



General Information

Third Country Training Programme on Rice Production Technologies for Food Security and Sustainability of African Countries

8 January – 14 February 2025

Conducted by

National Agricultural Extension and Training Center (NAETC), Kasetsart University
Implementing Organization

The Government of Japan
Japan International Cooperation Agency

The Government of Thailand
Thailand International Cooperation Agency, Ministry of Foreign Affairs of Thailand

**Third Country Training Programme on
Rice Production Technologies for Food Security and Sustainability
of African Countries**

Subsistence for rice production is considered as the integration of rice production as a complete process that is safe for producers and consumer. Application of alternative technology will support management of rice production and post-harvest for food safety. The course title is “Cultural Practice, Technology and Management for Subsistence Rice Production” which is conducted by the Royal Thai Government and the Government of Japan, as part of the Third Countries Training Programme (TCTP).

The course arrangements will be made by Thailand International Cooperation Agency (TICA) of Ministry of Foreign Affairs, Japan International Cooperation Agency (JICA), in collaboration with Kasetsart University (KU) and relevant organizations in Thailand.

1. Goal

Subsistence of rice production aims to reduce costs in rice production so that grain yields and grain quality are not decreased. The technology and management of rice production from planting to harvesting include seed testing, seed preparation, land preparation, planting methods, water management, nutrition management, and prevention of rice pests by using alternative methods for proper decision making for safe rice production and also postharvest technology. Moreover, alternative technologies for rice production, including bio-fertilizer, Trichoderma, Integrated Pest Management (IPM) and Alternate Wet and Dry (AWD) water management are added to this course. Furthermore, a financial analysis for estimating the budget of rice production is included.

2. Objectives

Transferring and exchanging best practices and knowledge for increasing rice production:

1) Rice Production alternative rice production techniques for high productivity per unit area, decrease in the cost of rice production, and sustainable rice production.

2) Rice Value Chain: quality control, rice aggregation system, stable supply, and market access and added values.

3. Course Contents

Module 1 Introduction to rice production and rice policy

- Overview of rice production in Thailand
- Rice Policy in Thailand: Economic and Production Issues

Module 2 Technology and Management for Rice Pre-Planting

2.1 Rice varieties

- Types of rice varieties

2.2 Seed Quality

- Rice seed testing quality and purity
- Practice for Rice seed testing quality
- Seed preparation for rice production (broadcasting, transplanting and parachuting)
- Practice on seed preparation

2.3 Land Preparation

- Land preparation for rice production
- Demonstration of land preparation

Module 3 Technology and Management of Rice Production

3.1 Planting

- Rice planting methods
- Practice on rice planting

3.2 Water management

- Water management in paddy fields
- Alternate wet and dry method (AWD)

3.3 Weed management

- Weed management in rice production
- Practice in weed management

3.4 Soil Fertility

- Soil testing
- Practice in soil testing

- Fertilizer management in paddy field
- Practice in fertilizer management

3.5 Pest and Diseases

- Disease management in rice production
- Practice in the field for the “Disease management”
- Pest management in rice production
- Practice in the field for the “Insect management”
- Tricoderma for rice production
- Practice in Tricoderma for rice production

Module 4 Technology and Management of Rice Post-Harvest

- Rice harvesting and post-harvest technology
- Practice for rice harvesting
- Practice for grain quality
- Rice processing for added value

Module 5 Economic and Financial analysis for rice production

- Cost-Benefit Analysis (CBA) in Rice Production
- Rice exporting procedure
- Rice logistics and Value Chain System
- Cropping System in Paddy Fields

Module 6 Country report, Presentation and Discussion

- Country report; presentation
- Summarize and Discussion for policy of rice production
- Action plan presentation
- Wrap up and Discussion
- Writing Project Proposal
- The writing project on “Individual Action plan”

Module 7 Study visit

- Upland rice, highland production
- Rice farmer community
- Big paddy field project
- Rice OTOP
- Rice Science Center, Kamphaengsaen

- Rice research station of Rice Department, Ministry of Agriculture and Cooperative
- Suphanburi Rice Research Center, Suphanburi Province
- Lifestyle and Spirit Thai Farmer Learning Center and seed producer, Suphanburi Province
- Nakhonluang Rice mill
- Rice flour industry
- Rice organic farm;

4. Training methods

Lecture (35 %) Field and laboratory practices (35 %) study visit (15%), discussion, creation, presentation (15%)

5. Language

The course will be conducted in English

6. Duration

8 January – 14 February 2024 (38 days)

7. Invited Countries: 1) Angola 2) Ethiopia 3) Gambia 4) Ghana 5) Guinea-Bissau, 6) Kenya 7) Liberia 8) Mozambique 9) Malawi 10) Nigeria 11) Sierra Leone 12) Rwanda 13) Tanzania 14) Uganda and 15) Zambia

8. Number of Participants

The number of participants from the invited countries shall not exceed 15 persons in totals with not more than 3 persons from each country.

9. Qualifications

The candidates must be

(1) Nominated by their respective governments in accordance with procedures for application

(2) be Researcher or Extension officer (Advanced) agronomists, breeders and rice extension personnel, advanced farmers,

(3) be at least two (2) years working experiences in rice production

(4) 25-50 years of age

(5) Sufficient command of spoken and written in English ;

(6) be in good health, both physically and mentally; each participant should have a health certificate provided by an authorized physician. The medical report form is also the Application Form. Participants shall follow health instruction/measures by the government of Thailand. Pregnancy is regarded as a disqualifying condition for participation in the Course; and

(7) Gender Equality and Women's Empowerment : Women are encouraged to apply for the program. JICA is committed to promoting gender equality and women's empowerment, and provides equal opportunities for all applicants regardless of their sexual orientation or gender identity.

10. Institutions

The course will be jointly sponsored by Japan International Cooperation Agency (JICA) (<http://www.jica.go.jp>), Thailand International Cooperation Agency (TICA) (<https://tica-thaigov.mfa.go.th>) and in collaboration with Kasetsart University (<http://www.ku.ac.th>).

11. Venue

The program will be conducted during 36 days at the National Agricultural Extension and Training Centre, Kasetsart University, Kamphaengsaen Campus, Nakhon Pathom province, Thailand.

Email: nopporn.L@ku.th

12. Certificate

Participants who have successfully completed the course will be awarded certificate issued by TICA, JICA Thailand Office, and KU based on:

- Real Time Onsite Class (not less than 80%)
- Onsite Class participation and discussion
- Onsite Presentation of Action Plan

13. Procedures for Application

(1) Applicants interested in participating in the course **must** be nominated by their government and submit three (3) **completed nomination forms not later than 15th November 2024 to the Royal Thai Government through the Royal Thai Embassy, or Consulate in their respective countries,** and send one (1) copy directly to

Director, Human Resources Development Cooperation Division,
Thailand International Cooperation Agency (TICA),
Ministry of Foreign Affairs,
The Government Complex, Building B (South Zone),
8th Floor, Laksi District, Bangkok 10210, THAILAND
Tel. 66-2203-5000 Ext. 43110, Fax: 66-2143-8357
E-mail: tctp.tica@gmail.com,
siwalee.w@mfa.go.th, CHARUVALEE.B@mfa.go.th
Web site: <https://tica-thaigov.mfa.go.th>

(2) The Government of the Kingdom of Thailand will inform the applying Governments of the name (s) of the selected nominee (s) to participate in the course **not later than 30 days** before the commencement of the course.

14. Allowance and Expenses

The following allowance and expenses will be borne by the Royal Thai Government and the Government of Japan;

- An economy class round trip air ticket designated by TICA will be issued to the approved candidates. The approved candidates are requested to send a copy of his /her passport for arranging the air ticket. Electronic AIR TICKET will be sent to the participants in advance by representatives of THAI AIRWAYS INTERNATIONAL PUBLIC COMPANY LIMITED, or through the National Airline Office in the participant's country.

- Living allowance at the rate of Baht 600 per day (approximately US\$17) will be paid to each participant during stay in Thailand. This living allowance is for food and other personal daily expenses. However, each participant is suggested to have his/her own pocket money sufficient for any emergency case prior to allowance payment.

15. Facilities Provided

The Government of the Kingdom of Thailand, through Thailand International Cooperation Agency (TICA), Ministry of Foreign Affairs, will provide the following facilities;

- (1) Arrangements for the training programme;
- (2) Orientation (Briefing upon arrival); and
- (3) Accommodation reservation and arrangement.

16. General Conditions of the Award

- (1) Participants are required to arrive in Thailand on the date as designated by TICA after its confirmation of acceptance. However, it will be finally confirmed through the air tickets sent to the participants. Participants are requested to confirm the flight details and date of arrival in Bangkok to TICA **at least 3 days** before the course commencement.
- (2) Participants should assume responsibility for other expenses incurred during travelling between the participants' home countries and Thailand, such as local transportation and passport fee.
- (3) Participants should make their own arrangements for any private financial matters. This is not provided by TICA and JICA.
- (4) Upon arrival at Suvarnabhumi International Airport of Thailand, participants will be received by staff of KU.
- (5) Participants are required to strictly observe the course schedule.
- (6) Application to change or alter the training subject or to extend the training period will not be accepted.
- (7) Participants are requested not to bring any of their family members.
- (8) Participants must return to their home countries after the course completion.
- (9) Participants are requested to prepare their COUNTRY PAPERS, concerning "Rice Production", a 20- minute presentation. (see Annex I for guidelines on country papers).

17. Life and Health Insurance

In accordance with relevant regulations, under the health insurance arrangement, free minor medical treatment will be provided for participant who becomes ill during his / her stay

in Thailand However, medical conditions resulting from an undisclosed pre-existent illness may not be financially compensated and may result in termination of the program.

18. Visa Procedures

Prior to departure from their home country to Thailand, the participants must apply for Non-Immigration type “F” at the Royal Thai Embassy/Consulate in or near their countries. Participant must cover all cost arising from visa application i.e. visa fee, travel cost to the Royal Thai Embassy/Consulate, postal and agency service fee (in case visa application is made by post or agency), transit visa fee (in case participant needs to apply for visa to Thailand at a transit country). Only Thai visa fee with receipt of Thai embassy can be reimbursed in full amount upon presenting an original receipt of the fee.

Annex I Guidelines for Country Papers

(1) Country.....

(2) Name of Participant.....

(3) The role of participant in seed purification, propagation and certification.

(4) Information

4.1 Brief general information

a) Overview of Agriculture in your country.

b) Situation of rice production in your country.

- Rice economic data in your country

- Rice area and yield

- Rice Varieties

- Rice cultural practice in Africa Countries

- Utilization and consumption of rice in community as food, value

added products and livelihood.

c) Extension and distribution of new varieties in each participating country

4.2 Proposal for establishing seed purification, propagation, certification, and distribution systems in each participating country.

Note: Participants should prepare video, power point presentation, or other audio-visual aids to **support 20 minutes**

(5) The Presentation of each country should be sent to KU by e-mail (nopporn.l@ku.th) before 28 Dec 2024

Rice Production Technologies for Food Security and Sustainability of African Countries

8 January 2025 – 14 February 2025 (38 days include travel time)

Day	Date	Time	Title	Lecturer	Place
1	8 Jan 2025		Arrival		Suvannabhumi international airport
2	9 Jan 2025	09.00 - 10.00	Introduction of JICA / CARD	JICA Thailand Office	เหมือนเดิม
		10.00 - 11.00	Course Pre-test	KU staffs NAETC	NAETC, KPS
		11.12 - 00.00	Campus Tour	KU staffs NAETC	KU, KPS
		13.00 – 14.00	Course Orientation	Assoc.Prof.Dr. Chanate Malumpong	NAETC, KPS
		14.00-15.00	Welcome address, Introduction to NAETC	Representative of KU for activities in Africa appointed by Ministry of Higher Education, Science, Research and Innovation and Director of NAETC	NAETC, KPS
		17.00-20.00	Opening Ceremony		
3	10 Jan 2025	09.30-11.30 Lec. 2 hrs	Thailand's Rice Production Economy and Policy Toward Sustainable Rice Platform	Assoc.Prof.Somporn Isvilanonda NAETC,	NAETC, KPS
		13.00-15.00 Lec 2 hrs	Rice value chain	Dr.Orachos Napisintuwong NAETC	NAETC, KPS
		15.30-17.30 Lec 2 hrs	Organic Rice Farming	Assoc.Prof.Dr. Chanate Malumpong	NAETC, KPS
4	11 Jan 2025		Weekend		
5	12 Jan 2025		Weekend		
6	13 Jan 2025	09.00-11.00 Lec 2 hrs	Cost-Benefit Analysis (CBA) in Rice Production	Assist.Prof.Dr. Rapee Dokmaithes	NAETC, KPS
		13.00-15.00 Lec 2 hrs	Rice growth and development	Assoc.Prof.Dr. Chanate Malumpong	NAETC, KPS
		15.30-17.30 Lec 2 hrs	Seed production and seed testing	Assist Dr Juthamas Romkaew	NAETC, KPS
7	14 Jan 2025	09.00-11.00 Lec 2 hrs	Rice breeding program	Assoc.Prof.Dr. Chanate Malumpong	NAETC, KPS
		13.00-15.00 Lec 2 hrs	Rice planting methods	Assoc.Prof.Dr. Chanate Malumpong	NAETC, KPS
		15.30-17.30 Lec 2 hrs	Land preparation	Assist.Prof.Dr. Tiwa Pakoktom	NAETC, KPS
8	15 Jan 2025	09.00-11.00 Lec 2 hrs	Plant climate and water management	Assist.Prof.Dr. Tiwa Pakoktom	NAETC, KPS
		13.00-15.00 Lec 2 hrs	Soil fertility and fertilizer management	Assist.Prof. Audthasit Wongmaneeroj	NAETC, KPS
		15.30-17.30 Lec 2 hrs	Weed and herbicide management	Assoc.Prof.Dr. Tossapon Pornprom	NAETC, KPS
9	16 Jan 2025	09.00-11.00 Lec 2 hrs	Rice harvest and post harvest management	Assist.Prof.Dr. Juthamas Romkaew	NAETC, KPS

Day	Date	Time	Title	Lecturer	Place
		13.00-15.00 Lec 2 hrs	Rice insect pest management	Assoc.Prof.Dr.Sopon Uraichuen	NAETC, KPS
		15.30-17.30 Lec 2 hrs	Rice disease management	Assoc. Prof.Dr.Chainarong Rattanakreetakul	NAETC, KPS
10	17 Jan 2025	09.00-11.00 Lec 2 hrs	The standard of rice grain quality	Assoc.Prof.Dr. Chanate Malumpong	NAETC, KPS
		13.00-15.00 Lec 2 hrs	Rice processing for added value	Dr Jukkrapong Pinyo	NAETC, KPS
		15.30-17.30 Lec 2 hrs	Good agriculture practice for rice	Assoc. Prof.Dr.Chainarong Rattanakreetakul	NAETC, KPS
11	18 Jan 2025		Weekend		
12	19 Jan 2025				
13	20 Jan 2025	09.00-12.00 Dis -3 hrs	Country report presentation	Assoc.Prof.Dr. Chanate Malumpong and Team	NAETC, KPS
		13.00-16.00 Dis -3 hrs	Country reports presentation		
14	21 Jan 2025	09.00-16.00 Lec -6hrs	Writing an Project proposal		
15	22 Jan 2025		Heading to Northern	Assoc.Prof.Dr. Chanate Malumpong and NAETC Staffs	
16	23 Jan 2025	09.00-16.00	Study visit in Northern of Thailand		
17	24 Jan 2025	09.00-16.00	Study visit in Northern of Thailand		
18	25 Jan 2025	09.00-16.00	Study visit in Northern of Thailand		
19	26 Jan 2025	09.00-16.00	Study visit in Northern of Thailand		
20	27 Jan 2025	09.00-16.00	Study visit in Northern of Thailand		
21	28 Jan 2025	09.00-16.00	Back from Northern		
22	29 Jan 2025	9.00-12.00 Lab 3 hrs	Cost-Benefit Analysis (CBA) in Rice Production	Assist.Prof.Dr. Rapee Dokmaithes	Computer room, Fac.of Agri Kps
		13.00-16.00 Lab 3 hrs	Plant climate for rice production	Assist.Prof.Dr. Tiwa Pakoktom	Field lab
23	30 Jan 2025	09.00-12.00 Lab 3 hrs	Land preparation (demonstration)	Assist.Prof.Dr. Tiwa Pakoktom	Field lab
		13.00-16.00 Lab 3 hrs	Seed quality and seed testing	Assist.Prof.Dr. Juthamas Romkaew	lab
24	31 Jan 2025	09.00-12.00 Lab 3 hrs	Rice planting methods	Assoc.Prof.Dr. Chanate Malumpong	Filed Lab
		13.00-16.00 Lab 3 hrs	Rice conventional breeding technique	Assoc.Prof.Dr. Chanate Malumpong	Lab
25	1 Feb 2025		Weekend		
26	2 Feb 2025		Weekend		
27	3 Feb 2025	09.00-12.00 Lab 3 hrs	Soil fertility analysis	Assit.Prof.Dr.Suphachai Amkha	Lab
		13.00-16.00 Lab 3 hrs	Fertilization management	Assit.Prof.Dr.Suphachai Amkha	Lab
28	4 Feb 2025	09.00-12.00 Lab 3 hrs	Identify weeds in paddy field	Assist.Prof.Dr. Jamnian Chompoo	Field lab
		13.00-16.00 Lab 3 hrs	Herbicide application	Assoc.Prof.Dr. Tossapon Pornprom	Field lab

Day	Date	Time	Title	Lecturer	Place
29	5 Feb 2025	09.00-12.00 Lab 3 hrs	Rice disease diagnosis and disease control	Dr.Pisut Keawmanee and Assoc. Prof.Dr.Chainarong Rattanakreetakul	
		13.00-16.00 Lab 3 hrs	Rice insect pest and its control	Assoc.Prof.Dr.Sopon Uraichuen	Dept.of Entomology
30	6 Feb 2025	09.00-12.00 Lab 3 hrs	Water measurement and management	Assoc.Prof.Dr. Chanate Malumpong	Field lab
		13.00-16.00 Lab 3 hrs	Rice harvesting and milling process	Assist.Prof.Dr. Juthamas Romkaew	Field lab
31	7 Feb 2025	09.00-12.00 Lab 3 hrs	Rice grain quality test	Assoc.Prof.Dr. Chanate Malumpong	Lab
		13.00-16.00 Lab 3 hrs	Food processing from rice (lab)	Dr Jukkrapong Pinyo	Lab Cab B
32	8 Feb 2025		Weekend		
33	9 Feb 2025		Weekend		
34	10 Feb 2025	09.00-12.00 St.3 hrs	Study visit Lifestyle and Spirit Thai Farmer Learning Center,	Assist.Prof.Dr. Jamnian Chompoo	Supanburi province
		13.00-16.00 St.3 hrs	Study visit Smart Farmer (Alternate wetting and drying field),		Supanburi province
35	11 Feb 2025	09.00-12.00 St. 3 hrs	Study Visit Nakhon Luang Rice Mill (CP)	Assoc.Prof.Dr. Chanate Malumpong	Ayutthaya province
		13.00-16.00 3 hrs	Preparation of action plans	NAETC staffs	NAETC Kps
		16.00-17.00	Course Post-test		
36	12 Feb 2025	09.00-12.00	Action plan presentation	Assoc.Prof.Dr. Chanate Malumpong and Team	NAETC Kps
		13.00-16.00	Action plan presentation		
37	13 Feb 2025	09.00-12.00 Dis 3 hrs	Wrap up	Assoc.Prof.Dr. Chanate Malumpong	NAETC Kps
		13.00-16.00	Closing ceremony		
38	14 Feb 2025		Departure		Suvannabhumi International airport