

# Ethio-SHEP Minimum Package

**A Step-by-Step Guide for Conducting  
Ethio-SHEP Market-oriented Approach**





# **Ethio-SHEP Minimum Package**

# Table of Contents

Background -----	i
Objective -----	v
1. Organizing Market Survey Training of Trainers -----	1
2. Conducting Market Survey Exercise -----	4
3. Target Crop Selection -----	10
4. Crop Calendar Making & Budgeting -----	15
5. In-field Training -----	18
Appendix 1. Sample Program -----	22

## **Background**

SHEP (Smallholder Horticulture Empowerment and Promotion) approach, which encourages mindset change of smallholder horticultural farmers from “grow and sell” to “grow to sell”, was originally developed in Kenya through a technical cooperation project between JICA and Kenyan Government. The SHEP approach has been successful by doubling the income of targeted smallscale farmers through a series of activities that include market survey, target crop selection, crop calendar making, budget planning, and technical training.

Recognizing the project’s success, SHEP approach has now been expanded to over 20 countries in Africa, Middle East, and Latin America. In Ethiopia, the Project for Smallholder Horticulture Farmer Empowerment through Promotion of Market-Oriented Agriculture” (Ethio-SHEP) has been implemented since 2017, and introduced the approach to improve the government’s agricultural extension services by incorporation the market-oriented approach.

## **Strengthening the upstream of food value chains**

Ethio-SHEP project focuses on capacity development of the government’s extension services through introducing the market-oriented farming among target farmers. In Ethiopia, farming by smallholders accounts for over 80% of the cultivated area and outputs. This indicates that to shift farmers’ mindset from “grow and sell” to “grow to sell”, would strengthen continuous crop supply to the market. Without a stable supply of raw materials, agro-processing companies are unable to run their business successfully. Capacity development for smallholder farmers’ towards market-oriented attitude is thus the foundation to lift the country’s economy.

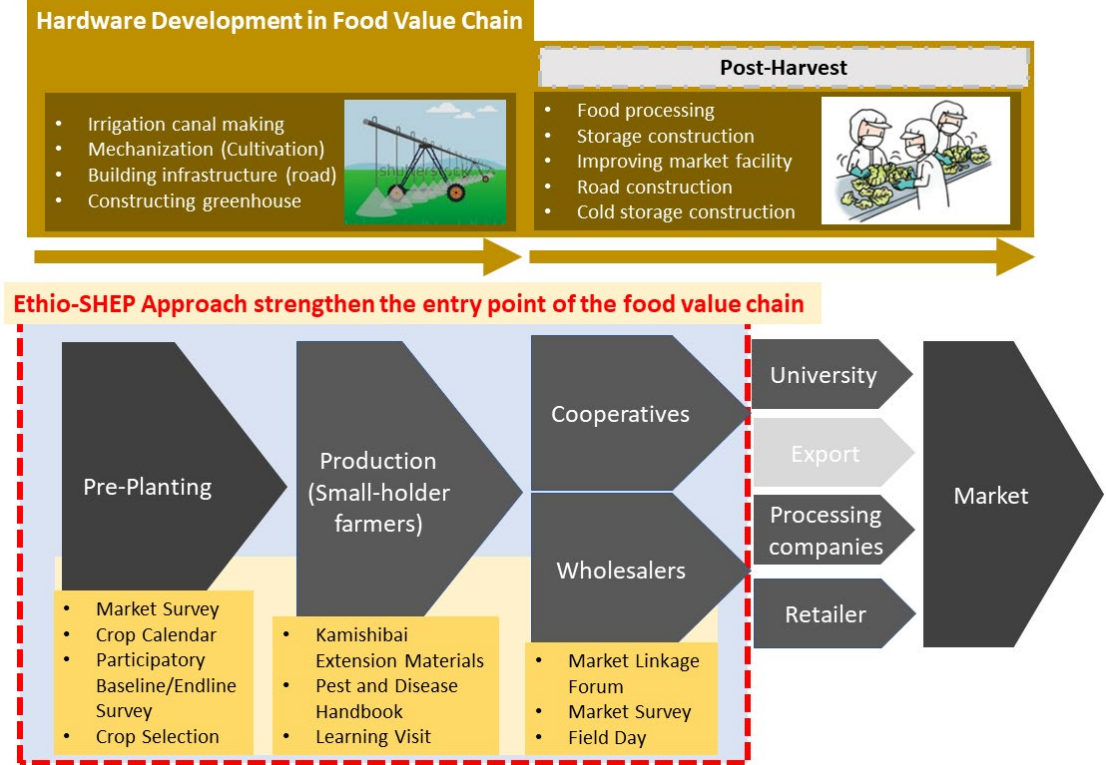


Figure 1. Ethio-SHEP Strengthen the Upstream of Food Value Chains

## Vision of the GoE in relation to Ethio-SHEP approach

The vision of the Government of Ethiopia (GoE) is to lift the country to the status of a middle-income country by 2025. Under the current Ethiopia Growth and Transformation Plan II strategy, the agricultural extension system plays a central role in the country's agricultural development. To realize this vision, GoE has established several agro-industrial parks in different regions.

Ethio-SHEP approach encourages farmers to find new market opportunities before producing crops. This provides opportunities to smallholder farmers to seek a better market not only in neighboring towns and cities but also at agro-processing companies and trading companies. The Ethio-SHEP approach can be a bridge to connect smallholder farmers with such private companies including those in the agro-industrial parks in the future (Figure 2).

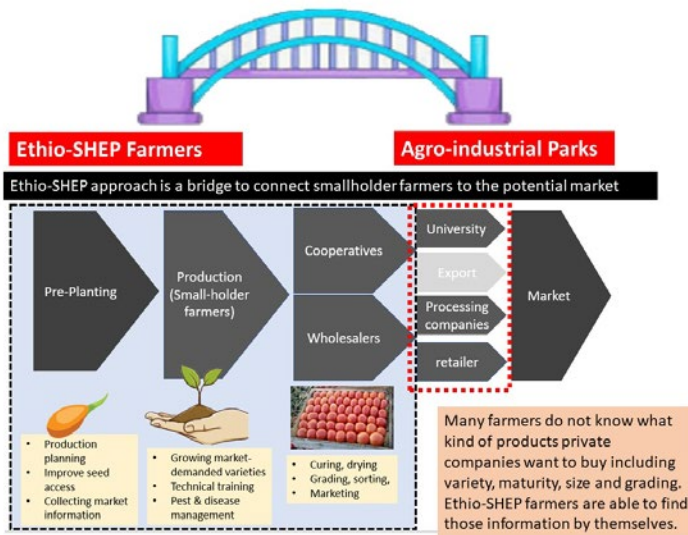


Figure 2. Ethio-SHEP approach is a bridge to connect smallholder farmers to potential markets

### Impact on the Ethio-SHEP interventions

After the project interventions, significant changes on farmers' behavior were observed. Some farmers kept a small portion of their land for vegetable production in the rainy season (Figure 3). Others started nursery preparation for vegetables earlier than before so that they could start selling vegetables when the price was high. One of the causes of these behavior changes was that, through the series of Ethio-SHEP activities, they realized the potential of horticulture production, and that motivated them to start and expand their vegetable production. By conducting the market survey by themselves, they understood that there was a high demand of vegetables if they follow market needs.

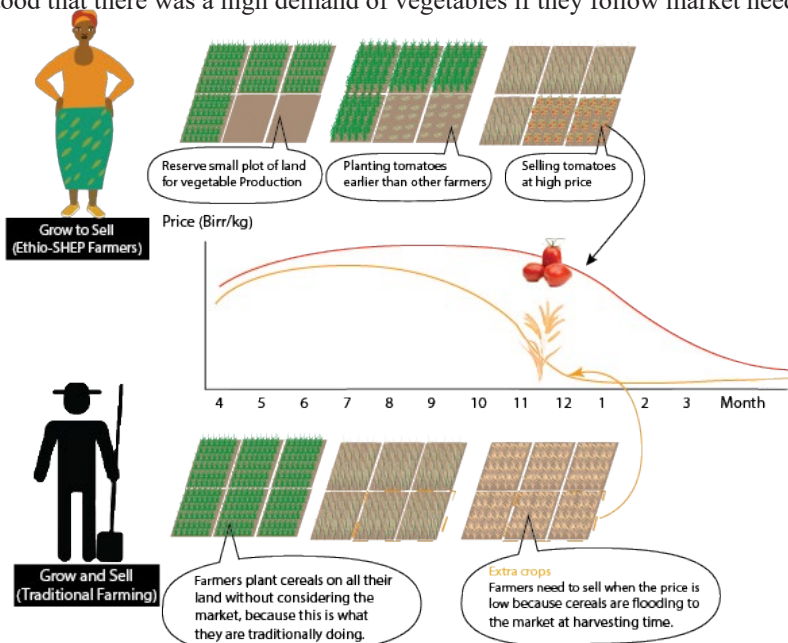
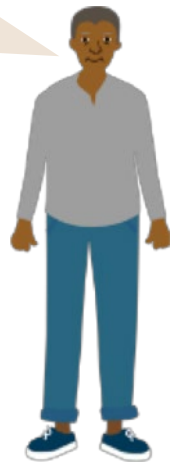


Figure 3. Ethio-SHEP farmers adjusted their crop planting calendar

# Voice on the Ground

"I am ashamed of myself as an expert working with farmers after listening to all those production problems from farmers in my woreda. I have always thought that the main problem for horticulture was the market itself, but now I realized that **the main problem was on our side**, or on both farmers and experts: lack of quality management, fragmented selling in the market, and the problem of timely supply."



Extension Officer

"Before this project, only very few farmers in our area tried vegetable production and supplied it at the local market. I also tried on my family land some small portion of vegetable production. The majority of the people are now expanding vegetable fields after project intervention because **their awareness has been improved**. Previously, our main problem was a lack of knowledge and experience in vegetable production and marketing. The experience-sharing trip that project arranged last year helped us visit high production areas, which encouraged us a lot. In 2019, Mr. Mebrat and I produced a big amount, and we even supplied it to big traders with Isuzu trucks. I personally bought this motorbike, which also facilitates my agricultural activities."



Mr. Zelalem (26)



# Objective of this Handbook

The Ethio-SHEP approach carefully lays out activities to increase farmers’ motivation through a series of capacity development programs as follows (Figure 4): **Step 1.** Share goal with farmers, **Step 2.** Farmers’ awareness is raised, **Step 3.** Farmers make decisions, **Step 4.** Farmers acquire skills.

Four Steps	Activities
1. Share goal with farmers.	-Sensitization Workshop
2. Farmers’ awareness is raised.	-Participatory Baseline Survey -(optional) Market Linkage Forum <b>-Market Survey</b>
3. Farmers make decisions.	<b>-Target Crop Selection</b> <b>-Crop Calendar Making</b>
4. Farmers acquire skills.	<b>-In-field Trainings</b> - (Optional) Exchange Visit
Follow-up and monitoring (including Participatory <u>Endline Survey</u> )	

Figure 4. Ethio-SHEP Essential Four Steps

In order to support extension officers and farmers to realize market-oriented farming, the project compiled a guideline as an integrated package called “**Ethio-SHEP implementation guideline.**” The guideline outlines the above full-spec activities of the SHEP approach including participatory baseline and endline survey, exchange visit, market linkage forum, etc. However, there was a concern raised by the project stakeholders that it might be too difficult for them to implement a whole package due to limitations of financial and human-resource capacities. By reflecting these concerns, the project team extracted only the essential activities from the full package, which still enables extension officers to help farmers practice **farming as a business** without compromising the quality of the intervention.

To build farmers’ capacity towards market-oriented farming, there are three key-pillar components that need to be strengthened through a series of trainings: business management, marketing and production skills (Figure 5). To fully address these core subject, the project team developed training materials through a six-year technical intervention. This handbook focuses on explanation of how to conduct trainings of these core subjects to extension officers, as well as how to utilize the developed materials when implementing the Ethio-SHEP trainings to farmers.

# Transforming from subsistence to Market-oriented farmers



Figure 5. Three key pillars to transforming subsistence farming to Market-oriented farmers

## Contents of this Handbook

Section 1 explains how to organize the market survey ToT to train extension officers. It is highly recommended to conduct a real market survey practice to give them a deep understanding of why the market survey needs to be conducted by farmers themselves. The workshop can be conducted with a minimum of half-day; however, we strongly recommend to secure enough time and budget to conduct it as a three-day workshop so that participants could learn how to use all the three key formats and implement Ethio-SHEP market-oriented approach effectively.

Section 2 to 4 explain how the extension workers should organize the actual training sessions to farmers. This handbook is compiled to provide a brief information to the workshop organizers; therefore, referring to the “Ethio-SHEP Implementation Guideline” which provides full information is recommended.

At the end of the section, sample programs are attached so that organizers can refer to them when conducting actual workshops and training.

# Organizing Market Survey Training of Train-



- ### Concepts Of SHEP
- What is SHEP ??
  - SHEP is interpreted as Smallholder Horticulture Farmer Extension and Promotion of market-oriented Agriculture
  - It is an approach originally developed in Kenya from 2004 technical cooperation Project between JICA and Kenyan Ministry of Agriculture. It mainly focuses providing integrated extension services to smallholder farmers by promoting concept of "Farming for Profit" and shifting mind-set of small holder farmers from "Grow and Sell" to "Grow to Sell"
  - It is innovated through try and error to improve Kenyan Horticulture services through Japan and Kenyan cooperation. Extension services are provided by principle of Economy and Efficiency
  - This innovation is backed up by principle of Economy and Efficiency



Follow the following step by step approach

# Section 1

half-day

# Organizing Market Survey Training of Trainers

## Objectives

The purpose of this ToT is to provide knowledge and skills on market surveys, crop selection, crop calendar making and conducting in-field trainings in order to implement the Ethio-SHEP market-oriented approach.

## Outline

The training contains three main activities (market survey and crop selection, crop calendar making and In-field training). However, you can decide which activities you want to carry out depending on your institutional resources and capacities.

## Procedure

### Step 1

### Who

Select target woredas & kebeles to be trained. Set the number of participants.



### Step 2

### When

Fix the training schedule and date.



### Step 3

### Where

The venue should be a place nearby market, if you conduct the market survey.



### Step 4

### What

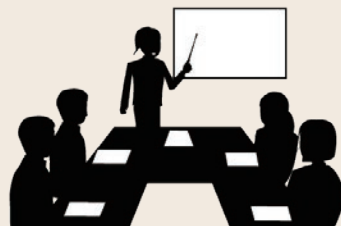
Revise the training program and contents. (Refer to the attachment 1)



### Step 5:

### How

Arrange lecturers who can provide the training. Consider inviting experts who already have experience of conducting the Ethio-SHEP activities including market survey & crop selection, crop calendar making and in-field training.



## Prepare a training program and contents

- Refer to the attached sample program and materials. The program can be modified to fit your budget and schedule.
- The venue should be a place near the market where you conduct the market survey exercise.
- You can conduct the training by utilizing the available Ethio-SHEP materials. However, if necessary, you can ask supports from other relevant stakeholders.





2

# Market Survey



Follow the following step by step approach

## Section 2

Half-day

# Conducting Market Survey Exercise

### Objectives

The main purpose of the Ethio-SHEP's market survey is to encourage farmers to have hands-on experiences of understanding what kind of challenges market actors face and what, when and how much products wholesalers/shopowners/retailers want to buy from farmers.

### Outline

Farmer representatives chosen by the farmer groups attend the training to learn how to conduct the market survey. The training includes (1) explanations on how to conduct the market survey and (2) exercising actual market survey at a local market.

### Procedure

#### Step 1 *Who*

Contact the trade office and collect the name and phone number of a responsible person of the target market.



#### Step 2 *When*

Get permission and appointment from the responsible person of the target market and wholesaler.



#### Step 3 *Where*

It should be conducted preferably at the main market of the target crops.



#### Step 4 *What*

List target crops to be surveyed (5 crops per survey is recommended). Explain to wholesalers the purpose of the market survey and questions to be asked.



#### Step 5 *How*

Visit the market early in the day because most of the vegetables are traded in the morning. However, morning time is also the busiest time for the market actors, so please discuss with wholesalers and shopowners/retailers on the appropriate time to visit them.



## Group formation

- Divide participants into small groups. Around 5 persons per group is preferable for easy handling.
- Ask the group member to assign roles as a leader, timekeeper, note-taker, and interviewer.

No	Role	Responsibility
1	Leader	Make sure, all survey will finish safely. Providing opening and closing remarks to the interviewee
2	Interviewer	Ask each questions to the interviewee.
3	Note-taker	Fill your questioner sheet
4	Time-keeper	Try to finish interview within 15 min except Interviewee allow them to continue. If customers come to shop, please stop asking question

## Implementation Tips

- The market survey aims at collecting information on not only market prices but also required quality and quantity of produce, seasonal fluctuations of prices and trading quantity, mode of payments, etc.
- During the market survey, farmers are encouraged to establish business relationships with the wholesalers/shop owners/retailers with whom they discuss at the market.
- Farmers should understand that the market survey needs to be carried out continuously by themselves at least before starting horticulture production at the beginning of the dry season.



We should discuss with other farmers so that we can sell together directly to the market. Today the wholesaler agreed to send Isuzu truck in the coming season. Now I don't worry about the market.



We are happy to buy onions if you have enough quantity with good quality. But most farmers don't have enough onions to fill our Isuzu truck.

## Filling the gaps between farmers and market actors



Farmer

We didn't know that so many vegetables are coming from a very far area from the market. Wholesalers are willing to buy our vegetables if we sell together with our neighbors to fill Isuzu truck.

We didn't care about the quality of the produce before. We also didn't like to sell through middlemen because they take our profits. Now I understand that wholesalers like to buy vegetables through middlemen; that is because of us. We mix bad ones at the bottom of the sacks. I will share this with groups.

They said they don't want to buy our potatoes because farmers irrigate their potatoes until right before harvesting to increase weight. We created the problem ourselves. I learned that we need to think about why they only pay lower price for our produce.



We didn't know local farmers are producing cabbages in volume. They usually sell their products individually, so we advised them to sell together. In that case, we can buy directly from them.

We like to buy vegetables through middlemen, because middlemen can sort and grade. But through today's discussion, farmers agreed to sort and grade, so we can offer a better price. If they do not grade, we need to hire somebody to grade anyway.

I am glad that farmers understand our challenges. We are willing to buy from them if they sell better quality potatoes since they are growing it just nearby our area so we can save our transportation cost as well.



Market Stakeholder

### Format - Market survey questionnaire

Here is a sample market survey questionnaire. In addition to filling in the table shown below, farmers are encouraged to gather any other relevant information they think is important to them. In that case, instruct them to jot down information they obtained in an empty space of the questionnaire sheet.

#### Note:

When representative farmers provide feedbacks of the market survey to other community members, they need to provide instruction on how to conduct it so other members could also practice it later.

# Market Survey Questionnaire

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Region: \_\_\_\_\_

Zone: \_\_\_\_\_

Woreda: \_\_\_\_\_

Market Survey Conducted by (names of farmer representatives): \_\_\_\_\_

Name & Contact of Produce Dealer	Produce & Variety	Produce Quality & Market Requirements	Peak Demand (months)	Unit Quantity & Frequency (daily/weekly etc.) of Supply	Place of Production	Purchasing Unit Price (ETB/kg)	Mode of Payment	Terms of Payment	Marketing Challenges	Dealer's willingness to purchase the produce from the Group





Follow the following step by step approach

## Section 3

2-3 hours

# Target Crop Selection

### Objectives

Sharing market survey results with group members is the first step of the target crop selection, so, the farmer's group could identify the specific types of crops that are demanded by the market.

### Outline

Based on the market survey results, group members discuss about crops they prefer and build a consensus on their target crops to grow. Woreda experts and DAs give advice to the group during the crop selection process.

### Procedure

#### Step 1 *When*

Inform the community/target group members and set the meeting date and time.



#### Step 2 *Who*

Invite all the group members, including spouses.



#### Step 3 *Where*

FTC or any convenient places nearby the community.



#### Step 4 *What*

Ask farmer representatives to share market survey results with other farmers and fill out the crop selection sheet.



#### Step 5 *How*

Ask the farmer's group to discuss advantages and disadvantages of choosing the listed crops as a target crop by considering the target crop selection criteria. Then let farmers choose two crops by voting (See the next page).



## Crop selection in a democratic manner

- Invite women for the crop selection meeting. It is preferable to arrange a meeting on the weekend so that women could participate in the meeting.
- After sharing the market information, fill out the crop selection sheet. Explain until all the participants understand basic market requirements, including production cost and estimate profitability in consideration of agro-ecological conditions to grow the listed crops.
- When taking a vote on crop selection by raising hands, ask farmers to look down and close their eyes to avoid powerful members (group leaders, successful business person or well-educated people) do not influence the group's decision (see the picture below)



## Format - Target crop selection sheet

Below table is the target crop selection sheet. The number of crops/varieties to be analyzed depends on the results of the market survey. However, be aware of time constraints. It may require too much time to analyze all the crops that farmers surveyed at the market. In that case, choose the most promising ones for detailed analysis.

### Crop Selection Sheet

Date: / /

Region: \_\_\_\_\_

Zone: \_\_\_\_\_

Woreda: \_\_\_\_\_

Name of Group: \_\_\_\_\_

Crop / Variety	Consumed by the locals or not	Experience in cultivating the crop	Month of planting / maturity period	Major production challenges	Average marketable yield per ha (kg)	Average unit price (ETB/kg)	Total income per ha (ETB)	Cost of production per ha (ETB)	Estimated net income per ha (ETB)	Main market(s)	Market Requirements (Quality/Quantity)	Remarks	Ranking



## Example

# Crop Selection Sheet

Date: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Zone: \_\_\_\_\_

Region: \_\_\_\_\_

Woreda: \_\_\_\_\_

Name of Group: \_\_\_\_\_

Crop / Variety	Consumed by the locals or not	Experience in cultivating the crop	Month of planting / maturity period	Major production challenges	Average marketable yield per timad (1/4ha) (kg)	Average unit price (ETB/kg)	Total income per timad (ETB)	Cost of production per timad (ETB)	Estimated net income per timad (ETB)	Main market(s)	Market Requirements (Quality / Quantity)	Remarks	Ranking
Potato / Gidene	Yes	Yes	April / 4 months	Disease (Late blight)	5,000	5.0	25,000	7,610	17,390	A Market B Market	A Market: 50qt on Friday B Market: 10qt everyday	Local market buys small size	1
Onion / Adama Red	Yes	Yes	August / 4 months	Disease (Downy mildew)	4,000	12.0	48,000	6,230	41,770	C Market D Market	C Market: 100qt on Tuesday D Market: 5qt everyday	C Market prefers dark red color, and medium	3
Cabbage / Euro	Yes	Yes	October / 4 months	Pests (Aphids)	10,000	2.7	27,000	5,290	21,710	A Market D Market	A Market: 120qt on Saturday B Market: 5qt everyday	small size canbe sold at local market	2





Follow the following step by step approach

# Section 4

half-day

# Crop Calendar Making & Budgeting

## Objectives

Crop calendar making enables farmers to provide basic information on vegetable production as well as budget planning. Through this exercise, farmers can understand a production plan by taking the peak demand time of the market into consideration.

## Outline

Through this training, farmers make a production plan, and exercise cost & benefit analysis by considering the market needs of the target crops.

## Procedure

### Step 1 *When*

Discuss with the farmer's group and set the meeting date and time.



### Step 2 *Who*

Invite all the group members including spouses.



### Step 3 *Where*

FTC or any convenient places nearby the community.



### Step 4 *What*

I am Improving or changing  Crop/Variety,  Quality,  Quantity,  Harvest timing,  Buyers,  Others (specify: )

Let the farmers think what changes they want to bring about on the target crops.

### Step 5 *How*

After deciding what changes they want to achieve, farmers make a production plan and budgeting.

Production cost		
Items	Amount	ETB
	5 qt	3,500
	45 kg	630
	30 kg	420
	1 bsh	300
		560
		2,200
<b>Total</b>		<b>7,610</b>

## Crop calendar making

- First, farmers should decide what changes they want to bring about on the target crops, considering market demands.
- Woreda experts and DAs facilitate the farmers' group to purchase seeds of the selected crops so that they can reduce their seed costs.
- Group selling gives the farmer's group bargaining power. DAs should facilitate farmers to express their ideas and concerns.

## Implementation procedure

- Divide farmers into some groups depending on their interest.
- Farmers fill their crop calendars together with DAs. Literate farmers should support farmers who cannot read or write.

## Implementation Tips

- It is important to produce market demanded quality and quantity of produce at a peak price season, and to implement all production activities on time.



# Format

## - Crop calendar

Below is the format of crop calendar. First of all, farmers decide what changes and improvement they want to achieve by ticking the corresponding squares at the top of the calendar. Then they fill in specific dates of each production step of the target crops; date of transplanting, top dressing and marketing. This format can also be utilized to review the production process after selling their produce and to check whether they could get expected profit or not. If not, analyze what factors impacted on profitability (i.e. low yield, low unit price, etc.) .



### Onion Production

#### Production Information

Planting distance: **40 × 20 × 5 cm**  
 Potential yield: **75-88 qt/0.25ha**  
 Seed amount: **1.6-2.0 kg/0.25ha**  
 Manure: **25-30 qt/0.25ha**

NPS: **60 kg**      Urea: **25 kg**

I am Improving or changing  Crop/Variety,  
 Quality,  Quantity,  Harvest timing,  
 Buyers,  Others (specify: \_\_\_\_\_)

**Net Profit: (1) × (2) - (3)**

**39,370 birr**

Woreda: \_\_\_\_\_  
 Kebele: \_\_\_\_\_  
 Name: \_\_\_\_\_

Variety: Adama Red  
 Area(ha): 0.25 ha  
 (qt): 25 qt

60 kg  
 Sowing Date: 12/Aug/2019  
 Transplant date  
 (6-7 weeks after  
 planting): 7/Oct/2019

**3 Weeks Later**

**2 Weeks Later**

Day: 11/Nov      12.5 kg

Day: 21/Oct      12.5 kg

Harvest(17weeks-):  
27/Jan/2020

**1 Yield: 40 qt**

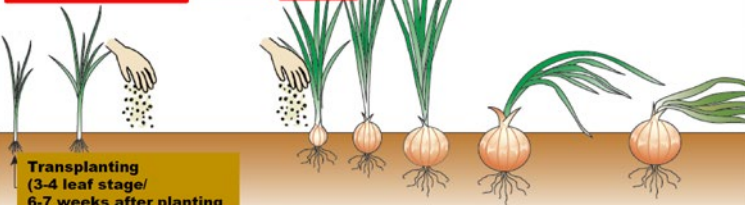
**1qt = 100 kg**

**2 Price: 1,200 birr**

Market: Adama

#### Production cost

Items	Amount	ETB
	1.7 kg	1,000
	60 kg	840
	25 kg	350
	1 bottle	2,040
	One way	2,000
	5 people	2,400
<b>3 Total</b>		<b>8,630</b>



# Farmers Acquire Skills

3





Follow the following step by step approach

# Section 5

2-3 hours

## Conducting In-field Training

### Objectives

In-field training is a demand-driven training that enhances farmers' skills and knowledge of practical production technique of the target crops that they have chosen.

### Outline

To learn the skills, techniques and knowledge that are necessary for production of the target crops, the training should be practical and conducted at farmers' fields or nearby their community.

### Procedure

#### Step 1

#### Who

Target farmers, preferably together with their spouses.



#### Step 2

#### When

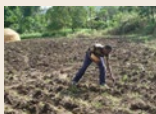
Set the training schedule and date by discussing farmers' groups. A religious holiday should be avoided.



#### Step 3

#### Where

The venue should be a farmer's field. If farmers agree to gather in the model farmer plot/FTC, conduct a training at the agreed place.



#### Step 4

#### What

To fill the identified technical gaps by providing basic cultivation techniques of their target crops and necessary knowledge of pest and disease management.



#### Step 5

#### How

Use Kamishibai extension materials in order to provide the necessary information and techniques. After the Kamishibai training, continuous follow-up is essential.



## Organizing in-field training

- Using Kamishibai (colored picture-based extension materials) is effective in delivering technical messages to farmers. It is an easy to use material for any DAs because all the necessary information is written in the backside of the picture page.
- DAs can conduct in-field training as one of their regular extension services. If necessary, woreda horticulture experts could support DAs as a technical backstop.
- After providing instruction on crop production, post-harvest handling and pest management technique, DAs can also demonstrate the basic agronomic practices, but the subject of demonstration should be discussed with farmers.



“Kamishibai” is a Japanese word that means ‘story panels with pictures’ which look like flip charts. This extension material is printed in full-color and laminated for all-weather use. The front page is for farmers to look at and has many pictures. The back page has descriptions of the photographs so that extension workers can read them aloud to the farmers.

**Front page**

**3.8.4.a: Late Blight**



Leaves and stem of potato plant infected by Late Blight

**Back page**

**3.8.4.a: Late Blight**



Leaves and stem of potato plant infected by Late Blight

**3.8.4.a: Late Blight**

- This is a fungal disease which is favored by cool, cloudy wet conditions
- It is one of the most destructive disease of potato

**Symptoms:**

- Water soaked spots on leaves which enlarge and turn brown below the leaf; the fungus produces white moldy growth seen clearly at the edge of the spot
- The affected leaves wither, yet frequently remain attached to the stem

**Control:**

- Resistant varieties, such as "Belata", "Gedasa", "Dagamega", "Jatene" and "Cagute" are claimed to have some tolerance
- Practice Crop Rotation with non-solanaceous crops
- Practice good field hygiene by rouging
- Select only certified, disease-free seed potatoes
- Spray with appropriate fungicides both protective & curative, such as
  - Protective:**
    - Antacol® (i. Propicon)
    - Dithane M45® (i. mancozeb)
    - ManDoff® (i. Fluzazinam)
  - Curative:**
    - Rodemil Gold® (i. metalaxyl + mancozeb)
    - Mitrax® (i. Propicon 70 % + Cymanoxil 6 %)
    - Victory® (i. metalaxyl + mancozeb)

**Amharic version**



**Oromiffa version**



# Sample Program



## Appendix1. Sample program

### Sample1. Market survey (half day)

Time	Day 1
8:30-9:00	Registration
9:00-9:20	Welcome Remarks and participants introduction
9:20-10:30	Introduction and Market survey lecture <ul style="list-style-type: none"><li>- Background, purpose and how to conduct market survey</li><li>- Explaining market survey format</li></ul>
10:30-10:50	Tea Break
10:50-11:20	Exercise of market survey by watching video (separate into 5 groups)
11:20-11:50	Presentation of market survey findings
11:50-12:00	Closing remarks

### Sample 2. Market survey and crop selection(1-day training)

Time	Day 1
8:30-9:00	Registration
9:00-9:20	Welcome Remarks and participants introduction
9:20-10:30	Introduction and lecture on Market survey <ul style="list-style-type: none"><li>- Background, purpose and how to do it</li><li>- Explaining market survey format</li></ul>
10:30-10:50	Tea Break
10:50-11:30	Exercise of market survey by going to the market
11:30-12:00	Presentation of the market survey findings
12:00-13:00	Lunch
13:00-13:30	Lecture on crop selection
13:30-14:30	Exercise on crop selection
14:30-15:00	Presentation by each group
15:00-15:10	Closing remarks
15:10-15:30	Tea break

### Sample 3. Market survey, crop selection, crop calendar and action plan making (2-day training)

Time	Day1	Time	Day2
8:30 – 9:00	Registration	8:30 – 9:00	Registration
9:00 – 9:20	Welcome Remarks and participants introduction	9:00 – 9:30	Lecture on problem analysis and crop calendar making
9:20 – 10:30	Introduction and lecture on Market survey - Background, purpose and how to do it - Explaining market survey format	9:30 – 10:00	Exercise on problem analysis
10:30 – 10:50	Tea break	10:00 – 10:20	Tea break
10:50 – 11:30	Exercise of market survey by going to the market	10:20 – 11:00	Exercise on crop calendar making
11:30 – 12:00	Presentation of the market survey findings	11:00 – 12:00	Presentation and Q&A
12:00 – 13:00	Lunch	12:00 – 13:00	Lunch
13:00 – 13:30	Lecture on crop selection	13:00 – 13:30	Lecture on action plan making
13:30 – 14:30	Exercise on crop selection	13:30 – 14:30	Action plan making
14:30 – 15:00	Presentation by each group	14:30 – 15:00	Presentation by each group
15:00 – 15:30	Tea break	15:00 – 15:10	Closing remarks
15:30 – 16:30	Q and A	15:10 – 15:30	Tea break

## Sample 4. Market survey, crop selection, crop calendar and action plan making and brief explanation on crop production (3-day training)

Time	Day1	Time	Day2	Time	Day3
8:30 – 9:00	Registration	8:30 – 9:00	Registration	8:30 – 9:00	Registration
9:00 – 9:20	Welcome Remarks and participants introduction	9:00 – 9:30	Lecture on problem analysis and crop calendar making	9:00 – 9:45	Potato production
9:20 – 10:30	Introduction and lecture on Market survey - Background, purpose and how to do it - Explaining market survey format	9:30 – 10:00	Exercise on problem analysis	9:45 – 10:30	Tomato production
10:30 – 10:50	Tea break	10:00 – 10:20	Tea break	10:30 – 10:50	Tea break
10:50 – 11:30	Exercise of market survey by going to the market	10:20 – 11:00	Exercise on crop calendar making	10:50 – 11:35	Onion production
11:30 – 12:00	Presentation of the market survey findings	11:00 – 12:00	Presentation and Q&A	11:35 – 12:20	Head cabbage production
12:00 – 13:00	Lunch	12:00 – 13:00	Lunch	12:20 – 13:20	Lunch
13:00 – 13:30	Lecture on crop selection	13:00 – 13:30	Lecture on action plan making	13:20 – 13:50	Q&A
13:30 – 14:30	Exercise on crop selection	13:30 – 14:30	Action plan making	13:50 – 14:00	Closing remarks
14:30 – 15:00	Presentation by each group	14:30 – 15:00	Presentation by each group		
15:00 – 15:30	Tea break	15:00 – 15:30	Tea break		
15:30 – 16:30	Q and A				

