

Overview

HARA Naoyuki, Ph.D

Vice President, Kagawa University

The "Second Trilateral Symposium on SDGs- New Strategic Approaches Towards SDGs Beyond the COVID-19 Pandemic" was held at Kagawa University for 3 days from August 29~31, 2023.

A total of 209 participants took part as on-site delegates, including 54 participants from Chiang Mai University in Thailand and 39 participants from National Chiayi University in Taiwan, one alumni member currently working in Ruhuna University, Sri Lanka and 115 participants from Kagawa University. In addition, 25 participants attended online, and it ended with great success.

From 2007 to 2018, Chiang Mai University and Kagawa University have held seven joint symposiums alternately at both universities. . From 2021, National Chiayi University joined the symposium, but due to the influence of Covid 19, the First Trilateral Symposium on SDGs was held online.

The Second Trilateral Symposium was scheduled to be held in 2022, but since the situation of Covid 19 did not improve, we held an online seminar to remain connected. . In 2023, we were finally able to hold it the symposium face-to-face.

The three universities eagerly awaited the symposium, and we were delighted to see each other again for the first time in several years. The symposium began with my opening remarks. After that, the Governor of Kagawa Prefecture gave a congratulatory address, President Pongruk Sribanditmongkol of Chiang Mai University, Professor Show-Jen Chiou, Director of the Center for Environmental Protection, Safety and Health on behalf of National Chiayi University, and finally President Yoshiyuki Kakehi of Kagawa University gave their respective greetings.

On the first day, Prof. Show-Jen Chiou, National Chiayi University and Prof. Bannakij Lojanapiwat, Dean of School of Medicine, Chiang Mai University gave keynote speeches. This was followed by joint research sessions, and poster sessions.

On the second day, the sessions were divided into five research sessions - Sustainability & Society, Sustainability & Tourism, Sustainability & Health, Sustainability & Food and Sustainability & Technology - and one student session, each of which was given oral presentations. After giving presentations for each session, each session visited Shodoshima, Naoshima, Higashikagawa City, Utazu Town, and companies in Kagawa Prefecture, and the participants learned about local

initiatives in Kagawa Prefecture.

On the third day, a keynote speech by Prof. Kuninao Tada, Director of the Setouchi Area Research Center and Prof. of Faculty of Agriculture, Kagawa University, was given. After that, the poster award ceremony was held and the symposium came to a close.

This symposium was very meaningful for each university, and it was a very valuable experience for young researchers and students, especially for presenting their research results and exchanging opinions in the international symposium.

Let me conclude this overview by expressing my heartiest appreciation to all participants and all staff and members of the organizing committee for their contribution to the successful completion of the symposium.

Summary of Main Session

WADA Kenji, Ph.D

Vice President, Kagawa University

The 2nd trilateral symposium on SDGs, titled "New Strategic Approaches Towards SDGs Beyond the COVID-19 Pandemic", took place from August 29th to 31st, 2023 at Kagawa University, Japan. The event was structured into main sessions, a joint research session, a poster session, and several parallel sessions.

On August 29th, the first main session commenced at 1:00 p.m. at the Center for DRI Education on the Saiwai-cho Campus, employing a hybrid format that combined in-person and remote participation.

The symposium was inaugurated with remarks by Professor Hara, Vice President of Kagawa University. Following this, the Governor of Kagawa Prefecture, Mr. Toyohito Ikeda, shared an opening message, which conveyed his anticipation for a symposium where insights from the three universities about the 17 goals of SDGs would intersect and inspire. Though the Governor couldn't attend in person due to prior commitments, his address was delivered by the chief of the Governor's Office. Then, CMU President Prof. Pongruk Sribanditmongkol extended his congratulations for the event's commencement, and this was followed by remarks from Prof. Show-Jen Chiou, Head of the Center for Environmental Protection, Safety, and Health, representing the NCYU delegation. Wrapping up the opening ceremony, Prof. Yoshiyuki Kakehi, the President of Kagawa University, expressed appreciation for everyone's participation and explained the Kagawa University's strategy towards the SDGs. He concluded his speech by showing his expectations for fruitful discussions leading to prospective collaborative research.

Following the photo session, a series of keynote lectures commenced. The first was delivered by Prof. Show-Jen Chiou, head of the NYCU delegation, who spoke on "Transforming SDGs into Actions: The Efforts Toward Sustainability at NCYU. She presented NCYU's five principles, "Plans, Commitments, Actions, Progresses, and Collaborations," for the development of sustainability on campus. Subsequently, Prof. Bannakij Lojanapiwat, the Dean of the Faculty of Medicine at CMU, presented a lecture titled "Improving Health and Well-being for All: CMU Medicine Endeavors." He showcased various initiatives that CMU has undertaken to collaboratively address health concerns shared by Thailand, Taiwan, and Japan. The audience was evidently captivated by the depth and dynamism of the projects presented.

After a friendly and enjoyable coffee break, a poster session was held at the Kagawa University Library. The discussion was lively, and even after the end of the session, participants seemed reluctant to leave. Of special mention, three exemplary poster presentations were recognized and awarded during the closing ceremony on the 31st.

In the late afternoon, a Joint Research Session took place. It featured a lecture from a professor from Sri Lanka, and five recent outcomes from collaborative research projects between CMU, NCYU, and Kagawa University were presented. The intent behind these presentations was to disseminate among the attendees the fruits of joint research initiatives that had their genesis in discussions at previous trilateral symposiums or remote seminars. While the advancement of each project differed, several have matured into significant endeavors. Having witnessed these commendable reports, we firmly believe that the discussions at the Trilateral Symposium can serve as an excellent springboard for global collaborative research.

The evening banquet attracted many participants from the three universities. In the middle of the meeting, members of the Chikuyukai, comprised of Kagawa University students, performed a Koto, Japanese harp, performance, adding vibrancy to the evening. With Prof. Lrong of Kagawa University gracefully playing the Shakuhachi, an end-blown bamboo flute, attendees departed, eagerly anticipating the parallel sessions scheduled for the following day.

On the morning of 31st Aug., another Keynote presentation was held. Prof. Kuninao Tada lectured on "Changes in nutrients and their effects on fisheries after the introduction of land-based nutrient loading regulations in the Seto Inland Sea since 1973: A review." The Seto Inland Sea is known for its beautiful landscape, but in the 1960s, it suffered from heavy eutrophication due to pollution. Despite the recent improvement in water quality, fish catches have gradually decreased, and seaweed cultivation has been severely damaged. He discussed nutrient decreases and their effects on fisheries in the Seto Inland Sea.

Before the symposium's closing ceremony, we introduced a plenary session as an innovative approach to gain insights into the topics discussed during the parallel sessions on August 30th. Understanding the content of these parallel discussions is vital for fostering interdisciplinary collaborative research. This session aptly wrapped up the symposium by offering all attendees a comprehensive recap.

We believe that the discussions during this Trilateral Symposium facilitated not just the sharing

of our research outcomes, but also deepened our understanding of diverse societies and cultures, and nurtured interpersonal connections. In upcoming symposiums, we anticipate that collaborative research outcomes will thrive across both specialized and interdisciplinary fields. After the closing ceremony, the participants left the venue, hoping to meet again at the next symposium in Chiang Mai next year.

Our heartfelt gratitude goes out to everyone who contributed to the organization of this symposium.

Sustainability & Society Session

TAKAGI Yumiko¹, Pornchai Wisuttisak², Kuo-Hung Huang³

¹Faculty of Education, Kagawa University; ²Faculty of Law, Chiang Mai University, Thailand; ³Dept. of E-learning Design and Management, National Chiayi University, Taiwan

takagi.yumiko@kagawa-u.ac.jp

The Sustainability and Society Session was one of the satellite sessions and consisted of a hybrid of an online session and a face-to-face session. The online session was open to the public in advance of the video, and was also held on Tuesday, August 30, 2023, from 10:00 to 13:00 (Japan time) via Zoom. The face-to-face session consisted of two parts: a session attended by faculty and staff and a student session.

The Zoom session featured an exchange of views on diverse but common aspects of the SDGs among 24 participants from various fields of expertise. This session moderated by Professors TAKAGI Yumiko and Paul Batten. The session started with a presentation by Professor Ishii (KU) in which he presented an insightful critique of the quintessential meaning and *raison d'être* for SDGs viewed from a Gandhian philosophical and historical point of view. Professor Ishii noted that if 'growth' and 'development' are defined as 'attaining the western standard of living' then any universal attempt to provide this will be intrinsically unsustainable. This view of SDGs provided a very good start to considering the issues and various challenges considered in the following presentations.

Throughout the presentations, the key themes that emerged overall were the need for professional and learning communities to work together towards their respective SDG goals and social innovation. These may be local community education initiatives – as in the Professor Chen (NCYU)'s introduction of a new strategy in rural villages, focusing on sustainable communities, health, the environment, and digital technology. The need for review and recalibration of SDG goal in education and administrative levels was considered, as in Professor Ching (NCYU)'s presentation of preschool teachers' quality assessment management. The necessity of understanding the world and how to change it was referred to repeatedly, as in Professor Wang (NCYU)'s presentation on how to communicate the needs of goals of various communities and individuals.

SDGs in the Sustainability and Society session covered a range of issues: involving the local community in conceptualizing these days (Professor Punya, CMU); dealing with air pollution

(Professor Sararit, CMU), providing assistance in science education for students with reading disabilities (Ms. Wang, NCYU), and English education (Professor Batten, KU). The sessions covered a range of countries – Japan, Taiwan, Thailand, and also Indonesia, from a variety of fields of academic research. Professor Kakinuma (CMU) provided interesting research on fintech – the ability to take advantage of recent developments in banking and financial services.

Professor Huang (NCYU) provided an insightful comment in his presentation on the value of students ‘leaving their comfort zone’ whilst on an intercultural exchange in Yogyakarta, Indonesia. In one sense, we academics must also realize that leaving our ‘comfort zones’ is essential for sustainable professional and societal growth and development.

The broad range, focus, and depth of the presentations on SDGs in this session encouraged those who attended to feel interconnected and a sense of unison of goal. They also felt renewed in pursuing ‘innovation and action’ (from the presentation by Professor Wisuttisak, CMU) in their respective areas of specialization dealing with education, society, and communities and individuals. The variety of areas of research in a cross-disciplinary context was very rewarding.

To list a few specific examples, finance and student programs may not appear to be cross-linked at first glance, but through face-to-face discussions, commonalities can be found and collaborative research can emerge. This is ‘innovation and action’ embodied.

This novel style of the session, in which the video was made known to participants early to promote research exchange and a full day of time for face-to-face exchanges, was highly appreciated by the participants of the Society Session from both universities.

In addition, the Student Session of Society Session was conducted on the same day as its own student-led session. Participants were six students from NCYU and five students from KU. The first part of the session was joined with the Student Session of Main Session, and the second part was for the students of the Society session alone. In the afternoon, the students visited the Kagawa Prefectural Higashiyama Kaii Setouchi Art Museum and the Shikoku Aquarium, which was ideal timing during the hot summer season. Only students of two universities, Kagawa University and Chiayi University, participated in this Student Session of Society Session. The upcoming Trilateral Symposium on SDGs will be held at Chiang Mai University in 2024. The true value of the student session will become clear depending on how many students from Kagawa University and Chiayi University will be able to attend this at Chiang Mai University and deepen exchanges. Through this session, however, we were convinced of the possibility of further development of the connections between the three, or more, universities in the future. We would also like to invite a wide range of all professors, which the Faculty of Education at Kagawa University plans to focus on in the future, to participate in these sessions and as a way for all participants to deepen their insights in this field.

Sustainability & Tourism Session

Naoyuki Hara and Tatsuro Futatsuyama
Faculty of Economics, Kagawa University

It was the first time we held Sustainability & Tourism session due to the efforts by Naoyuki Hara, Vice President and Organizing Committee Chair, whose specialty is tourism. At this session, we had six oral presentations by each three universities and two poster presentations by CMU.

On the first day, two poster presentations were held. Arinya Pongwat et al. showed the potential of wellness destination based on the case of Mae Rim area in Chaing Mai province. Pairach Piboonrunroj and Benjenop Buranasiri presented sustainable tourism of Lanna tourism in Chaing Mai. Both presentations provided challenging suggestions based on the empirical cases studies in Chaing Mai and Pairach and Benjenop's presentation won one of the Poster Prize awards.

On the second day morning, we had six presentations, each lasting 15 minutes. The first presenter was Miwa Nishinaka from the Graduate School of Management, KU. She analyzed the well-being of residents affected by tourism using Social Exchange Theory. The second presenter was Yuthasak Chatkaewnapanon from the Department of Tourism, Faculty of Humanities, CMU. He considered the possibility of universities and higher education institution contributing to the accomplishment of the SDGs through anthropological participatory action research. The third presenter was Shu-yun Chang from the Department of Marketing and Tourism Management, NCYU. She showed the positive aspects of "Place Creation" project achieved in small village in Taiping Mountain, Taiwan. The fourth presenter was Naotaka Hiramami from the Media and Product Design Course, Faculty of Engineering and Design, KU. He explored the factors of community-based ecotourism through empirical analysis of Latin American cases. The fifth presenter was Kansinee Guntawongwan from the Faculty of Economics, CMU and Akarapong Untong from the School of Tourism Development, Maejo University. They showed the evaluation of economic benefits derived from operating the Green Hotel Standard project based on the case of Nan province in Chiang Mai. Last presenter was Wei-hsing Kong from the Department of Applied Economics and Management, National Ilan University and Yih-ming Lin from the Department of Applied Economics, NCYU. They analyzed whether Agri-tourism can improve agricultural production from the case of Taiwan. After each presentation, we had 5 minutes question and discussion time, which led to vigorous discussion. These discussions deepened our understanding about the magnitude and diversity of tourism's impact on the SDGs.

In the afternoon of the second day, we went on a field trip to Shodoshima. On the island, we visited traditional rice field and soy sauce factory and Angel Road, which are famous tourist resources of Shodoshima.

As a result of this session and field trip, we hope for further collaboration and cooperation among the three universities. We would like to express our gratitude to all of participants in this session and field trip, and as well as to staff members of International Office and the administrative team for organizing this symposium.

Sustainability & Health Session

Hiromi Suzuki

Faculty of Medicine, Kagawa University

suzuki.hiromi@kagawa-u.ac.jp

Abstract

We conducted a meeting related to the field of healthcare at the medical campus of Kagawa University on August 30th. In this event, participants from Kagawa University (KU) and Chiang Mai University (CMU) delivered five oral presentations, and three presentations were contributed by National Chai Yu University (NCYU). Many participants, possessing expertise in closely related fields, actively engaged in in-depth discussions during the session. This, in turn, heightened anticipation for further advancement of cooperative research activities in the preparation of the following symposium in Chiang Mai.

Oral presentations on August 30th

The Sustainability and Health session was conducted at the medical campus. We had 13 participants from CMU, 3 from NCYU, and 12 from KU. The first session consisted of four presentations chaired by Prof. Kriengkrai Srithanaviboonchai from CMU. The topics included scientific discoveries at the micro-level regarding obesity and fatty liver, osseointegration to improve damaged bone cell function, degenerative disc disease, and medical devices to combat chronic wound bacteria.

The second session consisted of four presentations chaired by Prof. Hsin-I Chang from NCYU. The topics included vaccines against shipping fever in goats, the molecular biology of sugar transport, *Salmonella* and its pathogenicity, and a screening method for HIV infection in Thailand. The third session consisted of five presentations chaired by Dr. Hiromi Suzuki from KU (partly by Prof. Kenji Wada from KU). Three research topics were associated with COVID-19, including the effectiveness of vaccination, employment support for students with disabilities, and the prevalence of infodemics on Twitter. The other two topics delved into social issues in Japan, exploring career design for medical students and problematic internet usage among adolescents.

Tour of medical school and laboratories on August 30th

After the oral presentations, we visited the clinical skills lab, where a clinical engineer provided us with demonstrations on the use of medical devices to facilitate learning of medical skills, such as tracheal intubation, ventilation, and central vein catheter placement. Some participants from CMU had the chance to try out these devices and enjoyed facility tours. We also visited the

laboratories, where the staffs explained the experimental equipment. While these facilities may not have appeared particularly innovative to visitors from both CMU and NCYU and were even considered outdated, participants from CMU were surprised to learn that this research equipment is available 24 hours a day, free of charge, for all graduate students and researchers within the Faculty of Medicine.

After a brief intermission, we also paid visit to the Dean of the Faculty of Medicine, Prof. Miki, and received a warm welcome from him. Souvenirs were presented to Prof. Hsin-I Chang, Prof. Jyhmirn Lai, and Prof. Chishih Chu from NCYU and Prof. Kriengkrai Srithanaviboonchai from CMU.

Lessons learned session on August 31st

Prof. Kriengkrai Srithanaviboonchai from CMU kindly delivered a summary presentation. We had active and fruitful discussions revealing that researchers from the three universities shared significant scientific interests and encountered similar challenges. We strongly anticipate the emergence of international collaborative research in the future.

During the session, the following five possible research topics were suggested:

- (1) Dr. Sarawut Kumphune (CMU) and Dr. Hsin-I Chang (NCYU) shared a common interest in human bone research, particularly focusing on new technologies, such as secretory leukocyte protease inhibitors.
- (2) Dr. Chakkramong Kuensaen (CMU) and Dr. Hsin-I Chang (NCYU) were keen to collaborate on cold atmospheric-pressure plasma technology.
- (3) Dr. Hsin-I Chang (NCYU) and Dr. Sakaewan Ounjaijean (CMU) were interested in herbal medicine research.
- (4) Dr. Abhibhu Kitkamdhorn (CMU) and Dr. Hiromi Suzuki (KU) shared a common interest in social media analysis using data mining techniques.
- (5) Dr. Hiromi Suzuki (KU), Prof. Kriengkrai Srithanaviboonchai (CMU), and Dr. Hsin-I Chang (NCYU) shared common interests in problematic internet and smartphone use.

Sustainability & Food Session

KAWAMURA, Osamu

Faculty of Agriculture, KAGAWA University

kawamura.osamu@kagawa-u.ac.jp

Kagawa University, Chiang Mai University (Thailand), and National Chiayi University (Taiwan) held a joint symposium "Second Trilateral Symposium on SDGs" at Kagawa University from August 29 to 31. On the first day, August 29, a plenary session was held in the afternoon at the Saiwai-cho campus with 192 participants, including online participants. Keynote speeches, Joint Research Session (Dr. MATSUMOTO, Y. from the Faculty of Agriculture, Sudarshanee Geekiyanage from University of Ruhuna, Sri Lanka, who is Faculty of Agriculture Alumni) and Poster Session were made. In the poster session, there were 39 presentations, of which 17 were from the Food session, accounting for more than 43% of the total.

The second day, August 30, was divided into six specialized areas. The Faculty of Agriculture held a Food session, which was attended by a total of 63 people: 48 from Kagawa University, 10 from Chiang Mai University, and 5 from National Chiayi University. Participants from Chiang Mai University and National Chiayi University came to the Faculty of Agriculture by bus from the vicinity of their hotel in Takamatsu City and first visited the rare sugar production station. Later in the morning, the research of four research centers of the Faculty of Agriculture, Kagawa University, was introduced. In the afternoon, there were five research presentations by young researchers from Chiang Mai University, three from National Chiayi University, and four from Kagawa University, followed by a lively Q&A session. At the joint symposium with Chang Mai University held at Kagawa University in 2016, the number of participants from the Faculty of Agriculture in the presentation hall was limited, being only the presenter, his/her supervisor and the chairperson, and no other participants. This time, however, the event was held on the College of Agriculture campus, which meant that at least 10 faculty members and students who were not presenting were present at all times to listen to the presentations. Although the International Office staff had to work very hard, we believe that the fact that the second day was held at the Faculty of Agriculture was effective enough. It is expected that these exchanges will trigger the start of new international joint research in the future. In addition, a participant from National Chiayi University has expressed interest in the double degree program, and we will begin discussions to conclude an agreement.

On August 31, a plenary session was held at the Saiwai-cho Campus, with a keynote speech by Dr. TADA, Kuninao (Faculty of Agriculture), followed by summary reports from each session, and the symposium closed in the morning. It is hoped that this joint symposium will serve as an impetus to further deepen cooperation among the three universities.

I received the following comment from Assoc. Prof. Dr. Yuthana Phimolsiripol, Faculty of Agro-Industry (Director, Food Innovation and Packaging Center), CMU.

Dean Kazuya Akimitsu gave an opening remark. Then, we had a site visit for the Rare Sugar Research Center. The presentation started by sharing about 4 Research Centers at Kagawa University as follows.

- Genome and Gene Resource Research Center
- Advanced Biochemistry and Chemical Biology Center
- Food Safety and Nutraceutical Science Center
- Agricultural Resources and Technology Center

Twelve research topics were presented (as the attached file). Very fruitful discussion and sharing between 3 Universities were promoted. In the closing session, everyone in the meeting thought that the meeting was a success, and further meetings next year will be hosted by Chiang Mai University. The conference should be able to be organized as an onsite face-to-face meeting during August 2024. The Banquet Dinner at Kagawa University cafeteria. This was a good time to informal discussion and know each other well.

The summary sharing of the Sustainability & Food Session on 31 August 2023 was started by Prof. Kawamura (Kagawa University) and more discussion and sharing by Assoc. Prof. Yuthana Phimolsiripol. Finally, we have stronger collaboration between the 3 Universities.

Suggestions: Overall program was good and well-organized for the Food session. However, the long day period with presentation should be reorganized. Not only presentation in the academic forum, but also the adding some activities and visit tours such as food factory, food tour, or gastronomy experience are worthwhile. In addition, the period of the presentation should be about 10-15 min. The content of the presentation was a wide range of scope including food, agriculture, and so on. The good point is we can learn from other areas. However, some researchers may be directly involved in those topics. The presentation number should be around 9 topics. If it is possible, the Banquet dinner should be at a local restaurant (no need to be expensive but a typical one).

I would like to make use of Dr. Yuthana Phimolsiripol's Suggestions next time.

Sustainability & Technology Session

Nobuhiko Miki

Faculty of Engineering and Design, Kagawa University

Abstract

We had the sustainability & technology sessions at Hayashi-cho Campus, and visited two companies located in Takamatsu City. The participants from the three universities engaged in lively discussions and we believe it was a very successful event.

Keywords: Sustainability, Technology

On Wednesday August 30th, parallel sessions were held on each campus. We had the three sustainability & technology sessions at Hayashi-cho Campus with eight participants from National Chiayi University (NCYU), six from Chiang Mai University (CMU), and five from Kagawa University (KU), for a total of nineteen participants. The first session had three presentations from NCYU, the second session had four presentations from CMU, and the last session had four presentations from KU. Topics widely covered construction engineering, material engineering, and computer science. Although papers covered very broad technical fields and, in many cases, the audience were not familiar with the presented topics, discussions after the presentations were relatively active. We greatly appreciate all the participants' cooperation.

After the oral presentation sessions in the morning, we visited two companies in the afternoon. We first visited the Shikoku Dock Inc., and saw the cargo ship under construction. After that, he visited Aoi Electronics Co. Ltd., and saw the production (packaging) process of IC chips and other products.

I would like to express my gratitude to all the participants. In particular, I would like to express my deepest gratitude to Professor Chiung-Wu Su, the coordinator of NYCU, and Associate Professor Ukrit Mankong, the coordinator of CMU. I also would like to thank Professor Hayato Miyagawa, who coordinates the company visits. Finally, I would like to express my best wishes for the success of the next year's 3rd Trilateral Symposium on SDGs at CMU.

Student Session

Lrong Lim

Director & Professor

Kagawa University International Student Center

Presentations for the Student Session were conducted on the morning of 30th August (Wed). There were seven presenters: two each from Chiang Mai University and National Chiayi University, and three from Kagawa University.

The focus of the presentations was mainly on SDG number 14, Life below water. A total of 13 delegates attended the presentations.

Presentations from Chiang Mai University were more inclined towards academic research while presentations from National Chiayi University and Kagawa University were more oriented towards the hands on, practical aspects of environmental cleanups.

The topics presented by students from CMU were ‘Genetic Diversity and Maternal Lineage of Marine Mammals and Sea Turtles along the seacoasts of Thailand’ and ‘Vacuum Stripping Pretreatment of Chicken Manure for Sustainable Biogas Production’.

The topic presentation by students from NCYU was ‘Cleaning beach in Aogu Wetlands Forest Park’. Meanwhile, the Japanese students from KU presented their work on ‘Marine garbage collection and survey in an uninhabited island in Seto Inland Sea: lessons learned from an experience’. Finally, the Brazilian international student at KU presented his paper on ‘Marine garbage cleanup events as a means of community engagement towards tackling marine pollution’.

After lunch, the delegates took part in an excursion to East Kagawa. The first stop was a caviar producing facility. The experience was rather unusual for the delegates from CMU and NCYU as caviar is not commonly consumed in daily lives. The second stop was Ado Pond, which was the first location in the world whereby yellowtail fish was successfully reared. Delegates were briefed on the details of fish rearing. After which, delegates had the opportunity to feed the fish in the ponds.

A cleanup event was planned as the next item on the excursion. However, due to rain, this segment

was canceled. The delegation proceeded to the dinner site, which was a restaurant specializing in Sanuki cuisine.

We were very happy to note that the Assistant to the President of CMU for International Affairs, and the Director of International Relations Division of CMU joined this session. Such being the case, we were able to get to know one another better, thus facilitating our future collaboration especially in the environmental cleanup events jointly conducted by CMU, NCYU, and KU.

Poster Sessions Report

Yuko TAKIGAWA, Ran TANAKA

Kagawa University International Office

E-mail: takigawa.yuko@kagawa-u.ac.jp, tanaka.ran@kagawa-u.ac.jp

Abstract

During the Second Trilateral Symposium on SDGs, 39 participants joined the poster sessions and made their poster presentations on the first day of the symposium. As a result of voting and counting, 4 prizes were given to the award winners.

Keywords: poster presentation, voting, poster prizes

Poster sessions report

During the Second Trilateral Symposium on SDGs, posters were displayed at the Library Learning Commons room at Saiwai-cho Campus from 12:30 on August 29th to 12:00 on August 31st. The total poster presentations were 39, of which Chiang Mai University submitted 14, National Chiayi University 9, and Kagawa University 16. The number of posters in each session with their affiliation are shown in Table 1.

Table 1. Number of participants in each session and their affiliation

Session \ Univ.	CMU	NCYU	KU
Society	0	4	0
Health	5	0	4
Technology	2	3	0
Tourism	2	0	0
Student	1	0	0
Food	4	2	12
Total	14	9	16

Method of presentation

On the first day of the symposium right after registration, all the poster presenters displayed their posters at the designated area in the Library Learning Commons. Poster presentations were scheduled from 15:30 to 16:30 on August 29th, however, it was held 15 minutes behind schedule. During the first 25 minutes, participants with odd entry numbers made their presentations next to

their posters. The following 25-minute slot was for participants with even entry numbers.

Method of best poster selection

The poster session implementation team prepared 4 awards (Table 2). All symposium participants received a voting ballot that listed all of the presenters' names and poster titles in their name holders. Participating academic staff, researchers, and registered university staff could vote for three posters; participating students could vote for one poster. All participants were able to vote during the 1st day from 15:30 to 18:00 and the 2nd day from 8:30 to 13:00. After voting was closed, all the ballots were counted by the poster session implementation team.

Awards

The total number of voters was 94 (researchers and staff: 57; students: 37). As a result of voting and counting, the awards were given to the winners as shown in Table 2. The award ceremony for the Poster Session was held on August 31st after the “Lessons Learned from Parallel Sessions”

Table 2. “Best Poster Presentation” Prizes

Prize	Awards	Title	Name	Affiliation
First	PRESIDENT’S AWARD	Potential applications of mushroom mycelia to produce high-value added products in the biomaterials and food industries for future sustainability	Worawoot Aiduang	CMU
Second	TRUSTEE’S AWARD	Sustainable Tourism Development and Creative Economy: A Case of Creative Lanna Tourism in Chiang Mai	Pairach Piboonrungrroj	CMU
Third	VICE PRESIDENT & INTERNATIONAL OFFICE DIRECTOR’S AWARD	Effect of Antimicrobial Peptide LL-37 on Human Bone Marrow Mesenchymal Proliferation	Putida Pinthonglor	CMU
The most-voted student poster excluding prizes above	INTERNATIONAL STUDENT CENTER DIRECTOR’S AWARD	<i>In Silico</i> Drug Discovery of Inhibitors Targeting Main Proteases of SAR5-CoV-2 and Mutated Variants as a Potential Treatment for COVID-19	Panida Boontawee	CMU

References

- International Office, Kagawa University ed. 2023. Poster Session Program and Layout, Guidelines for Poster Session 2023, and Poster Abstracts. In International Office, Kagawa University ed., *Proceeding Second Trilateral Symposium on SDGs*, Kagawa: Kagawa University, pp. 116-158.
- Kumagai, N. and Ikeda, S. 2017. Poster Sessions Report. In Kagawa University International Office ed., *Journal of Kagawa University International Office, Vol.8*, Kagawa: Kagawa University, pp. 55-56.

**Second Trilateral Symposium on SDGs
- New Strategic Approaches Towards SDGs Beyond the COVID-19 Pandemic**



Group Picture, August 29, 2023

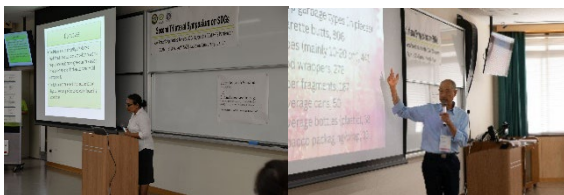
[DAY 1, August 29, 2023]



opening



Keynote Speech



Joint Research Session



Poster Session



Banquet

【DAY 2, August 30, 2023】



Sustainability & Health Session



Sustainability & Food Session



**Sustainability & Society Session
(Student)**



Sustainability & Tourism Session



Sustainability & Technology Session



Student Session

【DAY 3, August 31, 2023】



Lessons Learned from Parallel Sessions



Keynote Speech



Poster Prize

Geo-Culture Tour in Shodoshima

UEMURA Yukako, Office of Regional Partnership Strategy KU

TOKUDA Masaaki, International Office, Professor Emeritus KU

Introduction:

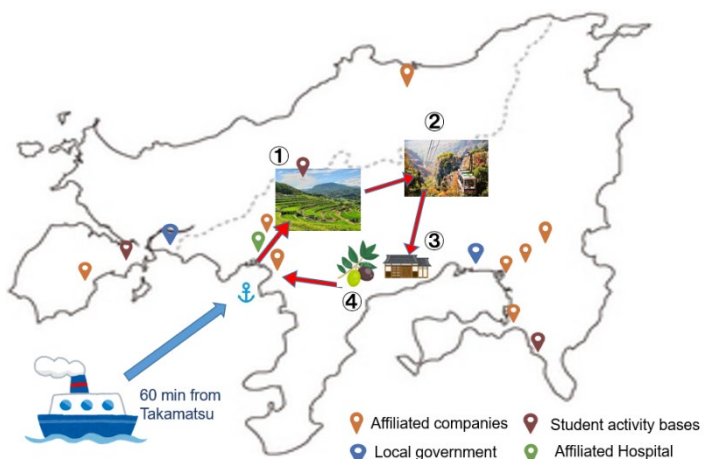
Mutual understandings and friendships on the personal levels are the premise for any successful organizational collaborations and partnership. The tour in Shodoshima was arranged to nurture the friendship on the highest management level of the partner universities and strengthening the ties among them. Seven members including the President of Chiang Mai University (CMU) and five members including the President Elect of Kagawa University (KU) shared the hands-on understanding of educational, research and regional revitalization programs that KU has been conducted in collaborations with the local community. They visited a few collaboration sites and also savoured the local food with the appreciation of the sustainable gastronomical philosophy, which stems from the unique geology of Seto Inland Sea.

Itinerary:

Takamatsu Port (8:32) → Ikeda Port → Nakayama Terraced Rice Field → Kankakei Gorge → lunch → Olive Park → Ikeda Port → Takamatsu Port (16:30)

Geo-Culture of Shodoshima and Kagawa University Community Outreach Activities

Shodoshima is the 19th largest island in Japan and locates in the center of the *Setonaikai* (Seto Inland Sea) National Park. It was formed by erosion of volcanic rocks that erupted 13 to 15 million years ago on top of the 80-million-year-old granitoids that make up the foundation of the island. We set the theme of this tour as “Geo-Culture”, which refers to culture seen



as everything people have cultivated on the earth. Shodoshima is an optimal place to observe the interrelated history of the earth and the human being.

Kagawa University has been conducted various projects and educational, research and regional revitalization programs in collaboration with the local stake holders such as companies, municipal government, and the regional core hospital.



Nakayama area and SUIJI (Six University Initiative Japan Indonesia)

Started in 2012, SUIJI offers service learning program to students of three universities in Japan and three universities in Indonesia with goals to encourage them to be proactive and creative to foster leadership and global mindset. Nakayama area, well-known for its terraced rice fields, is at the front line of the challenges caused by the aging and decreasing population. As one site of SUIJI activity in Japan, students stay here for two weeks and engage in the field work in the local community. The participants of the tour had an opportunity to hear from the students about their experiences and insights as well as the sub-projects that took place in Indonesia, were impressed with the impact they have gained through the mutual exchanges and cooperation.



Geo-Food

The participants visited “KOYOMI” restaurant which serves creative Japanese cuisines by following the “Local production for local consumption” philosophy which shares the concept of “Seto Inland Sea diet” proposed by KU. This diet is modelled after the Mediterranean diet, an intangible cultural



heritage by UNESCO, and is attracting attention as a healthy food around the world, due to the similarities in the climate and the ingredients eaten in this area.

Seto Inland Sea and Kankakei Gorge

The Seto Inland Sea (Setonaikai) lies between the Japanese main islands of Honshu, Shikoku and Kyushu. Its calm waters stretch over 450 kilometers and include some 3000 islands, many of which are inhabited. Most of the sea is part of the Setonaikai National Park, one of the first national parks designated in Japan. Kankakei Gorge is one of the “three most spectacular gorges in Japan,” and has some of the best scenery in Setonaikai National Park. Participants were welcomed by the clear blue sky in the sea during an hour ferry ride from Takamatsu to Shodoshima, while surprised by dense mist shower on top of Kankakei Gorge, learned how the tourism industry utilizes the topographical features both of the sea and the mountains.



Olive Park

Shodoshima is the birth place of olive cultivation in Japan. The island's Mediterranean climate made it an ideal place for growing olives, which was first succeeded in 1908. Since then, the island has been a top producer of Japanese olives and olive oil, and has earned Shodoshima the nickname "Olive Island". Participants learned the history and olive-related innovations. At the Olive Navi, the participants watched the movies which introduces Shodoshima Island including its olive industries.



References

日本地理学会 2022 年秋季学術大会 巡検第 2 班資料 (長谷川修一教授提供)

土庄町ホームページ <https://www.town.tonosho.kagawa.jp/gyosei/soshiki/shoko/4/518.html>

日本・インドネシアの農村漁村で展開する 6 大学共同教育プログラム 加藤尚 熱帯農業研究, 11, 2018