



Course Outline

Annual International Training Course

1. Course title:

Driving Local Agricultural Products from Self-sufficient Production to Creative Economy

2. Duration: 4 weeks (13 May– 7 June 2024)

3. Background:

Thailand International Cooperation Agency (TICA)

TICA is a national focal point for Thailand's international development cooperation. It was established in 2004 to realize Thailand's aspiration to be a contributor to international development cooperation. Believing that global challenges are best addressed through international cooperation and global partnership, TICA continues to work closely together with its development partners to realize the global development agenda through various capacity-building and human resources development programmes. In response to the recent changes in the global landscape of development cooperation, TICA has strengthened its partnerships to harness the synergy of South-South and Triangular Cooperation to tackle global development challenges, including expediting the implementation of Sustainable Development Goals (SDGs). It also continues to realign our focuses in order to deliver Thailand's commitments as a global reliable partner.

Since 1991, TICA, in collaboration with educational institutions in Thailand, has offered short-term training courses under its Annual International Training Course (AITC) programme. The number of courses offered each year varies between 25 to 35 courses for 20-35 participants per course. AITC not only fosters good and friendly relations which Thailand has already enjoyed with recipient countries across regions, but also helps Thailand to reach out to those countries with which we desire to engage more closely. The courses offered by TICA in 2023-2025 are categorized into 5 themes: Sufficiency Economy Philosophy (SEP), food security, climate change and environmental issues, public health, BCG Model related.

Faculty of Agriculture, Khon Kaen University

The Faculty of Agriculture was established in 1964. The responsibilities of the Faculty of Agriculture at that time were not only to be a resource of knowledge for students in various disciplines of agriculture but also to be a resource for contributing knowledge in agriculture in

order to solve agricultural problems for the country as a whole. From the beginning of the establishment until today, the Faculty of Agriculture has provided experienced lecturers, relevant and up-to-date technology, and equipment and textbooks in teaching and research for students and farmers in the region.

Small-scale farmers play a crucial role in world economics. According to the FAO, about two-thirds of the developing world's 3 billion rural people live in about 475 million small farm households; while at the same time, it is estimated that small scale farmers supply a majority of global food demand. However, small-scale farmers are at severe risk due to climate change, environmental degradation, changing in technology and globalization etc. It is, therefore, most important for every sector involved needs to empower small-scale farmers to ensure the livelihood of rural communities be protected and the sustainability of small-scale farming be maintained. One possible solution is the creation of bottom-up agricultural value chains—with small scale farmers playing the key role has been proposed and focused by experts and international organizations leading to various initiatives launched. Equipped small-scale farmers and people involved in this sector with concept of creative agriculture or creative economy to create value added to local agricultural produces and products may be able to make local agricultural products more competitive. However, to further put the products to larger markets, the resilience of small-scale farmers must be strengthened at the same time.

Sufficiency Economy Philosophy, SEP, was bestowed by His Majesty the King Bhumibol Adulyadej. Application of the philosophy has contributed to the balanced and stable development from individual, family and community to society by developing the ability to cope with changes arising from extensive and rapid change in the material, social, environment and cultural conditions. The SEP can be applied for development of economy, natural resource and environment, technology, society and psychology. Application of SEP in agricultural fields can be related to three main issues including economy, natural resource and environment, and technology. Basic practices of the philosophy embraced by several Thai communities yield several high-quality products. The products are primarily used for household consumption and are given to relatives, neighbors or community. Some products are sold for community local markets. Application of SEP in driving agricultural products from self-sufficient production and household consumption to be in a position of new market of creative economy may yield small-scale farmers more competitive and subsequently higher income and sustainability.

Faculty of Agriculture, Khon Kaen University, as situated in the region with harsh environment, has long experiences, more than 50 years, working with poor small-scale farmers. The knowledge based on SEP has been implemented in every aspect of agricultural production. Under a changing world, Faculty of Agriculture are fully aware that conventional practice solely may not be able to alleviate poverty of farmers, therefore, bridging creative agriculture, Bio-Circular-Green Economy, BCG Model, together with SEP is always our focus. Authentic experiences of ours can be good examples and can inspire participants worldwide.

4. Objectives:

- 4.1 To provide concept of SEP, academic knowledge on modern business management, logistics and supply chain management, digital marketing concept and strategy
- 4.2 To get participants acquainted with examples on driving agricultural products from self-sufficient production and household consumption to creative economy by applying SEP.
- 4.3 To provide opportunities for participants to gain new knowledge, experience and inspiration from Thai researchers, Thai farmers, and leaders of Small and Micro Community Enterprise (SMCE) who are able to promote and moving local agricultural products from self-sufficient production and household consumption to creative economy with the concept of BCG Model.
- 4.4 To provide study tour, SMCE, and farm visits for participants leading to moving local products to creative economy.
- 4.5 To share experience among participants on how to make local products more competitive.

5. Course content:

5.1 Course outlines

Module 1: Agricultural systems in sufficient economy and low input agriculture

- 1.1 Sufficiency Economy Philosophy concepts
- 1.2 Integrated farming systems
- 1.3 Low input technology and agriculture rooted with BCG Model
 - Efficient water management
 - Integrated nutrient management (manure, compost, liquid organic fertilizer)
 - Ag-zero waste management
 - Pest management with the utilization of bioproducts

Module II: Making small-scale farmers more competitive and resilience through bridging SEP and creative economy

- 2.1 Concepts of creative agriculture/creative economy,
 - Modern business management,
 - Logistics and supply chain management
 - Digital marketing concept and strategy
- 2.2 Application of SEP on small-medium scale financial management and marketing issues
- 2.3 Bridging SEP and creative economy and brought into practice

Module III: Local agricultural products, production and utilization

- 3.1 Genetic resources management for sustainable production: current, and future
 - Participation on the diversity of genetic resources
 - Key concept of utilization of genetic resources
 - Farmer conservation methods

3.2 Farmer organizations to promote agricultural products

- Lessons learnt from smart farmers group, organic farmers group, self-sufficient farmers group, community based enterprise: local products and U2T scheme, Modern farming system

Module IV: Application of the SEP and creative agriculture on production technology and other technological issues

- 4.1 Develop practical technologies from local resource/wisdom/ knowledge
- 4.2 Application of creative agriculture in food production, landscape and environmental management, ecotourism, green energy and green cities
- 4.3 Agricultural Standardization: Good Agricultural Practice (GAP)/Organic Production and Certification
- 4.4 Adaptation and select suitable technologies for increase production and reduce production cost
- 4.5 Adaptation and select suitable technologies for processing/packaging/storing/transportation to fulfill the needs and to meet market demand

Module V: Discussion/Wrap up/Evaluation

5.2 Practice: Each module consists of lecture, practicum work, case study

5.3 Study Trips/ Field Trips: 1-2 days field trip will be included in each module such as:

- KKU Agro outlet: Farmer market for high quality products
- AG-KKU Learning Center, Certified Organic AG-Farm
- Visit to various farmer groups such as
 - Off-season mango producer for export, Sum Sung GAP Vegetable Group in Khon Kean: supplying GAP certified vegetable to Tops supermarket/Lotus
 - Sakhon Nakhon province: The City of Indigo and Isan Heritage
 - Kalasin province: Commercial rice breeding and seed production by farmer
 - Chaiyaphum province: Mitr Phol Modern Farm
 - Various markets, both public and private located in Khon Kaen province and nearby provinces.

5.4. Advance assignment

Country report: case study on:

- Success factors in driving local products to high end market or niche market
- Value added in local agricultural products: A case study of participant's Country

6. Participants criteria:

- 6.1 Be nominated by their respective government
- 6.2 Be university graduated or have an equivalent academic background in agriculture (plant science, agronomy, animal science, agricultural economics, food science and technology, marketing, horticulture, agricultural extension) or related fields
- 6.3 At least 5 years-experience on agricultural sciences, extension, rural development, agricultural economics and marketing, or management researchers
- 6.4 Be under forty-five (45) years of age
- 6.5 Have a sufficient command of spoken and written English
- 6.6 Be in good health both physically and mentally, each participant should have a health certificate provided by an authorized physician. This form is also attached together with the Nomination Form. Pregnancy is regarded as a disqualifying condition for participation in the course.

7. Attendance and Evaluation:

Participants who complete the training will receive a certificate based on:

- Real-time class attendance (not less than 80%)
- Interactive class participation
- Presentation and report
- Module Evaluation
- Course Evaluation

8. Venue:

Training: Faculty of Agriculture, Khon Kaen University

Accommodation: Hotel in town (To be arranged)

9. Expected results:

After completing of the training course, the participant will be able to:

1. Gain knowledge and experience on how to drive local agricultural products from self-sufficient production and household consumption to market on the context of creative economy or creative agriculture by applying SEP".
2. Learn from each other
3. Gain lesson learnt from the visit to places in Thailand and learn from Thai researchers, Thai farmers and personals from Small and Micro Community Enterprise (SMCE) who are able to promote and moving local agricultural products from self-sufficient production and household consumption to different markets
4. Build up the network

10. Organization/Institution:**- Implementing Agency:**

Faculty of Agriculture, Khon Kaen University, Khon Kaen 40002, THAILAND

Tel: (66 43) 202360 Fax: (66 43) 202361

- Contact Person:

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11. Expenditure/Funding

Thailand International Cooperation Agency (TICA)

Government Complex, Building B (South Zone), 8th Floor,

Chaengwattana Rd., Laksi District, Bangkok 10210 THAILAND

Website: <https://tica-thaigov.mfa.go.th/en/index>

Email: aitc@mfa.go.th

**Schedule for Training Programme:
Driving Local Agricultural Products from Self-sufficient Production to Creative Economy**

Date	Time	Session/Activity	Responsible / Speaker
13 May 2024	09.00-12.00	Opening and Welcome Session <ul style="list-style-type: none"> <input type="checkbox"/> Opening Session <ul style="list-style-type: none"> o Welcome remarks and opening address by Dean of Faculty of Agriculture o Overview of the program o Explanation of program background, objectives & implementation by Associate Dean for Research, Innovation and International Affairs o Introduction of facilitators and participants <input type="checkbox"/> Program Introduction & synopsis <input type="checkbox"/> Conducting needs and expectation 	All Staff
	12.00-13.00	Lunch	
	13.00-14.00 14.00-16.30	- Country reports <ul style="list-style-type: none"> <input type="checkbox"/> PowerPoint must be prepared (5 min presentation) - Translational experiences <ul style="list-style-type: none"> <input type="checkbox"/> Case study in unsustainable Self-Sufficiency production and household consumption <input type="checkbox"/> Group discussion 	All Staff
Module 1: Agricultural Systems in Sufficient Economy and Low Input Agriculture			
14 May 2024	09.00-12.00	Sufficiency Economy Philosophy Concepts	Prof. Dr. Anan Polthanee, Assoc. Prof. Dr. Suchint Simaraks, Assist. Prof. Dr. Sukanlaya Choenkwan and team
	13.30-16.30	Integrated farming systems	
15 May 2024	09.00-16.30	Low Input Technology and Agriculture Rooted with BCG Model <ul style="list-style-type: none"> <input type="checkbox"/> Efficient water management <input type="checkbox"/> Integrated nutrient management (manure, 	Assoc. Prof. Dr. Chuleemas Boonthai Iwai, Assoc. Prof. Dr.

Date	Time	Session/Activity	Responsible / Speaker
		compost, liquid organic fertilizer) <input type="checkbox"/> Ag-zero waste management <input type="checkbox"/> Precision Agriculture	Wanwipa Kaewpradit Polpinit, Dr. Porntip Phontusang, Assist. Prof. Mallika Srisutham and Team Assoc. Prof. Dr. Supat Isarangkool Na Ayutthaya Dr. Kewaree Pholkern
16 May 2024	9.00-12.00	Insect Pest Management with low input technology for BCG Model <input type="checkbox"/> Low input method <input type="checkbox"/> Biological control	Assoc. Prof. Dr. Prakaijan Nimkingrat and team
	13.00-16.30	- Experience our bio-control innovation through VDO multimedia tour	
17 May 2024	09.00-12.00	Bioproducts for biological control of plant diseases: 1. Introduction for biological control of plant disease and bacterial based bioproducts for broad spectrum biological control of major plant diseases and plant growth promotion	Assoc. Prof. Dr. Petcharat Thummabenjapone
		2. Trichoderma bioproduct and mass production for plant disease control	Assist. Prof. Suwita Saepaisan
		3. Plant extract-based products for control root knot nematode	Dr. Kansiree Jindapannapat
	13.30-16.30	Utilization of bioproducts for plant disease management and case study for vegetable crop production	Assoc. Prof. Petcharat Thummabenjapone Assist. Prof. Dr. Anan Wongcharone
18-19 May 2024		Free day	
Module II: Making Small-scale Farmers More Competitive and Resilience Through Bridging SEP and Creative Economy			

Date	Time	Session/Activity	Responsible / Speaker
20 May 2024	09.00 -17.00	Concepts of creative agriculture / creative economy <ul style="list-style-type: none"> <input type="checkbox"/> Modern business management, <input type="checkbox"/> Digital marketing concept and strategy 	AG-ECON KKU Team
21 May 2024	09.00 - 17.00	Application of SEP on Small-medium Scale Financial Management and Marketing Issues	
22 May 2024	09.00 - 17.00	<ul style="list-style-type: none"> <input type="checkbox"/> Logistics and supply chain management Bridging SEP and creative economy and brought into practice	
23 May 2024	09.00 - 17.00	Presentation and Conclusion	
24-26 May 2024		Free day	
Module III: Local Agricultural Products, Production and Utilization			
27 May 2024	09.00-12.00	Genetic Resources Management for Sustainable Production: Current, and Future <ul style="list-style-type: none"> <input type="checkbox"/> Participation on the diversity of genetic resources <input type="checkbox"/> Key concept of utilization of genetic resources <input type="checkbox"/> Farmer conservation methods 	Assist. Prof. Dr. Jirawat Sanitchon, Assist. Prof. Dr. Sukanlaya Choenkwan, Assist. Prof. Dr. Sompong Chankaew, Dr. Tidarat Monkham and team
	13.30-16.30	Farmer Organizations to Promote Agricultural Products: Lessons learnt from smart farmers group, organic farmers group, self-sufficient farmers group, community based enterprise: local products and U2T scheme	
28 May 2024	09.00-16.30	Lessons learnt from Mitr Phol Modern Farm in Chaiyaphum province	Assoc. Prof. Dr. Nakorn Jongrunklang, Assist. Prof. Dr. Sompong Chankaew and Dr. Tidarat Monkham
29 May 2024	09.00-16.30	Lessons learnt from Farmer rice field in Kalasin province	Assist. Prof. Dr. Jirawat Sanitchon, Assist. Prof. Dr.

Date	Time	Session/Activity	Responsible / Speaker
			Sompong Chankaew, Dr. Tidarat Monkham and team
30 May 2024	09.00-16.30	Lessons learnt from The City of Indigo and Isan Heritage in Sakhon Nakhon province:	Assist. Prof. Dr. Jirawat Sanitchon, Assist. Prof. Dr.
31 May 2024	09.00-16.30	Discussion and conclusion for module III	Sukanlaya Choenkwan, Assist. Prof. Dr. Sompong Chankaew, Dr. Tidarat Monkham, Dr. Shanerin Falab and team
1-2 June 2014		Free day	
Module IV: Application of the SEP and creative agriculture on production technology and other technological issues			
3 June 2014	09.00-12.00	Agricultural Standardization: Good Agricultural Practice (GAP) / Organic Production and Certification	Dr. Ketsuda Dejbhimon, Dr. Shanerin Falab and team
	13.30-16.30	Impact of on community and well-being Lessons learnt from certified GAP in northeastern Thailand Lessons learnt from certified organic farms in northeastern Thailand	
4 June 2014	09.00-12.00	Innovative agriculture: Adaptation and select suitable technologies for increase production and reduce production cost Lessons learnt from Young Smart Farmer in northeastern Thailand	Dr. Ketsuda Dejbhimon, Dr. Shanerin Falab and team
	13.30-16.30	Case study: MEKIN FARM: From empty dry land to Agro tourism	

Date	Time	Session/Activity	Responsible / Speaker
5 June 2014	09.00-12.00	Creative agriculture: Adaptation and select suitable technologies for processing/packaging/storing/transportation to fulfill the needs and to meet market demand Case study: Value-added through creative agriculture	Dr. Ketsuda Dejbhimon, Dr. Shanerin Falab and team
	13.30-16.30	Discussion and conclusion for module IV Problem-based learning	
Module V: Discussion/Wrap up/Evaluation			
6 June 2014	09.00-16.30	Presentation and Conclusion	All Staff
7 June 2014	09.00-12.00	Closing session <ul style="list-style-type: none"> <input type="checkbox"/> Training summary from participant representatives <input type="checkbox"/> Wrap up & Training reflection <input type="checkbox"/> Closing address by Dean <input type="checkbox"/> Photo session 	