









SOPHIA UNIVERSITY, TOKYO - JAPAN KERALA CONFERENCE REPORT 10TH - 17TH AUGUST, 2023

General Introduction

The Global Environmental Studies (GES) department announced the opening of applications for the annual international conference in Kerala, India, which is designed and run by Prof. J. J. Puthenkalam. This report summarizes the trip activities. The students who participated in the trip were tasked by Prof. Puthenkalam to work together on gathering a report for each day of the trip, each day was tasked to a student. The group consisted of Ph.D. and Master's students from Sophia University who are doing research on environmental sustainability topics and the achievements of the SDGs, topics that vary in progress and field. This report combines summaries from the students and pictures that were taken throughout the trip.















Thursday, 10thAugust 2023



After learning about our flight's 6-hour delay, our group split and spent the afternoon in different places. While some of our team members decided to use this time to visit Narita-city, most of us waited for our flight at the airport to prevent missing the flight and risking further delays.

Our flight finally took off after a long wait in Narita Airport. During our 9-hour flight, we were served 2 meals and a snack. None of the group members got any sleep during this flight.





Our flight made a late arrival at Bandaranaike International Airport (Colombo, Sri Lanka). The seven of us spent the night on BIA's airport chairs talking and preparing the trip without managing to sleep or connect to Wi-Fi. Still, the group's morale was up since we were all looking forward to the start of the trip.











Friday, 11th August 2023

ST. TERESA'S COLLEGE (AUTONOMOUS), ERNAKULAM INTERNATIONAL SYMPOSIUM ON MULTIDISCIPLINARY RESEARCH IN SUSTAINABILITY AUGUST 11-12, 2023

PROGRAMME SCHEDULE

August 11, 2023, Friday

Official Inauguration of the symposium 9.00 a.m. Welcome Dr. Kala M.S., Vice principal, St. Teresa's College (Autonomous), Ernakuļam Inaugural Address Dr. Sr. Vinitha CSST, Manager, St. Teresa's College (Autonomous), Ernakulam Release of Book - 'In Science WE Trust' Introduction to Sustainability Dr. Priya K. Nair, Assistant Professor, St. Teresa's College (Autonomous), Ernakulam 10.00 a.m. **Research Paper Presentations** Session I 12.40 p.m. Lunch Break **Research Paper Presentations** Session II 1.30 p.m. 4.20 p.m. Vote of Thanks

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SCHEDULE OF RESEARCH PRESENTATIONS – AUGUST 11, 2023 VENUE 1: SEMINAR HALL

| Time | Name of the paper presenter | Title of the paper |
|----------------|-----------------------------|--|
| 10.00 a.m. | Ms. Anita Binu | Morphogenetic Study and Marker Based Identification of Heterotermes Malabaricus |
| 10.20 a.m. | Ms. Reshmi Joseph | Strategies for Sustainable Waste Management: Practices and Justifications |
| 10.40 a.m. | Ms. Elizabeth Abraham | Beyond Medical Marvels: Embracing Sustainability in Organ Transplantation |
| 11.00 a.m. , · | Ms. Seema Saikia | Mental Health Status and Parental Self-Efficacy o Parents of Children with Autism |
| 11.20 a.m. | Ms. T Aiswarya | Sustainable Method for Mosquito Control, by Comparing the Efficiency of Larvivorous Fishes against Culex Mosquitoes |
| 11.40 a.m. | Ms. Teena Kurian | Ensuring Food Safety in Outdoor Catering: A Growing Concern in Preventing Food Borne Illnesses |
| 12.00 p.m. | Ms. Kavitha Manohar | Criticizing Male Hegemony: Analyzing Gender Perceptions in Smt. Silvikkutty Joseph's Annayum Karthavum Through Sociological Lens |
| 12.20 p.m. | Lunch Break | la La |
| 1.00 p.m. | Mr. Yamashita Yuhi | Transfer of Japanese Waste management Technology in Developing Countries |
| 1.20 p.m. | Ms. Sarpong-Kusi Mabel | Assessing Biodiversity Literacy in Teacher Training Colleges, Eastern Ghana |
| 1.40 p.m. | Ms. Pranaya S Kumar | Foreign Direct Investment and its Impact on The Indian Economy |
| | | |





Arrival at Cochin Airport, Kerala India



After a very long and tiring trip we finally landed at the Cochin India airport safely around 8:30 am on Friday the 11/08/2023 eleven hours late due to the flight delay. We were happily received by a big delegation composed of Professor Puthenkalam and the Teresian team. To catch up with time since we were already running late regarding the activities, we had to rush quickly to prepare and commence the program scheduled for that day.

St Berchmans College

AUTONOHOUS

ASSUMPTION COLLEGE

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Welcome to St. Teresa's College

We were amazed by our arrival as we were all lovingly, warmly, and traditionally welcomed by a huge St Teresian team with a delicious lunch and the putting of the decorative Indian mark (Tilak) on our foreheads accompanied with beautiful flowers as seen on the attached picture.





Paper Presentations at St. Teresa's Conference Hall

Next was the presentation of papers by both the Sophian and Teresian students. A total of nine (09) presentations were done characterized by rich and diverse content all related to solutions to achieving SDGs. Q/A, constructive criticisms, comments, and observations were done by a Teresian professor and students from both schools after each presentation. This was a very important session as not only our research endeavors were disseminated to a larger community but the insights shared brought more meaning to all our respective projects.













Environmental Visit at Kadamakkudy Fishpond

Later that day, we visited an extensive fishpond in the Kadamakkudy vicinity of Kerala controlled by the local population. There we had a lecture from one of the farmers on how fish cultivation is carried out and the environmental challenges they face which was centered on flooding which usually makes the area inhabitable coupled with adverse accessibility issues during the heart of rainy seasons.













ASSUMPTION COLLEGE ChangemacherrysKontayam, Kerala 686101 AUTONOMOUS Reaccredited by NAAC with A Grade

Saturday, 12th August 2023

The second day of the international conference at Saint Teresa's College started with a welcoming speech around 9:00 a.m. The moderator announced the guest speakers at 9:30 starting with a Sophia University professor's presentation followed by professors from Saint Teresa's College. Each presentation received comments and questions from the audience, the professors, and other guest speakers. The presentations were enriched with the multiple sustainability aspects seen from different perspectives.

The international conferences ended at Saint Teresa's College with a valedictory and certificate distribution based on the research paper presented. After lunch at St. Teresa's College, we visited a natural forest surrounding a temple.

We had the opportunity to have a walk in the forest for about 30 minutes and we were privileged to hear the history of the forest from Mister Santhosh Thannikat who guided us throughout the visit in the forest.

Then, following our schedule, around 3 PM, we had the privilege to visit the "Mithradam" Mithra means "sun" and dam means center. The "Mithradam" means the renewable energy center. It's an educational and training center entirely made with renewable energy to promote the environment it is entirely autonomous in energy. The vision behind the center is sustainable living through renewable energy.



The site was entirely built with solar panels. We had

the opportunity to visit the Mithradam and the privilege of being guided during this visit by the owner who explained in detail how he came up with the idea to build this center. We discovered during the visit that the garden is designed with figures with specific meanings and during the visit, we had an explanation about the meaning of the artistic design in the garden. Some design was made from recycled items like plastic bottles.

This site was built specially to raise awareness about energy-renewable, Sustainable development goals with images and pictures for youth, and students.













The following pictures show the building design with the solar panel on top. The buildings are surrounded by a beautiful garden. We couldn't complete the visit of the garden within the time assigned. We only had 30 minutes to visit the garden of the center.



The garden displayed some artistic illustrations about social and environmental issues. The objective of the center is to raise awareness about environmental issues. The meaning of this picture: "DO NOT RUN FROM YOUR PROBLEMS, BUT FACE THE PROBLEM".

The man in front runs from the problem with a bottle of alcohol in his hand and this is indeed the problem. While the other man faces the problem by standing.

We learned that we should not run away from our everyday problems, but we should face them and find solutions.

At the end of the day around 6 PM, we went to the restaurant in Lulu Mall and had dinner with Saint Teresa's College professors.







St Berchmans College

Sunday, 13th August 2023

- The day started at St. Teresa's College, Prof. Puthenkalam and other students started the day in the Sunday church mass. The rest joined Prof. Puthenkalam and the students for breakfast where more than a hundred persons were in the St. Teresa's College campus and joined the mass, they joined us later for breakfast.

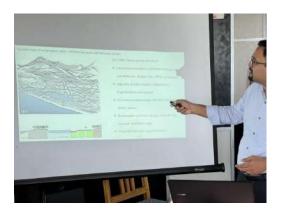




- It was the last day for us in St. Teresa's College and we were moving to Alappuzha, the bus moved at 09:00 AM, and on the route to Alappuzha three students from St. Berchmans College joined us, the students were selected from the college to support the conference and give us support and inform us about India, Kerala from a personal perspective.

- We arrived at Alappuzha at around 11:00 AM, and we were greeted by professors and other students who joined us on our educational boat trip. The boat trip was planned for us to learn about the city of Kerala and how it was first developed by the locals which turned it into one of the top 50 tourist destinations by National Geographic.





- Prof. Puthenkalam gave us and the other students a brief description of the area and the locals who live around the lake. The boat had professors and students from SB College and from Assumption College. After resting in the spacious boat and settling in, we had a profound on-site lecture by Professor Rubin Philip from the Regional Wetland Research Center at St.









Berchmans College. The lecture was titled "A Sail through the Past, Present, and Future of Kuttanad Wetland".

- The lecture gave a rich explanation of how the biological ecosystem around the lake was developed, and how species matured due to the human reclamation development around the lake. The main driver for humans to move to the lake was the agricultural activities, mainly the paddies, and how the local farmers formed ways to cultivate the paddies.

- Prof. Rubin later explained how the development that the local farmers brought to the lake had an impact on the environment, Prof. Rubin gave us a rich explanation of the floods, the altered hydrology, the breaching of the bunds, the overflowing and loss of fish farms, the acidification of the soil, the pesticides and the chemical pollution, the heavy metals, and the organic pollution due to Tourism and Pilgrimage.

- After lunch some students rested and others mingled with the other students, we got off the boat and were given the chance to see more of the local farmers and the paddies that surrounded the lake. The next stop was at the house of the family of Prof. Puthenkalam. We were greeted with a very warm family welcome and were introduced to the family members of Prof. Puthenkalam, a very loving family with ambitious youths who clearly will have a prosperous future.





- We had a very special dinner and had the chance to learn more from the family about their lives in Kerala and they had the chance to learn about our different backgrounds.

- The day ended in the new residence where we stayed, the Marigold Hotel.
- A brochure about the International conference and SB college is added in the page below:















| ASSUMP | TION COLLECE @ 上智大学 St Berchmans College |
|-----------|--|
| GRAD | UATE RESEARCH |
| | WORKSHOP 14 August |
| | SCHEDULE 2023 |
| 02:00 am | Molecome Conveniency: Introduction to Assaination College, Massee The Section 2014 and Massee The Section 2014 and |
| 10: 00 am | Assessing Biological Diversity Literacy Levels among Students and Teachers at Teacher Training Colleges in the Eastern Region of Chana - Ms. Mabel Sarpong: Kusi (Sophia University, Japan) |
| 10: 20 am | A Study on the Green Banking Measures for Sustainable Development Adopted by Nationalized Banks, Me Varsha Susary Greene (Assumption College) |
| 10: 40 am | · Effect of Climate Change on Amiguiture in India - Ma Manjima B (Assumption College) |
| 11:00 am | Inclusive Transportation Systems for Sustainable Cities and Communities Using Geospatial Analysis: The Case of Cameroon-Yaounde City - Ms Anehmborn Choutum (Sophia University, Ispan) |
| 11: 30 am | Sustainability in Agriculture: A Comparison of Livelihood Strategies in Japan and the Pederated States of Micronesia - Ms. Marjorie Marie Madeleine Odette Muller (Sophia University, Japan) |
| 11:40 880 | Effect of dust loading and meteorology on intensified rain in Kerala during August 2018 - Ms. Jarmine Mary Kuriakose (Assumption College) Improper waste management and Air quality degradation - A case study from Kerala - |
| 12:00 pm | Ms. Jayamok P (Assumption College) |
| 12:30 pm | LUNCH BREAK Chimate Change Impact on Agriculture: Environmental Convergence Analyses in Sub- |
| 1:30 pm | Saharan-African Countries - Ma Niangue Josephine Andrea (Sophia University, Japan) |
| 1: 50 pm | Examining Environmental Policies to Improve Understanding of Climate-related Security Risks in the Marshall Islanda - Mr Nover Juria (Sophia University, Japan) |
| 2:10 pm | Exploring CCE extract's Impact on A549 cells for Pioneering Biopesticide against major Pigeon Ectoparasites - Mr Joseph Tom (St Berchmans College) |
| a ao bia | A Policy Oriented Analysis of Environmental Jussiee in Indigenous Groups: The Case of the Bedouin Communities in Israel - Mr Mohammad Naser Aldren (Sophia University, |
| a logen [| Japan) • Unking Environmental Impact Assessment and the socio-economic development for Sustainable Cities A Comparative Study of Kampala, Dur el Salaam and Lusaka - Mi Eaker Sokulwa (Sophia University, Japan) |
| 1:10 pm | Nutritional status evaluation of dried leaves via vermicomposting with Periony- reylanensis. Mesherin Stati (St Berchmans College) |
| 1: 30 pm | Vote of thanks, Cestificate Distribution and Feedback |
| e: oo pm | • Tea |
| elso pm | Field Visit to SARK Spices Ltd, Neelamperoor, Kurichy |









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Monday, 14th August 2023



The staff from Assumption College guided us on a campus tour, allowing us to see the classrooms, and the work done by the students. This tour was also an opportunity to meet the students themselves since they would be accompanying us for the rest of the trip.

The university offers several specialties that are not taught at Sophia University. One example is a degree in Malayalam, the local language. Many of these specialties were used as a platform to integrate the SDGs into the curriculum. The picture on the right is an example showing a toilet paper dress made by a student from the Fashion Department who was required to make a garment out of single-use materials.





After the campus tour, we were given the opportunity to participate in an international conference with students and staff from Assumption College and SB College. Each of us presented our own research and received feedback and questions from the teachers. This was an opportunity for us to look at our research from a new perspective, and receive insight from academics whose field of study is different from ours.

Between presentations, the staff from Assumption College treated us to a sumptuous lunch. The school's chef prepared local cuisine with ingredients that made the pride of Kerala, such as pepper powder. The menu included the group's unanimous favorite dish: *Fish molee*.













After dedicating the afternoon to the second half of the international conference, the staff from Assumption College took us to the spice factory. Since Kerala is renowned for spice production, we could not visit the region without taking a peek into its production process.

Our last visit for that day was the church Mother of Farmers in Kuttanad. It was particularly appreciated by our group of students for its graphic depictions of notable scenes of the Bible, as well as the many animals that can be found on the site. The showpiece of this church was a reproduction of Michelangelo's statue *La Pietà*.





Our day ended with a meal in the company of SB faculty members. The students were spread across several tables, at most 2 students per table,, and met with the team from SB College. This was an occasion for us to learn more about the faculty itself, and the background of its esteemed professors, and share our experiences. This dinner with SB faculty members elevated our field trip and deepened our understanding of SB College's values and history.











| A REAL PORT | |
|-------------|--|
| GRAD | UATE RESEARCH |
| 1 | NORKSHOP |
| | Aug |
| | SCHEDULE 202 |
| 09:00 am | Welcome Ceremony: Introduction to Assumption College |
| ovice and | Research Presentations: (15 minutes PPT presentation and 5 minutes comments) |
| | Chairing: |
| | Rev Dr. John Joseph Puthenkalam, Professor and Trustee for Global Academic Affairs, Sophi |
| | University, Japan |
| | Prof Akemi Ori, Graduate School of Global Environment Studies, Sophia University, Japan |
| | Dr. Marina Aloysius, HoD, Dept of Physics, Assumption College, Chry |
| | Dr. Neethu Cyril, HoD, Dept of Chemistry, Assumption College, Chry Dr. Philip Litto Thomas, Assistant Professor, Dept of Zoology, St Berchmans College, Chry |
| | Di Finnip Erro Thomas, Assistant Professor, Dept of Zoology, St Berchmans Conege, Chry |
| 10: 00 am | Assessing Biological Diversity Literacy Levels among Students and Teachers at Teacher |
| | Training Colleges in the Eastern Region of Ghana - Ms. Mabel Sarpong- Kusi (Soph |
| | University, Japan) |
| 10: 20 am | · A Study on the Green Banking Measures for Sustainable Development Adopted b |
| | Nationalised Banks - Ms. Varsha Susan Geome (Assumption College) |
| 10: 40 am | Effect of Climate Change on Agriculture in India - Ms. Manjima B (Assumption College) |
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| | Federated States of Micronesia - Ms. Marjorie Marie Madeleine Odette Muller (Soph |
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| 11: 40 am | Effect of dust loading and meteorology on intensified rain in Kerala during August 2018 |
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| 12: 00 pm | Improper waste management and Air quality degradation- A case study from Kerala |
| 12: 30 pm | Ms. Jayamol P (Assumption College) LUNCH BREAK |
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| 1: 50 pm | · Examining Environmental Policies to Improve Understanding of Climate-relate |
| | Security Risks in the Marshall Islands - Mr Nover Juria (Sophia University, Japan) |
| 2; 10 pm | Exploring CCE extract's Impact on A549 cells for Pioneering Biopesticide against major |
| ALL ST | Pigeon Ectoparasites - Mr Joseph Tom (St Berchmans College) |
| 2:30 pm | A Policy Oriented Analysis of Environmental Justice in Indigenous Groups: The Case |
| - | the Bedouin Communities in Israel - Mr Mohammad Naser Aldeen (Sophia Universit |
| 2:00 | Japan) Linking Environmental Impact Assessment and the socio-economic development fit |
| 2: 50 pm | Linking Environmental impact Assessment and the socio-economic development in Sustainable Cities. A Comparative Study of Kampala, Dar es Salaam and Lusaka - N |
| | Baker Sekubwa (Sophia University, Japan) |
| 3; 10 pm | Nutritional status evaluation of dried leaves via vermicomposting with Periony |
| MAL. | ceylanensis - Ms Sherin Shaji (St Berchmans College) |
| 3: 30 pm | • Vote of thanks, Certificate Distribution and Feedback |
| 4:00 pm | • Tea |
| 4:30 pm | Field Visit to SARK Spices Ltd, Neelamperoor, Kurichy |







Tuesday, 15th August 2023

Commemorating India's 76th Independence Day

August 15th is always a special day in India they celebrate as their independence from the British. This year was the 76th Independence Day. For the Catholics, they were celebrating a double feast as they celebrated the Virgin Mary's ascension to Heaven generally known as the feast of Assumption. So our activity on this day first was celebrating this feast during the morning mass at St. Berchmans



College. This was followed by the celebration of the 76th Independence Day celebration in the same premise. We joined the Berchmans Principal who presided over this occasion with some Berchmans and Assumption students. In honoring this occasion, some of our Sophian team wore Indian clothing, as seen in the pictures attached. The celebration involved the singing of the Indian National Anthem, hosting of the flag, and an entertaining march past.

International Conference at St. Berchmans College



After the exquisite Indian Independence Day celebration, we attended and participated in the second International Conference at the St. Berchmans College conference room with other students from Assumption and St Berchmans Colleges. During the conference, Professors from Sophia University, Assumption College, and St. Berchmans College presented mind-blowing and unique themes full of rich and very informative content. The first presentation was made by Professors from the Kerala colleges and other Professors from Sophia University. Q&A sessions were followed after each presentation and Certificates were then awarded to all those who presented at the end of the conference.











Traditional Lunch and Museum Visit at St. Berchmans

Right after the conference, we had a special Indian lunch served on plantain leaves followed by a short tour of the college's zoology museum accompanied by one of the St. Berchmans professors who showed and gave us lectures on magnificent animal biology specimens. We found and learned that the school museum contains animal specimens both from the land and sea including almost all the small species in the deep ocean.



Farm visit

Later in the evening, we visited a "farm site" at _____ mixed with cow rearing, coconut, and cassava trees. The owner and his two children accompanied us around the farm and we tasted the sweet coconut fruit and drink harvested from the farm after the tour. Later we had our final dinner in Kerala with the Professors and students from the other colleges. A meeting chaired by Professor Puthenkalam at the end of the day with all the Sophia students marked the conclusive activity of the Kerala conference trip with discussions related to the trip.













St Berchmans College

Wednesday, 16th August 2023

Departure from the Airport



Early in the morning, around 4:30 AM (Indian time), we left the Marigold Hotel for the airport. We reached Cochin airport around 8:00 a.m. We took the flight at 10:20 and arrived at the Sri Lanka airport within 40 minutes, around 11:05. We stayed in transit for about 8 hours, waiting for our corresponding flight, and met for departure to Tokyo at 19:50.

We had a wonderful international conference in India and we had the opportunity to learn how sustainable solutions required interdisciplinary knowledge from a different perspective.

