properly learn **topic 5 of session 1 in the vegetable gardening handbook to** have sound knowledge and skills.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 6: PLANTATION BED PREPARATION

Agenda Items:

- Method of preparation of planting bed; and
- Use of organic fertilizer in preparation of planting bed.

Duration: 35 minutes

Inputs/Materials: spade, rope, pictures, poster, marker, compost, etc.

Training Method: Practical session participatory discussion, questions, and answers

Discussion with Participants:

[Ask participants the below questions to assess their knowledge and skill levels in comparison to the desired levels and to lead the discussion to conclude with correct messages/answers]

Discussion with Participants:

[Ask participants the below questions to assess their knowledge and skill levels in comparison to the desired levels and to lead the discussion to conclude with correct messages/answers]

- What is a planting bed and which types of vegetables can be grown in it?
- How can we make an ideal vegetable bed and what is its importance?
- What should be the distance between two vegetable beds?
- Do you use any fertilizer in beds? If yes, which type of fertilizer and what amount?

- Before conducting the sub-session on this topic, you need to properly learn **topic 3 of session 1 in the vegetable gardening handbook to** have sound knowledge and skills.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 7: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' knowledge and skill levels in relation to the session goals and objectives, as well as specific topics conducted in this session
- Summarize the knowledge and skills achieved in today's session

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess their knowledge and skills:

- What did we discuss today? What did you learn?
- Were the discussions and activities on the topics adequate?
- What else could be discussed or performed?
- Can you summarize today's learning?
- How do you plan to put this learning in to practice?

- Direct your questions to the group rather than to one person.
- Phrase questions like: "What can you recall from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants are able to give the correct answers.
- Thank the farmers who answered properly, but do not humiliate the others. No farmer should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants. If it is taking too long, tell them the answers to reinforce the learning.
- Together with the participants, sum up the day's learning:
 - Select appropriate sites for vegetable gardening
 - o Make a proper plan to grow diversified vegetables and throughout the year
 - o Select the appropriate seasonal crops and the right species
 - o Establish the appropriate planting beds and pits for better production
 - o Properly use organic fertilizer to prepare planting beds and pits
 - o Link a women's diet during pregnancy with vegetable gardening

TOPIC 8: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Choose the topic of the next session and explain the reason for choosing that topic.
- Set the next session's date, time, and venue.
- Select the next session's leader and discuss her possible role.
- Thank participants for attending today's session and invite them to the next session.

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out their opinions about the next session:

- What should we discuss in the next session? Why?
- When and where should we conduct the next session?
- Who will be the leader for next session and what should be her role?
- Do you have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics for the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose, but facilitate to make the appropriate decisions.
- Ask questions to find out participants' opinions and do not impose your ideas or plans.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue asking follow-up questions until you are able to make proper plans.
- Request that the day leader make the necessary arrangements for the next session.
- Thank the day leader for her kind support and thank the next session's day leader for her willingness to provide the volunteer services.
- Request that the day leader invite FNS members to the next session and ask others to assist her by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal

The goal of this session is to develop the knowledge and skills of the participants on the topics so that they become capable of selecting nutritious vegetables, sowing them following the proper methods/techniques, and taking care of them to ensure optimum production of diversified vegetable throughout the year.

Session Objectives

At the end of this session, participants will be able to:

- Explain and practice the methods for sowing seeds in the beds;
- Tell and show the methods of planting seedlings in the pits;
- Explain where, when and why to apply the compost and/or organic fertilizer, what should be the amount and what techniques to follow;
- Explain how and why to irrigate the garden and drain out the excess water; and
- Explain the need of and practice breastfeeding of 0-6 month-old children and nutrition of lactating mothers

Duration: 2.00 - 2.5 hours

Venue: Courtyard of an FNS household preferably near a vegetable garden

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda:

- Welcome the participants, introductions and ice breakers
- Short discussion on the goals and objectives of today's session
- Brief discussion on and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants, and ask the following questions:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- Were you able to use the information from the last session?
- Who is the day leader and what is her role?
- What are the topics, goals and objectives we will discuss today?

- Ensure a U-shape seating arrangement, and make sure the participants and facilitator are comfortable.
- Welcome and greet the participants and formally initiate the session.
- Ask about the wellbeing of the participants and their families to create a lively learning environment where everyone is encouraged to participate.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in detail during household/follow-up visits.
- Introduce the day leader. Explain her role and allow her to facilitate the session.
- Ask the day leader to present the day's program schedule including the session goal and objectives. This should be done on poster paper before coming to the session.

TOPIC 2: BREASTFEEDING FOR INFANTS FROM BIRTH TO SIX MONTHS AND DIET FOR LACTATING MOTHERS

Agenda:

- Significance of early initiation of breastfeeding
- Importance of exclusive breastfeeding for infants
- Importance and way of ensuring a nutritious diet for lactating mothers

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- What do you give to your baby immediately after he or she is born?
 - Explain the importance of early initiation of breast milk and the disadvantages of other foods, which can be contaminated with germs and are difficult for a baby to digest.
- Do you experiencing any difficulties breastfeeding your baby?
 - If possible demonstrate the ideal position and attachment during breastfeeding. If not possible during the session, this can be done during after session counseling or home visits.
- How long do you feed only breast milk?
- What can you do if you don't have enough milk?
 - Explain that it is important to feed the baby frequently in the correct position and attachment so that the mother can produce the amount of milk that the baby needs.
- What are the advantages of breastfeeding for both mother and child?
- How can you ensure that a lactating mother has the proper diet? Why is this important?
 - Demonstrate various cooked and raw foods which should be part of a lactating woman's diet, and explain how much of these foods women should eat when they are breastfeeding.
- Why is animal protein good for lactating mothers and the baby?
 - Ask whether the participants cultivate vegetables in their homestead, especially the nutritious vegetables.
 - Tell them today we will learn how to cultivate vegetables and get plant protein and diversified and nutritious vegetables throughout the year.
- Why and when do lactating mothers need to take iron and vitamin A supplements after giving birth?
 - Explain the sources of iron and vitamin A, the methods of cooking and preservation, and how these nutrients help improve women's health during pregnancy and lactation.

- Before conducting the sub-session on this topic, read **Practices 4, 5, 6, and 7** and **Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: METHODS OF SOWING SEEDS, PLANNING SEEDLINGS IN THE BED

Agenda:

- Techniques for sowing seeds and planting seedlings/saplings in beds
- Application of fertilizers on the surface

Duration: 30 minutes

Materials: seeds (red amaranth, radish, kangkong, yard long bean, okra), seedling (*knolkhol*) organic fertilizer, ash/sand and organic manure

Training Method: Practical session, participatory discussion, questions and answers

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in the area:

- Which types of seeds do you sow in bed by broadcasting?
- Which types of seeds do you sow in line in the beds?
- How many seeds do you sow in each bed?
- How many seedlings and/or saplings do you plant in each bed?
- How do you sow the seeds or plant the seedlings and/or saplings (in a row or not, distance, sown or broadcasted, planted, etc.)?
- Do you top-dress any fertilizer after seeds sowing or seedling planting?
- If yes, how many days after and what amount?
- Are you watering in your beds or pits?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 2** in the **Vegetable Gardening Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 4: METHODS OF SOWING SEEDS/SEEDLING IN THE PITS

Agenda Items:

- Techniques for sowing seeds and planting seedlings in pits
- Application of fertilizers on the surface

Duration: 10 minutes

Inputs/Materials: Bitter gourd, Ash gourd, Bottle gourd, Sweet gourd, Snake gourd, Ridge gourd, Papaya etc. (seeds and/or seedlings, organic fertilizers).

Training /Method: practical session, participatory discussion, questions and answers

Discussion with participants:

[Ask participants the below questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers]

- How many seeds/seedlings do you plant in each pit?
- How do you sow the seeds and/or seedling or sapling in the pit?
- Do you top-dress fertilizer after seeds sowing or planting seedling in the pits?
- If yes, how many days after and what amount?
- Are you watering in your pits?

- Before conducting the sub-session on this topic, you need to learn properly the **topic 4 of session 2** in **the vegetable gardening handbook** to have the sound knowledge and skills.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 5: FARM MANAGEMENT ANALYSIS (FMA) ON SEED SOWING AND CROP CULTIVATION OPERATIONS

Duration: 30 minutes

Materials: Poster paper, marker, observation questionnaire, scotch tape.

Training Method: Group work, farm visit, problem identification, group presentation and open discussion

Note: Before the visit, select a farm belonging to an FNS member and a farm belonging to a non-FNS member.

Discussion Questions:

- Does everyone actually practice the systems for growing vegetables that we just discussed?
- What are the general problems common to vegetable farming?
- Is your vegetable farm ideal? If not, why not?
- Can you provide some information and examples of the present condition of the farms being visited?
- What are some problem areas of the farms, based on the collected information?
- Can you suggest some solutions for addressing the identified problems?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 2** in the **Vegetable Gardening Handbook**.
- Ask the participants to visit two pre-selected vegetable farms (one improved and one traditional) in three to four small groups. Select a group leader for each group.
- Provide each group with a questionnaire. Help them collect information, if necessary.
- Ask them to observe properly and take necessary notes.
- After returning from the visit, ask the subgroups to sit separately and identify two positive aspects and two
 problems of the farms they visited, based on the collected information and samples. Ask them to make
 suggestions for addressing the identified problems.
- After the presentation of all the subgroups ask all the subgroups to provide their opinion. Add if there is anything to add. Summarize.
- Concentrate on the approach "learning by doing" and "seeing is believing."
- Do not answer the questions by yourself if the participants fail to answer.
- Facilitate the members in the analysis and decision-making process.
- Ask follow-up questions, leading the discussion in a way so that the participants are able to give the correct answers.

TOPIC 6: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill level in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions: Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What did you learn?
- Were the discussions/activities on the topics adequate?
- What else could be discussed/performed?
- Can you summarize today's learning?
- What is your plan to put this knowledge into practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase questions, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask questions and lead the discussion in a way so that the participants are able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly, but without humiliating the others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants; if taking too much time, tell them the answers to reinforce the learning.
- Together with the participants, sum up today's learning:
 - o Methods of sowing seeds/planting seedlings in the beds and pits;
 - Where, when and why to apply the compost and/or organic fertilizer, what should be the amount and what techniques to follow;
 - \circ $\;$ How and why to irrigate the garden and drain out the excess water;
 - \circ $\;$ How and why to weed, prune and mulch;
 - \circ $\;$ Why and how to thin, stake, fill gaps, and build fencing; and
 - Importance of breastfeeding of infants from birth to six months, and diet for lactating mother and the linkages with cultivation of diversified vegetables at the homestead.

TOPIC 7: CONCLUSION AND PLANNING FOR THE NEXT SESSION

Agenda Items:

- Identify the topic for the next session and the reason for choosing that topic
- Set the next session's date, time, and venue
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session.

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out their opinions about the next session:

- What should we discuss and/or to be performed in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session and what should be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics for the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue to ask follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Together with the members, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Request that the day leader invite FNS members prior to next session and ask that others help her by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants on the topics so that they become capable of getting year-round good production, keeping both the soil and family members healthy using organic manure, and establishing proper hygiene practices.

Session Objectives

At the end of this session, participants will be able to:

- Identify major nutritional shortages for vegetables
- Improve soil health in homestead area
- Apply organic fertilizers on the surface
- Prepare compost/manures
- Understand the importance of organic manures
- Identify the essential hygiene actions

Duration: 2.00 - 2.30 hours

Venue: Noise free place under a shade near any vegetable garden.

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, and ice breakers
- Short discussion on the goal and objectives of today's session
- Brief discussion on and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask the following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session.

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- How many of them were able to use the learning/experiences from last session?
- Who is the leader of the day and what will be her role?
- What will be discussed today: topics, goal, objectives and other items?

- Ensure that the seating arrangement is in a U-shape and that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Involve the leader of the last session, and summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader and explain her role.
- Ask the day leader to present the day's program schedule including the session goal and objectives. This should be done on poster paper before coming to the session.

TOPIC 2: INTRODUCTION TO KEY ESSENTIAL HYGIENE ACTIONS

Agenda Items:

- Importance of handwashing
- Handwashing methods that don't use a lot of water
- Importance and methods of keeping containers and food clean
- Family members who should practice essential hygiene

Duration: 20 minutes

Materials: Tippy tap instrument

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- When do you usually wash your hands?
- Why is handwashing necessary?
- What happens if you do not wash your hands?
- How do you get water to wash your hand? Is it easy?
 - Demonstrate tippy tap preparation and installation.
- Why is it important to keep containers and food clean? How can you keep them clean?

Remind participants to practice handwashing after bed preparation, sowing seed, mulching etc. Tell participants that this type of work spreads germs or you can have contact with harmful substances and can lead to the loss of all the nutrients, which they have worked hard to get.

- Before conducting the sub-session on this topic, read the **Practices 17, 18, 19,** and **20/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: CROP CULTIVATION OPERATIONS IN VEGETABLES FARMING

Agenda Items:

- Importance and techniques of fencing, weeding, thinning, gap filling & trail
- Importance and techniques of mulching:
- Importance and techniques of irrigation and drainage of excess water
- Importance and techniques of pollination

Duration: 20 minutes

Inputs/Materials: Net, stake, weeder, male& female flower (sweet gourd), seeds, seedlings, organic fertilizers, hyacinth, cow dung, ash.

Training Methods: practical session, participatory discussion, question and answers

Discussion with Participants:

[Ask participants the below questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers]

- What is the importance of gap filling and fencing?
- Do you irrigate your garden? How?
- How and why should you be weeding?
- Do you do mulching? If yes, why and how? If not, why?
- Why and how should you be pruning, stalking and thinning?
- Why and how should you prepare irrigation and drainage of excess water?
- Do you have any experience with hand pollination? How do you do that?

To make the above discussion participatory and thus to create an enabling environment for effective learning for the participants, you are advised to follow the notes below.

- Before conducting the sub-session on this topic, you need to learn properly the **topic 4 of session 2 in the vegetable gardening handbook to** have the sound knowledge and skills.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 4: SIGNS AND SYMPTOMS OF DEFICIENCIES OF DIFFERENT ESSENTIAL NUTRITION ELEMENTS IN VEGETABLE FARMING

Agenda Items:

- Importance of different nutrients for good production
- Signs and symptoms of different nutrients deficiencies in vegetable crops
- How to overcome the problem of nutrient deficiencies
- Techniques of fertilizer application

Duration: 20 minutes

Materials: Different vegetables with nutritional/organic fertilizer deficiency

Training Method: Practical session, participatory discussion, questions and answers,

Discussion Questions: Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers.

- How do vegetables use nutrients to increase production?
- How do you know when there are different nutrient deficiencies in vegetables?
- How can you recover those nutrient deficiencies?
- After sowing seeds/seedlings/saplings, do you apply fertilizers to the surface?
- If yes, what fertilizers, in what quantity, and how many days after planting?
- What is the technique for the preparation of organic manure (compost)?
- Why is it important to use organic manure?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 3** in the **Vegetable Gardening Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 5: PREPARATION OF ORGANIC MANURE/COMPOSTING

Agenda Items:

- Importance of compost in maintaining good soil health
- How to prepare and use compost
- Practical work: preparation of compost by the participants

Duration: 30 minutes

Materials: Spade, homestead wastage, poultry litter, cow dung, water hyacinth, crop residue, polythene / straw or other roofing material, bamboo, and rope

Training Method: Practical session, participatory discussion, questions and answers

Discussion Questions: Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:

- What is the importance of compost?
- How can you easily prepare compost in the homestead area?
- Why should you prepare two pits for compost preparation?
- Why should you provide shade for a compost pit?
- Why should you prepare a dam around the compost pit?
- How many days should you wait to use the compost in a homestead garden?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 3** in the **Vegetable Gardening Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 6: FMA ON SOIL HEALTH MANAGEMENT AND USE OF ORGANIC MANURE

Duration: 30 minutes

Materials: Poster paper, marker, scotch tape, observation questionnaire, transparent polythene

Training Method: Group work, farm visit, problem identification, group presentation, opens discussion

Discussion Questions:

- Are you practicing the systems for growing vegetables that we just discussed?
- What are the general problems common to vegetable farming?
- Is your vegetable farm ideal? If not, why not?
- What information did you collect during the farm visit? Can you provide examples of the present condition of the farms you visited?
- What are some of the problems you saw during the farm visit, especially those related to soil health?
- What are some solutions for addressing the identified problems?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 3** in the **Vegetable Gardening Handbook**.
- Ask the participants to visit two pre-selected vegetable farms (one improved and one traditional) separately in three or four small groups. Select a group leader for each group.
- Provide each group with an observation sheet. Ask them to answer the questions on the sheet. Help them collect information if necessary.
- Tell them that organic and inorganic fertilizers in the pits/beds are properly done in the farm that you are going to visit today. If they are not, ask them to identify the problems and collect examples. If required ask the farm owner.
- Ask them to observe properly and take necessary notes.
- After returning from the visit, ask the subgroups to sit separately and identify two positive aspects and two problems they saw at the farms they visited farms, based on the collected information and samples. Ask them to make decisions for addressing the identified problems.
- After the presentation of all the subgroups ask all the subgroups to provide their opinion. Add if there is anything to add. Summarize.
- Concentrate on the approach "learning by doing" and "seeing is believing."
- Do not answer the questions by yourself if the participants fail to answer.
- Facilitate the members in analysing and decision making process.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 7: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' knowledge and skill level in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives, and to reinforce the learning.

- What did we discuss today? What did you learn?
- Were the discussions/activities on the topics adequate?
- What else could be discussed or demonstrated?
- Can you summarize today's learning?
- What is your plan to put this learning into practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase questions in an encouraging way, like: "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants; if this takes too long, tell the group the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - o Identification of major nutritional shortages for vegetables
 - \circ $\;$ Ways to improve soil health in the homestead area
 - Application of organic fertilizers on the surface
 - Preparation of compost/manures
 - Importance of organic manures
 - Importance and techniques of essential hygiene practices in family life as well as during vegetable gardening practices at the homestead level

TOPIC 8: CONCLUSION AND PLANNING FOR NEXT SESSION

Issue to be discussed:

- Set the topic of the next session and explain the reason for choosing that topic
- Set the next session's date, time, venue and day leader
- Select the next session's day leader and discuss her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to know their opinions about the next session"

- What should we discuss and/or demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What should be her role?
- Do you have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics for the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose, but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Together with all participants, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Request the day leader to invite FNS members to the next session, and ask others to help her by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal

The goal of this session is to develop the knowledge and skills of the participants so that they become capable of practicing IPM and are able to maintain soil health, use products that are safe for consumption, and reduce human and environmental health hazards.

Session Objectives

At the end of this session, participants will be able to understand:

- agronomic control methods;
- mechanical control methods;
- biological control methods;
- chemical control methods; and
- complementary feeding for children ages 6-11 months.

Duration: 2.00 – 2.5 hours

Venue: A shady, quiet place near any vegetable garden

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, ice breakers
- Short discussion on the goal and objectives of today's session
- Brief discussion on and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask the following questions to create a learning environment, summarize the last session's learning and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed and done in the last session?
- How many of you were able to use the learning/experiences from last session?
- Who is the day leader? What is her role?
- What topics, goals and objectives will be discussed today?

- Arrange seating in a U-shape and make sure that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household and follow-up visits.
- Introduce the day leader and explain her role.
- Ask the day leader to present the day's program schedule including the session goal and objectives. This should be done on a piece of poster paper before coming to the session.

TOPIC 2: COMPLEMENTARY FEEDING FOR CHILDREN AGES 6-11 MONTHS

Agenda Items:

- Introduce the importance of complementary feeding from the age of 6 months
- Identify a variety of foods that could be included in the diet
- Explain how often and how much children ages 6-11 months should eat

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- What did your child eat yesterday?
- If you breastfeed your baby and he/she is growing well, why should you give him/her other food?
 - Responses could include: to grow and develop and to learn. Tell participants that in addition to breast milk, babies need solid food in order to grow, become more active and to develop mentally.
- How do you decide what kind of foods to give your baby?
 - \circ $\;$ Show them flash cards and discuss the key and additional messages in detail.
- Ask the mothers to look at the foods and let them decide whether this is a good complementary food.
 - Collect some cooked food such as rice, vegetables, fish, meat, eggs or dal from one participant before the session and demonstrate how much and how often children should eat these foods.
- What kinds of foods make good snacks?
 - Mashed ripe banana, papaya, mango and other fruits, fried potato, sweet gourd, payesh, and cake (homemade).
- Thinking about what we have learned, do you think the food your children had yesterday made up nutritious complementary meals?
- Why is it good for pregnant woman and young children to eat a variety of vegetables?
 - Ask them whether they cultivate vegetables, especially the nutritious vegetables in their homestead.
 - Tell them today we will learn how we can cultivate vegetables and get plant protein and a variety of nutritious vegetables throughout the year.

- Before conducting the sub-session on this topic, read **Practices 8, 9,** and **10/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: PESTS, DISEASE AND INTEGRATED PEST MANAGEMENT (IPM)

Agenda Items:

- Identification of pests
- Definition of disease
- Explanation of how to control pests for vegetable production
- Definition of integrated pest management
- Explanation of the different methods of IPM

Duration: 10 minutes

Materials: Infected fruits and leaves

Training Method: Practical session, open discussion and observation and demonstration as required

Discussion Questions:

Ask the following questions to create a learning environment, summarize the last session's experiences, as required and prepare them to initiate today's session:

- What do you know about pests?
- What do you know about what causes ruined or damaged vegetables?
- If the farmers/participants face difficulties to tell about pests, you can start discussion in this way; what are the different types of damage that can happen to vegetables and why?
- What do you know about integrated pest management? What are the useful aspects of the methods? Have a brief participatory discussion.

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 4** in the **Vegetable Gardening Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 4: PRACTICING IPM AND THE BENEFITS

Agenda Items:

- Agronomic control methods
- Mechanical control methods
- Bionatural management and biological methods
- Chemical control methods

Duration: 50 minutes

Materials: Poster paper and marker pens, infected fruits and leaves, soap/detergent powder, plastic bottle, neem leaves, tomato plants, belladonna plants

Training Method: Open discussion and observation and demonstration as required

Discussion Questions:

Ask the following questions to create a learning environment, summarize the last session's experiences, as required and prepare them to initiate today's session:

- How can insects be controlled? Discuss the mechanical control methods along with the participants' answers.
- Are all the insects that you have collected harmful?
- Which ones are useful insects?
- What do you know about controlling insects with fluids from plants?
- Can insects be controlled by birds?
- How do you feel if because of our actions harmful insects can't breed anymore?
- Why do diseases strike?
- What are the reasons that plants can be weak?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 4** in the **Vegetable Gardening Handbook.** Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 5: FMA ON USE OF IPM VERSUS TRADITIONAL TECHNIQUES

Duration: 30 minutes

Materials: Poster paper and marker pens, infected fruits and leaves, soap/detergent powder, plastic bottle (voly), neem leaves, tomato plants, belladonna plants, observation questionnaire

Training Method: Practical session, demonstration, Participatory discussion, questions and answers

Discussion Questions:

- How healthy were the plants?
- What samples of insects or disease stricken leaves/plants did you collect?
- What weeds did you observe?
- Were the vegetables planted in rows?
- How close were the plants to one another?
- Was the soil moist or dry?

- How much sun shone on the garden?
- If pits were used for farming, how big were they? How deep?
- Did the farmers use chemical or organic fertilizer?
- Were any pesticides used?
- Were any herbal methods used to control pests?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 4** in the **Vegetable Gardening Handbook**.
- Ask the participants to visit one pre-selected vegetable farm (one improved and one traditional) separately in four small groups. Select a leader for each group.
- Provide each group with an observation sheet, and ask them to answer the questions. Help them collect information if necessary.
- Ask them to observe properly and take necessary notes.
- Tell them that organic and inorganic fertilizers in the pits/beds are properly done in the farm that you are going to visit today. If this is not the case; participants should identify the problems and collect examples. If necessary, ask the farm owner for assistance.
- Invite the groups to present their work showing the poster and collected samples one by one. The presenter can provide some analysis or explanation about the collected samples. After the presentation the facilitator should invite the other groups to participate in an open discussion. If required the facilitator can also discuss her/his experience with them. Thank the group and encourage them after the group presentation is over.
- After the group work, start a participatory discussion on various pest control methods in line with the group presentations.
- Concentrate on the approach "learning by doing" and "seeing is believing."
- Do not answer the questions by yourself if the participants fail to answer.
- Facilitate the members in analysing and decision making process.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.
- 36 | Essential Nutrition Actions, Essential Hygiene Actions, and Homestead Food Production

TOPIC 6: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What did you learn?
- Were the discussions and activities on the topics adequate?
- What else could be discussed or demonstrated?
- Can you summarize the day's learning?
- What is your plan to put this learning into practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase questions in an encouraging way, like: "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.
- Thank the farmers who answered properly, but do not humiliate the others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants. If this takes too much time, tell them the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - Agronomic methods of pest control
 - Mechanical methods of pest control
 - Biological methods of pest control
 - Chemical methods of pest control
 - Importance and procedures of complementary feeding practice for children ages 6-11 months and the linkages with vegetable gardening practices at the homestead level

TOPIC 7: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Set the topic for the next session and explain the reason for choosing that topic
- Set the next session's date, time, venue and day leader
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session.

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out their opinions about the next session:

- What should we discuss and/or demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What should be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics for the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to find out participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader make any necessary arrangements.
- With all participants, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session, and ask them to be fully prepared and on time.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of participants on the topics so that they become capable of producing seeds needed for the next cropping cycle, ensuring the continuation of year-round production of nutritious vegetables.

Session Objectives

At the end of this session, participants will be able to:

- identify the difference between good and poor quality seeds;
- identify the different types of seeds;
- understand the methods for growing quality seeds;
- know the techniques of sorting quality seeds, collecting and storing those seeds;
- understand complementary feeding for children ages 12-24 months.

Duration: 2.00 – 2.5 hours

Venue: A quiet, shady spot near any vegetable garden

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions and ice breakers
- Short discussion about the goal and objectives of today's session
- Brief discussion on and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed and/or demonstrated in the last session?
- How many of you were able to use the learning/experiences from last session?
- Who is the day leader and what will be her role?
- What topics, goals, and objectives will be discussed today?

- Ensure that the seating arrangement in a U-shape and make sure the participants and the facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the day leader of the last session to help summarize the lessons from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader and explain her role.
- Ask the day leader to present the day's program schedule including the session goal and objectives. This should be done on the poster paper before coming to the session.

TOPIC 2: COMPLEMENTARY FEEDING FOR CHILDREN AGES 12-24 MONTHS

Agenda Items:

- Problems with complementary feeding and ways to overcome them
- Helpful ways of ensuring children get sufficient, diversified food
- Feeding a child during and after an illness

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

• What kind of problems do you find with your children when you introduce new food?

Responses may include:

- o Child prefers chips and sweets and does not want to eat a meal.
- Mother is busy and unable to take a long time to feed the child.
- If the child is sick and has no appetite.

Discuss solutions such as:

- Making food tasty and look good.
- Allowing time for eating and being patient, letting the child eat at the same time as the rest of the household.
- Not giving chips, chocolates, or sweets, which can cause the loss of appetite.
- How much and how often should children ages 12-24 months eat?
 - Show the 250 ml bowl with cooked food for different portions for the different age groups to the mother and explain.
- Why is it important to continue to breastfeed the child?
- How do you know if a child is sick? What are the signs?

Some signs of childhood illness include:

- o The child is unhappy and listless; crying and/ or inactivity and passivity.
- Inability or unwillingness to breastfeed or drink.
- o Unwillingness to eat or total loss of appetite.
- Child gets diarrhoea.
- Child gets fever.

- During and after sickness should you stop, decrease or increase feeding for a child? Why?
 - o Explain what children should eat when they are sick, and how much they should eat.

Mention:

- \circ $\,$ The importance of handwashing before feeding the child: and
- The importance of washing any tools and utensils used for caring for the sick child with soap and water.

- Before conducting the sub-session on this topic, read the **Practices 9**, **11**, and **12/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: SELECTION OF QUALITY SEEDS

Agenda Items:

- Difference between good and poor quality seeds
- Types of seeds
- Treating the seeds

Duration: 30 minutes

Materials: Seeds for four or five types of vegetables

Training Method: Practical demonstration/group work and participatory discussion

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- Which aspects should you focus on to identify good seeds?
- At present, what types of seeds do you use for farming?
- How many types of seeds are available in the market?
- If other types of bean plants are near the *kartiq jol* bush, plants or pits, will there be contamination? How can you maintain the purity of *kartiq jol* bean seeds?

- Before conducting the sub-session on this topic, read the **Topic 3** of **Session 5** in the **Vegetable Gardening Handbook.**
- Divide the participants into four groups and ask them to select a leader.
- Give each team a different type of seeds and ask the teams to separate good and bad seeds and other objects (other seeds, soil, hay, etc.) from the sample seeds according to their observations and opinions.
- After the groups have sorted the seeds, ask participants the discussion questions and listen to the answers.
- Do not answer the questions by yourself if the participants fail to answer.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 4: COLLECTING AND STORING SEEDS

Issue to be discussed:

- Collecting vegetable seeds
- Storing vegetable seeds

Duration: 40 minutes

Materials: Different types of vegetable seeds, pots, polythene , coal, neem leaf, tobacco leaf, belladonna leaf and naphthalene

Training Method: Practical session, question answer and open discussion

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:

- Do you decide which fruit and seeds you will collect before the harvest?
- What should be the size and shape of the seeds you collect?
- When should you collect fruits from the plant?
- How do you clean and dry seeds after collecting fruits?
- How do you know if seeds have been well dried?
- Where can you keep the dried seeds?
- Can various species of same vegetables be kept in the same pots?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 3** in the **Vegetable Gardening Handbook**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion so that the participants become able to give the correct answers.

TOPIC 5: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What have you learned?
- Were the discussions and activities on the topics adequate?
- What else could be discussed or demonstrated?
- Can you summarize the day's learning?
- What is your plan to put this learning into practice?

- Direct your questions to the group rather than asking one person.
- Remember to phrase questions in an encouraging way, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answer from participants. If this takes too long, tell them
 the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - o Benefits of good seeds and disadvantages of poor quality seeds
 - Difference between good quality and poor quality seeds
 - o Methods for growing quality seeds
 - Techniques of sorting quality seeds, collecting and storing those seeds
 - Importance and procedures of complementary feeding practice for children ages 12-24 months and the linkages with vegetable gardening practices at the homestead level

TOPIC 6: CONCLUSION AND PLANNING OF NEXT SESSION

Agenda Items:

- Set the topic for the next session and the reason for choosing the topic
- Set the next session's date, time, and venue
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session.

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to know their opinions in relation to next session.

- What should we discuss and/or demonstrate at the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What will be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue and the day leader. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Request that day leader invite FNS members to the next session, and ask that they assist her in this regard by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to reinforce nutrition and hygiene information and to grow the habit of practicing the messages during the sessions so that the participants are well informed about these nutrition messages and can continue the practices at the household level.

Session Objectives

At the end of the session, participants will be able to explain the following key nutrition practices:

- nutrition during pregnancy;
- nutrition during lactation;
- nutrition for children under 6 months of age;
- nutrition for children ages 6-11 months;
- nutrition for children ages 12-24 months; and
- nutrition during and after a child's illness.

At the end of the session, participants will be able to explain the following hygiene practices:

- handwashing before cooking;
- handwashing before feeding the child;
- handwashing after using the toilet;
- keeping cooking utensils clean; and
- using a sanitary toilet (adults and children).

Duration: 2.00 - 2.5 hours

Venue: Courtyard of a FNS household preferably with pregnant and lactating women (PLW)/children under two years old

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions and ice breakers
- Short discussion on the goal and objectives of today's session
- Brief discussion on and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- How many of you were able to use the learning/experiences from last session?
- Who is the day leader and what is her role?
- What topics, goal, objectives will be discussed today?

- Ensure that the seating is arranged in a U-shape and that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader and explain her role.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: KEY MESSAGES AND PRACTICES OF ENA/EHA

Agenda Items:

- Nutrition of a pregnant women
- Breastfeeding and nutrition during lactation
- Complementary feeding for children ages 6- 11 months and 12- 24 months
- Importance of vitamin A and how to prevent anemia
- Essential hygiene actions and use of tippy taps

Duration: 40 minutes

Materials: Tippy tap preparing instruments, a 250 ml bowl, foods to demonstrate complementary feeding

Training Method: Group work, participatory discussion, questions and answers

Group Work:

(Divide the participants into three groups. Each of the groups should cover two issues.)

- **Group One:** (1) Nutrition of pregnant women (Illustrations 1, 2 and 3) and (2) Breastfeeding and nutrition during lactation (Illustrations 4, 5, 6 and 7).
- **Group Two**: (1) Complementary feeding for children ages 6-11 months (Illustrations 8, 9 and 10) and (2) Complementary feeding for children ages 12-24 months (Illustrations 9, 11, 13).
- **Group Three**: (1) The importance of vitamin A and how to prevent anemia (Illustrations 14 and 15) and (2) Essential hygiene actions and use of tippy taps (Illustrations 16, 17, 18, 19 and 20).

To know what the participants learned in group works, in each group, ask the participants the questions:

- What is the current situation in their family on their given topic?
- Do they face any difficulties to practice those behaviors?
- How they deal with/overcome if any problem arises in relation to practice?

TOPIC 3: GROUP WORKS

Duration: 70 minutes

After all presentations, as the groups to do the followings:

- **Group 1**: Ask to collect different foods which are appropriate for pregnant and lactating women. (give hints- try to prepare pregnant woman's meal with diversified food)
- **Group 2**: give them 250 ml bowl and ask them to demonstrate three amount of Complementary food for different age.
- **Group 3**: Ask mothers to demonstrate how to prepare a Tippy Tap.

While 1 group presents their work, ask other 2 group to give their comments/feedbacks, etc.

TOPIC 4: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning.

- What we have discussed today? What did you learn?
- Were the discussions and activities on the topics adequate?
- What else could be discussed or demonstrated?
- Can you summarize today's learning?
- What is your plan put this learning into practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase questions in an encouraging way, such as "Can we recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answer from participants; if taking too much time, tell them the answers to reinforce the learning.
- Together with the participants, sum-up today's learning:
 - Importance and practices of nutrition action during pregnancy and lactation.
 - o Importance and practices of nutrition action for children under the age of 6 months.
 - Importance and practices of nutrition action for children ages 6-11 and 12-24 months.
 - Importance and practices of nutrition action during and after illness of children.
 - Importance and practices of handwashing before cooking, before feeding the child, after using the toilet (adults and children), and keeping cooking utensils clean.

TOPIC 5: CONCLUSION AND PLANNING FOR NEXT SESSION

Issue to be discussed:

- Set the topic of the next session and the reason for choosing that topic
- Set the next session's date, time and venue
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out know their opinions about the next session.

- What should we discuss and/or to demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What will be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members prior to next session, and request that others assist her in this regard by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

Module 2: Native Chicken Rearing

SESSION 1: BASIC TECHNIQUES FOR LOCAL CHICKEN REARING

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants so that they become motivated and capable of increasing poultry and egg production and ensure inclusion of animal protein in the family diet, especially for mothers and children.

Session Objectives:

At the end of this session, participants will be able to:

- explain the importance of native chickens and the improved management for increasing their production;
- demonstrate the methods and basic tasks for separating chicks from the mother; and
- understand women's nutrition during pregnancy.

Duration: 2.00 - 2.5 hours

Venue: Home or farm of a good chicken farmer

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions and ice breakers
- Short discussion on the goal and objectives of today's session
- Brief discussion about the adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session (if this is the second session)?
- How many of you were able to use the learning/experiences from last session?
- Who is the day leader and what will be her role?
- What topics, goal and objectives will be discussed today?

- Create a U-shape seating arrangement, and make sure that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader and explain her role.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: INTRODUCTION TO WOMEN'S DIET DURING PREGNANCY

Agenda Items:

- Importance of a diversified diet for pregnant women
- Importance of iron supplementation during pregnancy
- Importance of using iodized salt for pregnant women and all family members

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- Should a pregnant woman eat more or less often than someone who is not pregnant? Why?
- Which types of foods should a pregnant woman eat?
 - Demonstrate different kinds of vegetables, fishes, and pulses from their own production. Tell them that they should prepare their meal with a variety of foods that are available in their homestead, including both plant and animal source food.
- Why is animal protein good for both a pregnant woman and baby?
 - o Ask them if anyone raises small animals, especially poultry birds, in their homestead.
 - Tell them today we will learn how to rear poultry birds and get animal source food.
- Why is iron supplementation necessary for pregnant women, why should all pregnant women take supplements?
 - Explain that besides supplementation, you can get iron from animal sources foods like eggs, liver produced in your homestead.
- Why should pregnant women go to health facility for antenatal care checkups? How frequently?
- Why and how should you use iodized salt?
- Where can you get the iodized salt and can you preserve it?
 - Explain the sources of iodine, the methods of cooking and preservation, and how it will help improve women's nutrition during pregnancy and lactation.

- Before conducting the sub-session on this topic, read the **Practices 1**, **2**, and **3/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 3: IMPROVED MANAGEMENT IN INCREASING CHICKEN EGG PRODUCTION

Agenda Items:

- Importance of native chickens
- Importance of improved management in rearing native chickens
- The production cycle of native chickens

Duration: 40 minutes

Materials: FNS module, poster paper, marker and hard clip

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:

- Why should you rear native chickens?
- What are the profitable aspects of rearing native chickens?
- How often can native chickens lay eggs?
- How do you increase the number of eggs of a native chicken?

- Before conducting the sub-session on this topic, read the **Topic 3** of **Session 1** in the **Native Poultry-Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 4: SEPARATION OF CHICKS FROM THE MOTHER (BROODY HEN)

Agenda Items:

- Separating chicks from the mother
- Vaccination and medication

Duration: 30 minutes

Materials: FNS module, bamboo basket, gunny bag, straw and sample of vitamins

Training Method: Participatory discussion, demonstration, question & answer, and practical work

Discussion Questions:

Ask the following questions to find out the levels of understanding and experiences. Do not ask direct questions like a teacher, and instead use participatory discussion methods.

- Do you raise chickens by separating the chicks from the mother?
- What is the benefit of separating chicks from the mother?
- Do you vaccinate your chicks?
- Do you provide any medication to the chicks?

- Before conducting the sub-session on this topic, read the **Topic 4** of **Session 1** in the **Native Poultry-Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 5: SESSION EVALUATION AND REVIEW

Issue to be discussed:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What did you learn?
- Were the discussions and activities on the topics adequate?
- What else could be discussed or demonstrated?
- Can you summarize today's learning?
- What is your plan to put this learning into practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase questions in a way that encourages participation, for example: "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Together with the participants, summarize the day's learning. Facilitate the discussion to find out the correct answers from participants; if this takes too long, tell them the answers to reinforce the learning.
 - o Importance of rearing native chickens, especially in relation to nutrition
 - o Techniques to follow for increasing egg production by native chickens
 - o Techniques to increase egg-laying cycle of native chickens
 - Importance of and techniques for separating the chicks from their mother
 - o Importance and schedule of vaccination and medication as required
 - o Women's diet during pregnancy and linkages with native chicken rearing

TOPIC 6: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Announce the topic for the next session and explain the reason for choosing that topic
- Set the next session's date, time, and venue
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to know their opinions about the next session.

- What should we discuss and/or to demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What will be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to find out participants' opinions and do not impose your idea or plan.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Together with all participants, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session and request that the others assist her by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants about the topics so that they become capable of keeping coops healthy for poultry as well as reducing human health hazards and increasing egg production for family consumption.

Session Objectives:

At the end of this session, participants will be able to explain the:

- Use of improved housing system for chickens;
- Improved methods for rearing laying hens; and
- Breastfeeding of children up six months of age and nutrition of lactating mothers.

Duration: 2.00 – 2.5 hours

Venue: Home or farm of a good chicken farmer

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions and ice breakers
- Short discussion about the goals and objectives of today's session
- Brief discussion about and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed and demonstrated in the last session?
- How many of you were able to use the learning from last session?
- Who is the day leader and what will be her role?
- What topics, goal, objectives will be discussed today?

- Ensure that the seating arrangement is in a U-shape and that the participants and the facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her role and allow her to facilitate the session.
- Ask the leader of the day to present the day's program schedule including the session goal and objectives. This should be done on the poster paper before coming to the session.

TOPIC 2: INTRODUCTION TO BREASTFEEDING OF CHILDREN FROM BIRTH TO SIX MONTHS, AND DIET FOR LACTATING MOTHERS

Agenda Items:

- Significance of early initiation of breastfeeding
- Importance of exclusive breastfeeding for babies
- Importance and way of ensuring the diet of lactating mothers

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- What do you give to your baby immediately after birth?
 - Explain the importance of early initiation of breastfeeding and disadvantages of other food, such as that it can be contaminated with germs, and that infants cannot easily digest other foods.
- Are you having any difficulties breastfeeding you baby?
 - If possible demonstrate ideal positioning and attachment for breastfeeding; if not possible during the session, can be done after session counseling and/or during home visits.
- How long should mothers exclusively breastfeed?
- If you don't have enough milk, what do you have to do?
 - Explain that it is important to feed the baby frequently in the correct position and attachment so that the mother can produce enough and thus the baby can get enough milk.
- What are the advantages of breastfeeding for both mother and child?
- What should lactating mothers eat? Why is this diet important?
 - Demonstrate the type and amount of various foods, cooked and raw, which should be included in a pregnant woman's diet.
- Why is animal protein good for lactating mothers and ultimately for the baby?
 - Does anyone raise small animals, especially poultry birds, in their homestead?
 - Explain that today we will learn how to raise poultry birds and get animal source foods.
- Why and when do lactating mothers need to take iron and vitamin A supplements?
 - Explain the sources of iron and vitamin A, the methods of cooking and preservation, and how these nutrients will help improve women's nutrition during pregnancy and lactation.

- Before conducting the sub-session on this topic, read the **Practices 4, 5, 6**, and **7/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: IMPROVED HOUSING SYSTEM FOR NATIVE CHICKENS

Agenda Items:

- Improved housing for the raising of native chickens
- How to build a multi-tiered shed/coop

Duration: 20 minutes

Materials: Photo of coop, flip chart, shed for chickens

Training Method: Site visit and open discussion

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:

- Where do you clean the chickens?
- What features should be included in an ideal chicken coop?
- Do you have any ideas about multi-tier chicken coops?
- What are the advantages of multi-tier coops?
- How do you make a multi-tier coop?
- What local materials can be uses to build a multi-tiered coop?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 2** in the **Native Poultry Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 4: IMPROVED METHODS FOR RAISING THE LAYING HEN

Agenda Items:

- Feed and drinking water system for laying hens
- Vaccination or drug/vitamin supply
- Making egg laying boxes
- Cock rearing

Duration: 20 minutes

Materials: Growing hen, laying hen, sample of feed, hazal for egg laying, vegetable residue.

Training Method: Participatory discussion, demonstration, question & answer, and practical work.

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:

- What do you feed the chickens?
- How many times a day do you feed the chickens?
- Do you provide vaccinations or drugs/vitamins to egg laying hens?
- Do you rear cocks for collecting eggs for hatching?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 2** in the **Native Poultry Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 5: FMA ON POULTRY SHED: IMPROVED VERSUS TRADITIONAL

Agenda Items:

- Visit chicken coops in the small groups that were created in the last session
- Collect information and examine the present situation of the coop visited
- Identify any problems in the coop that is visited
- Make suggestions for addressing the identified problems
- Give a presentation about the problems that were identified, and write suggestions for solutions on poster paper

Duration: 40 minutes

Materials: Brown paper, poster paper, marker pen and observation questionnaire

Training Method: Field visit, group work, and presentation.

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:

- What is the required floor space for each chicken?
- Should you use antiseptics in your chicken coop?
- Should you use a feeder and provide water for chickens?
- What are the advantages of multi-tiered coops?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 2** in the **Native Poultry Rearing Handbook**.
- Ask the participants to visit chicken coops at pre- selected households (one improved and one traditional) separately in three or four small groups. Select a leader for each group.
- Provide each group with an observation sheet, and ask them to answer the questions. Help them collect information if necessary.
- Ask them to properly observe the chicken coops and take the necessary notes.
- After returning from the visit, ask the subgroups to sit separately. Ask them to write down their observations in relation to positive aspects and identified problems.
- Each group should make suggestions for addressing the problems they identified problems, and should also discuss the positive aspects of the farms they visited.
- After each group has presented, ask the other groups to provide feedback. Add if there is anything needs to be added and then summarize the learning.
- Concentrate on the approach "learning by doing" and "seeing is believing."
- Do not answer the questions by yourself if the participants fail to answer.
- Facilitate the members in analysing and decision making process.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 6: SESSION EVALUATION AND REVIEW

Issue to be discussed:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What did you learn?
- Were the discussions and activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize today's learning?
- What is your plan to put this learning in to practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.
- Thank the farmers who answered properly, but without humiliating the others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants; if this takes too long, tell them the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - Importance and practicing use of improved housing system for the chickens
 - o How to build a multi-tiered shed/coop for better utilization of available species
 - Importance and techniques in improved methods for raising the laying hen
 - o Importance and schedule of vaccination or drug/vitamin supply as required
 - Importance of breastfeeding children from birth to six months, diet for lactating mothers and the linkages with native chicken rearing practices.

TOPIC 7: PLANNING THE NEXT SESSION AND CONCLUSION

Agenda Items:

- Set the topic of the next session and the reason for choosing that topic
- Set the next session's date, time, and venue
- Select the next session's day leader and discuss her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out their opinions about the next session:

- What should we discuss and/or demonstrated in the next session, why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session and what should be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to find out participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Request that the day leader make any necessary arrangements
- Together with all the participants, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session, and request that the others assist her by being fully prepared and on time to the session.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants so that they become capable of getting more chicks through the use of a *hajol* and early separation technique, as well as maintaining health and hygiene practices to avoid potential health hazards for both poultry and the people.

Session Objectives:

At the end of this session, participants will be able to explain:

- how to select broody hens and eggs for hatching and the factors to consider during the incubation period;
- food management and care of broody hens; and
- key essential hygiene actions

Duration: 2.00 – 2.5 hours

Venue: Home or farm of a good chicken farmer

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, ice breakers
- Short discussion about the goal and objectives of today's session
- Brief discussion about and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask the following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- How many of you were able to use the learning from last session?
- Who is the day leader and what is her role?
- What topics, goal, objectives will be discussed today?

- Ensure that the seating arrangement is in a U-shape, and that the participants and the facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader and explain her role.
- Ask the day leader to present the day's program schedule including the session goal and objectives. This should be done on the poster paper before coming to the session.

TOPIC 2: INTRODUCTION TO KEY ESSENTIAL HYGIENE ACTIONS

Agenda Items:

- Emphasize the importance of handwashing
- Introduce an easy handwashing method that uses minimum water
- Explain methods of keeping containers and food clean and why it is important
- Identify family members who should practice the essential hygiene actions

Duration: 20 minutes

Materials: Tippy tap instrument

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- When do you usually wash your hands?
- Why is handwashing necessary?
- What happens if you do not wash your hands?
- How do you get water to wash your hands? Is it easy?
 - Demonstrate tippy tap preparation and installation
- How can you keep containers and food clean? Why is this important?

Remind participants to practice handwashing after feeding broody, cleaning the poultry shed, etc. Tell participants that this type of work spreads germs or you can have contact with harmful substances and can lead to the loss of all the nutrients, which they have worked hard to get.

- Before conducting the sub-session on this topic, read **Practices 17, 18, 19**, and **20/Flash Card** in the **Community Worker Handbook**.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 3: SELECTION OF BROODY HEN AND EGGS FOR HATCHING AND MANAGEMENT PRACTICES DURING INCUBATION

Agenda Items:

- Selecting hens
- Selecting eggs for hatching and caring for the eggs
- Making a *hazal* for incubation
- Number of eggs and period of placing
- Effect of temperature, air circulation and humidity
- Candling or checking eggs
- Storing eggs and the influence of the cock

Duration: 40 minutes

Materials: Facilitator's manual and broody hen, eggs of different size, shape and color, torch light, mud, tape, naphthalene, tobacco leaf

Training Method: Participatory discussion, demonstration, question & answer, and practical work

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What issues do you consider when selecting a brooding hen?
- What types of eggs do you select for incubation?
- Where do you place the eggs for the chicken to sit on?
- What does the basket in which you place eggs look like?
- How and when do you place the eggs in the basket?
- How many eggs do you place for the chicken to incubate?
- Do temperature, air circulation and humidity have any influence on the egg?
- What do you know about candling or checking eggs?
- Where should the eggs be placed for incubation?
- Do cocks play a role in selecting eggs for hatching?
- How many hens and how many cocks are required?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 3** in **The Native Poultry Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 4: FMA ON BROODING NEST: IMPROVED VERSUS TRADITIONAL

Agenda Items:

- Visit brooding nest in the small groups formed during the last session
- Examine the nests and collect information
- Identify problems of the visited nest
- Make suggestions for addressing the identified problems
- Present on identified problems and write solutions on poster paper

Duration: 40 minutes

Materials: Brown paper, poster paper, marker pen, and observation questionnaire

Training Method: Field visit, group work and presentation.

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What materials should you use at the time of brooding?
- Is it best to select eggs when they hatch?
- Should you provide balanced feed to the broody hen at the time of brooding?
- What are the benefits of an improved *hazal*?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 2** in the **Native Poultry Rearing Handbook**.
- Ask the participants to visit brooding nests at pre-selected households (one improved and one traditional) separately in three or four small groups. Select a leader for each group.
- Provide each group with an observation sheet, and ask them to answer the questions. Help them collect information if necessary.
- Ask them to properly observe the chicken coops and take notes.
- After returning from the visit, ask each small group to write down their observations in relation to positive aspects and identified problems.
- Ask them to make suggestions for addressing identified problems, and to also mention any positive aspects.
- After each presentation, ask all participants for feedback. Add if there is anything needs to be added and then summarize.
- Concentrate on the approach "learning by doing" and "seeing is believing."
- Do not answer the questions by yourself if the participants fail to answer.
- Facilitate the members in analysing and decision making process.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 5: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What did you learn?
- Were the discussions and activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize the day's learning?
- What is your plan to put this knowledge in to practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase question in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants. If this takes too long, if tell them the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - o Using hazal to increase the egg laying capacity of native chickens
 - Proper selection of broody hens and eggs for hatching for better production
 - Factors to be consider during the period of incubation for better hatching rate
 - Food management and care of broody hens during the incubation period
 - o Potential human health hazards if the hazal is kept in the living room
 - Importance and procedures of essential hygiene practices in family life and during native chicken rearing practices at homestead level

TOPIC 6: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Introduce the topic of the next session and explain reason for choosing that topic
- Set the next session's date, time, and venue
- Select the next session's day leader and discussion her role
- Thank participants attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out their opinions about the next session:

- What should we discuss and/or demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What should be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements.
 Don't impose but facilitate to make the appropriate decisions.
- Ask questions to find out participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Together with all the participants, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session and request that they assist her by joining the session on time and fully prepared.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants so that they become capable of reducing mortality and ensuring optimum growth of chicks, notably through early separation techniques, and to maintain health and hygiene practices to avoid potential health hazards for both poultry and people.

Session Objectives:

At the end of this session, participants will be able to:

- understand how to house and brood chicks;
- establish a feeding and drinking schedule for chicks; and
- explain complementary feeding for children ages 6- 11 months.

Duration: 2.00 – 2.5 hours

Venue: Home or farm of a good chicken farmer

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, ice breakers
- Short discussion about the goal and objectives of today's session
- Brief discussion about and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- How many of you were able to use the learning from last session?
- Who is the day leader and what will be her role?
- What topics, goal, objectives will be discussed today?

- Ensure that the seating arrangement is in a U-shape and that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader and explain her role.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: COMPLEMENTARY FEEDING FOR CHILDREN AGES 6-11 MONTHS

Agenda Items:

- Introduce the importance of complementary feeding from the age of 6 months
- Identify a diet that has a variety of foods
- Frequency and quantity of feeding for children ages 6-11 months

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- What did your baby/child eat yesterday?
- If you breastfeed your baby and he/she is growing well, why should you give him/her other foods?
 - Responses should include: to grow and develop and to learn. Add that in addition to breast milk, babies need solid food after six months in order to grow, become more active and to develop mentally.
- How do you decide what kind of foods to give your baby?
 - \circ $\;$ Show the flash cards and discuss the key messages in detail.
- Ask the mother to see the foods and let them decide whether this is a good complementary food.
 - Collect some cooked food such as rice, vegetables, fish, meat, eggs or dal from one participant before the session and demonstrate the how much and how often the child should eat.
- What kinds of foods make good snacks?
 - Mashed ripe banana, papaya, mango and other fruits; fried potato, sweet gourd, payesh, homemade cake.
- Ask the participants to remember and talk about these issues from the beginning of the session and review the food their children are yesterday. Did the food the children had yesterday make up nutritious complementary meals?
- Why is animal protein good for both a pregnant woman and baby?
 - Ask whether anyone raises small animals, especially chickens, in their homestead. Tell them today we will learn to can raise poultry birds for animal protein.

- Before conducting the sub-session on this topic, read **Practices 8, 9,** and **10/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 3: POULTRY SHED/HOUSING AND BROODING OF CHICKS

Agenda Items:

- Housing of chicks
- Brooding of chicks

Duration: 20 minutes

Materials: Facilitator's manual, bamboo basket, gunny bag, straw, harican, materials for make of housing, previously prepared house, net

Training Method: Participatory discussion, demonstration, question & answer, and practical work

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- Do you bring the chicks out immediately after hatching?
- Where do you keep the hatchlings?
- How much space do the chicks need in their first two months?
- Where can you get the heat that chicks need at their young age?
- How can you arrange heat for chicks in other ways?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 4** in the **Native Poultry Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 4: FEEDING AND DRINKING SCHEDULE FOR CHICKS

Agenda Items:

- Elements of feeding
- Feeding and drinking schedule
- Rules for providing daily feed for native chickens

Duration: 20 minutes

Materials: Facilitator's manual, feeder, drinker and element of feed (rice husks, wheat bran, grind corn, crushed snail or oyster, salt, etc.)

Training Method: Participatory discussion, demonstration, question & answer, and practical work

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What do you feed the chicks?
- What elements should be in the feed?
- How do you provide feed and water to the chicks?
- Can you identify the feed and water pots?
- How much feed you should give each chick (depending on the age)?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 4** in the **Native Poultry Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 5: FMA ON CHICKEN COOP: IMPROVED VERSUS TRADITIONAL

Agenda Items:

- Visit chicken coops in the small groups that were formed during the last session
- Examine the coop and collect information
- Identify any problems at the visited coop
- Make suggestions for addressing the identified problems
- Present the identified problems and write suggested solutions on poster paper

Duration: 40 minutes

Materials: Brown paper, poster paper, marker pen, and observation questionnaire

Training Method: Field visit, group work and presentation

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- Do you raise chickens by separating the chicks from the mother?
- What is the benefit of separating chicks from the mother?
- Do you vaccinate your chicks?
- Do you provide any medication to the chicks?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 2** in the **Native Poultry Rearing Handbook**.
- Ask the participants to visit chicken coops at pre-selected households (one improved and one traditional) separately in three or four small groups. Select a leader for each group.
- Provide each group with an observation sheet, and have them answer the questions. Help them collect information if necessary.
- Ask them to observe the chicken coops and take notes.
- After returning from the visit, ask each small group to write down their observations in relation to both the positive aspects and identified problems.
- Ask them to make suggestions for addressing the identified problems and to mention any positive aspects.
- After each presentation, ask all participants for feedback. Add to the discussion if needed, and then summarize the learning.
- Concentrate on the approach "learning by doing" and "seeing is believing."
- Do not answer the questions by yourself if the participants fail to answer.
- Facilitate the members in analysing and decision making process.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 6: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What did you learn?
- Were the discussions and activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize today's learning?
- What is your plan to put this learning into practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants. If this takes too long, tell them the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - o Importance and techniques of separating chicks from the broody hen
 - o Importance and techniques of brooding of chicks, especially separated chicks
 - o Importance and practice of feeding the chicks and a drinking water schedule
 - Improved coops for chickens.
 - o Importance and practice of bio-security issues during poultry rearing
 - Importance and procedures of complementary feeding practices for children ages 6-11 months and the linkages with native chicken rearing practices at homestead level

TOPIC 7: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Present the topic of the next session and the reason for choosing that topic
- Set the next session's date, time, and venue
- Select the next session's day leader and discuss her role
- Thanks participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to know their opinions in relation to next session:

- What should we discuss and/or demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What should be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the
 proper plans or the senses of proper plans. Continue asking the follow-up questions until you are able to
 make proper plans.
- Request that the day leader make any arrangements.
- Together with the members, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session, and request that the others assist her in this regard by joining the session on time and being fully prepared.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants so that they become capable of maintaining healthy hygiene practices to help avoid potential health hazards for poultry and people; and to consume the eggs and meat for the nutritional improvement of the family members, notably mother and children.

Session Objectives:

At the end of this session, participants will be able to:

- identify symptoms of various diseases and their control;
- maintaining bio-security;
- know the nutritional value and importance of consuming eggs and meat produced by the household, especially PLW and children; and
- understand complementary feeding for children ages 12-24 months.

Duration: 2.00 - 2.5 hours

Venue: Home or farm of a good chicken farmer

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, and ice breakers
- Short discussion about the goal and objectives of today's session
- Brief discussion about and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- How many of you were able to use the learning from last session?
- Who is the day leader and what is her role?
- What topics, goals and objectives will be discussed today?

- Ensure that the seating arrangement is in a U-shape and that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her role and allow her to facilitate the session.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: COMPLEMENTARY FEEDING FOR CHILDREN AGES 12-24 MONTHS

Agenda Items:

- Problems with complementary feeding and ways to overcome them
- Helpful ways of ensuring children get sufficient, diversified food
- Feeding a child during and after an illness

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:

• What kind of problems do you find with your children when you introduce new food?

Responses may include:

- o Child prefers chips and sweets and does not want to eat a meal.
- Mother is busy and unable to take a long time to feed the child.
- If the child is sick and has no appetite.

Discuss solutions such as:

- Making food tasty and look good.
- Allowing time for eating and being patient, letting the child eat at the same time as the rest of the household.
- o Not giving chips, chocolates, or sweets, which can cause the loss of appetite.
- How much and how often should children ages 12-24 months eat?
 - Show the 250 ml bowl with cooked food for different portions for the different age groups to the mother and explain.
- Why is it important to continue to breastfeed the child?
- How do you know if a child is sick? What are the signs?

Some signs of childhood illness include:

- o The child is unhappy and listless; crying and/ or inactivity and passivity.
- Inability or unwillingness to breastfeed or drink.
- o Unwillingness to eat or total loss of appetite.
- Child gets diarrhoea.
- Child get fever.
- During and after sickness should you stop, decrease or increase feeding for a child? Why?

o Explain what children should eat when they are sick, and how much they should eat.

Mention:

- \circ $\,$ The importance of handwashing before feeding the child: and
- The importance of washing any tools and utensils used for caring for the sick child with soap and water.

- Before conducting the sub-session on this topic, read **Practices 9, 11**, and **12/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: SYMPTOMS AND CONTROL OF VARIOUS CHICKEN DISEASES

Agenda Items:

- Various diseases of native chickens
- Symptoms of various diseases
- What to do in case of a disease outbreak

Duration: 20 minutes

Materials: Facilitator's Manual

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What are the diseases that affect native chickens?
- What are the symptoms of these diseases?
- What should you do when these diseases occur?
- What can be done so that diseases do not occur?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 5** in the **Native Poultry Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 4: MAINTAINING BIOSECURITY

Agenda Items:

- Biosecurity
- Vaccination

Duration: 20 minutes

Materials: Facilitator's Manual, antiseptics (timsen, vircon, virocid, etc.), lime, potash

Training Method: Participatory discussion, demonstration, question & answer, and practical work

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What do you know about biosecurity?
- Why is biosecurity needed?
- What is a vaccination?
- Why are vaccinations done?
- What problems can occur if no vaccination is done?
- How can you get vaccinated and what issues might you notice after vaccination?
- Which vaccines are given to chickens?
- What is on the list of vaccinations for chickens? What vaccines are needed, and when?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 5** in the **Native Poultry Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 5: NUTRITIONAL VALUE OF CHICKEN, EGGS AND MEAT

Agenda Items:

- Protein value of eggs and meat
- Usefulness of eggs and meat for children and PLW

Duration: 10 minutes

Materials: Facilitator's Manual

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What are the benefits of eating eggs for children?
- Why is it importance for pregnant and lactating women to eat eggs?
- What is needed to enable you to eat eggs every day?
- For which age groups is eating eggs and meat very important?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 5** in **Native Poultry Rearing Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 6: FMA ON POULTRY COOPS: IMPROVED VERSUS TRADITIONAL

Agenda Items:

- Visit chicken coops in the small groups that were formed last session
- Examine the coops and collect information
- Identify problems any problems in the visited coops
- Make suggestions for addressing the identified problems
- Present on identified problems and write suggestions on poster paper

Duration: 30 minutes

Materials: Brown paper, poster paper, marker pen, and observation questionnaire

Training Method: Field visit, group work and presentation

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- Do you provide deworming for your chickens?
- Do you use any antiseptic for your chicken coop?
- Do you clean the feeder and water basin every day?
- What are the advantages of vaccination?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 2** in **Native Poultry Rearing Handbook**.
- Ask the participants to visit chicken coops at pre- selected households (one improved and one traditional) in three or four small groups. Select a leader for each group.
- Provide each group with an observation sheet, and ask them to answer the questions. Help them collect information if necessary.
- Ask them to observe the chicken coops and take notes.
- After returning from the visit, ask each small group to write down their observations of both positive aspects and problems.
- Ask them to make suggestions for addressing identified problems and also positive aspects.
- After each presentation, ask the rest of the participants for feedback. Add to the discussion if necessary, and then summarize the learning.
- Concentrate on the approach "learning by doing" and "seeing is believing."
- Do not answer the questions by yourself if the participants fail to answer.
- Facilitate the members in analysing and decision making process.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 7: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning.

- What did we discuss today? What did you learn?
- Were the discussions and activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize today's learning?
- What is your plan to put this learning in to practice?

- Direct questions to the group rather than to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants. If this takes too long, tell them the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - o Various diseases of native chickens, their symptoms and control measures
 - Preventive measure to keep the chickens disease-free
 - o Reasons for the diseases and what can we do to prevent or control them
 - o Nutritional value and importance of consuming eggs produced by the chickens
 - Importance and procedures of complementary feeding practice for children ages 12-24 months and the linkages with native chicken rearing practices at the homestead level

TOPIC 8: CONCLUSION AND PLANNING OF NEXT SESSION

Agenda Items:

- Introduce the topic of the next session and explain the reason for the topic
- Set the next session's date, time and venue
- Choose the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to know their opinions in relation to the next session:

- What should we discuss and/or demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session and what should be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to find out participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans or the senses of proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Request that the day leader make any necessary arrangements.
- Together with all the participants, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session, and request that the others assist her in this regard by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to reinforce nutrition and hygiene information and reinforce the messages during the sessions so that the participants are familiar with these nutrition messages, and to continue the practices at household level.

Session Objectives

At the end of session, participants will be able to explain the following key nutrition practices:

- nutrition during pregnancy;
- nutrition during lactation;
- nutrition for children under 6 months;
- nutrition for children ages 6-11 months;
- nutrition for children ages 12-24 months; and
- nutrition during and after childhood illness.

At the end of session, participants will be able to explain the following hygiene practices:

- handwashing before cooking;
- handwashing before feeding the child;
- handwashing after using the toilet;
- keeping cooking utensils clean; and
- using a sanitary toilet (both adults and children).

Duration: 2.00 – 2.5 hours

Venue: Courtyard of a FNS household preferably with PLW and/or children under 2 years old

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions and ice breakers
- Discuss the goal and objectives of today's session
- Present today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed and demonstrated in the last session?
- How many of you were able to use the learning/experiences from last session?
- Who is the day leader and what will be her role?
- What topics, goals, and objectives will be discussed today?

- Ensure a U-shape seating arrangement, and make sure that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her role and allow her to facilitate the session.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: KEY MESSAGES AND PRACTICES OF ENA/EHA

Agenda Items:

- Nutrition of pregnant women
- Breastfeeding and nutrition during lactation
- Complementary feeding for children ages 6- 11 months and 12- 24 months
- Importance of vitamin A and how to prevent anemia
- Essential hygiene actions and use of tippy taps

Duration: 40 minutes

Materials: Tippy tap preparing instrument, 250 ml bowl, and food to demonstrate complementary feeding

Training Method: Group work, participatory discussion, questions and answers

Group Work:

(Divide the participants into three groups. Each of the groups should cover two issues.)

- **Group 1**: (1) Nutrition of a pregnant women (Illustrations 1,2 and 3) and (2) Breastfeeding and nutrition during lactation (Illustrations 4,5,6 and 7);
- **Group 2**: (1) Complementary feeding for children 6-11 months (Illustrations 8,9 and 10) and (2) Complementary feeding for children 12-24 months (Illustrations 9, 11, 13); and
- **Group 3**: (1) importance of vitamin A and how to prevent anemia (Illustrations 14 and 15) and (2) essential hygiene actions and use of two tippy taps (Illustrations 16, 17, 18, 19 and 20).

To know what the participants learned in group works, in each group, ask the participants the questions:

- What is the current situation in their family on their given topic?
- Do they face any difficulties to practice those behaviors?
- How they deal with/overcome if any problem arises in relation to practice?

TOPIC 3: GROUP WORK

Duration: 70 minutes

After all presentations, as the groups to do the following:

- **Group 1**: Collect different foods which are appropriate for PLW. (give hints- try to prepare pregnant woman's meal with diversified food)
- **Group 2**: Give them 250 ml bowl and ask them to demonstrate three amount of complementary food for different age.
- **Group 3**: Ask mothers to demonstrate how to prepare a Tippy Tap.

While 1 group presents their work, ask other two groups to give their comments/feedbacks, etc.

TOPIC 4: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What did you learn?
- Were the discussions/activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize the day's learning?
- What is your plan to put this learning in to practice?

- Direct your question to the group rather than to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants. If this takes too long, tell them the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - Importance and practices of proper nutrition during pregnancy and lactation
 - o Importance and practices of proper nutrition for children under the age of 6 months
 - o Importance and practices of proper nutrition for children ages 6-11 and 12-24 months
 - o Importance and practices of proper nutrition during and after a childhood illness
 - Importance and practices of handwashing before cooking, before feeding the child, after using the toilet (adults and children), and keeping cooking utensils clean

TOPIC 5: CONCLUSION AND PLANNING FOR NEXT SESSION

Issue to be discussed:

- Set the topic of the next session and the reason for choosing that topic
- Set the next session's date, time and venue
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out know their opinions about the next session.

- What should we discuss and/or to demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What will be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members prior to next session, and request that others assist her in this regard by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

Module 3: Pond Fish Culture

106 | Essential Nutrition Actions, Essential Hygiene Actions, and Homestead Food Production

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants so that they become motivated and capable of increasing small indigenous fish production and increasing fish consumption in the family, especially by pregnant and lactating women and children.

Session Objectives:

At the end of this session, participants will be able to understand:

- the importance of fish culture;
- the different types of ponds for fish culture;
- the ideal pond environment for fish culture;
- different fish culture systems;
- production planning for pond fish culture; and
- nutrition for pregnant women.

Duration: 2.00 - 2.5 hours

Venue: Pond dike or courtyard of a FNS household, preferably near a pond

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions and ice breakers
- Introduce goal and objectives of today's session
- Identify the day's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask the following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed or demonstrated in the last session (if this is the second session)?
- How many of you were able to use the learning from last session?
- Who is the day leader and what will be her role?
- What topics, goals, and objectives will be discussed today?

- Arrange the seating in a U-shape, and make sure the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her role and allow her to facilitate the session.
- Ask the leader of the day to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: INTRODUCTION TO WOMEN'S DIET DURING PREGNANCY

Agenda Items:

- Importance of a varied diet for pregnant women
- Importance of iron supplementation during pregnancy
- Importance of using iodized salt for pregnant women and all family members

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- Should a pregnant woman eat more or less often than normal? Why?
- Which types of food should a pregnant woman eat?
 - Demonstrate different kinds of vegetables, egg, and pulses from their own production. Tell them that they should prepare their meal with a variety of foods that are available in their homestead, including both plant and animal source food.
- Why is animal protein good for both a pregnant woman and baby?
 - Ask participants whether they fish, especially for the small indigenous fish in their homestead based pond.
 - Tell them that today we will learn how to culture fish and get animal source food.
- Why is iron supplementation necessary for pregnant women, why all pregnant women should take supplements?
 - Explain that women can also get iron from animal protein such as eggs and liver, and discuss how these things can be produced in the homestead.
- Why should pregnant women go to a health facility for an antenatal care checkup? How frequently should pregnant women have checkups?
- Why and how should you use iodized salt?
- Where can you get iodized salt? How can you preserve it?
 - Explain the sources of iodine, the methods of cooking and preservation, and how it will help improve women's nutrition during pregnancy and lactation.

- Before conducting the sub-session on this topic, read **Practices 1, 2,** and **3/Flash Card** in **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: IMPORTANCE OF FISH CULTURE AND DIFFERENT TYPES OF PONDS

Agenda Items:

- Different types of pond and fish culture systems
- Nutritional importance of pond fish culture
- Environmental importance of pond fish culture

Duration: 15 minutes

Materials: Poster paper, marker pen, small fish/fingerlings

Training Method: Participatory discussion, question and answer

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- Is anyone here involved with fish culture?
- What nutrients do fish provide for our bodies?
- Why should we participate in fish culture in ponds?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 1** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 4: FISH CULTURE SYSTEMS AND IDEAL POND ENVIRONMENTS

Agenda Items:

- Describe different types of ponds, depending on their water containing capacity
- Explain the different types of bodies of water for fish culture
- Demonstrate the ideal pond environment

Duration: 20 minutes

Materials: N/A

Training Method: Participatory discussion, question and answer

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- In your area, how many days does a pond contain water?
- Where can you culture fish?
- What is the best water depth for a pond?
- How much sunlight is needed for an ideal pond?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 1** in **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 5: PRODUCTION PLANNING FOR POND FISH CULTURE

Agenda Items:

- Availability of water, fingerlings and materials
- Production planning

Duration: 20 minutes

Materials: Poster paper/ brown paper, scale, marker pen

Training Method: Participatory discussion, question and answer

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What is needed for fish culture?
- When can you start fish culture?
- Why production plan is important for fish culture?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 1** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers.

TOPIC 6: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What did we discuss today? What did you learn?
- Were the discussions and activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize today's learning?
- What is your plan to put this learning into practice?

- Direct questions to the group rather than to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly, but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants. If this takes too long, tell them the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - o Importance of fish culture especially in relation to nutrition of children and the mothers
 - o Different types of ponds for fish culture and fish culture systems
 - Required pond environment for better production of fish especially small fish
 - Why and how to make a production plan for pond fish culture
 - Women's diet during pregnancy and linkage with pond fish culture

TOPIC 7: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Introduce the topic of the next session and the reason for choosing that topic
- Set the next session's date, time, and venue
- Choose the day leader for the next session and discuss her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out their opinions in relation to next session:

- What should we discuss and/or demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session and what should be her possible role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the idea what should be the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to find out participants' opinions and do not impose your idea or plan.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to make the proper plans or the senses of proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session, and request that assist her in this regard by being on time and full prepared.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants so that they become capable of creating a suitable pond environment for increasing fish production, notably the nutrient dense small indigenous fish.

Session Objectives:

At the end of this session, participants will be able to understand:

- the importance of pond preparation;
- steps of pond preparation
 - Water extraction
 - Prepare/repair pond side, wipe out aquatic weeds
 - Eliminate unwanted fish and predatory fish that eat other fish
 - Water supply
 - Application of lime
 - Application of fertilizer
 - Examination of natural food
- breastfeeding of infants from birth to six months, and nutrition of lactating mothers.

Duration: 2.00 – 2.5 hours

Venue: On the pond dike or courtyard of a household selected during the previous session

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, and ice breakers
- Discuss the goal and objectives of today's session
- Introduce the day's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- How many of you were able to use the learning/experiences from last session?
- Who is the day leader and is her role?
- What topics, goal, and objectives will be discussed today?

- Arrange seating arrangement in a U-shape and that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her roles and offer her to facilitate the session.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: BREASTFEEDING INFANTS FROM BIRTH TO SIX MONTHS, AND DIET FOR LACTATING MOTHERS

Agenda Items:

- Significance of early initiation of breastfeeding
- Importance of exclusive breastfeeding for the children
- Importance and way of ensuring diet of lactating mother

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- What do you give to your baby immediately after birth?
 - Explain the importance of early initiation of breastfeeding and disadvantages of other food; such as, it can contaminate germs and babies cannot easily digest other food.
- Do you feel any difficulties when breastfeeding your baby?
 - If possible, demonstrate position and attachment for ideal breastfeeding; if not possible during the session, can be done after session counseling and/or during home visit.
- How long should you exclusively breastfeed?
- If you don't have enough milk, what should you do?
 - Tell them to feed the baby frequently with correct position and attachment so that the mother can produce and the baby can get enough milk.
- What is the advantage of breastfeeding for both mother and child?
- Why and how should you ensure required diet for a lactating mother?
 - Present some examples of cooked and raw foods that are good for pregnant women, and demonstrate the appropriate quantity.
- Why is animal protein good for lactating mothers and thus ultimately for the baby?
 - Ask whether anyone cultures fish, especially the small indigenous fish in their homestead-based pond.
 - Tell them that today, we will learn how to culture fish and get animal source food.
- Why do lactating mothers needed to take iron and vitamin A supplementation after giving birth?
 - Explain the sources of iron and vitamin A, the methods of cooking and preservation, and how it will help improve women's nutrition during pregnancy and lactation.

- Before conducting the sub-session on this topic, read **Practices 4, 5, 6, and 7/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: IMPORTANCE OF POND PREPARATION: WATER EXTRACTION, CLEANING AQUATIC WEEDS, REPAIRING DIKES AND BEDS

Agenda Items:

- Importance of pond preparation, time and methods/steps
- Cleaning up aquatic weeds, cutting hanging branches, cleaning brush and eliminating debris
- Repairing dikes, eliminating excess mud from the bottom, and levelling

Duration: 10 minutes

Materials: Different aquatic weeds

Training Method: Participatory discussion, question-answer, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- How do you prepare a pond?
- What is necessary for pond preparation?
- When should the pond be prepared?
- What types of problems are created by aquatic weeds?
- Are problems created when there are excess branches and twigs around the pond sides?
- What type of dike should be used?
- What problems are created due to excessive amounts of mud?
- How can you measure the area of a pond?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 2** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 4: ELIMINATION OF PREDATORY AND UNWANTED FISH

Agenda Items:

- Introduce the concept of predatory and unwanted fish
- Discuss adverse effects of predatory and unwanted fish
- Demonstrate methods of elimination of predatory and unwanted fish

Duration: 15 minutes

Materials: Predatory fish, Rotenone, tape

Training Method: Participatory discussion, question and answer, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What do you mean by predatory and unwanted fish?
- How can predatory and unwanted fish be harmful?
- How can you eliminate predatory and unwanted fish?
- What precautions should be taken while filling the pond with water?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 2** in **The Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 5: APPLICATION OF LIME

Agenda Items:

- Necessity of lime application
- Application dosage
- Methodology of lime application and caution

Duration: 15 minutes

Materials: Poster paper, marker pen, lime, tape.

Training Method: Participatory discussion, question and answer, experience sharing, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- Why lime is needed in the pond?
- What type of lime is needed in the pond?
- How should lime be applied in the pond?
- What is the dosage of lime for application in pond?
- What precautions should be taken during lime application?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 2** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 6: APPLICATION OF FERTILIZER

Agenda Items:

- Concept regarding fertilizer (different types of organic and inorganic/ chemical fertilizers)
- Importance of using organic and inorganic fertilizers
- Quantity and method of application of fertilizer

Duration: 10 minutes

Materials: Poster paper, marker pen, cow dung, urea, TSP, pot

Training Method: Participatory discussion, question and answer, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What is fertilizer?
- How many types of fertilizer are available?
- Why is fertilizer necessary for fish farming?
- How do you apply fertilizer to a pond?
- What are the dosages of fertilizer application in a pond?

- Before conducting the sub-session on this topic, read **Topic 6** of **Session 2** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 7: EXAMINATION OF NATURAL FOOD IN PONDS

Agenda Items:

• Methods of examination of natural foods in ponds.

Duration: 10 minutes

Materials: Poster paper, marker pen, transparent glass, zooplankton

Training Method: Participatory discussion, question and answer, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- Why it is important to examine the availability of fish food in pond.
- What is the color of water when natural feed is produced in water?
- How is natural feed examined?

- Before conducting the sub-session on this topic, read **Topic 7** of **Session 2** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 8: PRACTICUM: USING ROTENONE, LIME AND FERTILIZATION

Agenda Items:

- Pond area measurement
- Application of Rotenone
- Application of lime
- Application of fertilizer
- Methods of examination of natural feeds in ponds.

Duration: 25 minutes

Materials: Poster paper, marker pen, transparent glass, rotenone, lime, urea, TSP, cow dung, drum, pot, mug, tape, thin cloth

Training Method: Group participation and application of learning (practicum)

- Before conducting the sub-session on this topic, read **Topic 8** of **Session 2** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 9: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning.

- What did we discuss today? What did you learn?
- Were the discussions/activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize the day's learning?
- What is your plan to put this learning into practice?

- Throw your question to the group rather than asking direct questions to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly but without humiliating others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants; if taking too much time, tell them the answers to reinforce the learning.
- Together with the participants, summarize the day's learning:
 - o Importance and techniques of preparing pond suitable for fish culture
 - o Cleaning the pond: an issue of hygiene similar to the need in family lives
 - o Importance of rearing small indigenous species to improve human nutrition
 - Negative effect of using chemicals to eradicate fish from pond as a health hazard
 - Importance of breastfeeding babies from birth to six months, and diet for lactating mother and the linkages with fish culture in pond, especially small indigenous species

TOPIC 10: CONCLUSION AND PLANNING FOR THE NEXT SESSION

Agenda Items:

- Introduce the topic of the next session and the reason for choosing that topic
- Set the next session's date, time, venue, day leader, other concerned issues
- Select the next session's day leader and discussion her possible roles
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to know their opinions in relation to the next session:

- What should we discuss or demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session and what should be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to find out participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading discussion so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Request that the day leader make any necessary arrangements.
- Together with all the participants, thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to next session and request that others to assist her in this regard by being on time and fully prepared for the session.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants so that they are able to reduce the mortality of fingerlings during transportation and stocking in ponds in a correct manner, and to include the nutrient dense small indigenous fishes as important for family consumption.

Session Objectives:

At the end of this session, participants will be able to:

- identify different food habit of fish and species selection;
- stock fish according to the layer of pond, density and accurate time of stocking;
- identify good quality of fingerlings;
- transport fingerlings properly;
- understand the adaptation of fingerlings;
- release fingerling in the properly; and
- be familiar with key essential hygiene actions.

Duration: 2.00 – 2.5 hours

Venue: On the pond dike or courtyard of a household selected previous session.

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, ice breakers
- Short discussion on the goal and objectives of today's session
- Brief discussion on and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- How many of you were able to use the learning from last session?
- Who is the day leader and what will be her role?
- What topics, goals and objectives will be discussed today?

- Create a U-shaped seating arrangement, and make sure the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her role and allow her to facilitate the session.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: INTRODUCTION TO KEY ESSENTIAL HYGIENE ACTIONS

Agenda Items:

- Importance of handwashing
- Easy way of handwashing using minimum water
- Importance and methods of keeping the containers and food clean
- The family members who should practice the essential hygiene actions

Duration: 20 minutes

Materials: Tippy tap instrument

Training Method: Participatory discussion, questions and answers and demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- When do you usually wash your hands?
- Why is handwashing necessary?
- What happened if you do not wash your hands?
- How do you get water to wash your hands?
 - Demonstrate tippy tap preparation and installation.
- Why is it important to keep containers and food clean? How can you do this?

Remind participants to practice handwashing after pond preparation, making and use of compost/manure, fish stocking or harvesting etc. Tell participants that this type of work spreads germs or you can have contact with harmful substances and can lead to the loss of all the nutrients, which they have worked hard to get.

- Before conducting the sub-session on this topic, read Practices 17, 18, 19, and 20/Flash Cards in the Community Worker Handbook.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 3: SPECIES SELECTION FOR STOCKING THE POND

Agenda Items:

- Species selection according to food habit
- Criteria for species selection

Duration: 15 minutes

Materials: Poster paper, marker pen, fingerlings of different species

Training Method: Participatory discussion, question and answer, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers.

- What are the food habits of different fish?
- What are the food layers of a pond?
- In which layer do the *rui* fish live?
- Which species can be cultured in ponds?
- What are the benefits for mixed culture?
- What are the selection criteria of fish species?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 3** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 4: STOCKING DENSITY ACCORDING TO LAYER

Agenda Items:

- Stocking density
- Ratio or proportion of stocking

Duration: 15 minutes

Materials: Poster paper, marker pen, fingerlings of different species.

Training Method: Participatory discussion, question and answer, experience sharing, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers.

- Which species have you stocked in your pond?
- How many fish have you stocked in your pond?
- How many fish can be stocked in one decimal area?
- How many fish can be stocked in different layers of the pond?
- Which size is better for stocking?
- How many *mola* fish can be stocked with other fishes?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 3** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 5: SELECTING QUALITY FINGERLINGS FOR STOCKING

Agenda Items:

- Identify fingerlings according to species
- Characteristics of healthy fingerlings
- Source of good fingerlings

Duration: 15 minutes

Materials: Good or diseased fingerlings of different species

Training Method: Participatory discussion, question and answer, experience sharing, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers.

- Which species' lower lips are greater than upper?
- What are the physical characteristics to recognize healthy fingerlings?
- Where can you get good quality fingerlings?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 3** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 6: TRANSPORTATION, ADAPTATION AND STOCKING

Agenda Items:

- Precautions to consider while transporting fingerlings
- Adaptation of fingerlings with the pond's water and release into the water
- Suitable time for stocking fingerlings

Duration: 15 minutes

Materials: Poster paper, marker pen, fingerlings, pot, saline

Training Method: Participatory discussion, question and answer, experience sharing, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What precautions need to be followed when carrying fingerlings?
- What are the rules for adapting fingerlings with pond water and release into the water?
- When is the best time to stock fingerlings?

- Before conducting the sub-session on this topic, read **Topic 6** of **Session 3** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 7: PRACTICUM: SELECTION AND STOCKING FINGERLINGS

Agenda Items:

- Identification of fingerlings
- Identification of healthy fingerlings
- Adaptation of fingerlings
- Releasing fingerlings

Duration: 25 minutes

Materials: Good or diseased fingerlings of different species, a pot, saline

Training Method: Group participation and applied issue (practical)

- Before conducting the sub-session on this topic, read **Topic 7** of **Session 3** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 8: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning.

- What did we discuss today? What did you learn?
- Were the discussions and activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize the day's learning?
- What is your plan to put this learning into practice?

- Direct your questions to the group rather than asking direct questions to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly, but do not humiliate others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants; if taking too much time, tell them the answers to reinforce the learning:
- Together with the participants, summarize the day's learning:
 - o Different food habitats of fish in pond and species selection according to niches
 - Stocking according to the layer of pond, density and accurate time of stocking
 - o How to identify good quality fingerlings and how to carry/transport them
 - o Importance of selecting small indigenous fish species for human nutrition
 - Importance and procedures of essential hygiene practices in family lives as well as during pond fish culture practices at the homestead level

TOPIC 9: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Introduce the topic of the next session and the reason for choosing that topic
- Set the next session's date, time, and venue
- Set next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to know their opinions in relation to next session.

- What should we discuss and/or to be performed in the next session, why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session and what should be her possible roles?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the idea what should be the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to make the proper plans or the senses of proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Request the day leader to arrange the required inputs, if to be arranged by members;
- Thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session and ask others join the session on time and to be fully prepared.
- Thank members for attending and actively participating in today's session.

SESSION 4: SUPPLEMENTARY FEEDING, POND FERTILIZATION AND LIMING

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the so that they are able to ensure optimum growth of fish and maintain continuous recruitment of nutrient dense small indigenous fish in the pond.

Session Objectives:

At the end of this session, participants will be able to:

- understand the importance of supplementary feeding, quantity and method of application;
- prepare supplementary feed;
- explain the importance, quantity and method of fertilizer application;
- explain the importance, quantity and method of lime application;
- Complementary feeding for children ages 6-11 months.

Duration: 2.00 – 2.5 hours

Venue: In the pond dike or courtyard of a household selected during the previous session

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions and ice breaking;
- Short discussion on the goal and objectives of today's session; and
- Brief discussion on and adoption of today's topics, timetable and activities.

Duration: 10 minutes

Materials: poster paper and marker pens

Training Method: open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed or demonstrated the last session?
- How many of you were able to use the learning from last session?
- Who is the day leader and what will be her role?
- What topics, goal, objectives will be discussed today?

- Arrange the seating in a U-shape and make sure the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her role and allow her to facilitate the session.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: COMPLEMENTARY FEEDING FOR CHILDREN AGES 6-11 MONTHS

Agenda Items:

- Introduce the importance of complementary feeding from the age of six months
- Identify dietary diversified food
- Explain the frequency and quantity of feeding for children ages 6-11 months.

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers, and demonstration

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

- What did your baby/child eat yesterday?
- If you breastfeed your baby and they are growing well, why should you give them other food?
 - Adequate nutrition helps babies grow, develop and learn. In addition to breast milk, babies need solid food in order to grow, become more active, and to develop mentally.
- How do you decide what kind of foods to give your baby?
 - Show them the flash card and discuss the key messages in detail.
- Ask the mother to see the foods and let them decide whether this is a good complementary food.
 - Collect some cooked food such as rice, vegetables, fish, meat, eggs or dal from one participant prior and demonstrate the frequency and quantity of food.
- What foods make good snacks?
 - Mashed ripe banana, papaya, mango and other fruits, fried potato, sweet gourd, payesh, and cake (homemade)
- Did the food your children had yesterday make up nutritious complementary meals?
- Why is animal protein good for lactating mother and thus ultimately for the baby?
 - Ask if anyone they cultures fish, especially the small indigenous fish in their homestead based pond?
 - Tell them today we will learn how to farm fish and get animal source food.

- Before conducting the sub-session on this topic, read **Practices 8, 9,** and **10/Flash Card in community Worker Handbook**.
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 3: APPLICATION OF SUPPLEMENTARY FEED

Agenda Items:

- Importance of post stocking supplementary feed management
- Methods of preparing supplementary feed
- Dosage of application and technique
- Some regulation on feeding

Duration: 25 minutes

Materials: Wheat bran, rice polish, oilcake, fish meal, molasses, pellet feed

Training Method: Participatory discussion, question and answer, demonstration

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:

- What is supplementary feed?
- Why are supplementary feed applications necessary?
- How do you prepare the food?
- How much food should be given daily?
- What are the precautions for applying feed?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 4** in the **Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 4: POST-STOCKING FERTILIZER AND LIME MANAGEMENT

Agenda Items:

- Importance of post-stocking fertilizer management
- Dosage of fertilizer and applying method and precautions
- Importance of post-stocking lime management
- Dosage of lime application method and precautions

Duration: 20 minutes

Materials: Urea, TSP, cow dung, lime, pot

Training Method: Participatory discussion, question and answer, experience sharing

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- Does anyone have experience applying fertilizer to the pond?
- Why is fertilizer application necessary after stocking?
- How should you apply fertilizer?
- When is fertilizer use restricted?
- Why is lime application necessary?
- What are the methods of lime application?
- How much lime should you apply before winter?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 4** in **The Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask supplementary questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 5: PRACTICUM: APPLICATION OF SUPPLEMENTARY FEED

Agenda Items:

- Supplementary feed preparation
- Application

Duration: 25 minutes

Materials: Oilcake, rice polish, wheat bran, fish meal, molasses, pot

Training Method: Group participation and applied issue (practicum)

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 4** in **The Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 6: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning:

- What we have discussed today? What did you learn?
- Were the discussions and activities adequate?
- What else could be discussed or demonstrated?
- Can you summarize the day's learning?
- What is your plan to put this learning into practice?

- Direct your questions to the group rather than to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly, but do not humiliate others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants; if taking too much time, tell them the answers to reinforce the learning.
- Summarize the day's learning with help from the participants:
 - o Importance of supplementary feeds, quantity and method of application
 - Supplementary feeding in fish culture is similar to the practice of complementary feeding that is recommended for children ages 6-24 months, and both are important
 - o Importance, quantity and method of fertilizer application
 - o Importance, quantity and method of lime application: hygiene issues
 - Importance and procedures of complementary feeding practice for children ages 6-11 months and the linkages with pond fish culture practices at homestead level

TOPIC 7: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Introduce the topic of the next session and the reason for choosing that topic
- Set the next session's date, time, venue, day leader, other concerned issues
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out their opinions about the next session:

- What should we discuss and/or to be performed in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session and what should be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the idea what should be the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans or the senses of proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Request that the day leader make any necessary arrangements.
- Thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members to the next session, and request that the others be on time and fully prepared for the next session.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to develop the knowledge and skills of the participants so that they become capable of keeping the fish in good health and motivated to harvest the fish more frequently especially the nutrient dense small indigenous fishes.

Session Objectives:

At the end of this session, participants will be able to understand:

- observing fish growth and health and the necessary tasks
- partial harvesting and restocking
- complete harvesting of fish
- complementary feeding for children ages 12-24 months

Duration: 2.00 – 2.5 hours

Venue: On the pond dike or courtyard of a household selected previous session

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions, ice breakers
- Short discussion on the goal and objectives of today's session
- Brief discussion on and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session:

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed or demonstrated in the last session?
- How many of you were able to use the learning from last session?
- Who is the day leader and what will be her role?
- What topics, goals, and objectives will be discussed today?

- Arrange the seating in a U-shape and make sure the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her roles and allow her to facilitate the session.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: COMPLEMENTARY FEEDING FOR CHILDREN AGES 12-24 MONTHS

Agenda Items:

- Problems with complementary feeding and ways to overcome them
- Helpful ways of ensuring children get sufficient, diversified food
- Feeding a child during and after an illness

Duration: 20 minutes

Materials: A variety of raw- e.g. fruits and cooked foods- e.g. vegetables, fish, eggs, pulses, etc. (Cover the food items at the beginning of the session and use the flash card for the food item for which are not possible to demonstrate as not available).

Training Method: Participatory discussion, questions and answers

Discussion Questions:

[Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct messages/answers:]

• What kind of problems do you find with your children when you introduce new food?

Responses may include:

- o Child prefers chips and sweets and does not want to eat a meal.
- o Mother is busy and unable to take a long time to feed the child.
- If the child is sick and has no appetite.

Discuss solutions such as:

- Making food tasty and look good.
- Allowing time for eating and being patient, letting the child eat at the same time as the rest of the household.
- Not giving chips, chocolates, or sweets, which can cause the loss of appetite.
- How much and how often should children ages 12-24 months eat?
 - Show the 250 ml bowl with cooked food for different portions for the different age groups to the mother and explain.
- Why is it important to continue to breastfeed the child?
- How do you know if a child is sick? What are the signs?

Some signs of childhood illness include:

- The child is unhappy and listless; crying and/ or inactivity and passivity.
- Inability or unwillingness to breastfeed or drink.
- Unwillingness to eat or total loss of appetite.
- Child gets diarrhoea.
- Child get feaver.

- During and after sickness should you stop, decrease or increase feeding for a child? Why?
 - o Explain what children should eat when they are sick, and how much they should eat.

Mention:

- \circ $\;$ The importance of handwashing before feeding the child: and
- The importance of washing any tools and utensils used for caring for the sick child with soap and water.

- Before conducting the sub-session on this topic, read **Practices 9, 11**, and **12/Flash Card** in the **Community Worker Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to give the correct answers. If needed, you can also give some hints of the correct answers.

TOPIC 3: COMMON DISEASES OF FISH

Agenda Items:

- Common diseases of fish
- Symptoms of diseases
- Preventive measure

Duration: 15 minutes

Materials: Poster, marker pen, diseased fish, pictures of diseased fish, lime, salt, oxytetracycline, pellet feed

Training Method: Participatory discussion, question and answer, demonstration.

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What are the common diseases of fishes in your area?
- What are the common symptoms of these diseases?
- What do you do, if disease spreads in fish?

- Before conducting the sub-session on this topic, read **Topic 3** of **Session 5** in **The Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 4: COMMON PROBLEMS IN FISH CULTURE

Agenda Items:

- Solutions for common problems in fish culture
- Important messages about fish culture

Duration: 20 minutes

Materials: Poster, marker pen, diseased fish, lime, fitkiri (alum), bamboo stick

Training Method: Participatory discussion, question and answer, experience sharing

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What types of problems have you faced with fish ponds?
- What problems are seen in fish?
- What can be done to solve these problems?

- Before conducting the sub-session on this topic, read **Topic 4** of **Session 5** in **The Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 5: PARTIAL HARVESTING, RESTOCKING AND FULL HARVESTING OF FISH

Agenda Items:

- Importance of partial harvesting of fish
- Importance of restocking
- Some factors for partial harvesting and harvesting

Duration: 15 minutes

Materials: Poster paper and marker pens

Training Method: Participatory discussion, question and answer, experience sharing

Discussion Questions:

Ask participants the following questions to assess their knowledge and skill levels in compare to the desired levels and to lead the discussion to conclude with correct answers:

- What is partial harvesting?
- Why is partial harvesting needed?
- How to partial harvest *mola* fish?
- What is restocking and why?
- When is harvesting essential?

- Before conducting the sub-session on this topic, read **Topic 5** of **Session 5** in **The Pond Fish Culture Handbook.**
- Do not answer the questions by yourself if the participants fail to answer and don't discourage them if they give wrong answer, rather encourage them to continue the discussion.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.

TOPIC 6: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning.

- What did we discuss today? What did you learn?
- Were the discussions and activities adequate?
- What else could be discussed or performed?
- Can you summarize today's learning?
- What is your plan to put this learning into practice?

- Throw your question to the group rather than asking direct questions to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly (but without humiliating others). Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants; if taking too much time, tell them the answers to reinforce the learning.
- Summarize the day's learning:
 - Common diseases of fish, their symptoms and way of prevention or control
 - Common problems seen in pond fish culture how they can be avoided
 - o Importance and techniques of partial harvesting in pond fish culture system
 - o Importance and techniques of restocking approach in pond fish culture system
 - Importance and procedures of complementary feeding practice for children ages 12-24 months and the linkages with pond fish culture practices at homestead level

TOPIC 7: CONCLUSION AND PLANNING FOR NEXT SESSION

Agenda Items:

- Introduce the topic of the next session and the reason for choosing that topic
- Set the next session's date, time, and venue
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to know their opinions in relation to next session:

- What should we discuss or demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session and what should be her possible role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the idea what should be the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans or the senses of proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements if necessary.
- Thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members prior to next session and request others to assist her in this regard by joining the session on time and being fully prepared.
- Thank members for attending and actively participating in today's session.

SESSION SUMMARY

Session Goal:

The goal of this session is to reinforce nutrition and hygiene information and to grow the habit of practicing the messages during the sessions so that the participants are well conversant to these nutrition messages as well as continue the practices at household level.

Session Objectives

At the end of session, participants will be able to explain the key nutrition practices:

- during pregnancy;
- during lactation;
- for children under 6 months;
- for children ages 6-11 months;
- for children 12-24 months; and
- during and after illness of children.

At the end of session, participants will be able to explain the following hygiene practices:

- washing hands before cooking;
- washing hands before feeding the child;
- washing hands after using the toilet;
- keeping cooking utensils clean; and
- use of sanitary toilet for adults and children.

Duration: 2.00 – 2.5 hours

Venue: Courtyard of a FNS household preferably with PLW/children under two years of age

Conduct the Session

TOPIC 1: INTRODUCTION

Agenda Items:

- Welcome the participants, introductions and ice breakers
- Short discussion on the goal and objectives of today's session
- Brief discussion on and adoption of today's topics, timetable and activities

Duration: 10 minutes

Materials: Poster paper and marker pens

Training Method: Open discussion and observation/demonstration as required

Discussion Questions:

Welcome and greet the participants. Ask following questions to create a learning environment, summarize the last session's learning as needed and prepare them for today's session.

- How are you and how is your family?
- How are the HFP and other activities going?
- What was discussed/done in the last session?
- How many of you were able to use the learning/experiences from last session?
- Who is the day leader and what will be her roles?
- What topics, goal, and objectives will be discussed today?

- Arrange the seating in a U-shape and that the participants and facilitator are comfortable.
- Welcome and greet the participants and initiate the session formally.
- Ask about the wellbeing of the participants and their families to make a lively learning environment where all participants are encouraged to participate in the session.
- Ask the leader of the last session to help summarize the topics from that session.
- Assess the adoption rate and reasons for non-adoption (if any) but don't give much time to this issue; it should be discussed in details during household/follow-up visits.
- Introduce the day leader, explain her roles and offer her to facilitate the session.
- Ask the day leader to present the day's program schedule including the session goal and objectives (this should be done on the poster paper before coming to the session).

TOPIC 2: KEY MESSAGES AND PRACTICES OF ENA/EHA

Agenda Items:

- Nutrition for pregnant women
- Breastfeeding and nutrition during lactation
- Complementary feeding for children ages 6- 11 months and 12- 24 months
- Importance of vitamin A and how to prevent anemia
- Essential hygiene actions and use of two tippy taps

Duration: 40 minutes

Materials: Tippy tap preparing instrument, 250 ml bowl, foods to demonstrate complementary feeding

Training Method: Group works, participatory discussion, questions and answers

Group Work:

(Divide the participants into three groups. Each of the groups should cover two issues.)

- **Group 1** will discuss: (1) Nutrition of a pregnant women (Illustrations 1,2 and 3) and (2) breastfeeding and nutrition during lactation (Illustrations 4,5,6 and 7);
- **Group 2** will discuss: (1) complementary feeding for children 6-11 months (Illustrations 8,9 and 10) and (2) complementary feeding for children 12-24 months (Illustrations 9, 11, 13); and
- **Group 3** will discuss the topics- (1) importance of vitamin A and how to prevent anemia (Illustrations 14 and 15) and (2) essential hygiene actions and use of 2 tippy taps (Illustrations 16, 17, 18, 19 and 20).

To know what the participants learned in group works, in each group, ask the participants the questions:

- What is the current situation in their family on their given topic?
- Do they face any difficulties to practice those behaviors?
- How they deal with/overcome if any problem arises in relation to practice?

TOPIC 3: GROUP WORKS

Duration: 70 minutes

After all presentations, as the groups to do the followings:

- **Group 1**: Ask to collect different foods which are appropriate for pregnant and lactating women. (give hints- try to prepare pregnant woman's meal with diversified food)
- **Group 2**: give them 250 ml bowl and ask them to demonstrate three amount of complementary food for different age.
- **Group 3**: Ask mothers to demonstrate how to prepare a Tippy Tap.

While one group presents their work, ask other two groups to give their comments/feedback, etc.

TOPIC 4: SESSION EVALUATION AND REVIEW

Agenda Items:

- Assess participants' achieved knowledge and skill levels in relation to the session goals and objectives as well as specific topics conducted in this session.
- Summarize the knowledge and skills achieved in today's session (in relation to the topics discussed and/or activity performed as per the session objectives and goal).

Duration: 10 minutes

Materials: Session schedule, poster paper and marker pen and/or session materials (if required to demonstrate by participants or facilitator)

Training Method: Open discussion and/or practical demonstration (if necessary)

Discussion Questions:

Ask participants the following questions to assess whether they have achieved the desired levels of knowledge and skills as per session objectives and to reinforce the learning.

- What did we discuss today? What did you learn?
- Were the discussions/activities on the topics enough?
- What else could be discussed/performed?
- Can you summarize today's learning?
- What is your plan to put this learning into practice?

- Direct questions to the group rather than to one person.
- Remember to phrase questions in a way that encourages participation, such as "Can you recall what we learned from today's discussion and activities?" Don't ask direct questions like a teacher.
- Ask follow-up questions to lead the discussion in a way so that the participants become able to give the correct answers or the senses of correct answers.
- Thank the farmers who answered properly, but do not humiliate others. Remember, no farmers should feel embarrassed if they can't give the answer.
- Facilitate the discussion to find out the correct answers from participants; if taking too much time, tell them the answers to reinforce the learning.
- Together with the participants, sum up today's learning out loud:
 - o Importance and practices of nutrition during pregnancy and lactation
 - o Importance and practices of nutrition for children under 6 months
 - Importance and practices of nutrition for children ages 6-11 and 12-24 months
 - Importance and practices of nutrition for children during and after illness
 - Importance and practices of handwashing before cooking, before feeding the child, after using the toilet (adults and children), and keeping cooking utensils clean

TOPIC 5: CONCLUSION AND PLANNING FOR NEXT SESSION

Issue to be discussed:

- Set the topic of the next session and the reason for choosing that topic
- Set the next session's date, time and venue
- Select the next session's day leader and discussion her role
- Thank participants for attending today's session and invite them to the next session

Duration: 10 minutes

Training Method: Open discussion

Discussion Questions:

Ask participants the following questions to find out know their opinions about the next session.

- What should we discuss and/or to demonstrate in the next session? Why?
- When (date and time) and where should we sit for the next session?
- Who will be the day leader for next session? What will be her role?
- Does anyone have anything further to add?

- Facilitate the participatory discussion so that the farmers can come up with the title and topics of the next session.
- Facilitate the participatory discussion in setting the date, time, venue, day leader, and other arrangements. Don't impose but facilitate to make the appropriate decisions.
- Ask questions to know participants' opinions and do not impose your idea or plan.
- Ask follow-up questions, leading the discussion in a way so that the participants become able to make the proper plans. Continue asking the follow-up questions until you are able to make proper plans.
- Ask the day leader to make any arrangements, if needed.
- Thank the day leader for her kind support and the next session's day leader for her willingness to provide the volunteer services.
- Ask the day leader to invite FNS members prior to next session, and request that others assist her in this regard by being fully prepared and on time.
- Thank members for attending and actively participating in today's session.

