



# Introduction of SHEP Program

## - Innovation for Agricultural Extension Service -

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# Challenges of Conventional Agricultural Extension

- ✓ **Technology Transfer**: Farmers do not adopt recommended technologies/technics demonstrated by agricultural research.
- ✓ **Lack of Marketing**: The increase in yield does not necessarily lead to the improvement of agricultural profit.
- ✓ **Empowerment**: Farmers' efforts to improve farming do not persist.



**SHEP as one of the agriculture extension approaches gives concrete solutions for these basic issues on agricultural extension.**



# “What is SHEP?”

- Stands for “**S**mallholder **H**orticulture **E**mpowerment and **P**romotion” Approach
- Developed in Kenya through technical cooperation project by JICA which started from 2006 and succeeded in increasing farmers’ income
- An extension approach which realize “**Market-Oriented Agriculture**”





# “What is SHEP?”

- YouTube Video (26'12):  
<https://www.youtube.com/watch?v=UmV9-42YLdA>



## 2. Introduction of SHEP Activities



# “How to realize it in SHEP?”

Essential 4 steps	Activities in Kenya	Other Countries
<b>1. Selection of targets and sharing vision/goal</b>	Sensitization Workshop Selection of Target County	Sensitization Workshop Selection of Target Group (Rwanda)
<b>2. Farmers' awareness of current situation and new information</b>	Participatory Baseline Survey FABLIST Forum Market Survey	Participatory Baseline Survey Needs Assessment (Malawi) Market Survey
<b>3. Decision making by Farmers</b>	Crop Calendar Making Action Plan Making	Crop Selection Making Crop Calendar
<b>4. Provision of technical solutions</b>	Training for Extension staff Demand driven In-field trainings for farmers	In-field Training

# 1. Sharing the vision/goal Sensitization Workshop

- All levels of stakeholders attend the workshop
- Participants understand what they are going to do
- Participants identify their roles and responsibilities
- All stakeholders share how to realize Market-Oriented Agriculture



**Participants of the Sensitization Workshop**

## 2. Awareness of situation

# Market Survey

- Farmers visit to adjacent market and understand not only price but also required quality and quantity, selling condition, price fluctuation, etc.
- Both market stakeholders and farmers can share their own information



**Exercise on Market Survey**

# 3. Decision Making

## Crop Calendar Making

- Based on the results of Market Survey, group members of farmers make a Crop Calendar

### Example Crop Calendar

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

Name of District: \_\_\_\_\_ Name of Sub-District: \_\_\_\_\_

Name of the Farmer Group: \_\_\_\_\_

We are improving and/or changing  Crop/Variety,  Quality,  Quantity,  Harvest timing,  Buyers,  Others  
(specify: Packaging, Stronger price negotiation).

What changes and improvements do the farmer group want to make?

Month		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Production	1 <sup>st</sup> Crop (Tomato)		Land preparation Nursery	Transplanting	1st Topdressing Pest & disease control Weed control	2nd Topdressing	Harvesting/ Cleaning/ Grading/ packaging						
	2 <sup>nd</sup> Crop (Cabbage)												
	3 <sup>rd</sup> Crop (Sweet Potato)												
Marketing & Business Management		Market survey at X market and Y market	Start record keeping for this season	Regularly contacting potential buyers			Arranging transportation Group selling	Profit analysis					
Group Activities/Others		Convert maize field to veggie garden	Group purchasing of seed & fertilizer	Cleaning irrigation canals			Collecting group membership fee						

Production plan on the target crops

Marketing and business management plan

Other group activities

## 4. Provision of Technical Solution **Demand Driven In-field Training**

- Extension staff are trained on crops or skills according to farmers' needs
- All skills are easy for farmers to adopt
- Farmers learn what they want to know, so adoption rate is high



Extension Officer training Farmer Group



User friendly skills

Red line: Level of motivation  
Green line: Skill level

An increase in income with acquisition and utilization of the skills leads to confidence in one's capacity.

High motivation facilitates learning of technical skills.

Learning with experience of research methods helps enhance motivation.

Motivation

Skill level

Sensitization  
Workshop

Exercise on Market  
Survey

Selection of crops  
to be grown

In-field training

Sales of crops

Sustainable  
growth



# “Previous model of technology transfer”

Essential 4 steps	Activities in Kenya	Other Countries
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# “Previous model of technology transfer”

Essential 4 steps	Activities in Kenya	Other Countries
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**Farmers were suddenly given guidance on the “correct” and “appropriate” technologies as defined by the project, without any opportunity to form their own vision, become aware of their needs, or make decisions based on their own understanding.**

<b>4. Provision of technical solutions</b>	Training for Extension staff Demand driven In-field trainings for farmers	In-field Training
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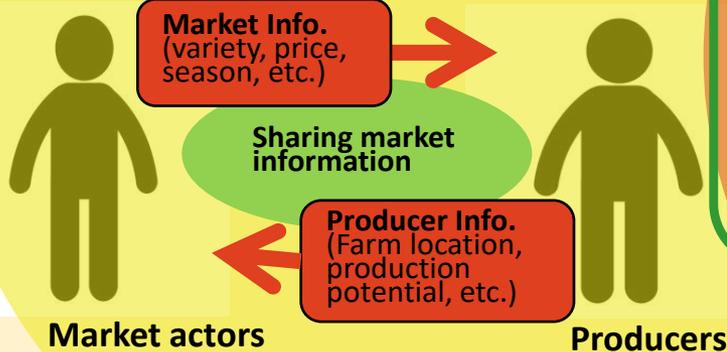
## “What is the concept of SHEP?”

Various donors implement similar projects/programs

Feature of JICA’s technical cooperation (Capacity Development)

### Promoting “Farming as a Business”

Sharing information among market actors & farmers for improving efficiency of local economies (Mitigating the **asymmetry of information**)



- Market actors**
- Retailers, middlemen
  - Agricultural inputs companies (seed, fertilizers, etc.)
  - Agricultural product processors

**Producers**



### Developing and motivating people by effective activity designs and “tips”

Raising intrinsic (internal) motivation for continuous activities implementation (Self-determination Theory)  
- Three psychological needs to motivate people-



#### **Autonomy**

People need to feel in control of their own behaviors and goals



#### **Competence**

People need to gain mastery of tasks and learn different skills

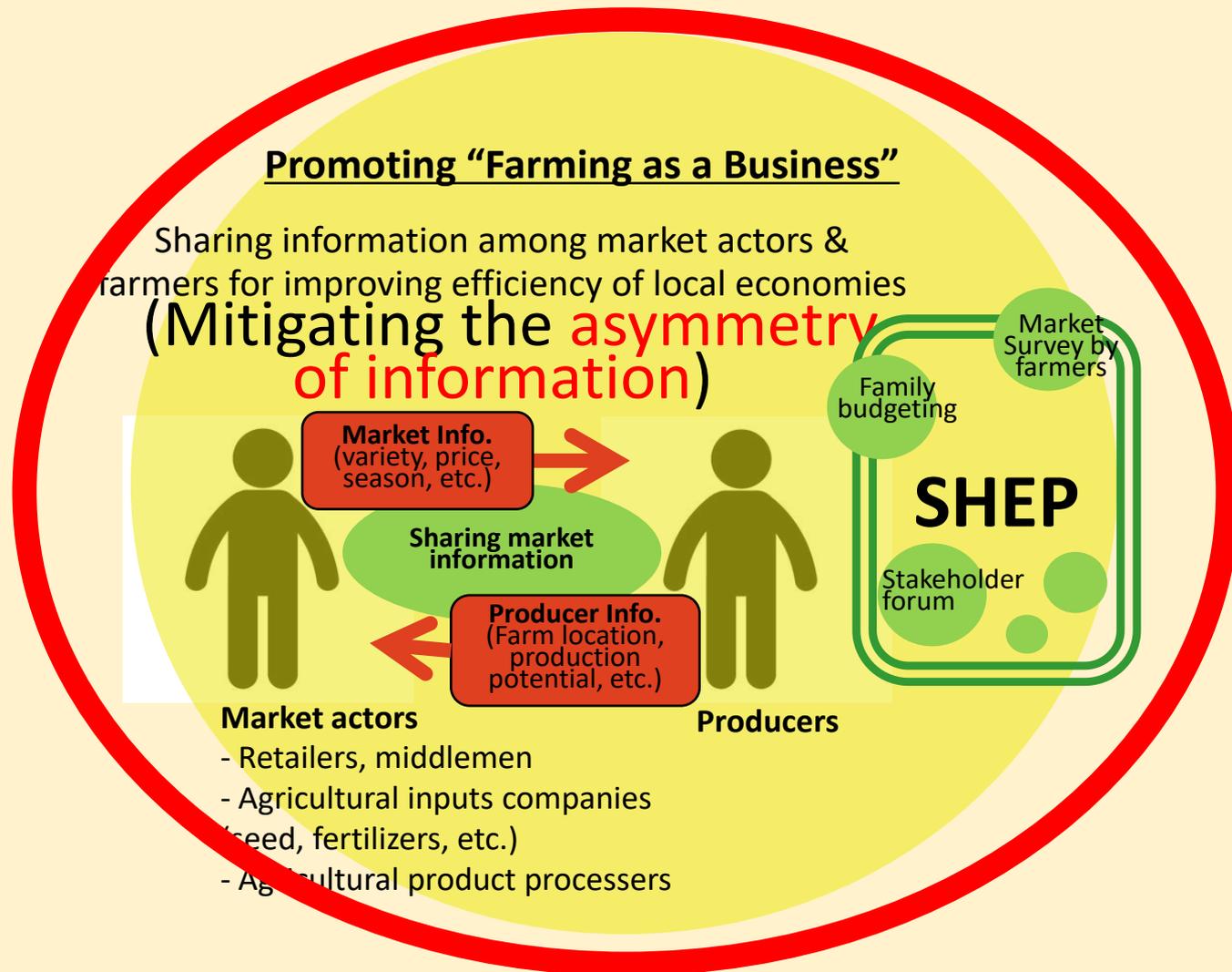


#### **Relatedness**

People need to experience a sense of belonging and attachment to other people

### 3. Inside of SHEP Approach “Farming as Business”

# SHEP realize “Farming as Business”



Promoting “Farming as Business”

**Market Information**  
(Price fluctuation, high demand crops, required quality, etc)

→ **Producers**

Small scale farmers



## Market Stakeholders

- Retailers, Middle agents, Supermarket
- Agro-processing companies
- Input companies

**Producers’ Information**  
(Location, Potential, Experiences)

Bridging the Information Gap by [Market Survey](#)

**POINT:** Market information not as “mere data” but as “information with a human face”

**Signaling**



After meeting a middleman during the market survey, we invited her to come and visit our farm. We showed her how we grew vegetables and how good our vegetables were. (farmer)

Before, we didn't talk about vegetables at all with middlemen. We only talked about the price. Now our buyers give us consumers' feedback, both positive and negative, on the vegetables we supplied. We improve our farming based on the feedback. (farmer)

**Effort to become a trustworthy supplier**

### 3. Inside of SHEP Approach “Farming as Business”

Bridging the Information Gap through **Repeated Transactions**

**Mutually-beneficial business practices (win-win) through repeated transactions**



We wanted to offer one stop services to the local traders by producing a variety of leafy vegetables here so that the traders will keep coming back. (farmer)

**Trust-building through repeated transactions**

**win-win**



I am glad this group produces several kinds of leafy vegetables since I don't have to travel a long distance searching for vegetables. (trader)



### 3. Inside of SHEP Approach “Farming as Business”

Bridging the Information Gap through **Repeated Transactions**

Mutually-beneficial business practices (win-win) through repeated transactions



We now supply watermelons to the same trader. We don't have to worry about where to sell anymore. (farmer)



**win-win**

**Trust-building  
through  
repeated  
transactions**

I can get good quality watermelons constantly from this farmer group. I can avoid the risk of getting low quality ones from the wholesale market. (trader)



### 3. Inside of SHEP Approach “Motivation”

# SHEP’s Emphasis on “Motivation”



### 3. Inside of SHEP Approach “Motivation”

## Edward Deci’s Self-Determination Theory: Three Psychological Needs

- **Autonomy**
  - People need to feel in control of their own behaviors and goals
- **Competence**
  - People need to gain mastery of tasks and learn different skills
- **Relatedness**
  - People need to experience a sense of belonging and attachment to other people

## Introduction and utilization of Motivation theory

- **Autonomy support**



-Farmers themselves decide the crops to grow and make a crop calendar based on the results of the market survey.

- **Competence support**



-Skills and techniques provided to farmers are user friendly and low cost. Farmer can practice it immediately after learning

- **Relatedness support**

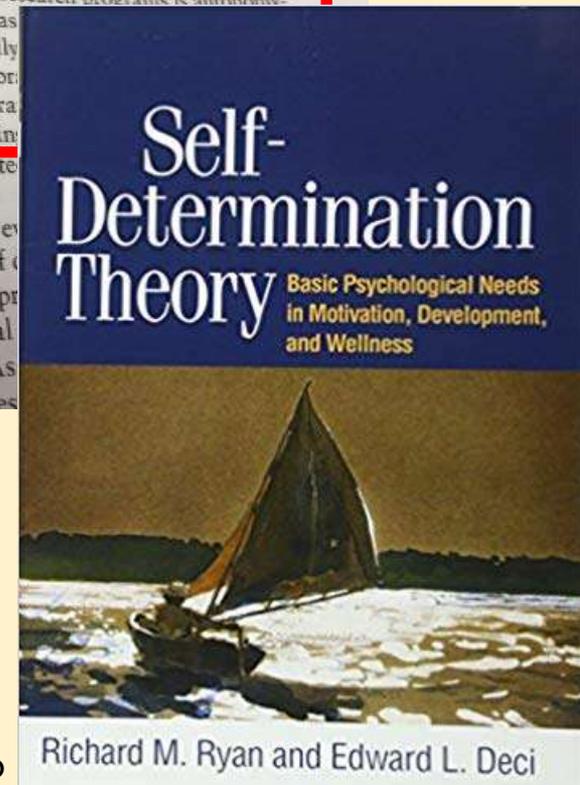
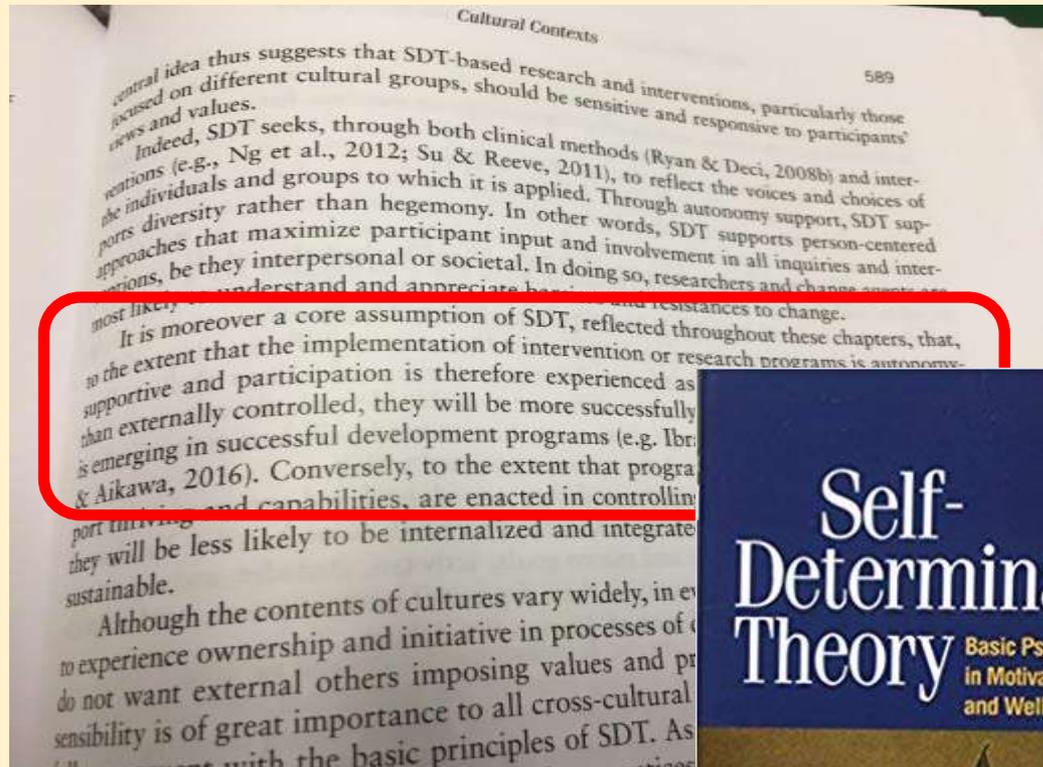
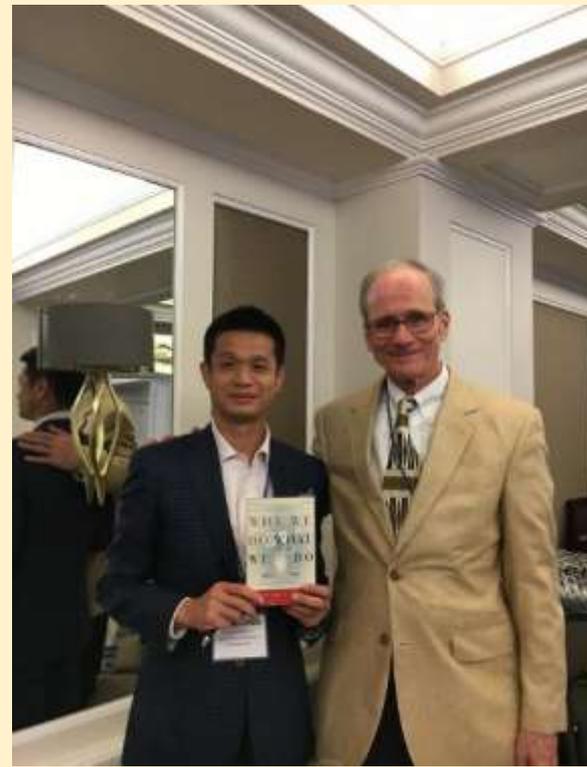


-Face to face communication between farmers and market stakeholders benefit to build good relationship



### 3. Inside of SHEP Approach “Motivation”

Presentation on “Utilization of SDT” at 6<sup>th</sup> International Conference of SDT



It is moreover a core assumption of SDT, reflected throughout these chapters, that, to the extent that the implementation of intervention or research programs is autonomy-supportive and participation is therefore experienced as elective and volitional rather than externally controlled, they will be more successfully internalized. Evidence for this is emerging in successful development programs (eg. Sayanagi and Aikawa, 2016)

### 3. Inside of SHEP Approach



“What can SHEP bring about change?”

Change of farmers’ mind on marketing from **“Grow and Sell”** to **“Grow to Sell”**



**Market Survey by Farmers**

Name & Contact of Produce Dealer	Produce & Variety	Produce Quality Market Requirements	Peak Demand (months)	Quantity (kg) & Frequency (daily/weekly etc) of Supply	Unit Price (Ksh./kg)	Mode of Payment	Terms of Payment	Marketing challenges	Dealer's Willingness to purchase the Produce from the Group
S. K. Mwai (0722-xxxxxxx)	Tomato (cal j)	- Medium size - Half ripen	March, April, & May	1,000 kg/week	100	Cash	Cash on Delivery	Inadequate Storage Facilities	Willing
J. O. Ouma (0736-xxxxxxx)	Tomato (cal j)	- Large size - Half ripen	February & March	2,500 kg/week	120	Cheque	Two Weeks after Delivery	Inadequate Storage Facilities	Willing
O. J. Aduu (0720-xxxxxxx)	Tomato (cal j)	- Medium size - Half ripen	December & January	2,500 kg/week	115	Cash	A week after Delivery	Inadequate Storage Facilities	Not willing

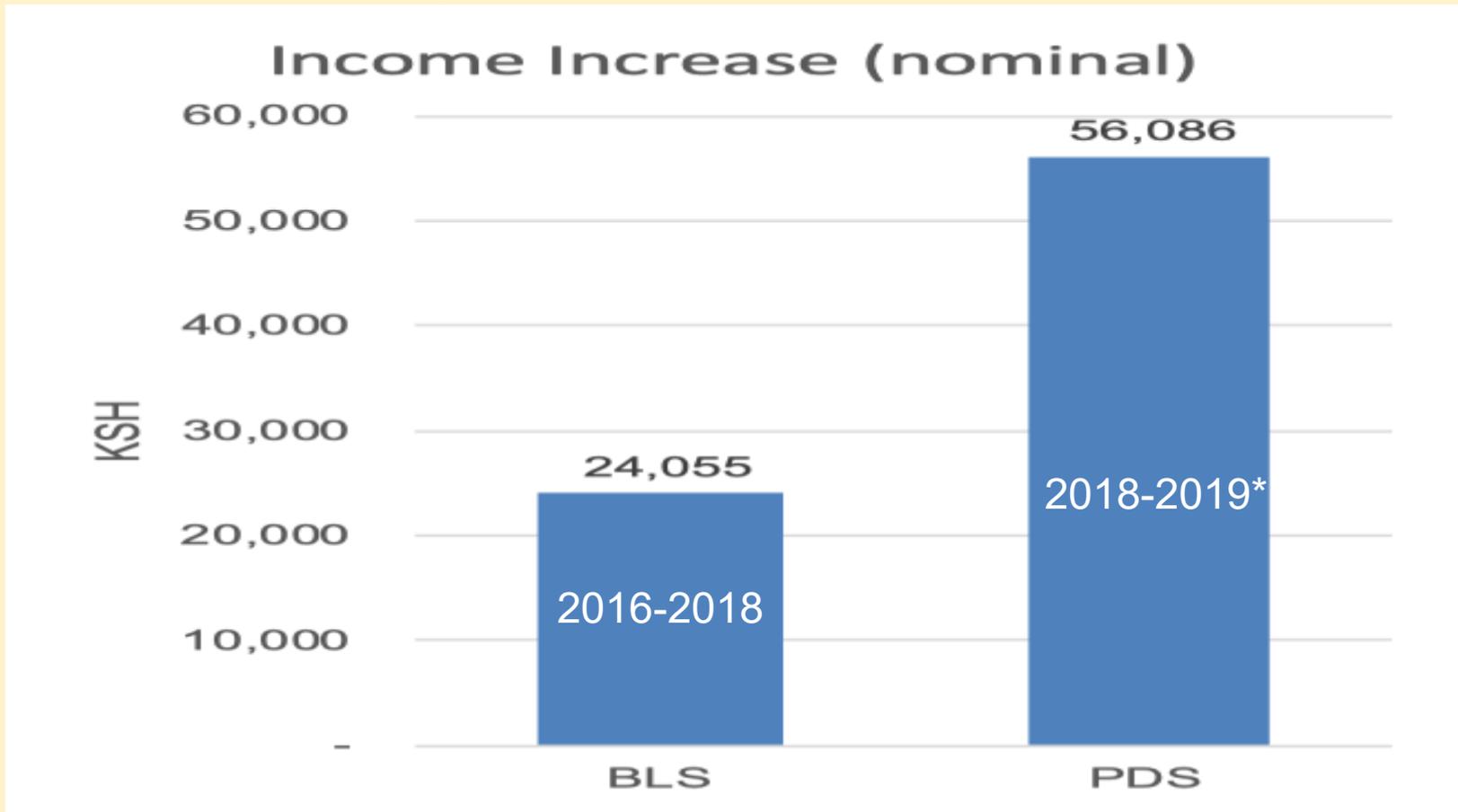
**e.g.) Results of the Market Survey**

## 4. Results and Impacts of SHEP



“What happened at the field level?”

Income from horticulture crops increased in various countries, i.e.; Kenya, Rwanda, Lesotho, etc.



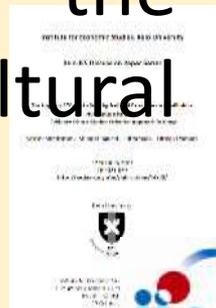
\*Periodical data survey was conducted after 2 years of the baseline survey

# "The Impact Evaluation of the SHEP Program in Kenya"

### Key Findings

- SHEP works: SHEP **improves horticultural income by 70%** over 2 years on average.
- SHEP is for all: **effective more for vulnerable farmers (head of household was female, less educated and older)** and irrelevant to horticultural experience, contrasting to the “common sense” of traditional agricultural extension.

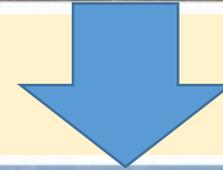
Full paper is available at <https://ies.keio.ac.jp/en/publications/14828/>



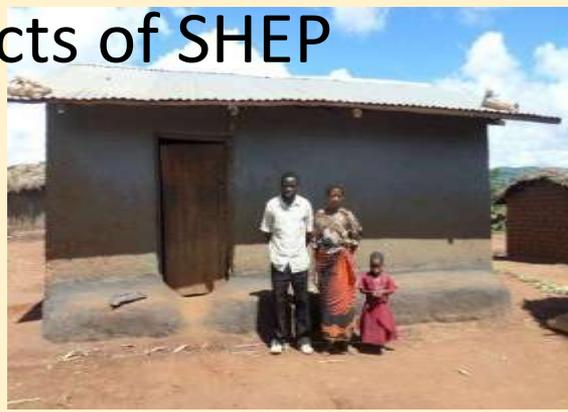
# Change of the relationship between genders from “One farm manager (husband) and one labour (wife)” to **“Management Partner”**”



**Equal Participation opportunity for Training**



# 4. Results and Impacts of SHEP



Before

After

Others





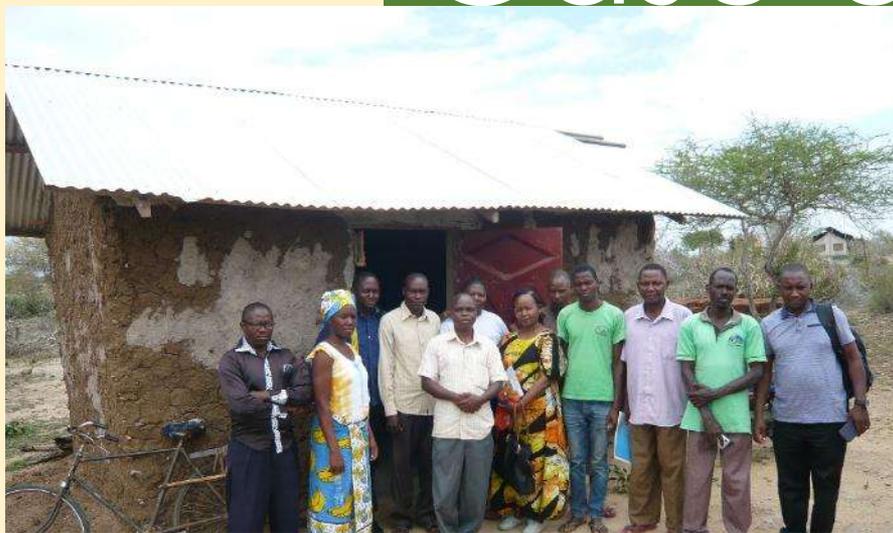
# 4. Results and Impacts of SHEP



Light by solar panel



Invitation by National event as a most successful young group



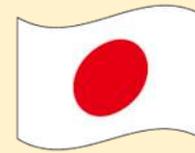
Building new office for group (Current)



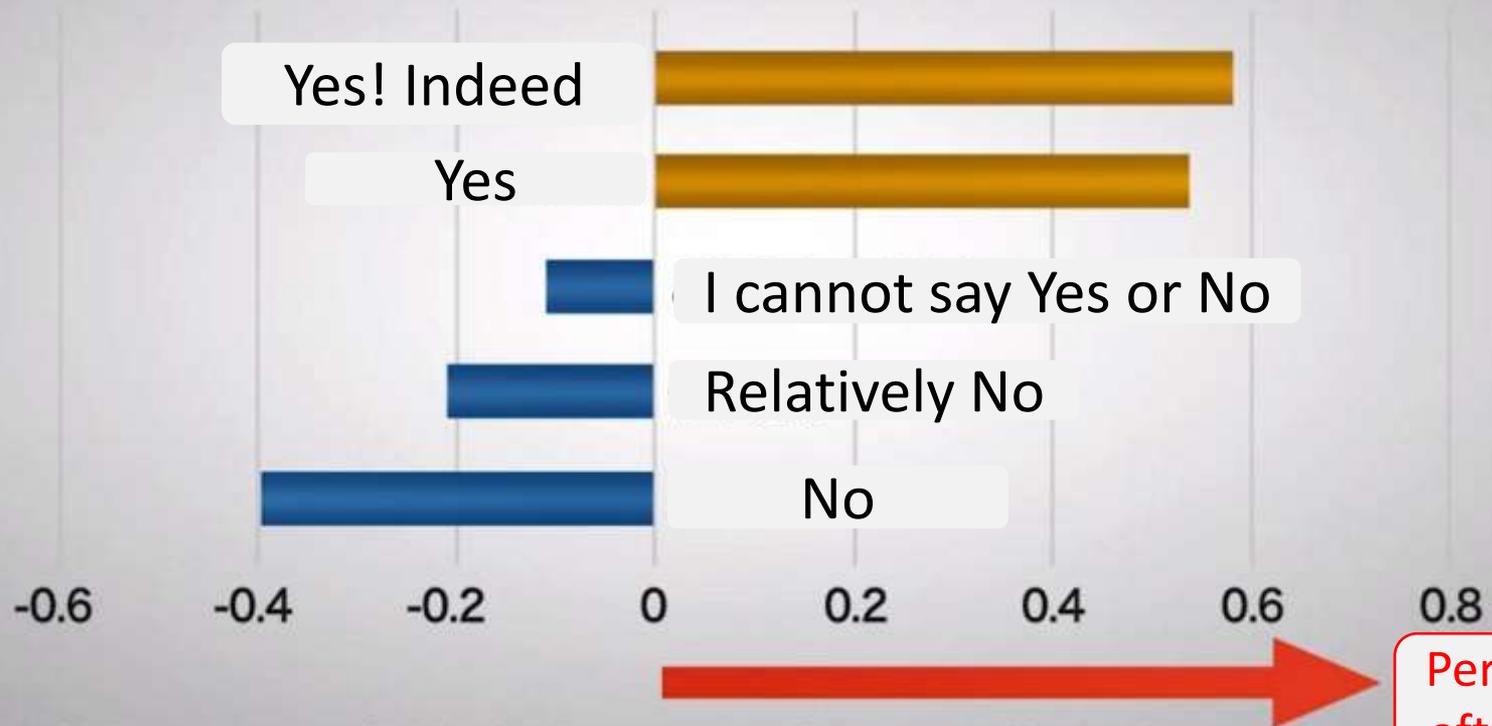
Building new office for gro (Under Construction)



# Case in Japan (1)

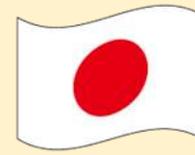


Relationship between performance and farmers who answered whether “Communicated nicely with consumer” or not

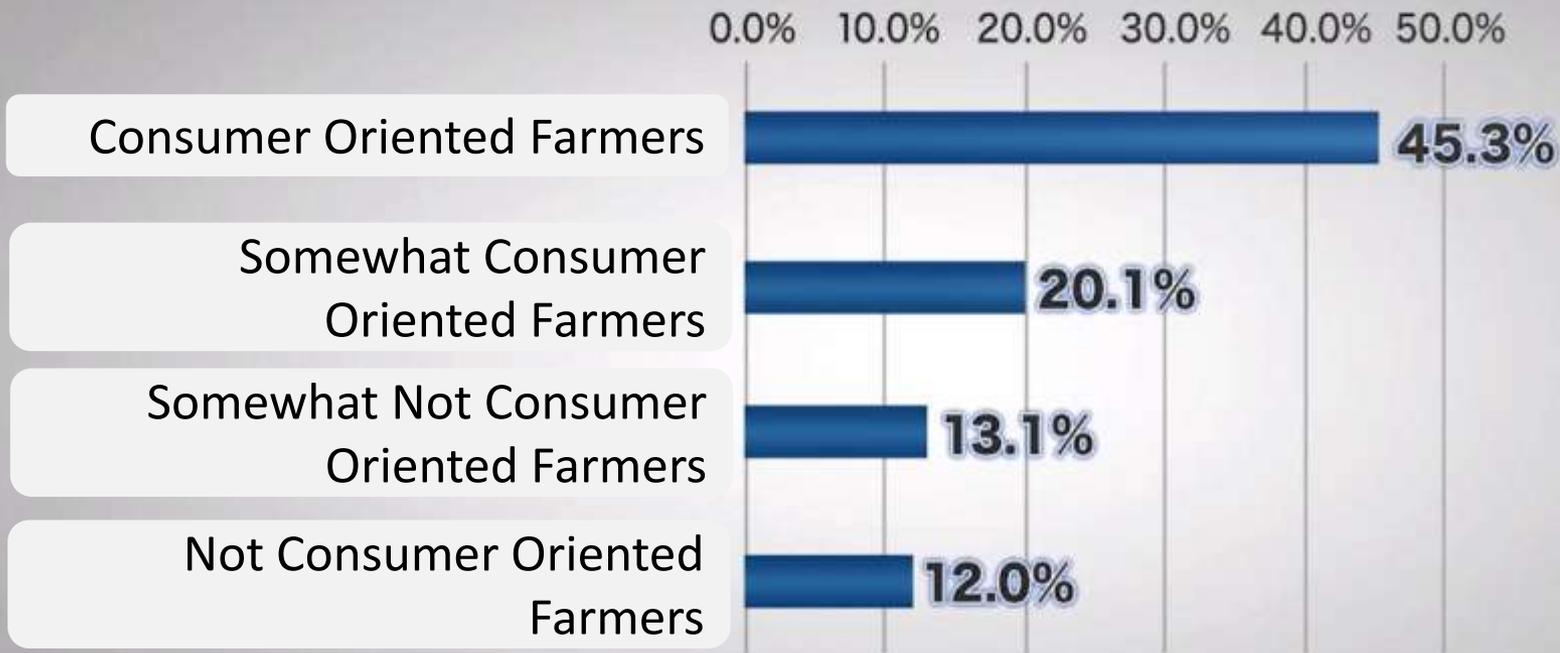


\* Source: draw by JICA base on Kunihiro IWASAKI “A textbook for Agricultural Marketing: A Tasty way of Linking Food and Agriculture” published by Nihon Keizai Shinbun.

# Case in Japan (2)



## Relationship between increase sales and farmers perspective on consumers



\* Sales history shows an increase of **“5% or more”** as compared to three years ago.

\* Source: draw by JICA base on Kunihiro IWASAKI “A textbook for Agricultural Marketing: A Tasty way of Linking Food and Agriculture” published by Nihon Keizai Shinbun.

# Commitment by Govt. of Japan

- “We would like to transition away from agriculture “that enables the farmer to eat” to agriculture the farmer to earn money.” by Prime Minister Mr. Shinzo ABE@TICAD V in 2013
- Commitment: Expansion to **10** countries, Capacity building of **1,000** skilled agricultural trainers, support to **50,000** farmers
- YouTube Video (26'12):  
<https://www.youtube.com/watch?v=UmV9-42YLdA>



# Outcome of SHEP Expansion so far

- **842 officials** have participated in the Training Courses of the SHEP Approach from Africa
- In total, 39,394 officials of **32** **African countries** are involved in the SHEP Approach, benefitting **341,930 small scale farmers**



# Next Stage of SHEP Expansion

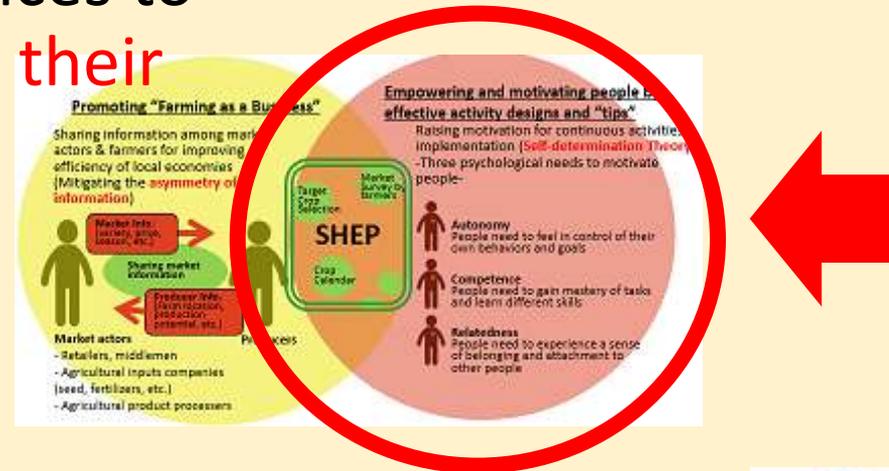
- Do you recommend farmers to grow some crops **WITHOUT** seeing the market? **No!!**

“Farming as a business”

## Two Questions

- Do you provide extension services to farmers **WITHOUT** considering their motivation? **No!!**

“Empowering and motivating farmers”



⇒ SHEP is for all the farmers who supply crops to markets 

# Next Stage of SHEP Expansion

“Joint Declaration for Achieving better lives of One Million small scale farmers through SHEP Approach” by Representative of Government, Development Partners, Private Companies and Relevant Organization at TICAD VII SHEP Approach High Level Event, August, 2019



# Other donors × SHEP

## IFAD

- In October 2018, International Fund for Agricultural Development (IFAD) and JICA signed a memorandum of cooperation in the agricultural sector. Joint seminar on SHEP Approach has been organized three times for South and East Africa, Western Africa, and Latin America
- IFAD is adopting and practicing the SHEP approach in its various project sites supporting smallholder farmers around the world.

## Sasakawa Africa Association

- In August 2019, Sasakawa Africa Association (SAA) and JICA signed a memorandum of cooperation in the agricultural sector of Africa and are introducing the SHEP approach in SAA projects

# Private company × SHEP

## Malik Seed Pvt. Ltd.



- The SHEP approach is also adopted by private companies. In Bangladesh, Malik Seeds Pvt. Ltd. is practicing the SHEP approach, simultaneously achieving the two goals of better livelihoods for farmers and increased sales of the company.

## Powerhive Inc.



- Powerhive Inc. based in Kenya is a company developing a mini grid business combining photovoltaic power generation systems and storage batteries in non-electrified regions.
- Expecting increase in electricity charge by increasing the income of rural residents and fostering their business mindset, the company implemented the SHEP training for farmers.
- Trained farmers who are customers of Powerhive Inc. started agriculture as a business

# Livestock × SHEP

- In Palestine, the SHEP approach was used for a wide variety of products, including livestock and apiculture. Particularly for livestock, activities for “raising farmers’ awareness,” which is the second step of the SHEP approach, succeeded in increasing the income of the target farmers by encouraging them to adopt techniques not only through a market survey but also through visits to successful farmers and information exchange with feed companies. 
- The application of the SHEP approach has started in Namibia in beef cattle. 



Visiting a market-oriented livestock farmer ©EVAP2



Visiting a feed company ©EVAP2



Learning methods from a successful Farmer ©EVAP2

# Spread to other Continents



- Following the “One Million declaration” at TICAD8, SHEP Approach is being promoted to countries outside the African continent from FY2020.
- So far, 422 participants in Asia and 158 participants in Latin America have received SHEP training.
- As a result, the SHEP approach, now applied in various forms, is being practiced in many countries and small farmers are benefiting.



Before

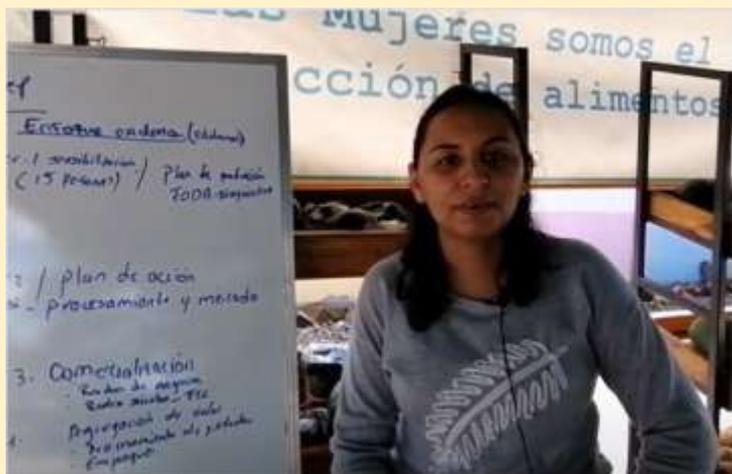


After

Feria in Marcala city, Honduras

# Voices from the Fields Nicaragua

- Good morning. This is Nazareth Obando. I work for the Ministry of Family, Community and Cooperative Economy of Nicaragua. For us, the SHEP approach has been very helpful, above all in supporting small farmers.
- We work with the farmers in a series of activities, starting with market research, the development of production calendars, and technical training based on these calendars. By utilizing this approach, we are able to deliver faster and, above all, better results. We will continue to use this approach to support small farmers in the future.



Licenciada Nazareth Obando

**Directorate of Small Business,  
MEFCA**

# Voices from the Fields Guatemala



Extension Officers Who Participated in the Training

- We finally came to understand the purpose and significance of the activities at each step of the SHEP approach and the tools used within those steps. By implementing activities according to the four steps, we were able to experience firsthand that farmers' awareness toward agriculture as a business improves, their motivation increases, and the trust between farmers and extension officers is further strengthened.



# Beyond Africa



**62 countries**

**Target is One Million Small scale farmers by 2030**

# Expansion in Latina America

- **JICA Knowledge Co-Creation Program**

SHEP training program has been conducted since FY2020.

Trained **158 participants from 15 countries.**

- **Individual Expert Dispatch**

Bolivia(2024.9-), Guatemala(2024.12-), Belize(FY2026-)

- **Technical Cooperation Projects**

Ecuador(2025.2-), Paraguay(FY2026-)



# Other collaborations

- **IFAD–JICA Joint Statement (Bolivia, 31 May 2024):**

IFAD and JICA announced that they will work together in Bolivia to promote the introduction of the SHEP approach, aiming to improve smallholder farmers' livelihoods, strengthen food security, and enhance agricultural and food systems.

- **IICA–JICA MoC (20 February 2026):**

IICA and JICA agreed on a comprehensive framework to cooperate in Latin America and the Caribbean, centered on scaling up the SHEP approach through technical cooperation, training, capacity development, and information sharing to improve agricultural productivity, smallholder incomes, and food security.

- **JMPP–JICA (Mexico):**

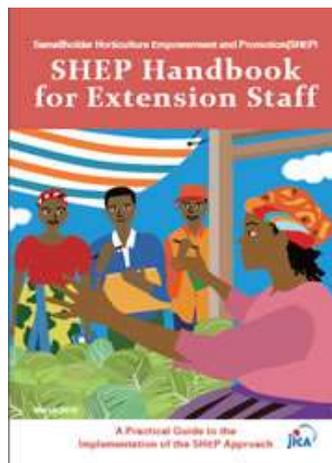
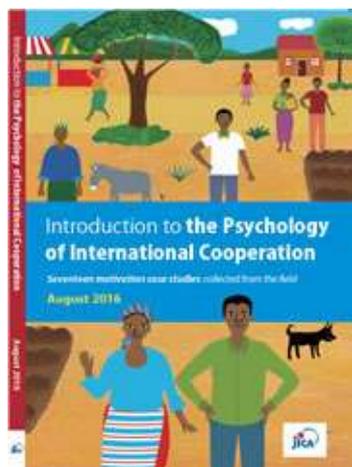
Japan and Mexico collaborate through a triangular cooperation framework that promotes third-country training, expert dispatch, and joint efforts to address development challenges and advance regional development in Latin America.

The **SHEP International Workshop** will be held on **25–26 February 2026**.

Online participation is available on **25 February**: **URL** \_\_\_\_\_

# References:

## 1. JICA's Website on SHEP



- JICA Website:  
[https://www.jica.go.jp/english/our\\_work/thematic\\_issues/agricultural/shep/index.html](https://www.jica.go.jp/english/our_work/thematic_issues/agricultural/shep/index.html)
- JICA SHEP Facebook:  
<https://www.facebook.com/jicashep/>

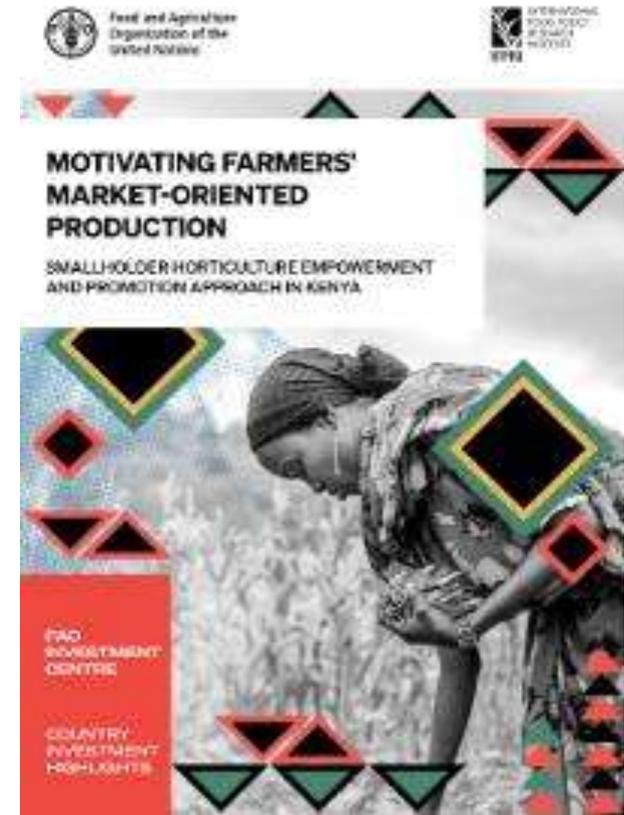
## 2. SHEP Game App.



- iOS: <https://apps.apple.com/jp/app/shep-game/id1144804671?l=en>

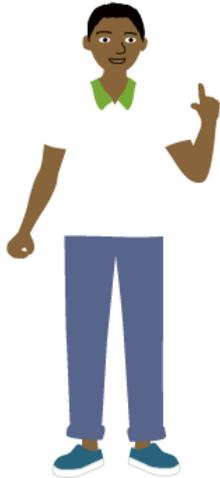
# 3. Impact of SHEP in Kenya

- The achievements and impacts of the “SHEP Approach” in Kenya were analyzed by KeFAAS and reported in the “Agriculture Human Capital Investment Report” published by FAO-IFPRI in October, 2021 (Source: <https://www.fao.org/documents/card/en/c/cb7026en>)
- The Impact Evaluation using RCT was done during SHEP Phase 3 (SHEP PLUS) in Kenya to analyze the actual impact of the “SHEP Approach” (Source: <https://ies.keio.ac.jp/en/publications/14828/> )



# 4. SHEP ToT Materials

Available @  
Google Drive



Home > Our Work > Thematic Issues > Agricultural and Rural Development > JICA Activities > SHEP Approach > Teaching Materials and PR > Materials for ToT (Training of Trainers)

## Materials for ToT (Training of Trainers)

**Thematic Issues**

- Education
- Health
- Water Resources and Water Supply
- Governance
- Peacebuilding
- Social Security / Disability and Development
- Transportation
- Energy and Mining
- Public Finance and Financial Systems
- Private Sector Development
- Agricultural and Rural Development**

### 01. Introduction to SHEP Approach

- 1-1. Introduction of SHEP - Presentation\_final (PDF/3.01MB)
- 1-1. Introduction of SHEP - Presentation\_final (Power Point/7.08MB)
- 1-2. Quiz (Introduction to SHEP Approach) (PDF/127KB)
- 1-2. Quiz (Introduction to SHEP Approach) (Word/25.5KB)
- 1-3. Quiz (Introduction to SHEP Approach) Answer & Explanation (PDF/141KB)
- 1-3. Quiz (Introduction to SHEP Approach) Answer & Explanation (Word/26.9KB)

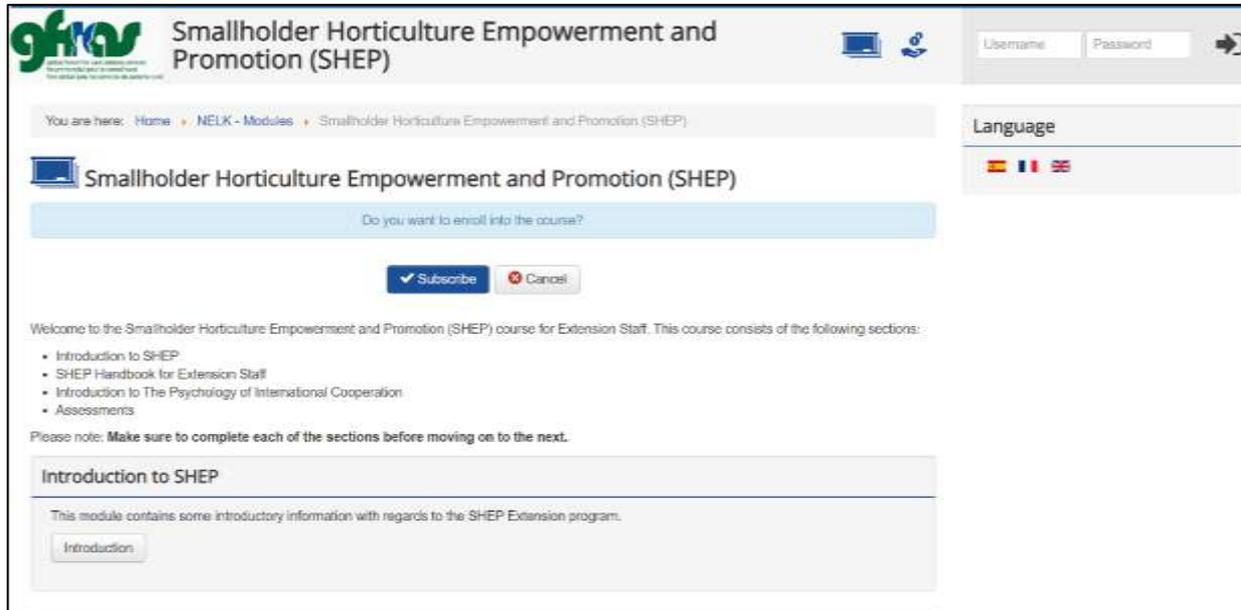
### 02. Sensitization Workshop

- 2-1. Sensitization Workshop - Presentation (PDF/975KB)
- 2-1. Sensitization Workshop - Presentation (Power Point/301KB)
- 2-2. Quiz (Sensitization Workshop) (PDF/113KB)
- 2-2. Quiz (Sensitization Workshop) (Word/24.1KB)
- 2-3. Quiz (Sensitization Workshop) Answer & Explanation (PDF/117KB)
- 2-3. Quiz (Sensitization Workshop) Answer & Explanation (Word/24.3KB)

### 03. Baseline Survey

- SHEP ToT Materials (English):  
[https://www.jica.go.jp/english/our\\_work/thematic\\_issues/agricultural/shep/tot.html](https://www.jica.go.jp/english/our_work/thematic_issues/agricultural/shep/tot.html)

# 5. GFRAS/NELK SHEP Module




- GFRAS/NELK SHEP Module: <https://nelk.gfras.org/index.php/en/home-alias-alias/topic-1/34-smallholder-horticulture-empowerment-and-promotion-shep/preview>