



Course Outline

Annual International Training Course

1. Course Title:

Advancing Sustainable Development through the Transformation from Sufficiency Economy to a Green Circular Economy (onsite workshop)

2. Duration: 21 days (May 31st to 20th June 2026)

3. Background:

Thailand International Cooperation Agency (TICA)

TICA: Thailand International Cooperation Agency is the national focal point for Thailand's International Development Corporation. TICA was established in 2004 to realize Thailand's aspiration to be a contributor of development cooperation. Believing that global changes are best addressed by international and global partnerships, today we continue to strengthen our contribution to achieve global development agenda through various capacity-building and human resources development programs. In response to the recent changes in the global landscape of Development Corporation, especially through the concept of South-South and Triangular Corporations, TICA commitment to realign our focuses in order to deliver Thailand's commitment to be a relevant partner in global agendas including the 2030 Agenda for Sustainable Development.

AITC: Annual International Training Courses

Was initiated in 1991 as a framework in providing short-term training for developing partners. Today, the AITC remains one of TICA'S flagship programs. It offers not only a training experience, but also a platform in exchanging ideas and establishing professional network among participants from across the developing world. Aiming to sharing Thailand's best practices and experience to the world, the AITC training courses focus on development topics of our expertise currently categorized under five schemes namely: "Sufficiency Economy Philosophy" or SEP, Food Security, Public Health, Climate Change, and other topics related to Sustainable Development Goals (SDGs).

Maejo University

Maejo University, located in Thailand, is known for its commitment to advancing agricultural knowledge and practices. The university likely plays a significant role in integrating sustainable practices within its agricultural programs and in shaping sustainable agricultural transformation through higher education, fostering intelligent well-being agriculture by combining research, innovation, community engagement, and a forward-thinking curriculum. Intelligent Well-being Agriculture encompasses a holistic framework that integrates economic sufficiency and culture, convergence technology, and eco-agricultural development. By focusing on these three interconnected elements, agriculture can achieve sustainability that not only enhances productivity but also improves the quality of life for farmers and promotes environmental stewardship. This comprehensive approach is essential for addressing the complexities of modern agriculture, ensuring that it meets current needs without compromising future resources or the well-being of communities. Maejo University has demonstrated remarkable progress in global academic rankings, particularly in sustainability indicators. In the Green University rankings by UI GreenMetric, Maejo rose from global rank #157 in 2022 to #113 in 2024. Additionally, the institution maintains a strong presence in the Times Higher Education Impact Rankings, SCIMAGO, QS Asia, and URAP systems, evidencing its research strength, teaching quality, international collaboration, and commitment to global impact.

The university has pioneered curriculum and training programs in net-zero agriculture, emphasizing renewable energy, agroecology, and carbon-neutral farming practices. Students and faculty actively participate in research, internships, and fieldwork aimed at addressing food security and environmental sustainability. Maejo's innovation-led education approach is supported by initiatives such as the Maejo Agriculture and Food Innovation District (MAID), which bridges academic knowledge with practical entrepreneurial outcomes.

Through the MAID initiative, the university has developed a comprehensive ecosystem for entrepreneurial education and innovation. This includes support for technology spin-offs, joint ventures, and venture-building activities that transform university research into commercially viable products and services. Mechanisms such as intellectual property (IP) conversion, pre-seed funding, and accelerator programs provide a launchpad for students, faculty, and researchers to become sustainability-oriented entrepreneurs. Notable achievements in innovation include receiving Gold and Silver Medals at the Higher Education Innovation Awards 2024 in energy, environmental technology, and the agricultural sector. The university also garnered multiple G-Green awards for its commitment to environmental best practices. Further strengthening its environmental education impact, Maejo has engaged in key informant interviews and regional dialogues on carbon farming as a nature-based solution for Southeast Asia.

On the international stage, Maejo University continues to actively participate in key academic forums. The President and faculty have contributed to international conferences such as the ICAST 2024 in the Philippines, the SEARCA AgriVision 2029 Dialogue, the 11th GEAR-UP Forum in Taiwan, and the Centennial ICS 2024 at NPUST and also hosted many international conferences on campus, such as The 11th Southeast Asia Network of Animal Science (SEANAS), The 29th Tri-U International Joint Seminar & Symposium 2023, ASEAN Agriculture University Network (AAUN) 2023, the 8th UC Graduate Forum 2023, SAFE 2023 International Conference on Sustainable Agriculture, Food, and Energy, 19th ABBS-International Conference on Biohydrogen and Bioprocesses 2024, 5th International Conference

on Agroforestry (ICAF) Agroforestry for Sustainable Development (AG4DEV) in 2024, PAEPI International Extension Conference 2024 and also short-term training courses; such as; Initiatives for Nigerian Farmers, Agro-Tourism Trail and Cultural Exchange Internship Program, Short-Term Training (STT) on Climate Smart Agriculture & Livestock, and Senior Executive and Leadership Program (ELP) & Training on the Landscape and Floriculture (TLF). These engagements reflect Maejo's regional leadership in tropical agriculture, innovation, and resilience. The presentation also showcased unique interdisciplinary projects, such as research into alternative medicinal plants, and the launch of Post-Graduate Micro-Credentials (PMC-FSCC), tailored to equip professionals with future-ready skills in food systems and climate change.

Furthermore, MJU has established over 20 learning centers and research achievements by the faculty members that are considered as relevant wisdom. MJU receives at least 30,000 visitors each year that observed these agricultural learning centers and therefore has the capability of giving training courses at the international level. In conclusion, Maejo University's experience illustrates the power of integrating sustainability, innovation, and entrepreneurship in higher education. It serves as a model for institutions seeking to align academic excellence with global climate goals, economic transformation, and societal well-being. Through a holistic, community-connected, and forward-thinking strategy, Maejo is not only responding to the environmental challenges of today but also shaping the agricultural and educational paradigms of tomorrow.

Green circular economy and sustainable development

The concept of a green circular economy is increasingly recognized as a transformative approach to development, impacting all sectors of society—including agriculture, services, industry, and private households. In Northern Thailand, local development is particularly shaped by the dual pillars of agricultural and food production, as well as the rapidly expanding service sector, notably tourism. This region's socio-economic and biophysical diversity presents a unique setting for pioneering sustainable development strategies.

Since the 1960s, the introduction of the Royal Projects based on His Majesty King Bhumibol Adulyadej's Sufficiency Economy Philosophy has significantly influenced the transformation of rural communities. These initiatives have guided Northern Thailand towards becoming a model for rural modernization, recognized both regionally and globally. The region continues to face complex environmental challenges, such as climate change and recurring air pollution, which have prompted continuous innovation in sustainable rural development.

Maejo University has played a vital role in addressing these challenges and driving innovation. As a leading institution in Northern Thailand, Maejo University specializes in advanced research and education in sustainable agriculture, organic farming, and local economic development. The university is also at the forefront of promoting sustainable tourism and the development of eco-friendly agricultural technologies and value-added products.

In response to these pressing needs and opportunities, Maejo University annually organizes an International Training Course on Green Circular Economy and Sustainable Development, under the framework of the Thailand International Cooperation Agency (TICA)'s Annual International Training Course (AITC) program. This initiative brings

together interdisciplinary teams of faculty members, researchers, and practitioners to deliver hands-on training and academic insights to international participants. The program emphasizes sustainable food production technologies, integrated rural development strategies, and community-based tourism models.

After the first AITC in 2022, follow-up courses will build-up on knowledge related to the Sufficiency Economy Philosophy, and contributing elements of rural development, sustainable agricultural production and matter cycles to reduce the destruction of the environment.

4. Objectives:

The program is designed for participants to:

- 1) Gain a comprehensive understanding of key principles and practices in organic agriculture.
- 2) Exchange insights and experiences related to local and community-based development initiatives.
- 3) Explore the role of sustainable tourism in the context of environmentally sensitive areas.
- 4) Examine innovative organic products and understand the processes involved in their development and value addition.
- 5) Encourage the sharing of local knowledge, cultural values, beliefs, and traditions among participants.
- 6) Foster collaboration and strengthen social networks within the field of agricultural education.

5. Course Contents:

1) Foundations of Resilience and Area-Based Development

The first section of the course will introduce participants to the global climate crisis and how localized solutions — rooted in agriculture, community planning, and university–community partnerships — are essential for resilience. At the heart of the workshop is Maejo University, Thailand’s leading Organic and Innovation University, renowned for its hands-on approaches to sustainable agriculture and environmental education. Participants explore how Maejo’s “San Sai Model” connects academic expertise with real community needs. This area-based development model supports the San Sai District through university-driven research, technology transfer, and policy engagement. The week ends with a field visit to Maejo’s Smart Farm, showcasing organic systems, renewable energy, smart irrigation, and waste recycling innovations developed through faculty–farmer collaboration.

2) Circular Systems, Urban Management, and Renewable Energy

The second section focuses on circular systems — how organic waste, water, and energy can be managed more efficiently through integrated, community-driven approaches. Learners explore how Maejo University supports the San Sai District with academic services in organic farming, community composting, and renewable energy systems such as biogas and solar-powered irrigation. Site visits include Maejo’s organic learning center, local farms

supported by the university, and Chiang Mai's urban waste separation and reuse projects. These case studies show how technical knowledge from universities can be translated into real policy and infrastructure for sustainable cities and rural areas. Participants will work in teams to design context-specific solutions based on what they observe in Chiang Mai and Maejo, drawing on both field evidence and digital tools.

3) Sustainable Tourism and Creative Economy for Climate-Resilient Cities

The final week introduces tourism and creative economy as key dimensions of climate-resilient city development. Participants explore how local identity, traditional knowledge, and plant-based gastronomy can be harnessed through community-based tourism and creative enterprises. Drawing on the Five Elements philosophy, the sessions link cultural heritage with ecological stewardship. Activities include lectures on sustainable tourism models, field visits to artisan villages and agro-tourism sites, and workshops on developing green business models. By the end of the week, participants co-design local creative economy projects that integrate environmental, social, and cultural resilience.

4) Policy, Innovation, and Local-to-Global Action Planning

In the final week, participants move from understanding local realities to building globally informed action. This week focuses on how local knowledge, grassroots innovation, and university–community partnerships can influence regional, national, and global frameworks for sustainable development and climate resilience. Sessions explore how Maejo University and the San Sai Model serve as a microcosm for scalable and transferable practices — where academic service, citizen engagement, and environmentally sound innovation can inspire change far beyond a single community. Participants are guided to reflect on how local success stories (such as organic agriculture cooperatives or low-carbon rural energy projects) contribute to the broader global agendas. Ethics and equity are central to the discussion. Participants will explore climate justice, indigenous rights, and decision-making in development, recognizing the tensions between economic growth, environmental stewardship, and community wellbeing. Interactive sessions help learners navigate these trade-offs through ethical reasoning and participatory methods. Using a Design Thinking approach, teams develop a final innovation pitch or action plan, synthesizing what they've learned from Maejo's community-based practices and the wider Chiang Mai context. Projects are designed to be realistic and implementable in the participants' own countries — grounded in local needs but aligned with global aspirations.

6. Participants' Criteria:

Applicants must fulfill the following requirements:

- Be nominated by their respective governments;
- Education:
 - A **Bachelor's degree or higher** in a relevant field; Tourism Management

- Applicants without a formal degree in these areas may still be considered if they demonstrate **strong practical experience** and responsibilities in related sectors
- Language: proficiency in English (speaking, reading and writing)

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
- Evaluation
- Engagement in the design of a creative tourism or green business concept will be part of
- Participants will receive feedback on their integration of cultural and climate-resilient practices in their final action plan.

8. Venue:

Maejo University, Chiang Mai, Thailand

9. Expected Results:

- 1) Enhanced Philosophy of Sufficiency Economy
- 2) Practical Knowledge of Sustainable Tourism in a modernizing society
- 3) Extend Knowledge of Circular economy and Innovative products from organic materials

10. Organization/ Institution:

- **Implementing Agency; International College, Maejo University**
- **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>

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Schedule for the Training Program:

Advancing Sustainable Development through the Transformation from Sufficiency Economy to a Green Circular Economy (onsite workshop)

Onsite workshop 21 days (May 31st to 20th June 2026)

Day	Time (Thailand time)	Content	Speaker	Note
Sunday 31 th May: Pick up from Chiang Mai Airport to Maejo University				
Mon 1 st	08:30-09:00	Opening Ceremony & Program Orientation	Assoc. Prof. Dr. Weerapon Thongma, president of Maejo University and Assoc. Prof. Dr. Rapeephun Dangtankee, Dean of International College	
	09:00-12:00	Orientation & Introduction to SDGs in Local Context	Assoc. Prof. Dr. Weerapon Thongma	Lecture 3 h
	13:00-17:00	Maejo University's Ecosystem for Sustainable Development	Assoc. Prof. Dr. Weerapon Thongma	Lecture 3 h
Tue 2 nd	09:00-12:00	Philosophy of Sufficiency Economy (SEP)	Assistant Professor Dr. Mujalin Phonchan,	Lecture 3 h
	13:00-17:00	SEP in Practice: Community Applications and Local Wisdom	Assistant Professor Dr. Mujalin Phonchan,	Lecture 3 h
Wed 3 rd	09:00-12:00	Introduction to Circular Economy	Assoc. Prof. Dr. Nirote Sinnarong	Lecture 3 h
	13:00-17:00	Green Circular Economy (GCE): Integrative Framework	Asst. Prof. Dr. Kangsadan Kanokhong	Lecture 3 h
Thu 4 th	09:00-12:00	Comparing SEP, CE, and GCE	Dr. Winitra Leelapattana	Lecture 3 h
	13:00-17:00	Workshop: Designing Circular Systems	Dr. Winitra Leelapattana	Lecture 3 h
Fri 5 th	09:00-12:00	Agroecology & Regenerative Agriculture	Asst. Prof. Dr. Sutheera Hermhuk	Lecture 3 h

Day	Time (Thailand time)	Content	Speaker	Note
	13:00-17:00	Maejo Smart Farming: Technologies and Applications	Dr. Prakash Murgeppa Bhuyar	Lecture 3 h
Sat 6 th	09:00-12:00	Field Visit: Maejo Model Farm & Learning Centers	Dr. Winitra and Dr.Suthira	Field Visit 3 h
	13:00-17:00	Field Visit: Organic Waste to Bio-fertilizer Center	Dr. Winitra and Dr.Suthira	Field Visit 3 h
Sun 7 th	09:00-12:00	Field Visit: Smart Farming and Renewable Energy Integration	Dr. Winitra and Dr.Suthira	Field Visit 3 h
	13:00-17:00	Field Visit: Community- led Environmental Governance Project	Dr. Winitra and Dr.Suthira	Field Visit 3 h
Mon 8 th	09:00-12:00	Bioeconomy and GCE Policy Landscape	Asst. Prof. Dr. Yuwalee Unpaprom	Lecture 3 h
	13:00-17:00	Agroindustry Innovations for the Circular Economy	Asst. Prof. Dr. Yuwalee Unpaprom	Lecture 3 h
Tue 9 th	09:00-12:00	Community-based Development and Social Innovation	Asst. Prof. Dr. Nattapol Laorodphan	Lecture 3 h
	13:00-17:00	Participatory Rural Appraisal (PRA) Tools in Practice	Asst. Prof. Dr. Nattapol Laorodphan	Lecture 3 h
Wed 10 th	09:00-12:00	Sustainable Water Resource Management	Dr. Prakash Murgeppa Bhuyar	Lecture 3 h
	13:00-17:00	Maejo Water Efficiency Projects	Dr. Prakash Murgeppa Bhuyar	Lecture 3 h
Thu 11 th	09:00-12:00	Renewable Energy & Transitioning from Fossil Fuels	Assoc. Prof. Dr. Rameshprabu Ramaraj	Lecture 3 h
	13:00-17:00	Maejo Bioenergy Research and Pilot Models	Assoc. Prof. Dr. Rameshprabu Ramaraj	Lecture 3 h

Day	Time (Thailand time)	Content	Speaker	Note
Fri 12 th	09:00-12:00	Circular Waste Management Systems	Prof. Dr. Arnat Tancho	Lecture 3 h
	13:00-17:00	Organic Waste Valorization and Composting	Prof. Dr. Arnat Tancho	Lecture 3 h
Sat 13 th	09:00-12:00	Field Visit: Forest- Community Partnerships (Maejo)	Dr. Winitra and Dr.Suthira	Field Visit 3 h
	13:00-17:00	Field Visit: Green Circular Tourism Village	Dr. Winitra and Dr.Suthira	Field Visit 3 h
Sun 14 th	09:00-12:00	Field Visit: Elephant dung management for the environment, Mae Taeng Elephant Camp	Dr. Winitra and Dr.Suthira	Field Visit 3 h
	13:00-17:00	Field Visit: Elephant dung management for the environment, Mae Taeng Elephant Camp	Dr. Winitra and Dr.Suthira	Field Visit 3 h
Mon 15 th	09:00-12:00	Sustainable Tourism and Green Experience Design	Dr. Winitra Leelapattana	Lecture 3 h
	13:00-17:00	Community-based Tourism and Heritage	Asst. Prof. Dr. Jirachai Yomkerd	Lecture 3 h
Tue 16 th	09:00-12:00	Sustainable Food Systems and Local Economies	Dr. Kanjana Sommit	Lecture 3 h
	13:00-17:00	Traceability & Innovation in Farm-to- Table Systems	Dr. Kanjana Sommit	Lecture 3 h
Wed 17 th	09:00-12:00	Environmental Education and Behavior Change	Dr. Pit Jitpakdee	Lecture 3 h
	13:00-17:00	Science Communication for Sustainability	Assist. Prof. Dr. Tanwutta Thaisuntad	Lecture 3 h

Day	Time (Thailand time)	Content	Speaker	Note
Thu 18 th	09:00-12:00	Transformational Leadership for Sustainability	Assist. Prof. Dr. Tanwutta Thaisuntad	Lecture 3 h
	13:00-17:00	Tools: SDG Mapping & Life Cycle Assessment (LCA)	Assoc. Prof. Dr. Nirote Sinnarong	Lecture 3 h
Fri 19 th	09:00-12:00	Final Project Workshop & Coaching	MJU-IC Team	Lecture 3 h
	13:00-17:00	Presentation Rehearsals and Panel Feedback & Certification Ceremony	MJU-IC Team	Presentation 3 h
Sat 20 th	09:00-12:00	Pick up from Ranch Inn Hotel and Drop at Chiang Mai International Airport	MJU-IC Team	