



General Information

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

17 January – 20 February 2024

Conducted by

Implementing Organization

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

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

1. To address the important roles of rice production of local and new rice varieties in Africa.
2. To identify problems in practices, processes, distribution, and regulation of rice production in each participating African county.
3. To understand the processes, management and technology of rice production in centralized and decentralized farmers' participatory approaches for effective rice production and distribution.
4. To gain experience and understanding of pre- and post-harvest rice production technologies for effective implementation.
5. To develop an action plan to implement rice production in participants' countries after returning home to promote the practical improvement of rice production.

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

- Farm mechanization for Rice production
- 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
- 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
- Nakonluang Rice mill
- Rice flour industry
- Rice organic farm; green living camp, Dontum district, Nakhon Pathom province

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 French and English

6. Duration

17 January – 20 February 2024 (35 days)

7. Invited Countries:

Benin, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Côte d'Ivoire, DR Congo, Gabon, Guinea, Madagascar, Mali, Niger, Republic of Congo, Senegal and Togo

8. Number of Participants

The number of participants from the invited countries shall not exceed forty-eight (48) in totals with not more than 3 persons from each country.

Nominations from the invited countries should be as follows;

9. Qualifications

The candidates must be

- (1) Agronomists, breeders and rice extension personnel, advanced farmers,
- (2) Nominated by their respective governments in accordance with procedures for application

- (3) Have 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 or French;
- (6) Be in good health, both physically and mentally, to complete the course For this reason, pregnancy is considered not appropriate for the course;
- (7) Have a medical certificate issued by an authorized physician. This form is also attached to the Application Form;

Note:

Due to COVID-19 pandemic, all participants must follow the health measures of the host country.

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 35 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 2023 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. 43302, Fax: 66-2143-8357
E-mail: tctp.tica@gmail.com, siwalee.w@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

18. Visa Procedures

Prior to departure from their home country to Thailand, the participants must apply for Non-Immigrant visa (F) at the Royal Thai Embassy or Thai consulate in or near their countries and pay approximately US\$ 55 for VISA fee. This VISA fee, with receipt of Thai embassy will be reimbursed (reimbursement not exceeding 3,000 Baht).

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 tape, CD, DVD, 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 15 Jan 2024

Rice Production Technologies for Food Security and Sustainability of African Countries

Batch 2 Francophone Countries

15-16 January 2024, 21 February 2024 (Travelling Time)

17 January 2024 – 20 February 2024 (exclude travelling time)

Day	Date	Time	Title	Duration	Lecturer
	15-16 Jan 2024		Arrive at Thailand		Depend on flight schedule
1	17 Jan 2024	09.00-10.00	Welcome address, Introduction to NAETC and Training Overview	Lec.3 hrs	Director of NAETC
		10.00-12.00	Introduction of JICA / CARD		Japanese lecturer
		13.00-16.00	Course Orientation and Campus Tour	3 hrs	Assoc.Prof.Dr. Chanate Malumpong and KU staffs NAETC, KPS
2	Thu 18 Jan 2024	09.00-11.00	Thailand's Rice Production Economy and Policy Toward Sustainable Rice Platform	Lec. 2 hrs	Assoc.Prof.Somporn Isvilanonda
		13.00-15.00	Rice value chain (lecture), BKK	Lec 2 hrs	Dr.Orachos Napasintuwong
		17.00-20.00	Open Ceremony		BKK
3	Fri 19 Jan 2024	09.00-11.00	Cost-Benefit Analysis (CBA) in Rice Production	Lec 2 hrs	Assist.Prof.Dr. Rapee Dokmaithes
		13.00-15.00	Rice growth and development	Lec 2 hrs	Assoc.Prof.Dr. Chanate Malumpong
		15.30-17.30	Seed production and seed testing	Lec 2 hrs	Assist Dr Juthamas
4	Sat 20 Jan 2024	09.00-11.00	Plant climate and water management	Lec 2 hrs	Assist.Prof.Dr. Tiwa Pakoktom
		13.00-16.00	Study visit Lifestyle and Spirit Thai Farmer Learning Center (Rice seed provider company)	St.3 hrs	Assoc.Prof.Dr. Chanate Malumpong
5	Sun 21 Jan 2024		Weekend		
6	Mon 22 Jan 2024	09.00-11.00	Rice breeding program	Lec 2 hrs	Assoc.Prof.Dr. Chanate Malumpong
		13.00-15.00	Rice planting methods	Lec 2 hrs	Assoc.Prof.Dr. Chanate Malumpong
		15.30-17.30	Land preparation	Lec 2 hrs	Assist.Prof.Dr. Tiwa Pakoktom
7	Tue 23 Jan 2024	09.00-11.00	Plant climate and water management	Lec 2 hrs	Assist.Prof.Dr. Tiwa Pakoktom

Day	Date	Time	Title	Duration	Lecturer
		13.00-15.00	Soil fertility and fertilizer management	Lec 2 hrs	Assist.Prof. Audthasit Wongmaneroj
		15.30-17.30	Weed and herbicide management	Lec 2 hrs	Assoc.Prof.Dr. Tossapon Pornprom
8	Wed 24 Jan 2024	09.00-11.00	Rice disease management	Lec 2 hrs	Assoc. Prof.Dr.Chainarong Rattanakreetakul
		13.00-15.00	Rice insect pest management	Lec 2 hrs	
		15.30-17.30	Rice harvest and post harvest management	Lec 2 hr	Assist.Prof.Dr. Juthamas Romkaew
9	Thu 25 Jan 2024	09.00-11.00	The standard of rice grain quality	Lec 2 hrs	Assoc.Prof.Dr. Chanate Malumpong
		13.00-15.00	Rice processing for added value	Lec 2 hrs	Dr Jukkrapong Pinyo
		15.30-17.30	Rice export procedure	Lec 2 hrs	
10	Fri 26 Jan 2024	09.00-11.00	Country report presentation	Dis -3 hrs	
		13.00-16.00	Country reports presentation	Dis -3 hrs	
11	Sat 27 Jan 2024		Weekend		
12	Sun 28 Jan 2024		Heading to Northern		Assoc.Prof.Dr. Chanate Malumpong and NAETC staffs
13	Mon 29 Jan 2024	09.00-16.00	Study visit in Northern of Thailand, Chiang Mai, Chiang Rai		
14	Tue 30 Jan 2024	09.00-16.00	Study visit in Northern of Thailand, Chiang Mai, Chiang Rai		
15	Wed 31 Jan 2024	09.00-16.00	Study visit in Northern of Thailand, Chiang Mai, Chiang Rai		
16	Thu 1 Feb 2024	09.00-16.00	Study visit in Northern of Thailand, Chiang Mai, Chiang Rai		
17	Fri 2 Feb 2024	09.00-16.00	Study visit in Northern of Thailand, Chiang Mai, Chiang Rai		
18	Sat 3Feb 2024	09.00-16.00	Back from Northern		
19	Sun 4 Feb 2024		Weekend		
20	Mon 5 Feb 2024	9.00-12.00	Cost-Benefit Analysis (CBA) in Rice Production	Lab 3 hrs	Assist.Prof.Dr. Rapee Dokmaithes
		13.00-16.00	Plant climate for rice production	Lab 3 hrs	Assist.Prof.Dr. Tiwa Pakoktom

Day	Date	Time	Title	Duration	Lecturer
21	Tue 6 Feb 2024	09.00-12.00	Land preparation (demonstration)	Lab 3 hrs	Assist.Prof.Dr. Tiwa Pakoktom
		13.00-16.00	Rice planting methods (lab)	Lab 3 hrs	Assoc.Prof.Dr. Chanate Malumpong
22	Wed 7 Feb 2024	09.00-12.00	Rice conventional breeding technique	Lab 3 hrs	Assoc.Prof.Dr. Chanate Malumpong
		13.00-16.00	Seed quality and seed testing	Lab 3 hrs	Assist.Prof.Dr. Juthamas Romkaew
23	Thu 8 Feb 2024	09.00-12.00	Soil fertility analysis	Lab 3 hrs	Assist.Prof. Audthasit Wongmaneroj
		13.00-16.00	Fertilization management	Lab 3 hrs	Assist.Prof. Audthasit Wongmaneroj
24	Fri 9 Feb 2024	09.00-12.00	Identify weeds in paddy field	Lab 3 hrs	Assoc.Prof.Dr. Tossapon Pornprom
		13.00-16.00	Herbicide application	Lab 3 hrs	Assoc.Prof.Dr. Tossapon Pornprom
25	Sat 10 Feb 2024	09.00-12.00	Rice disease diagnosis and disease control	Lab 3 hrs	Assoc. Prof.Dr.Chainarong Rattanakreetakul
		13.00-16.00	Rice insect pest and its control	Lab 3 hrs
26	Sun 11 Feb 2024		Weekend		
27	Mon 12 Feb 2024	09.00-12.00	Water measurement and management	Lab 3 hrs	Assoc.Prof.Dr. Chanate Malumpong
		13.00-16.00	Rice harvesting and milling process	Lab 3 hrs	Assist.Prof.Dr. Juthamas Romkaew
28	Tue 13 Feb 2024	09.00-12.00	Rice grain quality test	Lab 3 hrs	Assoc.Prof.Dr. Chanate Malumpong
		13.00-16.00	Food processing from rice (lab)	Lab 3 hrs	Dr Jukkrapong Pinyo
29	Wed 14 Feb 2024	09.00-11.00	Good agriculture practice for rice	Lec 2 hrs	Assoc. Prof.Dr.Chainarong Rattanakreetakul
		13.00-16.00	Study visit organic rice field, Nakhon Pathom	St. 3 hrs	NAETC staffs
30	Thu 15 Feb 2024	09.00-12.00	Study visit rice flour industry, Nakhon Pathom	St.3 hrs	NAETC staffs
		13.00-16.00	Study visit rice milling factory, Nakhon Pathom	St. 3 hrs	NAETC staffs

Day	Date	Time	Title	Duration	Lecturer
31	Fri 16 Feb 2024	09.00-12.00	Study visit rice packaging factory, Ayuttaya	St. 3 hrs	NAETC staffs
		13.00-16.00	Preparation of action plans	3 hrs	NAETC staffs
32	Sat 17 Feb 2024		Weekend		
33	Sun 18 Feb 2024		Weekend		
34	Mon 19 Feb 2024	09.00-12.00	Action plan presentation	6 hrs	Assoc.Prof.Dr. Chanate Malumpong
		13.00-16.00	Action plan presentation		
35	Tue 20 Feb 2024	09.00-12.00	Wrap up	3 hrs	Assoc.Prof.Dr. Chanate Malumpong
		13.00-16.00	Closing ceremony		
	Wed 21 Feb 2024		Departure		