

Objective

Overall Objective

Smallholder farmers increase their income sustainably by implementing activities applying SHEP Approach.

Course Objective

Market-oriented agriculture approach, vegetable cultivation, distribution, marketing and extension methods will be shared within their organizations and targeted areas.

Module

1

2

3

4

5

6

To extract and analyze challenges of vegetable cultivation, distribution, marketing and extension methods in participant's targeted areas

To be able to explain essential points of SHEP Approach and clarify participant's role and necessary skills for implementing SHEP approach activities

To gain skills for effective use of market trend and marketing / distribution system of horticulture crops

To gain knowledge and skills of vegetable cultivation techniques for market-oriented agriculture

To gain skills/knowledge on organizing small-scale farmers, agricultural technology development and extension system

To compile learning in Japan, examine how to apply it to the participant's targeted areas, and formulate a report

Lecture

Preliminary Phase

- Online Kick-off Meeting

- Introduction to SHEP Approach/Expansion of SHEP Approach(2)
- Facilitating intrinsic and autonomous motivation(1)
- SHEP Approach(4)

- Marketing for promoting small-scale business(3)
- Marketing and trade of horticulture(1)
- Japanese agricultural value chain(1)
- Development of cropping types in vegetable(1)
- Basic agro-economics of input-output relation(2)

- Plant physiology and biology for vegetable production(2)
- Crop production and water requirement(2)
- Tomato mulching experiment(7)
- Management of Cucurbitaceae (melon and pumpkin)(9)
- Grafting in vegetables(2)
- Effect of growing media for nursery production(4)
- Diagnosis and management of vegetable pests(2)
- Diagnosis and management of vegetable diseases(4)
- Physiology and management of nematode(1)
- Soil physical properties and plant growth(2)
- Sustainable soil fertility management(1)
- Nutrient deficiency of vegetables(4)

- Japanese agricultural extension system(1)
- Production area formation to secure quantity and quality(1)
- How to write and read scientific graphs and tables(1)
- Analysis of regional issues for extension planning(4)
- Rural life improvement and rural development(2)
- Organizing small scale farmers(2)

Explanation of interim & final report writing(1)

Note :
Unit is shown in ().
One unit is equivalent to 2.5 hrs.
One day usually has 2 units.

Practice

Preliminary Phase

- Farmer Interview
- Market Survey

- Preparation for the Inception Report Presentation(3)

- Cultivar trial of melon(4)
- Cost-benefit analysis of pumpkin cultivation(4)
- Effect of thinning on carrot marketable yield (7)

Use of market trend

Marketing/
distribution systems

Farm management

- Tomato seed extraction(2)
- Crop management(5)
- Microscopic observation of flower-bud in tomato(1)
- Neridoko, soil block nursery(1)
- Soil solarization(2)
- Seed disinfection methods(2)
- Soil sampling and testing(2)
- Compost and Bokashi making(2)
- Carbonized rice husk, "Kuntan" making(1)
- Maintenance of freshness in vegetables(1)
- Food processing (Jam and ketchup making)(1)

- Preparation for Field day(5)
- Field day(5)
- Participatory agricultural and rural development(2)

Agricultural
policy & system

Technology
development &
extension method

Agricultural
cooperative

Individual Project(41)
Writing a report on individual project(23)
Mid-term discussion for individual project(12)
Correction and submission of experimental reports(3)
Experimental design for individual project(3)
Formulation and presentation of the interim report(5)

Presentation

Preliminary Phase

- Write up the Inception Report

- Inception Report Presentation(2)

Plant physiology
and biology

Nursery management

Pest & disease

Soil & fertilizer

Postharvest handling

Report presentation(5)

Discussion

- Experience sharing of the SHEP activities(1)

- Agricultural extension systems in the respective countries(1)

Site visits

- Collective grading & shipment (1)
- Diversified marketing channels(4)
- Consumer cooperative(1)
- Role & function of the wholesale market(2)
- Agricultural inputs shop (seeds, fertilizer, etc.)(1)
- Contract farming with food company(2)
- Farm management in tourism orchard farm(1)
- Home delivery of a sorted vegetables(1)

- Irrigation facilities(1)
- Seed company and breeding institute(2)
- Horticultural crop production and processing(5)
- Raising vegetable vegetables(1)
- Agro chemical company(1)
- Soil media manufacture(1)
- Recycling and utilization of organic waste(1)
- Value addition(1)

- Fostering youth farmers(2)
- Agricultural extension in Japan(2)
- Production and distribution of potato tubers(1)
- Research activities in NARO and JIRCAS(3)
- Women in agriculture(1)
- Winter tomato production(1)

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Finalization Phase

- Share learning points and contents of technical and interim reports with related persons and to inform the result to JICA

To share learning points and contents of technical and interim reports with related persons and to inform the result to JICA

JICA TSUKUBA

SHEP

**MARKET-ORIENTED AGRICULTURE PROMOTION
FOR EXTENSION OFFICER FY2022**