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Practical Training on Sustainable Agriculture

A Practical Sustainable Agricultural
Approach to Secure Food Systems

Developed from PISAI Project's
three practical modules

ERASMUS+ Capacity Building
in Higher Education

Participatory and Integrative
Support for Agricultural Initiative
2017-2021





A Practical Sustainable Agricultural Approach to Secure Food Systems

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Implementation date: 13 – 22 November 2020

Duration: 10 days (100 hours)

Field and practical session

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Sustainability



Acknowledgments

The success of the practical training on sustainable agriculture resulted from the dedicated effort and hard work of the four Thai partners under the PISAI Project.

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General Information

Duration

10 days (100 hrs.)

Training period

13 – 22 November 2020

Place

Faculty of Natural Resources,
Prince of Songkla University
(PSU), Songkhla, Thailand

Training methods

Participatory and interactive activities, lectures, study trip, practical fieldwork, and on-farm practice at PSU

General Learning objectives

1. To understand the concepts of a sustainable agricultural system
2. To identify and characterize a farming system in the context of sustainability, namely organic farming, integrated farming, agroecology, the Thai King's New Theory Agriculture
3. To understand the concepts of value chain management
4. To independently study multiple market research techniques, including surveys, interviews, and consumer observations
5. To identify and relate the marketing to agricultural commodity production
6. To identify requirements and problems from consumers, sellers, and producers
7. To create a farming system

The training course aims to provide knowledge and a practical approach for comprehensive sustainable agriculture by adopting the three practical modules of the PISAI Project, which were successfully delivered to the participants. The training's overall goal was to enhance the breadth of knowledge on sustainable agricultural production and marketing. Another goal was for participants to understand and be able to implement the whole process from production to marketing in the context of sustainable agriculture. Lectures topics included basic knowledge of farming systems, assessing the suitability of ecosystems for agricultural production and adapting to changes and challenges in agricultural production, including soil quality and soil analysis, and integrated plant pest and disease management. The training was also designed to inculcate participants' skills to analyze and describe multiple market research techniques, including surveys, interviews, and consumer observations. As a result of the training, the participants could better understand and relate the marketing aspect to agricultural commodity production. Hands-on learning and knowledge exchange with farmers also enhanced participants' interest and attitude in participating in sustainable agricultural activities. They participated in rigorous research (including in the field and market data collection processes). They learned to plan the production of a commodity they have chosen. The skills gathered during the course will empower participants to succeed in a professional field.



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โครงการ : ฝึกอบรมเชิงปฏิบัติ เกษตรยั่งยืน ภายใต้โครงการ PISAI

Practical Training on Sustainable Agriculture under PISAI Project

(Participatory and Integrative Support for Agricultural Initiative)

Sustainable Agriculture Farm for Secured Food Systems - Practical Approach

Date: 13 – 22 November 2020

Faculty of Natural Resources, Prince of Songkla University



2 Training Program

| Date | Time | Details | Action by |
|--|-----------------------|---|---------------------------------------|
| Sustainable Agriculture | | | |
| Day 1 Fri-13 Nov ⌚ 8 hours | Morning | Registration of participants | Rungrat & PISAI team |
| | | Opening session | |
| | | Introduction to the training program | |
| | | Participants' self-introduction | |
| | | Self-evaluation of participants' interest in sustainable farming | |
| | Afternoon | Introduction to sustainable agriculture and food systems | Kobchai, Rungrat & PISAI team |
| A brief introduction to agriculture in Thailand | | | |
| Sustainable farming system (organic farming, integrated farming, Agroecosystem, King's New Theory Agriculture) | | | |
| Day 2 Sat-14 Nov ⌚ 10 hours | Morning and Afternoon | Field study I: farm visits - organic farm and integrated farm | Kobchai & PISAI team |
| Day 3 Sun-15 Nov ⌚ 10 hours | Morning | Consumer behavior | Rungrat & PISAI team |
| | | How to find consumer's needs and wants | |
| | Afternoon | Market research including interviews and question lists | Rungrat & PISAI team and Participants |
| | | Practical example by questionnaire on the consumption of organic vegetables | |
| Value Chain Management, Farming Systems and Ecosystems for Sustainable Agriculture | | | |
| Day 4 Mon-16 Nov ⌚ 12 hours | Morning | Value chain management | Pornsiri (CMU), Rungrat & PISAI team |
| | | Prepare the list of interview and observation questions | |
| | Afternoon | Field study II: local market visit - PSU Farmer's Market - Data collection – from consumers & sellers | PSU & PISAI team, Worapat and Teams |
| Day 5 Mon-16 Nov ⌚ 12 hours | Morning and Afternoon | On-farm practice at PSU farm Work on creating own farming system | Worapat and Farmers, Participants |
| Day 6 Wed-18 Nov ⌚ 8 hours | Morning | Presentation on working data (consumers' and sellers' points of view) | Participants Rungrat & PISAI team |
| | | Farm designing workshop | |
| | Afternoon | Choosing a commodity for own business | Rungrat & PISAI team |
| | | Presentation on chosen commodity, and farm & business operation plan | |
| | | Teamwork game and activities | Yaowalak & Team |

| Date | Time | Details | Action by |
|--|---------------|---|---|
| Day 7 Thu-19 Nov 🕒 8 hours | Morning | Important production factors for agricultural production - Environment and ecosystem | PSU & PISAI team |
| | 08.30 – 09.30 | Soil quality and soil analysis | Phrueksa (KKU) |
| | 09.40 – 10.40 | Sustainable and integrated plant disease management | Supot (KU) |
| | 10.50 – 11.50 | Biological control of insect pests | Narit (PSU) |
| | Afternoon | Principles and adoption of organic agriculture: PSU Farmer's Market and network | PSU, Worapat, Successful farmers and participants |
| Day 8 Fri-20 Nov 🕒 12 hours | Morning | Field study III: Enterprise and company visit - community enterprise/processing company - gathered data from community enterprise | Rungrat & PISAI team |
| | Afternoon | Work on collected data and information Presentation on BMC | Participants (about 8 hours) |
| Day 9 Sat-21 Nov 🕒 12 hours | Morning | Work on creating own farming system | Participants (about 12 hours) |
| | Afternoon | Consultation with teaching staff/successful farmers | |
| Day 10 Sun-22 Nov 🕒 8 hours | Morning | Work on and improvement of participants' own farming system | Participants |
| | | Preparation of final report | |
| | Afternoon | Presentation and wrap up | Participants |
| | | Closing of the training program | PSU & PISAI Team |

3 Activities organized during the training



DAY 1

Registration, opening session, warm-up, and self-evaluation of participants' interest in sustainable farming



The training started with the registration of the participants. Fifteen participants from different backgrounds such as agriculture, engineering, business administrative, financial, economics, nurse, and liberal arts attended this training. Assist. Prof. Taweesak Niyombandit, Dean of Faculty of Natural Resources, PSU, delivered the opening speech and welcomed all participants. After the opening session, Assist. Prof. Dr. Chutima Tantikitti, Coordinator of the PISAI Project and Associate Dean for International Relations and Graduate Studies, Faculty of Natural Resources, PSU, introduced the PISAI project and the practical training details.



*Assist. Prof. Taweesak Niyombandit,
Dean of Faculty of Natural Resources, PSU*



*Assist. Prof. Dr. Chutima Tantikitti,
Coordinator of the PISAI project*

The training opened with self-introductions, followed by an ice-breaker to welcome participants and warm-up for the training and team-building sessions. Based on random selection, the participants were divided into four groups. Everyone was encouraged to give some personal information, such as their names, where they are from, and their favorite food, color, and actor. After that, each group's representative introduced the group's name and member's information.





The morning session ended with the self-evaluation of the participant's interest in agriculture using the personal information sheet. Afterward, the members worked in their respective groups using the 7W1H question guideline so they could clarify their interest in and readiness for farming. The program then was followed by presentations, feedback, and time to exchange opinions.



DAY 1

Sustainable farming systems



The afternoon lectures started with an introduction to sustainable agriculture and the ecosystems associated with agriculture by Dr. Kobchai Worrapiumphong, an invited lecturer from the Faculty of Natural Resources, PSU. Sustainable farming systems in Thailand, such as organic farming, integrated farming, agroecology, and the King's New Theory Agriculture, were introduced, including some examples of Thai rice farmers' organic practices and an avocado plantation. The discussion session was opened for everyone to exchange opinions on sustainable agriculture to encourage the participants' involvement and participation.



Sustainable


"sustainable development must ensure that it meet the needs of the present without compromising the ability of future generations to meet their need"



(The World Commission on Environment and Development, 1987)

Agroecosystem

:communities of plants and animals interacting with their physical and chemical environments that have been modified by people to produce food, fiber, fuel and other products for human consumption and processing



Sustainable farming examples

- A Thai rice farmer in Suphan Buri province with organic approach and his adaptation ability
- Avocado plantation: Economic & Ecological Dilemma (If Time available)
- Plan for field trip

Learning Objectives

- Encourage participants to get to know each other and the facilitators and the training's objectives.
- Help participants start working together more cohesively towards shared goals or plans.
- Understand the concepts of a sustainable agricultural system.
- Understand the integration of theory and practice by discussing and exchanging opinions from the actual practice case studies.

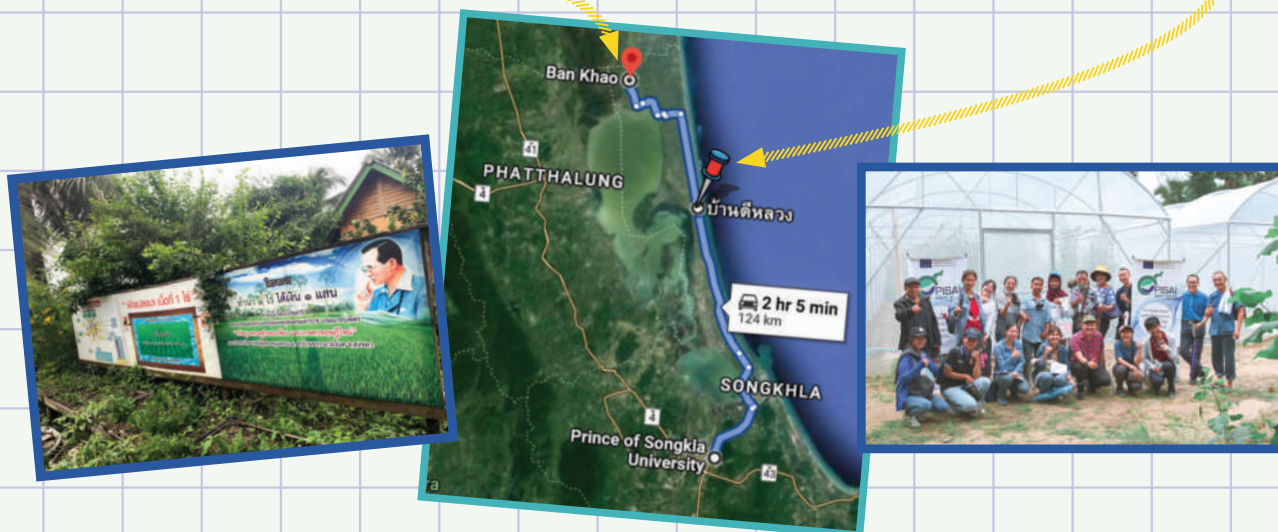
DAY 2 Field study I - farm visits

During the second day, participants visited one organic farm in the morning and one integrated farm in the afternoon. The two different farming systems provided the participants with close-up experiences and knowledge. Participants' interest in sustainable agriculture was stimulated. They also got information about the market-oriented management of vegetable farming under Thailand's "Organic Standard" and how these two farms implemented their market-oriented production plans.



*K.Natthaphon Farm,
Bann Khao, Ranod district, Songkhla province
124 km north of the city of HatYai*

*K.KamNueng Farm,
Bann Dee-Lhuang, Sathing Phra,
Songkhla province
76 km north of the city of HatYai*

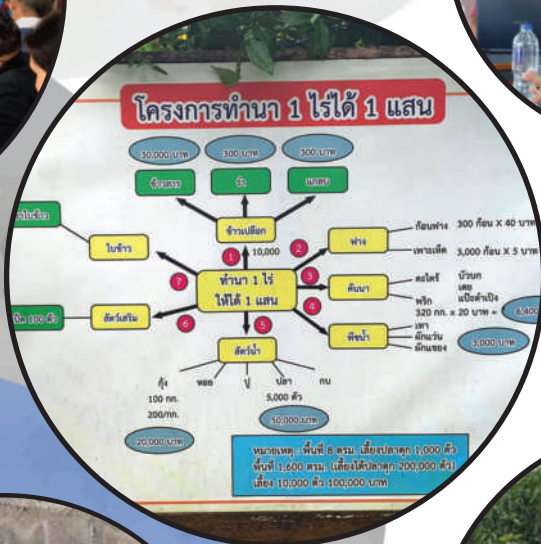


The first farm is located at Bann Dee-Lhuang, Sathing Phra District, Songkhla Province. Khun Kamnueng Soisrimak, the farm owner, successfully converted from conventional to organic farming. Khun Kamnueng is a member of the network of the PSU Farmer's Market that operates under the Faculty of Natural Resources, PSU. As an organic farmer, he does a lot to make his crops grow healthy and produce good yields. For example, he improves the soil quality and structure by adding organic matter and optimize on-farm resources such as manure and rice husks. Additionally, he has adopted biological controls such as beneficial insects and microbial pesticides and techniques such as keeping pests away from his crops by growing food crops for insect pests. In an area of only two rais, Khun Kamnueng plants different types of vegetables and rotates the planting blocks regularly.





The integrated farm of Khun Natthaphon NuSaeng is located at Bann Khao, Ranod District, Songkhla Province. This farm is one of Songkhla’s integrated-farming best practice farms. He operates the farm based on the idea that an area of one rai brings in 100,000 baht. He focuses on integrating various crops and livestock in the same area. Khun Natthaphon also emphasizes self-reliance agriculture by applying King Bhumibol’s philosophy of Sufficiency Economy. This farm grows various crops, namely green chilis, bitter gourds, zucchinis, seasonal vegetables for sale as fresh produce, and raises cattle, ducks, catfish, and layer hens to produce salted eggs, and sun-dried fish, among other products.



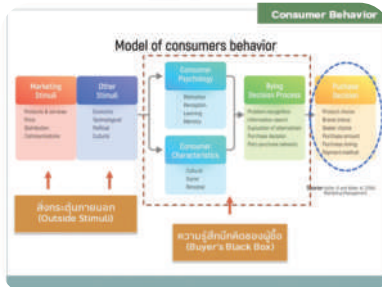
Learning Objectives

- Experience real-world management of organic and integrated farming systems based on Sufficiency Economy principles.
- Learn how to implement organic farming and integrated farming for self-reliance by planning the production and processing based on market research result.

DAY 3

Consumer behavior and market research

The training started with short lectures regarding the concept of consumer behavior and how to identify consumer needs and wants. Afterward, choosing agricultural farm inputs was briefly presented. The participants were asked to identify their agricultural inputs, including land, labor, capital, management, and knowledge. Generally, all participants understand what inputs, resources, skills, and knowledge they will need to succeed in sustainable farming. The morning session ended with a discussion on possible approaches to sustainable agriculture.



| Buyer's Black Box | |
|---|--|
| Consumer Characteristics | |
| 1. Cultural Factors (ปัจจัยทางวัฒนธรรม) | <ul style="list-style-type: none"> วัฒนธรรมพื้นฐาน (Culture) วัฒนธรรมย่อยเฉพาะกลุ่ม (Sub-culture) ระดับชั้นในสังคม (Social class) |
| 2. Social Factors (ปัจจัยทางสังคม) | <ul style="list-style-type: none"> ครอบครัว (Family) กลุ่มอ้างอิง (Reference group) บทบาทและสถานะบุคคล (Role & Status) |
| 3. Personal Factors (ปัจจัยส่วนบุคคล) | <ul style="list-style-type: none"> อายุ รายได้ อาชีพ การศึกษา รูปแบบการดำรงชีวิต บุคลิกภาพ |



- การเลือกใช้ปัจจัยการผลิต**
- เลือกวิธีการผลิตที่เหมาะสมกับศักยภาพปัจจัยการผลิตที่มีอยู่
 - ปัจจัยการผลิตที่ต้องพิจารณา
 - ปัจจัยที่ดิน
 - ปัจจัยแรงงาน
 - ปัจจัยทุน
 - ปัจจัยการจัดการ
 - ความปลอดภัยของผู้ผลิต ผู้บริโภค และสิ่งแวดล้อม

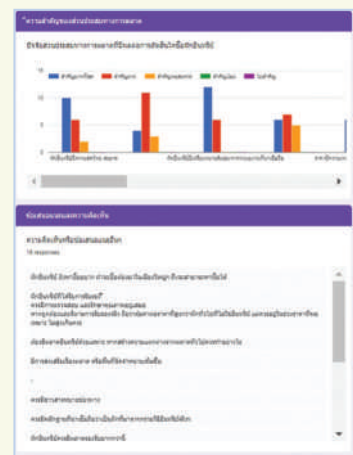
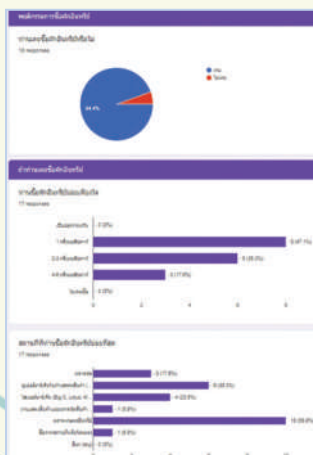
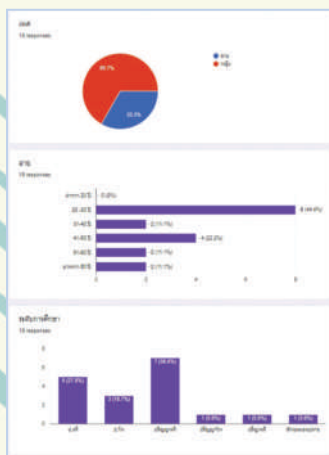




A short lecture on market research methods was presented in the afternoon. Then for real-world practice, participants were asked to answer the questionnaire on the consumption of organic vegetables to learn how to design the questionnaires and interpret the market survey results. Participants discussed the results of the survey and exchanged their opinions with the training staff.

The field study at the PSU Farmer's market on day 4 provided the opportunity to learn and experience other market research techniques include interviews and consumer observation. Therefore, participants were asked to create questions for interview sellers at the PSU Farmer's market and observe consumers. Afterward, individual work on identifying consumer needs and wants was assigned to participants to clarify their understanding of consumer behavior. At the end of this day, the worksheet on "consumer profile and consumer model canvas" was presented to prepare participants for field study on day 4.

| ลักษณะประชากร | ชาย | หญิง | อายุ 18-24 ปี | อายุ 25-34 ปี | อายุ 35-44 ปี | อายุ 45-54 ปี | อายุ 55 ปีขึ้นไป |
|---------------------------|----------------------------------|----------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ระดับการศึกษา | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ระดับรายได้ | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ระดับอาชีพ | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ระดับการบริโภคผักอินทรีย์ | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ระดับการบริโภคผักอินทรีย์ | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| ระดับการบริโภคผักอินทรีย์ | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |



Learning Objectives

- To be able to identify the resources necessary for doing agriculture
- Understand the processes of market research and questionnaire design
- Learn how to interpret consumer behavior in a real-world situation, e.g., purchasing organic vegetables

DAY 4

Value chain management with on-site practice (Field study II)

On Monday morning, lectures on value chain management, supply chains, and logistics of agricultural products were presented by Assist. Prof. Dr. Pornsiri Suebpongsang, an invited lecturer from the Faculty of Agriculture, CMU. A supply chain diagram of an agricultural product was assigned to each participant based on their interests. This exercise generally helped participants improve their understanding of the supply chain and the value creation in agricultural products. Afterward, a lecture regarding the business model canvas (BMC) was presented. Then, participants worked on a consumer profile worksheet and a consumer model canvas to identify consumer behavior regarding purchasing agricultural products.





In the afternoon session, participants had the opportunity to do market research at the PSU Farmer's Market. The manager of the market gave a brief overview, including the market's operating regulations. Participants met the market staff and sellers and farmers, then were assigned to work with sellers. While with the sellers, they collected both seller and consumer data; the latter regarded how consumers made purchase decisions on fresh produce as well as processed foods. Consumer's characteristics and behavior on buying fresh and processed agricultural products were also observed and gathered. The day ended with a discussion and a feedback session regarding market management.





Learning Objectives

- Understand the concepts of value chain management and value creation for agricultural products
- Do market research by working with the sellers
- To identify consumer needs and practice data collection from the consumer's and seller's points of view

DAY 5

Preparation for on-farm practice at PSU farm - vegetable farming

The on-farm practice was organized on the fifth day. By working with the PSU Farmer's Market, which is already collaborating with organic farmers, participants had the opportunity to learn from farmers who have established their own organic farms. PSU farm was selected as the field study area for this training.



Organic farming

Each participant group was responsible for preparing their grow tables and learning how to grow vegetables. Under the supervision of the manager and farmers in the network, participants learned about preparing the soil, planting, fertilizing, watering, and preparing and managing plant material, tools, and farm equipment. All participants were assigned group work for the preparation of vegetable beds. In general, participants enthusiastically worked and helped each other on all farm activities.

A feedback session was held at the end of the day. Participants and farmers discussed and shared experiences about organic farming.



preparing the soil



planting



watering

fertilizing



*managing ...
plant material,
tools, and farm
equipment*





Learning Objectives

- Increase their own inspiration for organic farming by exchanging opinions and ideas with organic farmers
- Understand how to grow vegetables on grow tables and in vegetable beds
- To be able to prepare a grow table through “learning by doing”

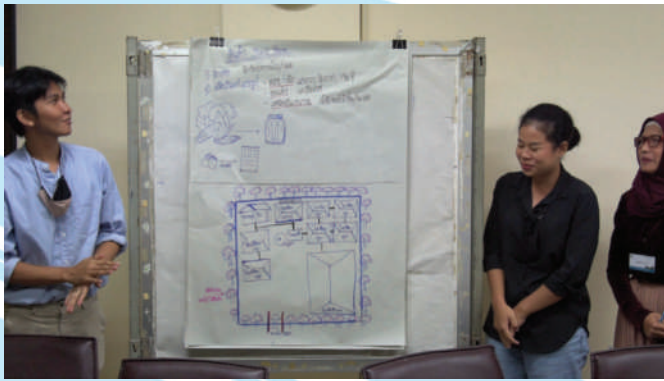
DAY 6

Agricultural farming systems - farm design

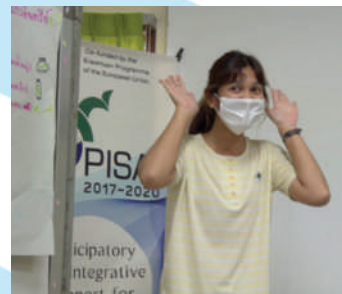
Training started with a discussion between participants and training staff. After participants finished data collection with consumers and sellers at the market and had on-farm practice, they shared their experiences and opinions. They observed that each seller had a different product management method, including postharvest management, shelf arrangement, and sales techniques. They were inspired to do organic agriculture and they acquired easy-to-learn techniques for growing vegetables.

A brief workshop was conducted on how to design and plan the farm. Each group selected agricultural products, both fresh and processed that they would like to produce. They were asked to design a farming system, including the necessary agricultural activities using the producer model canvas and farm profile worksheet.





In the afternoon, participants showed their farm designs in the form of a presentation. In general, all participants were able to make the connection between consumer behavior and sellers' and producers' perspectives. The farm designs of each group were comprehensive and illustrated a clear understanding of the links between consumers' needs and producers' products. At the end of the session, participants joined in team activities.



Learning Objectives

- Understand the linkage between marketing and production in the context of a farming system
- To be able to design a farming system
- Identify the needs of the farming system based on producing agricultural products

DAY 7

Farm management - environment and ecosystem

On Thursday morning, participants learned about important factors affecting agricultural production, including soil management and integrated pest management.



First, lectures on the concepts and methods of soil quality and soil analysis were given by Assist. Prof. Dr. Phruksa Lawongsa, an invited lecturer from the Faculty of Agriculture, KKU. Then lectures on integrated management of plant pests and diseases were presented. This session was divided into two parts. The first part was about sustainable and integrated plant disease management, given by Assist. Prof. Dr. Supot Kasem, an invited lecturer from the Faculty of Agriculture, KU. The second part focused on the biological control of insect pests, given by Assoc. Prof. Dr. Narit Thaochan, an invited lecturer from the Faculty of Natural Resources, PSU.



About 20 farmers interested in soil quality and IPM have joined the morning session. The session was organized to be a casual and friendly discussion, openly sharing ideas, including solutions to problems. Later, all participants went to the PSU farm to see how to assess the grow tables in terms of soil quality and plant disease, with Dr. Phruksa and Dr. Supot. Learning by doing provided the opportunity for participants and farmers to exchange knowledge and techniques with the lecturers.







During the afternoon, participants continued working on their group tasks, i.e., on-farm practice for their grow tables and vegetable beds.





Learning Objectives

- Understand the principles and importance of soil quality and soil structure.
- Learn the basics of soil analysis, including the diversity of microorganisms.
- Understand the concepts of plant disease and integrated pest management (IPM).
- Understand the concept of biological control of insect pests.
- Create good relations and teamwork among participants by encouraging them to get actively involved in all activities.

DAY 8

Field study III - community enterprise visit



The visit to Bann Na-Kuan Community Enterprise was on the morning of 20 November 2020. This community enterprise was selected as a case study to identify and analyze how the business operates. Participants were briefly reminded of the BMC (business model canvas) for group work assignments before the trip. They were asked to prepare interview questions to ask enterprise members about their business and marketing management.



The community enterprise, established in 1999, is located in Bang Liang Sub-district, Kuan Niang District, Songkhla Province. This small community enterprise was started by a group of women who had the idea to increase their income by producing curry paste. Mrs. Pen Kaewjaroen is the president, and the group now has 70 members. This group produces about 3,000 kg. of different types of curry paste per month or about 36,000 kg. every year. The group produces various curry pastes, including red, green, and yellow, for cooking different curry dishes.



All of their products are certified and guaranteed by the Food and Drug Administration to be safe. The group has received GMP, Halal, and OTOP certifications. Participants learned about making a value-added product from local materials. During the field study, participants actively discussed and exchanged ideas about the enterprise's production process and marketing with the group president and members.



In the afternoon, participants working on the collected data. First, the whole group worked together to determine the value proposition of the community enterprise's products, using the Menti tool. Afterward, each group was assigned to respond to two blocks from the BMC. Each group presented the data they collected with feedback from the training staff. The data collection in the context of the entrepreneur was done in BMC for the case study of Bann Na-Kuan Community Enterprise.

**วิสาหกิจชุมชน
กลุ่มแม่บ้าน
เกษตรกร
บ้านหน้าควน**

- ผลิตภัณฑ์ : เครื่องแกง
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→ ออ. เลขที่ 902039562001
→ มพช. เลขที่ 92/2552
- ช่องทางการจัดจำหน่าย :
ขายเอง, ฝากขาย, ผลิตตามคำสั่งซื้อ

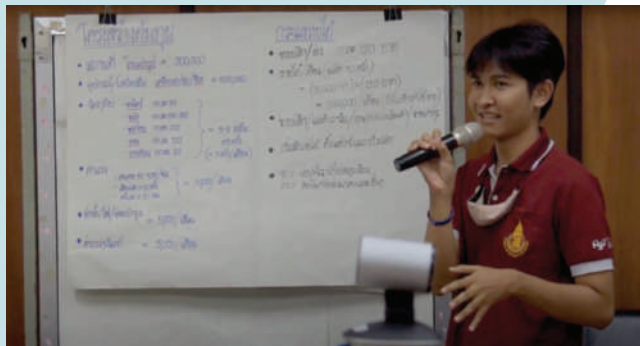
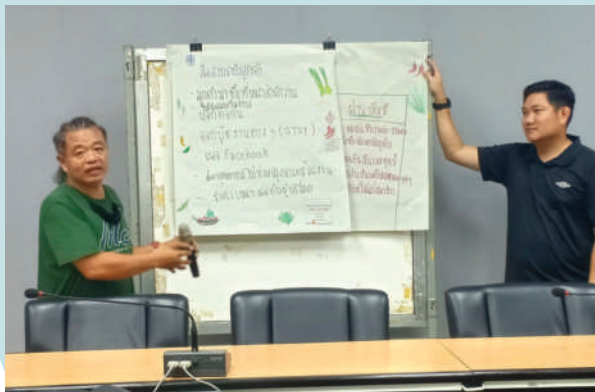
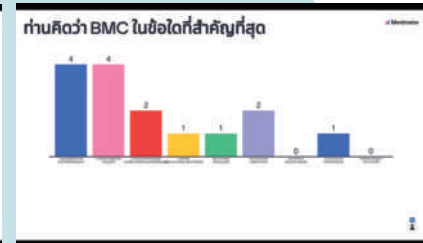
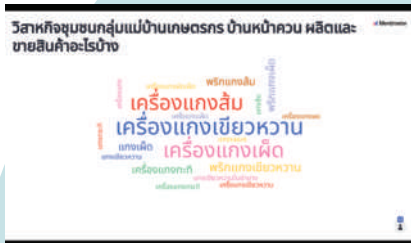
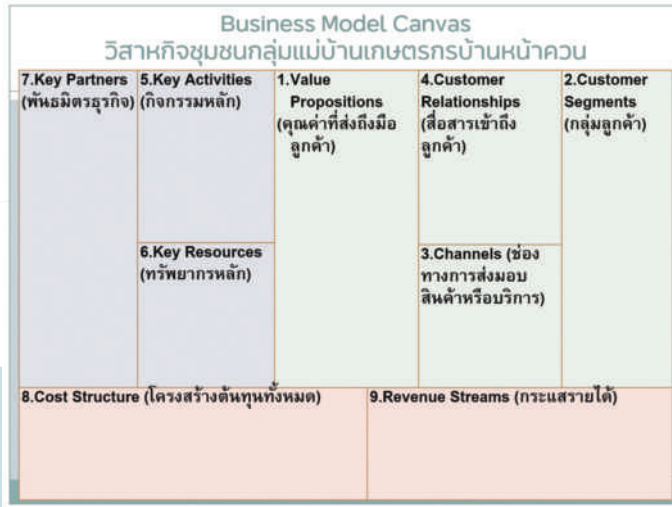
ที่ตั้ง:
เลขที่ 97/3 หมู่ที่ 13
ตำบลนางเหนือ
อำเภอคอนเียง
จังหวัดสงขลา

ศูนย์ อบรม วิสาหกิจชุมชน (2563)



Learning Objectives

- Understand the production process and the creation of value-added agricultural products.
- To be able to apply the BMC to analyze the operation of a business.





DAY 9

On-farm practice

Participants had the whole day to continue working on their grow tables and vegetable beds with the farmer, members of the PSU market network. They were able to experience many agricultural practices, including soil preparation using a small tractor, the process of making rice husk ash, a watering system, etc. Generally, all participants acted responsibly, helped each other, and work well in teams. Good relationships among participants and farmers were created. Strong teamwork made their group work more enjoyable, and they wished to have more time to learn through on-farm practice.







Learning Objectives

- Build good relations and teamwork among participants and farmers.
- Learn the processes of the cultural practice of organic vegetable production.



DAY 10

Presentation, wrap-up, and closure of the training program



This day, participants prepared their final reports. The faculty provided the computer room for the participants to work on their group reports. Participants used helpful software with relevant video clips and photographs to make quality presentations. Due to the different backgrounds of participants in each group, their presentations reflected various perspectives regarding knowledge, experience, learning outcomes, and anticipated changes in their futures.





A closing ceremony was held at the Faculty of Natural Resources, during which a short video clip of the training was shown. Assist. Prof. Dr. Chutima Tantikitti, coordinator of the PISAI project, handed out the training certificates to participants. The participants evaluated the training through an online survey. Participants and the organizing team discussed the feedback and comments about the training. They recommended that the PISAI Project continue the practical training with more training days and more topics related to sustainable agriculture.





Certificate of Participation

Mrs. Sudchit Kaewsuksree

Practical Training on "Sustainable Agriculture"

13-22 November 2020

Within the PISAI Project

Participatory and Integrative Support for Agricultural Initiative

Co-funded by the Erasmus+ Programme of the European Union

held at Prince of Songkla University, Songkhla, THAILAND

Tawanda Nisumbundu
Asst. Prof. Tawanda Nisumbundu
Dean, Faculty of Natural Resources
Prince of Songkla University

Asst. Prof. Dr. Chantima Tantikitti
Associate Dean for International Relations and Graduate Studies
PISAI Project Coordinator



Certificate of Participation

Mr. Paisol Somprasit

Practical Training on "Sustainable Agriculture"

13-22 November 2020

Within the PISAI Project

Participatory and Integrative Support for Agricultural Initiative

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Prince of Songkla University

Asst. Prof. Dr. Chantima Tantikitti
Associate Dean for International Relations and Graduate Studies
PISAI Project Coordinator



4 Evaluation by participants

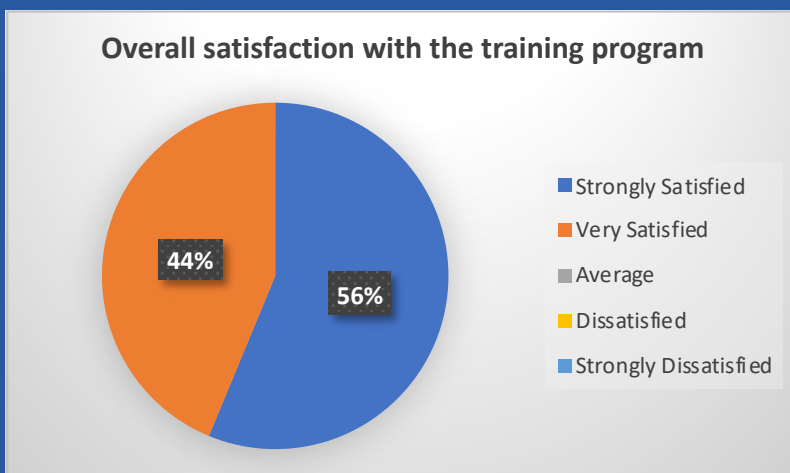


Figure 1. Participants' level of satisfaction with training

Fifteen participants attended the training. They were a mix of students, farmers, retired teacher, engineering, and business people. The evaluation form was comprised of five categories with a total of 21 questions. All participants were generally satisfied with the training course, as illustrated in the pie chart (Figure 1). The average scores regarding training organization and the content of the training and workshop are depicted in the bar graph (Figure 2).

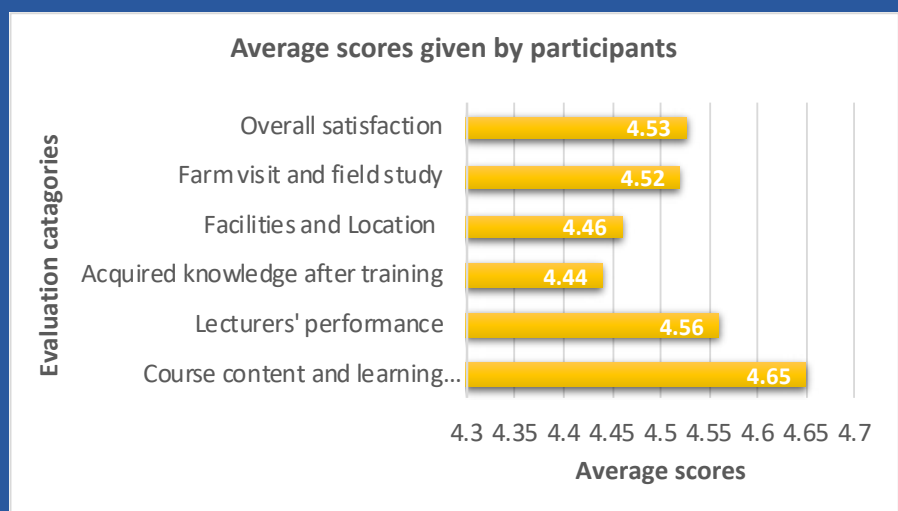


Figure 2. Participants' levels of satisfaction with specific aspect of the training



Several observations can be highlighted from the findings:

The participants evaluated the training courses positively. Their feedback showed that the course content aligned with the learning objectives. The course outline was well-organized and easy to understand. There was a good mix of theory and practice, and participants' learning and interaction were enhanced by suitable group work.

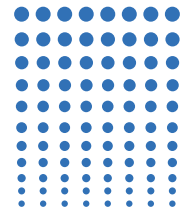
All participants had a positive evaluation of the lecturers. For example, the teaching method was well designed and practical for knowledge transfer; there were many opportunities for participants and lecturers to discuss and exchange opinions. The lecturers responded well to questions, and participants could apply classroom knowledge to actual practice.

All participants strongly agreed on "improvement in their knowledge after attending the training" and that they would be able to "apply the acquired knowledge in their future sustainable agricultural activities."

All participants were delighted with the training locations of the farm practice area and training rooms.

The work of the organizing team, training documents and materials, the length of the training period, and the food and beverages were highly appreciated. All participants strongly agreed that they gained a good understanding of sustainable agriculture and marketing and learned new things during the study trip, i.e., the farm and community enterprise visits. All participants stated that the length of the study visit program was perfect. Overall, all participants were delighted with the training course. It can be said that the training was productive, efficient, and in alignment with the learning objectives.





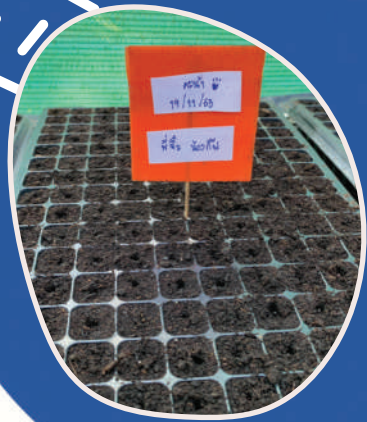
Suggestions and comments

Participants shared suggestions for further training and comments of the training, as below.

- More farm visits to PSU's farm and plant biotechnology center
- Allocate more time on soil, pest, and insect management topics.
- Organize additional practical training on other topics (such as animal husbandry and fishery) and provide more frequent training.
- Promote the project or the training through the faculty's website or some other channel that is easy to access.
- The length of the topics for lecturers from partner universities should be arranged for more times.
- There should be a consultation and follow-up program after the training to monitor the training's effectiveness.
- Group meetings should be organized periodically to have a platform for discussion and exchange of knowledge.
- The FNR can provide frequent practical training for the general public.
- Many topics were fascinating and could be applied in an actual situation.
- The training was very impressive, especially the lecturers' knowledge, experience, and communication skills. They made complex things easy to understand and answered all questions.
- The course was well-designed, skillfully integrating theory and field practice. It was easy for participants to understand and had a well-organized order.
- Participants were encouraged to participate and be actively involved in all activities.
- The training provided actual practice.
- A follow-up plan is needed for assessing the success of the training, both short-term and long-term.



XXXX
OOOO



Participant list

5



Miss Sirivipa Sae-Wun
Age: 22 years old
Student in Economic



Mr. Thanakrit Bavontaveechok
Age: 55 years old
Farmer



Mr. Paisol Sornprasit
Age: 33 years old
Finance, business owner



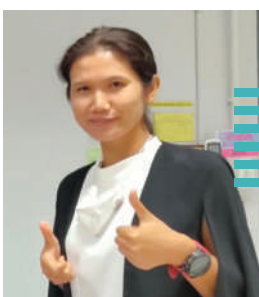
Miss Kanyarat Kongpantara
Age: 22 years old
Student in Agriculture



Mrs. Sudchit Kaewsuksree
Age: 65 years old
Former Nurse



Miss Sasipat Dechaakrawanit
Age: 32 years old
Liberal art, business owner






Mrs. Kanyaphak Petchkwan
Age: 41 years old
Business owner






Miss Pawinee Khamkaew
Age: 23 years old
General Administration Staff






 *Mr. Visis Tuntinimitchoc*
 *Age: 43 years old*
 *Engineer, business owner*






 *Miss Arissara Heemsuhree*
 *Age: 22 years old*
 *General Administration Staff*



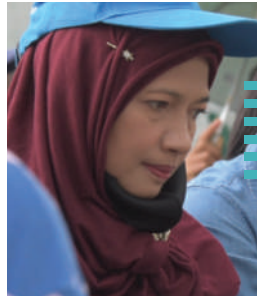
 *Mr. Tanaphat Petchkwan*
 *Age: 45 years old*
 *Farmer, business owner*






 *Mr. Thavorn Kaewsukree*
 *Age: 65 years old*
 *Retired teacher, farmer*






 *Miss Rinrada Kongsin*
 *Age: 21 years old*
 *Student in Agriculture*



 *Miss Somjit Bumrungrchart*
 *Age: 61 years old*
 *International trade staff in private company*



 *Mr. Jiraphan Manee*
 *Age: 23 years old*
 *General Administration Staff*



6

Professional Support



Mrs. Pannee Kaewsuwan

Mrs. Phairoe Galsee

Mrs. Prapatsorn Nantararat

Mrs. Sudawadee Sae-Jaen

Mr. Chakrit Tongsrichan

Mr. Kamnueng Soiseemark

Mr. Nikorn Disawat

Mr. Prasan Galsee

Mr. Songyot Suwannanon

Mr. Sudtipong Bunrat

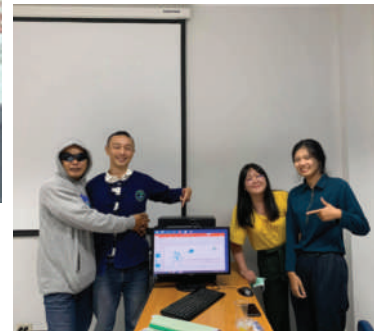


7

Unforgettable moments *with practical training*

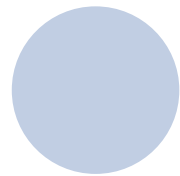


Amazing memories





Unforgettable moments



8

Presentation

by participants



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4 โฟต้า

สิ่งที่อยากจะทำ

ได้ปลูกผักอินทรีย์...
- เพื่อสุขภาพของคนในครอบครัว
- แบ่งปันความรู้ที่ถูกต้องให้กับผู้ที่สนใจ
- อนาคตมีการพัฒนาไปสู่การประกอบอาชีพ

ความรู้ที่ได้กับการนำไปประยุกต์ใช้

1. การวางแผนเพาะปลูกพืชอย่างมีระบบ เช่น ระบบน้ำ การทำปุ๋ยปลูก
2. การเตรียมดิน เช่น การตากแปลง การผสมดินปลูก
3. การคัดเลือกเมล็ดพันธุ์
4. การเพาะเมล็ดพันธุ์
5. การดูแลรักษาต้นพืช เช่น การให้น้ำ การกำจัดวัชพืช การใส่ปุ๋ยอินทรีย์ การดูแลโรคและแมลง

การจัดการผลผลิต ด้านการตลาด

1. การศึกษาและเก็บข้อมูลพฤติกรรมผู้บริโภคของกลุ่มลูกค้าเป้าหมาย
2. การหาพันธมิตร เช่น คนขายเมล็ดคนขายวัสดุปลูก เป็นต้น
3. การแนะนำสินค้า แหล่งผลิตสินค้าให้กลุ่มลูกค้า
4. การทำมาตรฐานสินค้าให้ผู้บริโภคมั่นใจ เช่น GAP, Organic Thailand
5. การออกแบบบรรจุภัณฑ์ที่เหมาะสมกับสินค้าของเรา
6. มีผลผลิตมาเพิ่มมูลค่าโดยการแปรรูปเป็นผลิตภัณฑ์
7. นำความรู้เรื่อง BMC

| | | | |
|---|---|--|---|
| <h4>ฝึกคิด</h4> <p>ไม่มีความรู้ทางด้านเกษตรที่ถูกต้อง มีความรู้ด้านการเกษตรที่ได้รับจากพ่อแม่ และศึกษาเพิ่มเติมจากยูทูบ</p> | <h4>ฝึกไหว</h4> <p>มีความรู้ทางด้านเกษตรเหมือนๆกัน มีความรู้แบบแบ่งปันจากพ่อแม่</p> | <h4>ฝึกปฏิบัติ</h4> <p>มีความรู้ที่เกี่ยวกับเกษตรเหมือนๆกัน ของป็นผลจากการทำจากทำจริง เรียนรู้อะไร</p> | <h4>ฝึกฝน</h4> <p>มีความรู้ทางด้านเกษตรเหมือนๆกัน ปฏิบัติทำจริง</p> |
|---|---|--|---|

ความรู้หลังการได้อบรม

| | | | |
|--|---|---|--|
| <h4>ฝึกคิด</h4> <p>มีความรู้ที่เพิ่มขึ้นเกี่ยวกับความรู้ที่ได้มีเครื่องมือเพื่อเกษตรและใช้ลงมือทำได้จากการปฏิบัติจริง นอกเหนือจากการดูหนังสือต่าง ๆ และบอกเพื่อนที่กลุ่ม</p> | <h4>ฝึกไหว</h4> <p>1. ได้มีความรู้เรื่องเกษตรอินทรีย์อย่างเต็มรูปแบบ 2. ได้มีความรู้ในการแปรรูป 3. ได้เข้าใจเรื่องการตลาด</p> | <h4>ฝึกปฏิบัติ</h4> <p>ได้มีความรู้เรื่องปฏิบัติที่ลงมือทำได้จริง ๆ ได้แบ่งปันประสบการณ์กับเกษตรกรด้วยกัน</p> | <h4>ฝึกฝน</h4> <p>ได้มีความรู้ที่ถูกต้องและมีความรู้ที่ถูกต้อง</p> |
|--|---|---|--|

กิจกรรมในห้อง

กิจกรรมลงแปลง

“ความมุ่งมั่น ความสำเร็จ เกิดขึ้นได้ อยู่ที่ใจ”

“เกษตร+ใจดี = ความสุข”





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กลุ่ม 3 IN 1

ทำไมถึงเข้าร่วมโครงการ PISA ?





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ความรู้ที่ได้รับจากการเข้าร่วมโครงการ



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ศึกษาเชิงปฏิบัติโดยคณาจารย์ที่เชี่ยวชาญในสาขาต่าง ๆ จากมหาวิทยาลัยในความร่วมมือของโครงการ PISA


ได้แก่ มหาวิทยาลัยขอนแก่น มหาวิทยาลัยอุบลราชธานี มหาวิทยาลัยเกษตรศาสตร์ มหาวิทยาลัยเชียงใหม่





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ระดมความคิดจากการเรียนรู้





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ความรู้นอกห้องเรียน







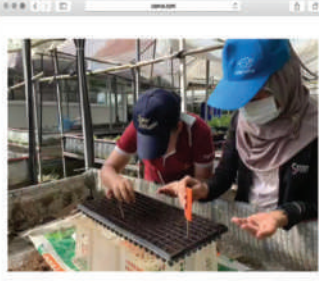
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ลงพื้นที่ศึกษากับเกษตรกรตัวจริง





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การเพาะต้นกล้า






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การเตรียมแปลงและไถ่ปลูก





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การทำแกลบดำ





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การนำไปปรับใช้และปฏิบัติจริงในขนาด

- กัฒมติดต่อเกษตรกรไทย
- การวางแผน/การจัดการ
 - SWOT ANALYSIS
 - Business Model Canvas (BMC)
 - RISK ANALYSIS
- การปรับโครงสร้างปัจจัยการผลิต
 - ที่ดิน
 - ระบบน้ำ
 - ปุ๋ย

Group four

Presentation of participants



โครงการฝึกอบรมเชิงปฏิบัติ "เกษตรยั่งยืน" ภายใต้โครงการ PISAI
By ชมพู่วาจิง

Agenda

- 01 สิ่งที่ได้รับจากโครงการ PISAI
- 02 ความคาดหวังก่อนและหลังเข้าร่วมโครงการ
- 03 บทสรุป

สิ่งที่ได้รับจากโครงการ PISAI

ได้รู้จักกลุ่มเกษตรกร อาจารย์ และเพื่อนในโครงการ PISAI

เข้าใจมีส่วนร่วมของเกษตรกรในพื้นที่

ทราบถึงความต้องการของผลิตภัณฑ์เกษตรอินทรีย์

นำความรู้ที่ได้รับไปปฏิบัติจริง และถ่ายทอดไปให้ผู้อื่น

ทดลองขายสินค้าในตลาดเกษตรกร

ได้รับการดูแลต้อนรับจากเจ้าหน้าที่ และอาจารย์ตลอดทั้งโครงการ

ไปทัศนศึกษา - ไร่สาธิตชุมชน

ความคาดหวังก่อนและหลังเข้าร่วมโครงการ

ความคาดหวังก่อนและหลังเข้าร่วมโครงการ

Before | knowledge | Practices | After | Future

ความคาดหวังก่อนและหลังเข้าร่วมโครงการ

Before | knowledge | Practices | After | Future

ความคาดหวังก่อนและหลังเข้าร่วมโครงการ

Before | knowledge | Practices | After | Future

ความคาดหวังก่อนและหลังเข้าร่วมโครงการ

Before | knowledge | Practices | After | Future

บทสรุป

เพาะเมล็ด | รดน้ำ + ใส่ใจ | ใช้ระยะเวลา | เกิดผลผลิต

ภาพประทับใจ

ตลาดเกษตรกร ม.อ.



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www.ku.dk



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www.czu.cz



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P.O. Box 4 (Yliopistonkatu 3), 00014 University of Helsinki, Finland
www.helsinki.fi



AGRINATURA

The European Alliance on Agricultural Knowledge for Development
42 rue Scheffer, F-75116 PARIS, FRANCE
<https://agrinatura-eu.eu/>



13-22 November 2020

Prince of Songkla University, Hat Yai, Songkhla, THAILAND



PISAI - Erasmus + CBHE Project

 <http://natres.psu.ac.th/pisai/index.php>