



WMU Sasakawa Fellowship Students The Japan Field Study Trip 2024

May 12-19, 2024

Supported by  日本財団 THE NIPPON FOUNDATION

 OCEAN POLICY RESEARCH INSTITUTE
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Preface

The WMU Sasakawa Fellowship Program started its operation in 1987 when The Nippon Foundation made a grant of \$1 million to WMU through the Sasakawa Peace Foundation, just after WMU's founding in 1983 at the request of IMO.

In 1992, an extra \$4 million was added to ensure that scholarships would be provided to seven to ten students every year. Since 1993, we have planned and executed the Japan Field Study Trip to respond to the Sasakawa Fellowship Students' growing interest in Japan as a donor and as a country that has one of the world's largest merchant fleets and is a major shipbuilder.

In previous Japan Field Study Trips, we selected facilities to visit in the western regions of Japan, starting from Tokyo, where the maritime industry is concentrated. This time, to show students how Japan, a country surrounded by the sea, has achieved balanced development across the entire nation utilizing maritime transportation and ports, we visited maritime facilities in the northern regions of Japan, starting from Tokyo, for the first time. Notably, this is the first time a nuclear power plant, which supports Japan's electrical power supply, was included in the tour program. Despite all the new destinations, I believe that the trip became meaningful for the students through the understanding and cooperation of many involved parties.

Our hope is that this experience will be a source of inspiration for future nation-building of their countries by Sasakawa Fellowship students.

Finally, my belief is that spending a week together will be one of the most rewarding experiences for the unique network of Sasakawa Fellowship Students.

Eisuke Kudo

Senior Advisor, Sasakawa Peace Foundation

The Japan Field Study Trip 2024

Date	Visiting Places
May 12 (Sun)	Arrival in Tokyo Orientation
May 13 (Mon)	GOLI Presentation at SPF office (Option) The Nippon Foundation Maritime Bureau, MLIT Welcome Reception
May 14 (Tue)	Hakodate Research Center for Fisheries and Oceans The Hakodate Dock Co., Ltd
May 15 (Wed)	Nippon Steel North Nippon Works Muroran Area Shin Nihonkai Ferry
May 16 (Thu)	Hokuriku-Shin'etsu District Transport Bureau Kashiwazaki-Kariwa Nuclear Power Station
May 17 (Fri)	Hotel Nikko Niigata Observation Room Niigata City Aquarium Marinepia Nihonkai Tokyo Port
May 18 (Sat)	Tokyo Sightseeing Tour (Meiji Jingu, Asakusa, Hama-rikyu Gardens)
May 19 (Sun)	Departure from Tokyo

Site Visit Report

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Monday, May 13, 2024



●The Nippon Foundation



●Maritime Bureau, MLIT



●Welcome Reception



The Nippon Foundation

Jasmine Deneen Bellini (Belize)

As Sasakawa Fellows, our visit to The Nippon Foundation was fascinating and marked a significant milestone. It was our first chance to meet our main sponsor, Dr. Yohei Sasakawa, and express our gratitude for the World Maritime University (WMU) scholarship. It also gave us a platform to share our plans for using the knowledge we gained when we return to our home countries.

When we arrived at The Nippon Foundation, everything was well-organized, and everyone was on time. The fellows were warmly escorted to the designated room for our courtesy visit. Dr. Hide Sakaguchi, the Executive Director of the Sasakawa Peace Foundation (SPF), warmly welcomed them. During his address, Dr. Sakaguchi shed light on SPF's objectives and underscored the organization's steadfast support for providing scholarship opportunities to WMU. He also emphasized the thirty-seven-year relationship between SPF and WMU, portraying it as a bond poised to endure through time.

Afterwards, Chairman Yohei Sasakawa entered the room and greeted all his WMU Sasakawa Fellows for the Class of 2024. Chairman Sasakawa then took the opportunity to address the room by sharing his experiences with some of the countries represented by the students. He was very passionate about his work in promoting a peaceful and prosperous global society. One of the key points in achieving this is through the fellowship scholarships to universities like WMU. He did mention that there were other universities with which he also has scholarship collaborations in hopes of continuing to promote global responsibilities in saving our planet. Chairman Sasakawa was very expressive and engaging when he spoke about the years of dedicated work from him and his team to ensure that individuals are offered the opportunity to make a difference in their country and the world. He also spoke about the joy he has experienced when welcomed by the Sasakawa Fellows who have since graduated from WMU. He also stressed the importance of networking and continuing the dialogue even after graduation, as it is crucial to continue the work after leaving Sweden.

Networking and cooperation are not just important, but absolutely crucial in the maritime industry. This industry is a complex web of interconnected entities, including shipping companies, port authorities, logistics providers, and regulatory bodies. Effective networking allows these stakeholders to collaborate, share information, and coordinate activities, leading to smoother operations and improved efficiency. In the face of global challenges such as piracy, environmental concerns, and economic fluctuations, cooperation among maritime stakeholders is not just beneficial, but essential for addressing these issues collectively. By sharing best practices, intelligence, and resources, the industry can enhance safety and

security while promoting sustainable practices. Networking also fosters innovation and knowledge exchange, driving technological advancements and operational improvements. Collaboration among maritime professionals, researchers, and policymakers can lead to the development of industry standards, regulations, and initiatives that benefit the entire sector. This scholarship opportunity has not only offered us a chance but also presented us with a challenge to contribute positively to reducing the negative impacts on our planet.

After Dr. Sasakawa had concluded his address to his fellows, Prof. Johan Hollander, The Nippon Foundation Chair at WMU, took the floor to express our profound gratitude to Dr. Sasakawa on behalf of WMU. We are deeply thankful for his unwavering support of Maritime Excellence and for providing us with the life-changing opportunity to visit the enchanting country of Japan. Following his speech, each student was given a precious one-minute window to introduce themselves to Dr. Sasakawa personally. During this time, they shared their name, country of origin, area of study, and aspirations for personal and professional growth through this scholarship opportunity. Dr. Sasakawa displayed genuine interest and engagement with each student, often offering insightful commentary on their respective countries and sharing anecdotes about his recent connections to their homelands. His warmth and attentiveness left a lasting impression on everyone present, and we are truly grateful for this unforgettable experience.

After the warm introductions, the students gathered for a group picture, capturing the momentous occasion. Ms. Jasmine Bellini, hailing from Belize, conveyed heartfelt greetings to Dr. Sasakawa on behalf of the Students' Class of 2024. The experience was truly unforgettable and left an indelible mark on everyone present. It provided a rare opportunity for the students to connect with the visionary leader, promoting a peaceful and prosperous society. Arigato!

Lucy Garmai Varnie (Liberia)

The Nippon Foundation, also known as The Nippon Foundation Peace Initiatives, was established in 1962 as a non-profit philanthropic organization with a mission to foster world peace and enhance cooperative relationships among countries, especially in the maritime and shipping sectors. It supports a wide array of activities including research, education, social welfare, and public health, operating in over 100 countries. The foundation collaborates with more than 20 organizations globally, providing funding and assistance to community-led efforts aimed at promoting a more peaceful and prosperous global society.

The Nippon Foundation plays a pivotal role in peacebuilding through its grants, scholarships, and promotion of dialogue among peacebuilders. Recently, thirty Sasakawa Fellowship Students from various nations participated in a program alongside Professor Johan Hollander and Elin Sigurjonsdottir. During this event, they had the privilege of meeting Dr. Sasakawa at the foundation's headquarters.

The fellowship students were enthusiastic about meeting Dr. Sasakawa, who was greeted with applause as he entered the conference hall. Dr. Sasakawa welcomed everyone with a warm smile and exceptional hospitality. Professor Hollander and Ms. Sigurjonsdottir delivered appreciation speeches on behalf of the World Maritime University (WMU), thanking Dr. Sasakawa for his steadfast support of the institution.

Each student had the opportunity to introduce themselves and discuss the challenges their countries face, fostering meaningful cross-cultural dialogue. This experience was invaluable, allowing students to share their perspectives and learn from one another in a supportive environment. Personally, I am profoundly grateful for the chance to meet such an educated, inspiring, and humble individual and to witness his unwavering dedication to peace and promotion.

Meeting Dr. Sasakawa and participating in this program has been a transformative experience. It provided us with a unique platform to engage in dialogue, share our experiences, and gain insights into global peacebuilding efforts. The interaction with Dr. Sasakawa was particularly inspiring, as he embodies the principles of peace and collaboration that The Nippon Foundation strives to promote. His commitment to fostering international cooperation and understanding is truly commendable.

The support from Mr. Sasakawa and The Nippon Foundation has opened doors for us to make significant contributions to our countries and the world at large. The foundation's investment in education, research, and cultural exchange programs plays a crucial role in creating a more peaceful

and harmonious world. Through these initiatives, the foundation helps bridge cultural divides and promotes mutual understanding among nations.

Reflecting on this experience, I feel immense gratitude for the opportunities provided by The Nippon Foundation. The fellowship has not only enriched our knowledge and skills but also strengthened our resolve to work towards global peace. The memories and lessons from this program will be cherished forever, serving as a constant reminder of the importance of dedication and collaboration in achieving a peaceful world.

In conclusion, Mr. Sasakawa and The Nippon Foundation have made remarkable contributions to peacebuilding through their support of grants, scholarships, and international partnerships. Their dedication to investing in education, research, and cultural exchange is instrumental in promoting global harmony. We extend our heartfelt thanks to Mr. Sasakawa and The Nippon Foundation for their unwavering support and for providing us with a life-changing opportunity to contribute to our countries and the world. The foundation's efforts are a testament to the power of philanthropy in fostering a more peaceful and prosperous global society, and their commitment to peace is truly inspiring.

Through The Nippon Foundation's initiatives, we have learned that peace is not just an abstract concept but a tangible goal that can be achieved through collective effort, education, and mutual respect. This experience has empowered us to become ambassadors of peace in our own right, inspired by the vision and leadership of Mr. Sasakawa and the foundation. We are committed to carrying forward the legacy of The Nippon Foundation and working towards a more peaceful world for future generations.

Stephen Yekeson Kamara (Liberia)

1. Introduction

On 13 May 2024, the Sasakawa S24 Fellows of 30 students of WMU visited The Nippon Foundation in Tokyo, Japan. This visit was an integral part of the Sasakawa Fellowship Program, designed to deepen the fellows' understanding of Japanese culture, society, and the role of non-profit organizations in addressing global challenges, in the case of SPF.

2. Aim of the Visit

-Gain insight: Provide fellows with an understanding of The Nippon Foundation's contributions to public welfare.

-Foster relationships: Enable interactions with foundation officials and staff to explore potential collaborative opportunities.

-Enhance knowledge: Learn about key projects and initiatives of The Nippon Foundation that address social issues in Japan and globally.

3. Individual Fellows Introduction

Each Sasakawa S24 Fellow introduced themselves, sharing their background, areas of expertise and aspirations for the visit. This segment helped establish a personal connection between the fellows and The Nippon Foundation staff.

4. Dr. Yohei Sasakawa's Remarks

Dr. Yohei Sasakawa, Chairman of The Nippon Foundation, welcomed the Sasakawa S24 Fellows with an inspiring speech. He provided an overview of The Nippon Foundation's history, mission, and key initiatives. Key points from his speech included:

-Foundation History: Established in 1962, The Nippon Foundation has been dedicated to enhancing public welfare and addressing social issues in Japan and internationally.

-Mission: The Foundation's mission revolves around improving human welfare, focusing on maritime safety, education of persons especially from developing or predatory/ weak countries, disability support particularly persons living with Hansen's disease commonly known as Leprosy, andl innovation.

-Key Initiatives:

-Maritime Safety: Efforts to promote safe and secure maritime activities.

-Education: Programs aimed at fostering educational opportunities for underprivileged communities.

-Disability Support: Initiatives to enhance the quality of life for people with disabilities.

-Social Innovation: Projects that drive innovative solutions to complex social problems.

Dr. Sasakawa emphasized the importance of global partnerships and encouraged the fellows to explore collaborative opportunities with The Nippon Foundation.

5. Conclusion

The visit to The Nippon Foundation was a significant experience for the Sasakawa S24 Fellows. It provided valuable insights into the foundation's impactful work and fostered meaningful exchanges between the fellows and the Foundation's staff. The fellows left with a deeper understanding of how non-profit organizations can address social issues and a renewed commitment to applying these learnings in their future endeavors.

The Sasakawa S24 Fellows extend their profound gratitude to Dr. Sasakawa and The Nippon Foundation for their warm welcome and for organizing an enlightening and engaging visit. This experience will undoubtedly contribute to the fellows' personal and professional growth and inspire future collaborations.

Carlos Manuel Mosquera Athanasiadis (Panama)

Sasakawa fellows gathered in the conference room at 10 am to receive the Chairman of The Nippon Foundation Mr. Yohei Sasakawa. Firstly, Mr. Sasakawa started the meeting by addressing essential topics related to the latest activities in which he was involved such as the impact of COVID-19 on global trade, the Scandinavia-Japan Sasakawa Foundation, the peace-related research, the importance of cooperation between Sasakawa alumni and the peacemaker conference held in Gaza, Indonesia. Afterward, Mr. Sasakawa closed his speech by stressing how crucial the networking of the Sasakawa fellowship is, which leads to cooperation between countries of different regions that might be the key to solving the world's various problems.

After Mr. Sasakawa's closing remarks, Professor Hollander addressed the chairman to extend his sincere appreciation for receiving Sasakawa fellows and WMU guests. Following Professor Hollander's speech, the students introduced themselves to Mr. Sasakawa sharing with him relevant information about their academic and professional experience such as major degree, previous background, current position, and further professional aspirations. Furthermore, it is important to mention that Mr. Sasakawa shared personal experiences related to the students' countries. Once the students finished their introduction, Sasakawa fellows' representative Ms. Jasmine Bellini gave the final appreciation speech to Mr. Sasakawa.

Maritime Bureau, MLIT

Akbar Akbarov (Azerbaijan)

On May 13, 2024, Sasakawa Fellows made a courtesy visit to Maritime Bureau, MLIT according to a predetermined schedule. During the courtesy visit, MLIT employees presented presentations on introduction of MLIT, ports and harbors in Japan, maritime policy toward achieving carbon neutrality and Japan Coast Guard, also interesting and useful discussions were held. To begin with, the MLIT official welcomed the WMU delegation with his opening speech and briefed on the place and role of the Maritime Bureau within the Ministry of Land, Infrastructure, Transport and Tourism. Then Professor Johan Hollander, representing the WMU delegation, delivered a short speech and expressed his gratitude for the organization of the meeting and the hospitality shown. Tiffany Skinner also gave a short message on behalf of Sasakawa Fellows and expressed her gratitude for the help in organizing the program. Later, on behalf of WMU and Sasakawa Fellows, a memorial gift was presented to the MLIT official and a group photo was taken. After that, the program continued with presentations of MLIT employees, and discussions.

First of all, **Mr. Ryu Nara (International Planning and Coordination Office, General Affairs Division, Maritime Bureau, MLIT)** introduced presentation on introduction of MLIT. The presentation provided an overview of Japan, the challenges facing Japan, the mission of MLIT and the organization of MLIT. First, information was given on the geographical location, territory, population and administrative structure of Japan. It was mentioned that natural disasters, lack of natural resources, low birth rate and aging population are some of the main challenges that Japan faces. Then, the legislative responsibilities of MLIT and organization of MLIT was discussed and it was mentioned that the main missions of MLIT are utilizing, developing and conserving land in Japan in an integrated and systematic way, developing infrastructure necessary for attaining those goals, implement transportation policies, maintaining marine safety and security and others.

At second, **Mr. Masayuki Tanemura (Director of International Planning Office, Ports and Harbours Bureau, MLIT)** made presentation on ports and harbors in Japan. Presentation was about the overview of Japanese ports, port development and management/operation scheme in Japan and recent topics on port policies. Through the map, the location of Japan's major ports across the country, as well as international hub ports and strategic international hub ports and their importance were discussed. During talking about port management system and role sharing between PMB and the national government, it was mentioned that the responsibility of the Japanese national government is

limited to review the port planning prepared by PMBs and to develop a basic policy of development, usage and management of ports. Whereas, PMB is publicly responsible for planning and developing ports as a whole, making them available for public use, and operating them as an integrated infrastructure.

When it comes to the recent topics on port policies, there are two main directions here: disaster prevention and carbon neutral ports. As mentioned before, natural disasters are one of the main challenges that Japan faces. It was mentioned that, MLIT has explored countermeasures against large typhoons considering the lessons learned from the past experiences. Immediate countermeasures include lashing containers with belts and installing fences to prevent containers from flowing out and lifting electrical equipment of cargo handling machines to prevent power outages. For example, in 2023, the Tokyo Metropolitan Government developed a plan for improving the seawall at Tokyo Port.

Then, WMU delegation was informed about carbon neutral ports initiative which consisted of two parts: decarbonization of terminal operation (installing near zero emission fuel bunkering facilities etc.) and decarbonization of industries located in port areas (promote fuel conversion from oil/coal to low-carbon fuels etc.).

Thirdly, **Mr. Shinnosuke Hada (Deputy Director, International Negotiation Office, Ocean Development and Environment Policy Division, Maritime Bureau, MLIT)** delivered the presentation on maritime policy toward achieving carbon neutrality. It was noted that, CO₂ emissions from international shipping rank within top 10 largest emitter, if it were a country. The IMO adopted the “2023 IMO GHG Strategy” on Reduction of GHG Emissions from international shipping and the ultimate target of this strategy is achieving net-zero GHG emissions by 2050. It was emphasized that Japan has been contributing to the discussion in the IMO by providing the risk and possible safety measures based on our safety assessment, bibliographic survey and knowledge acquired by various R&D projects. When talking about the technological development of zero-emission ships, it was mentioned that, Japanese manufacturers are developing the core technologies (such as hydrogen and ammonia fueled engine etc.) for that kind of ships.

The final presentation focused on the **Japan Coast Guard**, covering its history, characteristics, missions, and assets in detail. Then, the Japan Coast Guard's international collaboration with other countries' coast guards was highlighted. Multilateral cooperation was also discussed, including the Head of Asian Coast Guard Annual Meeting (HACGAM) and the Coast Guard Global Summit (CGGS).

The meetings and presentations at MLIT were highly informative and beneficial. We gained valuable insights not only about the operations of MLIT but also about the Japan Coast Guard. I'd like to extend my sincere gratitude to MLIT, The Nippon Foundation and the Sasakawa Peace Foundation for facilitating this visit. This opportunity allowed us to understand the maritime policies of Japan, a nation with a significant presence in the shipping industry.

Aji Keway Bangura (Gambia)

Mr. Ryu Nara of Maritime Bureau, domiciled under the Ministry of Land, Infrastructure, Transport, and Tourism gave an introduction of the Bureau to the WMU Sasakawa sponsored Candidates of S24. From a general overview of Japan to challenges facing Japan and the missions of MLIT. The objectives of MLIT include the integrated and methodical use, development, and conservation of land in Japan; the construction of infrastructure required to achieve these objectives; the implementation of transportation policies; the advancement of meteorological tasks; and the maintenance of marine safety and security.

The Maritime Bureau, operating under the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), is a key regulatory and administrative body responsible for overseeing maritime transport activities in Japan. The bureau plays a pivotal role in ensuring the safety, security, and efficiency of maritime operations within Japanese waters and beyond. Here's an overview of its functions, responsibilities, and organizational structure:

Functions and Responsibilities

1. Maritime Safety and Security:

- The JMTB establishes regulations and standards to ensure the safety of ships and their operations.
- It is responsible for the implementation and enforcement of international maritime conventions, such as SOLAS (Safety of Life at Sea) and MARPOL (Marine Pollution).
- The bureau oversees the safety inspection of ships, issuance of safety certificates, and the investigation of maritime accidents.

2. Maritime Environmental Protection:

- The JMTB works on policies and measures to prevent marine pollution from ships.
- It promotes the use of environmentally friendly technologies and practices within the maritime industry.

3. Maritime Industry Promotion:

- The bureau supports the development of Japan's maritime industry, including shipping companies, shipbuilding, and port operations.
- It provides subsidies and support programs to enhance the competitiveness of Japanese maritime businesses.

4. Port and Harbor Management:

- The JMTB is involved in the planning and development of ports and harbors to ensure they meet the needs of modern maritime logistics.

- It oversees the management and operation of major ports, ensuring they are efficient and capable of handling international trade volumes.

5. International Cooperation:

- The bureau engages in international maritime organizations, such as the International Maritime Organization (IMO), to contribute to global maritime policy development.
- It collaborates with other countries to improve maritime safety and security standards.

Organizational Structure

The Japan Maritime Transport Bureau is structured into several divisions, each specializing in different aspects of maritime transport. These divisions include:

1. Maritime Safety Division:

- Focuses on the safety regulations and standards for ships and maritime operations.

2. Maritime Security Division:

- Deals with measures to protect maritime transport from security threats, including piracy and terrorism.

3. Marine Environment Protection Division:

- Handles issues related to the prevention of marine pollution and the promotion of sustainable maritime practices.

4. Shipping Policy Division:

- Develops policies to support and promote the shipping industry.

5. Port and Harbor Division:

- Oversees the planning, development, and management of ports and harbors.

6. International Affairs Division:

- Manages the bureau's participation in international maritime organizations and cooperation with other countries.

Key Initiatives and Projects

- Green Shipping Initiatives:

- Promoting the use of LNG (liquefied natural gas) and other cleaner fuels to reduce emissions from ships.

- Supporting research and development of advanced marine technologies.

- Port Modernization Projects:

- Upgrading port facilities to accommodate larger vessels and improve logistical efficiency.
- Implementing smart port technologies for better management and operation.

- Maritime Safety Programs:

- Enhancing the training and certification processes for seafarers.
- Improving the infrastructure for search and rescue operations.

The Japan Maritime Transport Bureau plays a crucial role in ensuring the smooth operation, safety, and sustainability of Japan's maritime transport sector, which is vital for the country's economy and global trade connections.

Presentations were also made by the director of International Planning Office, Ports and Harbours Bureau Mr. Masayuki Tanemura who gave details on Japan Ports, Recent developments, Challenges and Policies for ensuring sustainability and growth, he further explained some of the natural disaster challenges encountered in Japan and measures to guard against them from typhoons to flooding of the city and the measures taken to deal with climate change and the challenges faced by port in implementing decarbonization measures.

Presentation on Japan Coast Guard authorities was also given by an alumnus of WMU from 2002. He gave an overview of the current capabilities including all the assets from 97 aircraft, helicopters, 455 vessels, speed boats, helicopter carriers, patrol vessels, hydrographic vessels, lighthouse service vessels and strategies employed by the coast guard ensuring adequate security is provided for the Japanese EEZ and ensuring optimal safety for vessels transiting through the water, the procedures for other coastal states obligations such as search and rescue operations were also presented and it was stated the Japan Coast Guard personnel of about 14,788 are not military personnel but under the MLIT which is an interesting model compared to other countries.

Peter Tamarakro Orubebe (Nigeria)

On May 13th, 2024, Sasakawa Fellows from the World Maritime University had the privilege of visiting the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) in Japan where Mr. Ryu Nara of the International Planning and Coordination Office, General Affairs Division, Maritime Bureau, MLIT made a presentation of the overview of the MLIT.

The visit began with an overview of Japan, highlighting its geographical features, population, and unique challenges. Mr. Ryu explained that with a population of 123 million, a land area of 378,000 km², and a coastline of 34,000 km, Japan faces several challenges including natural disasters, scarcity of natural resources, an aging population, the need for sustainable economic growth, and climate change.

The mission of MLIT was then discussed, emphasizing its role in the integrated and systematic development and conservation of land in Japan. The ministry also focuses on developing necessary infrastructure, implementing transportation policies, promoting meteorological tasks, and maintaining marine safety and security. The organizational structure of MLIT was also presented, showcasing its various bureaus and their respective roles. From the Minister's Secretariat to the Civil Aviation Bureau, each department plays a crucial role in fulfilling MLIT's mission.

In continuation, Mr. Masayuki Tanemura, Director of Japan's Ports and Harbours Bureau discussed the comprehensive plan for the development and management of ports. The country has a total of 932 ports, managed by various entities including prefectural and municipal governments, administrative associations, and port authorities. These ports are categorized into Strategic International Hub Ports, International Hub Ports, Major Ports, and Local Ports.

Japan's ports play a significant role in the country's economy and logistics, handling approximately 99.5% of the country's trade volume. They are strategically located in areas with high population density and industrial activity. Major ports include Tokyo Bay, Osaka Port, Kure Port, and Chiba Port.

The national government's role is to develop a basic policy for port development, use, and maintenance, review port plans prepared by Port Management Bodies (PMBs), and support the construction of large-scale infrastructure. Recent policy topics include disaster prevention and carbon neutrality. The bureau is actively working on measures to prevent disasters like typhoons and to make ports carbon-neutral, reflecting Japan's commitment to environmental sustainability.

Mr. Shinnosuke Hada, Deputy Director at the Maritime Bureau, MLIT, discussed the maritime policy toward achieving carbon neutrality. He highlighted that international shipping contributes to 2.1% of

global CO₂ emissions. The International Maritime Organization (IMO), a UN agency, has adopted several strategies to reduce these emissions, including the Initial GHG Strategy in 2018 and the revised GHG Strategy in 2023. The 2023 strategy aims for a 20-30% reduction in GHG emissions by 2030, 70-80% reduction by 2040, and net-zero emissions by 2050. This strategy introduces measures such as a maritime GHG emissions pricing mechanism and a goal-based marine fuel standard. The principle of Common but Differentiated Responsibilities (CBDR) is also considered, with each country setting reduction targets for domestic shipping. The ultimate goal is to achieve GHG net-zero emissions by or around 2050.

In conclusion, Captain Ryoji Hayashi lectured on the role of the Japan Coast Guard. He stated that Japan, a maritime nation surrounded by oceans, benefits from maritime trade and fishing, but also faces challenges such as maritime accidents, marine crime, and territorial disputes. He informed that the Japan Coast Guard (JCG), established in May 1948, works tirelessly to address these issues through criminal investigations, maritime security operations, search and rescue work, and more. They also focus on preserving the marine environment, mitigating disasters, conducting oceanographic research, and ensuring maritime safety. Furthermore, he emphasized that the JCG works with other countries to ensure that the Japanese people can fully benefit from the ocean environment.

The visit gave the Sasakawa Fellows a comprehensive understanding of MLIT's role in addressing Japan's unique challenges and its commitment to sustainable development and security. It was an enlightening experience that will undoubtedly contribute to their future endeavors in maritime affairs. The fellows look forward to applying the insights from this visit in their respective fields.

Asela Peneueta (Tuvalu)

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) plays a crucial role in the comprehensive and systematic use of national land especially Land Use and Development, in which MLIT oversees the development and conservation of national land. MLIT is also responsible for consistent infrastructure development, implementing transport policies, ensuring efficient transportation systems, and ensuring safety and security in maritime activities.

MLIT aims to create a safe, smart, and sustainable infrastructure that supports regional development. Also focusing on promoting best practices, technological exchange, and urban development while at the same time ensuring maritime safety and disaster resilience.

During the Japan Sasakawa Peace Foundation Field Trip, we were privileged to visit the wonderful places in Japan and one of the places that was arranged by the Sasakawa Peace Foundation (SPF), is to visit the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). This particular visit to MLIT is to learn from what they are doing especially from the Maritime perspective of the Administration of MLIT.

Mr. Ryu Nara provides us with the first presentation of the day, on the introduction of MLIT from the International Planning and Coordination Office, General Affairs Division, Maritime Bureau, MLIT, providing in his presentation the overview of Japan, and the challenges faced by Japan from the Ministry's perspective and then continue to the mission of MLIT and organizational structure of the Ministry of Land, Infrastructure, Transport and Tourism.

Japan a country of around 123 million people consists of 378,000km² with around 66% of forest all over Japan, with a coastline of around 34,000km. Japan consists of 47 prefectures and Hokkaido is the biggest Prefecture of all the 47 Prefectures of Japan. It is really interesting to know that Japan is an island surrounded by the ocean. With the limited resources it has Japan through MLIT is working towards its mission of utilizing, developing, and conserving its land area in an integrated and systematic way, developing infrastructure, implementing transport policies, and at the same time promoting the progress of meteorological tasks; and maintaining the marine safety and security.

The second part of the presentation was presented by the Director of the International Planning Office, Ports and Harbours Bureau, MLIT Mr. Masayuki Tanemura. Mr. Tanemura talks about the overview of the Japanese port, the port development and management/operation scheme in Japan, and recent topics on port policies. Like most countries Japan most of its trade volume is through maritime transports via ports which accounts for 99.5%. Mr. Tanemura also added the main challenges faced by the Japan port

concerning the damage to port facilities and operations from typhoon as of 2018 (Typhoon Jebi). The damage not only caused damage to the port area but it flooded the city center, containers were drifting in the Port of Kobe, cargoes scattered in the container terminal of Kobe, plus containers were caught on fire due to flooding at the Port of Kobe. From the past typhoons, MLIT explored countermeasures to ensure that they could be fixed or address future unpredicted phenomena.

Mr. Tanemura also shared Japan's Carbon Neutral Port Initiative (CNP), by decarbonizing the terminal operation and supporting zero and near-zero emissions for ship fuels. All these measures are also important as well to realize the "Green Shipping Corridor" Initiative that was signed in Glasgow, London in November 2021. The Carbon Neutral Ports Initiative not only focuses on ports but extends its focus on decarbonizing the industries located in port areas.

The third presenter of the day was the Deputy Director of the International Negotiation Office, Ocean Development and Environment Policy Division Maritime Bureau, MLIT, Mr. Shinnosuke Hada. Mr. Hada presented the maritime policy toward achieving carbon neutrality, the presentation provided some insight into MLIT actions concerning GHG emissions from international shipping and also domestic shipping. Also reflects the IMO 2023 IMO GHG Strategy on Reduction of GHG Emissions from International Shipping, plus measures like the pricing mechanism; and marine fuel standard aiming to achieve "GHG net-zero emission by or around 2050".

The last presenter of the day was from the Japan Coast Guard presented by Captain Ryoji Hayashi the Senior Research Officer for International Cooperation also known as (Mr. 20,000). Capt. Hayashi presented the roles and duties of the JCG keeping the Japan oceans safe and enjoyable for future generations. Operations like guarding Japan's territorial sea and the EEZ and protecting the marine environment. Capt. Hayashi also mentioned operations like saving lives and protecting assets threatened by disaster. The JCG continues to implement various measures to ensure the safety of maritime traffic, which brings 'safety' and 'peace of mind' to the sea surrounding Japan.

The visit to MLIT has provided me with new things like initiatives in the maritime sector of Japan and learned from the knowledge and understanding of Japan's MLIT administration and its works. As a WMU student, I am so happy, honoured, and privileged to have had the chance to visit MLIT, truly the visit helped me and also, and I believe that my colleagues also learn from MLIT which will assist us in our studies and our work and even when we go back to our various countries after completion of studies here in Malmo Sweden.

Tuesday, May 14, 2024

●Hakodate Research Center for Fisheries and Oceans



●The Hakodate Dock Co., Ltd



Clipping from The Hokkaido Newspaper, published on May 17, 2024.

Hakodate Research Center for Fisheries and Oceans

Miki Yanagisawa (Japan)

On 14 May, Sasakawa Fellows visited the Hakodate Research Center for Fisheries and Oceans (hereafter referred to as 'the Centre'), where we received a lecture on the overview of facilities and ongoing research, and were also given a tour of the entire facilities. We could look around actual experimental tanks where fish are farmed and the scene researchers engaged in aquaculture. Located in Hakodate, Hokkaido, the Centre was established in 2003 by local businesses, government and academic institutions. Hakodate city is located near the tidal line between the Liman and Oyashio currents, and has long been famous for its salmon and crab fisheries, and has also prospered as a gateway for international trade. The Centre aims to promote the development of local industry and a sustainable fishing industry through research in fisheries and marine science, and is developing a wide range of research projects.

Facility overview:

Research projects in this Centre are conducted into fish ecology, catch fluctuations, analysis of the impact of environmental changes, and the sustainable use and management of fish and shellfish resources. The main building has a huge experimental aquarium, the information dissemination space that local residents can freely visit, experimental facilities and laboratories shared by local universities and research institutions, and a conference space. The water used in the experimental facilities is taken directly from Hakodate Harbour at the rear of the Centre, allowing fresh water to be used.

Interaction with local residents:

The Centre has recognized the conservation and restoration of the marine environment is an important issue for local citizens, and Hakodate is home to a number of maritime educational institutions. Therefore, the Centre aimed to gather local research entities and work closely with local fishermen and local authorities to apply research findings to real industry. Furthermore, in cooperation with local fishermen, the Centre conducts demonstration tests and on-site application of new technologies, and also develops educational and awareness-raising activities for local schools and the general public.

Cooperation with overseas research institutions:

The Centre works to attract international fisheries and marine research organisations to invite its secretariat and branches. It is also in the process of developing a wharf to allow overseas research vessels to dock, and is expected to further deepen its cooperation with overseas research institutes in the future.

Visit and tour:

We began our visit with a lecture on the development of Hakodate, its relationship with the fishing industry and the Centre's efforts to date. Of interest was the 'Hakodate Mariculture Project', which has so far succeeded in carbon-neutral cultivating of king salmon and kelp, with the aim of using this research to help shape the culture of Hakodate through the cooperation from the young generation. This project is grant-funded by the Cabinet Office from 2022. Although there may be a bias due to the nature of the specialisation course which I am involved in, I assume it is rare to find a research project that so concretely links food, culture and the marine environment. Students asked several questions about the impact of invasive species, which were answered in detail. We were also given a tour of the experimental aquarium tanks that use fresh seawater from Hakodate, as well as the results of research conducted by the universities using the Centre. The experimental tanks were stocked with representative Hakodate species such as salmon, squid and crab. The Centre also facilitated sleeping quarters and spaces for researchers to relax. Overlooking the city of Hakodate and the sea, the facility is an ideal place as a research facility and as a gathering place for local residents.

Conclusion

The Hakodate Research Center for Fisheries and Oceans plays an important role in contributing to the local community and the global fisheries industry through advanced research. Their activities cover a wide range of areas, including resource management, quality improvement, environmental conservation and the development of new resources, and it is expected that the research results will continue to contribute to the realisation of a sustainable society. In addition, I have gained important knowledge in the Centre, as the aspect of safe operation of ships, which is my area of expertise, is also closely related to the protection of marine life. I would like to express my sincere thanks to the Centre for giving us this opportunity.

Tanapit Petchmunee (Thailand)

The site visit to the Hakodate Research Center for Fisheries and Oceans in Hakodate, Hokkaido, Japan, was a part of Sasakawa Fellowship Students' Japan Field Study Trip between 11 - 19 May 2024.

Overview of Hakodate

Hakodate is a city located in the southern part of Hokkaido, which is the northern part of Japan's four main islands. It is the third largest city in Hokkaido, after Sapporo and Asahikawa. Situated in the southern part of the Oshima Peninsula, Hokkaido, Hakodate is a trading port city with rich business and cultural exchange since 1859. Located in a prosperous location with abundant marine resources, particularly salmon, trout and crab, Hakodate has prominent academic research institutions for fisheries and ocean as well as relevant industries in the area.

The Concept of International Fisheries and Ocean City

In 2003, the Concept of International Fisheries and Ocean City was launched to strengthen the city's geographical and natural position where three ocean currents converge: the Tsushima, Liman and Oyashio currents. The inflow of warm and cold currents supports an excellent fishing ground. With an ideal location, this conceptual policy aims to establish a research center for marine and fisheries to cumulate both academic knowledge and generate beneficial business opportunities for the local fishery and marine-related industries.

Moreover, the policy aims to formulate community collaboration between the government, academia and industry. The concept has been well-received by the locals. Currently, there are approximately 400 researchers and 5,000 students from fishery, information, human and social sciences who participate in this collaboration. From industrial sectors, there are participating shipping buildings, fisheries processing, machinery parts, and marine IT industries.

The policy aims to promote the fisheries and marine industry based in Hakodate and develop the academic marine science research to international level which aligns with broader national policy to enhance Japan's scientific and technological capabilities and to foster the regional economy through industrial development and innovation.

The Hakodate Research Center for Fisheries and Oceans

The Hakodate Research Center for Fisheries and Oceans is a rental research institute with laboratory facilities for academic institutions and private enterprises. The research center was established in June 2014. It houses a large experimental aquarium, an observation lobby with a panoramic view of the Port of Hakodate, a seawater practice room, conference rooms, and an exhibition space serving as a symbol of the International Fisheries and Ocean City Concept. One of the unique facilities is the seawater practice room where researchers can directly dock at the adjacent pier and use fresh seawater from

outside Hakodate for aquarium experiments. Furthermore, the center has a wharf for research vessels. Currently, there are three research vessels (RV) using the center's wharf: RV Kinsei Maru from Hakodate Fisheries Research Institute, RV Oshoro Maru supported by a Japanese fishery agency and RV Ushio Maru operated by Hokkaido University. The investment on research vessels well reflects the government-industry-academia cooperation.

The center is actively involved in international collaborations. For example, it hosted delegations from the Southeast Asian Fisheries Development Center (SEAFDEC), Canadian senators, and other international academic conferences. These visits indicate the center's role in promoting international cooperation and the exchange of knowledge in the fields of ocean sciences and fisheries. Moreover, the center has engaged the local community, particularly youth with marine science. For example, the research center opened an exhibition of the aquariums for public visit, organized presentations by the research institutes within the facility, and arranged a two-day marine festival event with educational activities targeting local youths.

The research center has conducted various kinds of research. One of the interesting projects is Hakodate Mariculture Project. As the local fisheries industry has been negatively impacted by changes in the marine environment, specifically climate change, resulting in a significant decline in the catch of squid, kelp, and other economically important local fish species. Consequently, there has been a decrease in the number of workers in both primary and secondary industries, leading to sluggish industrial activity and a decline in the local economy. In order to tackle these issues, a research and development initiative has been launched to establish a sustainable fishing sector by investigating methods to consistently and methodically acquire marine resources. Consequently, the project has concentrated its research efforts on the development of fish and algae to establish aquaculture, which plays a significant role in achieving regional carbon neutrality. Japan achieved the successful establishment of the first comprehensive king salmon farming technology by artificial insemination. Additionally, they developed a complete cultivation technique for Ma Kombu – the Japanese edible kelp seaweed – with the maximum volume production and used a low carbon drying system for food production development. Furthermore, they restructured the university system and enhanced human resource development at Hokkaido University. For development plan, the center, which is sponsored by the local administration, will expand the multipurpose area with more infrastructure on the sea after the sea wall construction is completed. Furthermore, there is room for further research i.e. the king salmon size control and appropriate price setting.

Personal Reflection

I am thankful to Dr. Naotsune Saga, Director General of the Hakodate Research Center for Fisheries and Oceans and all staff who warmly welcomed us with an informative presentation, answered our curiosities, and guided us around their facilities. Their hospitality and professionalism made the visit and learning process enjoyable. The center's collaboration with national and international research

institutions, as well as engagement with local fishing and industrial communities, are crucial for advancing sustainable fisheries and marine conservation practices. The provided site visit reflects the threatening impact of climate change on the local economy and the importance of integrative policy planning and multisectoral collaboration. Lastly, I would like to extend my gratitude to Sasakawa Peace Foundation for supporting this inspiring site visit.

Kathy Ann Young (Trinidad and Tobago)

The concept of International Fisheries and Oceans City.

Our delegation was welcomed at the Hakodate Research Center for Fisheries and Oceans where the Director and staff met us. We first had a presentation of the center to learn about their mission and objectives, followed by a tour of the facilities, including the research laboratories and got to meet some of the scientists.

Hakodate is a coastal city where the people have close cultural, social and economic ties to the sea that they live next to. The Hakodate International Fisheries and Oceans City Initiative was launched in 2003 and was developed by the local industry, government and academia to create and support sea-based community development, fisheries and ocean research and marine related industries through partnerships and joint collaborations.

Hakodate is known for its good fishing grounds and rich marine biodiversity due to the warm and cold currents that interact in the region. The goal of the concept is to bring together all the stakeholders to improve the lives of the community and industry through economic, education and research advancements while sustainably using marine resources.

Hakodate Research Center for Fisheries and Oceans.

The Hakodate Research Center for Fisheries and Oceans was built to support this concept of international fisheries and coastal cities. It is a facility to promote research and development and to foster collaboration amongst industry-government and academia to support and innovate the fisheries sector for the benefit of the economy and communities dependent on fisheries. This research base allows the community to interact with the sea and science, brings together industry and researchers to investigate commercially focused projects in fish breeding, aquaculture and seafood products. To support the community and industry, research is centred around new seafood products that can build the economy and increase employment.

The center has laboratories, shared experiment facilities, ocean survey facilities, marine water supply facilities, marine tanks and other equipment that allow experimental research to be conducted. A large experimental tank that can hold three hundred tons of water is also available where water temperature and flow can be controlled to conduct fish behaviour experiments. This tank is open for viewing by the public and the public area also has many displays for outreach and education. Past experiments include the spawning experiment for the Japanese squid and a spawning and behaviour experiment on the Atka mackerel. In addition, the center welcomes and rents space and facilities to researchers from different universities to conduct their own experiments. Research is not only conducted on fisheries, but on marine mammals, sound and noise, bathymetry and other aspects of the marine environment. At the time of our visit there were twelve different institutions conducting their research at the facility.

It also has training and meeting rooms and other facilities to allow for presentations and workshops. The center also believes in building community capacity and hosts events for young people, and people of all ages to share knowledge and inspire innovative ideas and initiatives.

The center also has three research vessels for monitoring and collecting samples in the field. The vessels conduct ocean observation surveys and every two months at specified locations collect data on temperature, salinity and current patterns as well as undertake plankton surveys. In addition, fisheries resource surveys for target species of fish and squid are undertaken, through the use of instruments like fish finder, catch measurements, fish identification tags and the study of the feeding behaviour of seals on squid.

Hakodate Mariculture Project

The Hakodate Mariculture Project is a subsidiary project that was developed in an attempt to not be wholly dependent on wild caught fish. It was initiated due to the reduction of fish in the region due to changes in the marine environment which had a negative impact on the fishing industry. These declines were mainly seen in the targeted species of squid and Japanese kelp. The impacts of the decline in these fisheries have been felt in the decrease in the number of primary and secondary industry workers and a decline in the local economy.

What was observed by industry and scientists was a 70% reduction in the squid catch and a 40% reduction in landed volume of kelp. These negative impacts have been accredited to

- No specific conservation methods to support an increase in squid catch.
- Climate change is the main cause of the decline as sea water temperatures increase there is a change in the occurrence and migration of target species.
- The species of fish that are being caught are changing, however, local fishers do not have fishing knowledge for these new species and training will be needed.

The Mariculture Project aims to support the production of marine products that can be obtained systematically and transition to a sustainable fishing industry. These projects are spearheaded and supported by the city of Hakodate.

In the project, the first successful breeding of sixty wild caught King salmon and hatching of fry was established in Japan. This is a long-term project and after three years the young salmon will be released into a sea-pen, it is anticipated that they could mature in four plus years. Additionally, they are researching and developing feed for salmon for aquaculture breeding.

The Japanese kelp aquaculture research is looking at the development of

- seeding production techniques
- low carbon drying
- growth status surveys
- genetic data to determine species and unique qualities

- odour control technology

These projects are expected in the future to establish innovative technology to help build a new aquaculture industry that will improve carbon neutrality and help create a strong and highly profitable industries across Japan.

The research center also collaborates with local Universities to develop courses and student initiatives to support and foster interest in fisheries research, aquaculture and mariculture amongst young people in Japan.

We had the opportunity to tour the center and facilities, learn more from our hosts who graciously answered all of our questions and see some of the ongoing research projects as well as visit the dock where the research vessels were moored.

We were grateful for the time taken to explain the work and objectives of the Hakodate Research Center for Fisheries and Oceans and were invited to collaborate on projects in the future.

The Hakodate Dock Co., Ltd

Da Ly (Cambodia)

The field study trip to Japan was packed with fascinating and productive site visits. It was a great opportunity and my first experience to visit the shipyard of one of the biggest heavy machine manufacturers that build ships in northern Japan, The Hakodate Dock Company in Hakodate.

On May 14, 2024, Students of the Sasakawa Fellowship from the World Maritime University had the opportunity to visit the Hakodate Dock Company site and were warmly welcomed by the President, Mr. Yoichi Saito, along with lecturers who gave us a brief overview presentation of the company. The Hakodate shipyard was established in 1896 to meet the diverse needs of domestic and foreign shipowners by offering high-quality work at affordable prices with recognition of the international standard of ISO 9001. In 2022, the Hakodate shipyard had annual sales of 20.7 billion Yen.

After finishing the presentation, we started the shipyard tour to learn more about how The Hakodate Dock builds the ship. The first location we visited was the cutting and sub-assembly shop, where we could understand the complex curves bent by skilled workers using the characteristics of steel, which shrinks with gas burners and water. After that, we visited the small assembly and joining area for small structures. This is the area where small assembly parts are manufactured and then put together to create a large hull. The hull is welded, inspected, polished, prepared, painted, and dried in the paint factory and within the hull assembly shops. Once the large hull is completed, it is lifted onto the building berth using a 10-ton weight crane. The installation of building blocks has begun in the shipyard. They will be installed in order, starting from the bottom of the ship, and connected by welding. Accurate positioning is important, and a coordinated effort between the ground and the crane is required. Once all body installation parts of the ship are completed, including the engine, it's time to install the rudder plate. The propeller is then attached to the tip of the shaft extending from the engine, with a very large propeller. After all the construction work on the ship is finished, it is time to hand it over to the owner. The ship is seen off by the workers and others involved in its construction. From now on, it will sail to ports around the world, transporting various goods to different destinations. On the other hand, the building berth has a large size of 240m x 33.60m with a capacity of 35,200 G/T, allowing for the construction of new ships to meet a wide range of size vessel needs. Additionally, we visited one of the three repairing dry docks at the Hakodate shipyard. The largest repair dock has 329.20m x 58m dimensions and a 120,000 G/T holding capacity. It is suitable for serving a variety of customers, including cargo ships, cruise ships, government and overseas shipping vessels, for maintenance, docking surveys, and other

vessel inspections. The Hakodate Dock not only focuses on building larger ships but also works on continuously improving building technologies. They prioritize promoting labor and energy-saving measures to meet and exceed their customers' needs, with a strong consideration for safety concerns and environmental conservation. They are designing and building flexible systems that can be quickly re-engineered in response to increasingly strict environmental regulations such as NO_x, SO_x, and EEDI. This approach allows them to meet the demands of international shipping regulators while closely adhering to their customers' needs.

At the end of our visit to The Hakodate Dock, we gained a comprehensive and enlightening experience that significantly enriched our understanding of modern shipbuilding and repair processes. It inspired us to appreciate the intricacies of shipbuilding and repair and the critical role these activities play in the global maritime sector. We extend our gratitude to the President, Mr. Yoichi Saito, and the staff of The Hakodate Dock for their hospitality and for providing such an informative and engaging tour—their willingness to share knowledge and insights made this field trip a valuable educational experience.

Adetayo Yusuf Adesokan (Nigeria)

Introduction

The visit to The Hakodate Dock Company Limited was a key highlight for the Class of 2024 Sasakawa fellows, Japan field study tour. Our delegation arrived at the Dockyard at about 1400 hours on 14 May 2024. After a warm welcome, a power point presentation on the activities of the Dock was delivered to our delegation, followed by a comprehensive guided tour of the facility, showcasing the various shipbuilding production lines at the Dockyard.

The Presentation on The Hakodate Dock Company Limited

The presentation took place at the administrative block of the complex, an 89 years old building which was evidently in good condition. We learnt that the Hakodate Shipyard Complex itself was about 128 years old, having been established on 7 November 1896 by Viscount Eiichi Shibusawa. Currently, the Dock is owned and operated by Namura Shipbuilding Co. Ltd and Sasebo Heavy Industries Co. Ltd. It had about 477 employees under the leadership of Mr Makoto Hattori, the president. It was noted that Hakodate Dock Co. Ltd comprised of two sites that were both located in Hokkaido prefecture of Japan. These were the Hakodate Shipyard, which occupied a total land area of 281,388 m² (where we visited) and the Muroran Manufacturer, which occupied a total land area of 176,143 m². The Dock specializes in building new merchant ships of various categories, such as 40,000 DWT dry bulk carriers as well as 3,000 G/T Car Ferries, amongst others. It also provides ship maintenance, recovery, and repair services for marine accidents and constructs steel structures for bridges. The annual sales for the year 2022 were noted to be ¥20.7 billion.

The Guided Tour of the Hakodate Shipyard

The guided tour of the Hakodate Shipyard facility began with a visit to the number one dry dock, which is 121 years old and the oldest dry dock in the shipyard. We observed that the dry dock was undergoing maintenance. Thereafter, we proceeded to the metal cutting workshop, where we observed the heating, cutting, and cooling process required to shape steel into different forms for assembling a ship's hull. Our guide noted that "it takes about 10 years to master the technique of heating and preparing steel into the required measurements and shapes for assembling a ship's hull." Next, we visited the assembly factory, which was next in line in the production process. We witnessed the process of joining metal sheets together to form blocks. It was noted that it takes about 70 blocks to make a ship, and each block weighs about 70–80 tonnes. Thereafter, we visited the next line of production, which was the building factory. We witnessed the welding of these blocks together in the ongoing construction of an 8,500-tonne ship. This was reportedly to assemble the hull and superstructure of the ship for the final stage before launching. Subsequently, we visited a fitting out berth where a newly built ship, FRANBO BRAVE, was being equipped and painted with internal fittings and machinery. The ship was nearing

completion and scheduled for delivery to the clients by the end of June 2024. It was noted that it takes about 3–4 months to construct a 40,000 DWT dry bulk carrier, and the Dock can build up to 4 ships annually.

Finally, our team visited a dry dock where a car ferry was undergoing routine inspection and maintenance. Having sighted two Japanese warships within the Dock berths, it was highlighted that The Hakodate Dock Co. Ltd. is among the few shipyards licensed to maintain Japanese Self-Defense Force warships. The tour concluded with an interactive session at the administrative block, followed by a vote of thanks and a gift presentation to our hosts by Mr. Brandon Potter, a student from Antigua and Barbuda.

Concluding Comments

The visit to The Hakodate Dock Co. Ltd. provided valuable insights into the Japanese shipbuilding industry, showcasing its technical proficiency and efficiency. The Dock's significant annual sales of over ¥20 billion (\$133 million) with just 477 employees highlight its high productivity and substantial contribution to Japan's GDP. Observing the meticulous and skilled processes at The Hakodate Dock underscored Japan's capacity to hold a 20% share of the global ship construction market on a gross tonnage basis. The visit reinforces the importance for developing maritime nations to strengthen shipbuilding capacity to boost local economies and empower their workforce.

Shripathy Thirunavukkarasu (Sri Lanka)

On 14th May 2024 we visited to The Hakodate Dock as part of WMU Sasakawa fellows Japan Field Study Trip. The Hakodate Dock co., Ltd founded by Viscount Eiichi Shibusawa on 7th November 1896. This company located at Hakodate which is the top-class destination featuring fresh sea food, exotic city skyline. Currently leaded by Mr. Makoto Hattori and 477 employees. The annual sale in 2022 was 20.7 billion JPY with the capital of 100JPY. Its the group of companies of Namura Shipbuilding co.,ltd and Sasebo Heavy Industries co.,Ltd. The Hakodate Dock co.,Ltd mainly operates in Hakodate and Muroran. The site area of the Hakodate ship yard is 281,388 square meters.

The company greatest strengthen is the advanced technology, honed and accumulated as their knowledge base over more than one century. It's a customer focused company in the construction of ship and known as "Hakodate Brand" and the main product is High bulk 40E/40SE. Its DWT is about 39,800t and can carry Grain in bulk, Coal, Log, Ore, Steel Coil. The other product is HAYABUSA II/III which is 3,000GWT in the new Ship building business. In the other hand it involves the ship repair business based on the traditional techniques and a wealth of experience, maintain and repaired kinds of vessels such as Japan Coast Guard vessels, Car ferry, Cement tanker and Pure Car Carrier. The Hakodate company earned the higher reputation and trust, I have observed the repairing progress of the vessels which belongs to Japanese Navy.

In the Ship building The Hakodate Dock process series of steps as follows respectively to build a vessel up to hand over to the customer Basic design, Detail design, NC Plasma cutting, Bending, Small assembly, Block transportation, Equipped with Engine, launching ceremony, Sea trial run finally delivery.

In relation to the basic design referred by the customer, The Hakodate Dock calculating the capacity and speed and ensuring the customers' requirements full filled. When it comes to detailed design, digitize each piece of information and generate single product drawing for accurate processing, manufacturing, and installation.

NC Plasma cutting – According to the blue printing computer control cutting performed

Bending – with the utilization of steel materials skill work will be made to complex curve.

Small assembly-small units are called small assemble member. In order to make the large ship the small assembly linked together then it's converted as large assembly.

Painting work- Completion of the inspection followed by the inspection it will be painted and dried.

Block transportation

Completion of the painting painted blocks transported via the self-propelled 200t trolley to the dock.

Block transportation includes 3 steps.

Equipped with Engine

Engine is installed in three parts. Crank mounted and the propeller shaft connected to the center with the various equipment.

Launching ceremony

It uses a sliding type launch system, which is rare in modern times, and it is very impressive to see the ship sliding down into Hakodate Port with a roaring sound up close. It's open to the public.

Sea trial run

Speed, maneuvering of the vessel checked with the presence of the ship owner and the classification society in the actual sear over two/three days.

Delivery

The ship sail after being seen off by many people and works who involved for construction handed over to the ship owner. Then she will sail all around the world with kinds of goods.

Their flagship, bulk cargo ship, features a “wide and shallow draft” it can entrée different types of ports in the globe. further their highly seaworthy eco-ship, equipped with advance, energy saving technologies leading to excellent fuel economy. Hakodate dock product, handy-sized bulk carrier of wood loading specifications, has earned high praise for its world class performance and reliability.

In order to continue to meet exceeded customer's needs the company uses the improved building technologies by enhancing the labour and energy servings. And adhering the environmental conservation methods. Ship building systems follows the international shipping regulations regard to NOx, SOx and EDDI.

Based on my observation The Hakodate Dock is building the vessels in the innovative technology and adhering the environment conservation based on the customer preference align with the international regulation. Based the innovation it's supplying the vessels in the maritime fleet and contribute the blue economy.

Wednesday, May 15, 2024

●Nippon Steel North Nippon Works Muroran Area



●Shin Nihonkai Ferry



Nippon Steel North Nippon Works Muroran Area

Simranjeet Singh (India)

As a Sasakawa Fellow, I am pleased to present this report on our field study visit to Japan, which included a tour of Nippon Steel Corporation's North Nippon Works in Muroran on 15th May 2024. This visit was part of the annual field study program organised by the Sasakawa Peace Foundation for Sasakawa Fellowship students.

Introduction

Our group of Sasakawa Fellowship students had the privilege of visiting various maritime-related facilities in Japan, including the Nippon Steel Corporation's North Nippon Works. This visit enriched our experience regarding the steel facility and the surrounding area of Muroran City.

Muroran City Overview

Before delving into the details of our visit to the steel works, it's worth noting the unique characteristics of Muroran city. Muroran is a coastal city located in Iburi Subprefecture, Hokkaido. The city's name originates from the Ainu words "Mo Ruerani," meaning "the bottom of a little slope." It is also known as a center for heavy industry, particularly steel production, earning it the nickname "Muroran - the city of steel." The city boasts scenic spots such as the Hakucho Bridge, which spans the Port of Muroran, and Cape Chikyu, one of the famous "Muroran-Hakke" (Eight Views of Muroran).

Nippon Steel Corporation - North Nippon Works

The North Nippon Works is a key production facility of Nippon Steel Corporation, which is Japan's largest steelmaker and the world's third-largest crude steel producer. Our visit focused on the Muroran Area of the works, located at 12 Nakamachi, Muroran City, Hokkaido.

Facilities and Operations: The North Nippon Works is equipped with state-of-the-art technology and machinery. The site visit included a tour of the following areas:

- a) **Blast Furnace Operations:** The heart of the steel-making process, where raw materials such as iron ore and coke are converted into molten iron.

- b) **Steelmaking and Casting:** Observations of the Basic Oxygen Furnace (BOF) and Continuous Casting Processes, where molten iron is transformed into steel and then cast into slabs or billets.
- c) **Rolling Mills:** Examination of the hot and cold rolling mills, where cast steel is processed into finished products such as sheets, plates, and coils.
- d) **Quality Control Labs:** Insight into the rigorous testing and quality assurance procedures to ensure the highest standards of product quality.

Key observations:

- a) **Innovation and Technology:** The use of cutting-edge technology and automation was evident throughout the plant, showcasing Nippon Steel's commitment to innovation. The facility employs both blast furnace-basic oxygen furnace (BF-BOF) and electric arc furnace (EAF) technologies for steel production.
- b) **Product Range:** Based on the ISO certifications, the Muroran Area produces steel bars, wire rods, plates, pipes, and tubes.
- c) **Quality Assurance:** The facility maintains ISO 9001 certification, demonstrating its commitment to quality management systems.
- d) **Environmental Initiatives:** We learned about Nippon Steel's "Carbon Neutral Vision 2050" initiative, which aims to contribute to a decarbonized society. Nippon Steel Corporation is committed to sustainability and environmental stewardship. The North Nippon Works has implemented various measures to reduce carbon emissions, enhance energy efficiency, and minimize waste. These initiatives include advanced recycling processes, the use of alternative energy sources, and continuous monitoring of environmental impact.
- e) **Safety and Workforce:** The plant places a strong emphasis on safety, with comprehensive training programs and strict adherence to safety protocols. The workforce is highly skilled and knowledgeable, contributing to the overall efficiency and productivity of the facility.
- f) **Employee Engagement:** The workforce demonstrates a high level of expertise and engagement, reflecting the company's investment in employee development and well-being.

Educational Value

As maritime students, this visit provided invaluable insights into the steel industry, which is crucial for shipbuilding and various maritime infrastructures. We observed firsthand the scale of operations and the advanced technologies employed in modern steelmaking.

Reflection

We extend our heartfelt gratitude to the staff at Nippon Steel Corporation's North Nippon Works for their hospitality and informative tour. This field study has significantly enhanced our understanding of the maritime industry's supply chain, particularly the role of steel production. It has also highlighted the importance of balancing industrial development with environmental considerations, as exemplified by Nippon Steel's carbon neutrality goals. The use of digitalisation and technology was noteworthy in the delivery concept, where the plant utilizes “Integrated Manufacture Controlling System,” which covers the whole process from order to delivery.

Nadarajan Perumal (Malaysia)

During our field trip to Japan, one of the places we visited was Nippon Steel Corporation (North Nippon Works). This visit occurred on May 15, 2024, at Nippon Steel's main manufacturing site in Muroran, Hokkaido. Nippon Steel Corporation is renowned as Japan's largest steelmaker and one of the world's leading steel producers. The visit aimed to provide insights into their production processes, management practices, and contributions to both the local and global economies. Nippon Steel is a cornerstone of Japan's shipbuilding industry and supplies most of the steel materials for manufacturing automobiles, electric appliances, and construction purposes. The company specialised in manufacturing a variety of steel products, including high quality steel plates, wire rods and sheets. The facility is equipped with advanced technology and follows stringent quality control measures to ensure the highest standards of production. Products made by Nippon Steel are shipped domestically and internationally, contributing significantly to the country's economy and modernization.

Upon our arrival, we were warmly welcomed by the General Manager and other key personnel from Nippon Steel Corporation. The introductory session provided an overview of the facility's history, its strategic importance, and its role within the broader framework of Nippon Steel Corporation. The General Manager highlighted the facility's commitment to innovation, sustainability, and continuous improvement. The visit began with a tour of the production units, where we observed the intricate processes involved in steel manufacturing. A representative from Nippon Steel guided us through various sections, including blast furnace operations, steelmaking and casting, and rolling mills. In the blast furnace operation, we witnessed the raw material handling and the blast furnace processes, which are crucial in converting raw iron ore into molten iron. The precision and scale of operations were impressive, showcasing advanced technological integration.

Next, in the steelmaking and casting section, we observed the stages of the steelmaking process, where molten iron is converted into steel through basic oxygen furnaces. We also observed the continuous casting process, where molten steel is solidified into semi-finished products like slabs and billets. Following the steelmaking and casting section, we moved to the rolling mills. This section showcased the transformation of semi-finished products into finished steel products. The high-speed rolling mills, equipped with automated control systems, ensure the production of high-quality steel with precise dimensions. Some of the advanced equipment introduced during our tour included the Automatic UST, Magnaflux tester, milling cutter, automatic finishing line, automatic warehousing system, and automatic ID marker and reader.

There were many key takeaways from this visit. The first was the adaptation of technological advancements to deliver quality products. During our tour, we witnessed the significant investments

made by the company in high-tech equipment to meet customer needs. The use of cutting-edge technology and automation enhances production efficiency and product quality. Another key takeaway was Nippon Steel's commitment to sustainability. As one of the industries that emit high amounts of CO₂, steel manufacturing poses environmental challenges. Nippon Steel is not exempt from this, but we were briefed on the company's sustainable goal to reduce greenhouse gas emissions by 2050. They are studying various solutions to eliminate carbon in the steelmaking process and exploring the use of hydrogen as an alternative. Additionally, Nippon Steel produces steel slag, which is planted in coastal areas of Japan. This promotes the growth of seaweed due to its fertilizing nature, indirectly helping to reduce carbon levels.

Additionally, we were briefed on the importance of safety in the steelmaking industry. The facility has stringent safety protocols to ensure the well-being of its employees. Continuous training and development programs are in place to enhance skill levels and operational efficiency. Nippon Steel plays a vital role in contributing to both the local and broader Japanese economies. It provides employment opportunities and supports ancillary industries, thereby fostering the country's economic growth.

In conclusion, the visit to Nippon Steel Corporation was a valuable and informative experience, providing deep insights into the steel manufacturing industry. The facility's commitment to adopting technological advancements, maintaining global sustainability standards, and ensuring workforce welfare is commendable. This visit has not only broadened our understanding of the steel industry but also highlighted the pivotal role played by Nippon Steel Corporation in the global steel market and Japan's national economy and modernisation.

Prasanna Kumara Rajapaksha (Sri Lanka)

We visited Nippon Steel North Nippon Works Muroran Area factory premises dated 15th May 2024. It was a massive factory premises I have ever visited in my life. Nippon Steel has manufacturing bases in Japan, Asia, Europe, Middle East and North, Central and South America. North Nippon Works Muroran Area was started in 1909 as one of the symbols of Japanese modernization. The steel works in the same has been growing together with the industrial development of Japan. Most of the products from the Muroran Area are related to the automobile industry and high quality is the main focus since those are used in producing parts for engines, power trains, chassis which requires higher strength and durability. They produce steel plates, steel sheets, round and square bars, structural steels, pipes and tubes as a raw material steel for producing different parts.

We learned about the major steps involve in producing steel products from the beginning of the Iron Ore then through coke oven, sintering furnace, blast furnace, BOF (basic oxygen furnace), electric arc furnace, secondary refining, continuous casting, bloom and billet mill, bar mill, wire rod mill, pickling and coating and end with heat treatment. We visited to see the activities in furnace and bar mill where round bars are produced in an automated production process. Most of the production processes are automated since it involves with very high temperature where humans cannot reach. The factory is situated near to sea are to get the advantage of importing Iron Ore with less inland transportation and exporting finish product also with less inland transportation. The huge land space let them to store finish products and Iron Ore to full fill any customer demand. They have a delivery concept that they can match what customer want, how much they need and when they need it. They have introduced flexible manufacturing system for wire and bars with highly accurate roll schedule directly to the shipping berth for customer delivery under any weather condition. Additionally, they have applied an integrated manufacturing controlling system which covers entire process from order to delivery.

Muroran area has sophisticated R&D facility with modern testing facilities such as testing melting furnace, valve spring fatigue tester, forging process simulation system and computer aided electronic probe Z-ray micro analyzer for inclusion analysis. Hence, they can respond to growing customer needs effectively.

Nippon steel work of sustainability goal since the steel industry emit more carbon to atmosphere by using huge amount of furnace oil for heating purposes. Nippon steel has announced its carbon neutral vision for 2050. They have formulated target of reducing total CO₂ emissions by 30% by 2030 compared to the 2013 baseline of achieving carbon neutrality in 2050. They are already working on developing breakthrough technologies in steel making process ahead of other countries. They are planning to use three new technologies in steel production process as hydrogen direct reduction of iron,

hydrogen injection into blast furnace and high-grade steel production in large size. Additionally, they plan to use three external conditions for carbon neutrality process such as green hydrogen, green power and chemical biofixing underground storages. The road map to carbon neutrality is based on these three breakthrough technologies and three external conditions. Nippon steel alone expected to expend roughly 500 billion Japanese yen as R&D expenditure in carbon neutral process and for practical implementation it is estimated to spend 4-5 trillion Japanese yen.

In overall the field study was very valuable to learn about production concepts, management concepts, sustainability concepts, quality standard and continues development of Nippon Steel which we can use for our home countries to develop industries in line with maritime industry.

Shin Nihonkai Ferry

Ryo Hiwatashi (Japan)

Arriving in Otaru, I felt happy to smell the sea breeze for the first time in a while. As Miyo-san explained, the Otaru Canal, which still retains its ancient features, is home to many historical buildings and stone warehouses built during the Meiji period (1868-1912). We arrived at the port of Otaru with these old Japanese structures in the background. The ferry we embarked on, “Azalea,” was already moored at the port. Many Sasakawa fellows took photos with the beautiful Azalea and the clean Otaru Bay. The name of the ferry *Azalea* comes from Western flowers as well as all ferries operated by Shin Nihonkai Ferry are named after flowers such as *Acacia* and *Lavender*. Azalea was awarded the Ship of the Year 2017 in the large cruise ship category in recognition of its energy-saving hull design and high-efficiency propulsion system, which reduced hull resistance and improved propulsion efficiency.

As we boarded Azalea, we were greeted by a very elegant entrance. After Miyo-san explained the schedule for our stay on the ferry, many fellows observed leaving the ship’s operation, took photos, and viewed Otaru Bay from the outside of the 6th floor. One of this ferry's characteristics is its large funnel due to an SOx scrubber system which was equipped in 2020. Azalea passed through very narrow between broken waters and sailed on the Sea of Japan toward the port of Niigata. Although we were able to have a comfortable life on board due to calm conditions, the strong winds in the Sea of Japan continued throughout the voyage, resulting in few opportunities to visit outside of the ferry.

Thanks to Kudo-san, we were able to have the opportunity to enter the Engine Control Room (ECR) during the actual navigation. The tour consisted mainly of questions and answers among marine engineers, covering topics, such as how to operate engine motion, current speed and maximum speed, Fixed Pitch Propeller (FPP) or Controllable Pitch Propeller (CPP), Fire Safety System (FSS) in the ECR, and many other questions. I have often heard that shipping companies do not allow external persons to enter the engine room under the sailing because it contains significant equipment, such as main engines and generators, necessary for operating the ship. We want to thank Mr. Kudo and Shin Nihonkai Ferry for providing us with the valuable opportunity to enter the ECR and answering many of our questions.

For dinner, we ordered our favorites from a variety of dishes on the electronic menu, including Japanese foods (e.g., ramen and sashimi) and Western dishes (e.g., steak and gratin). Although the menu was written only in Japanese, Miyo-san not only translated it into English but also added some information

considering our cultures and religions. Some of the Sasakawa fellows tried Natto, which is a famous Japanese fermented food made from soybeans and is known for being a nutritious food in a well-balanced manner. Since it was our first dinner together during the field study in Japan, we had a wonderful time enjoying delicious food on board.

After the dinner, Miyo-san, Reiko-san, and Emi-san invited us to participate in a Japanese tea ceremony known as Sado “茶道” which translates to “the way of tea” in English. Sado is a Japanese cultural activity that involves the ceremonial preparation and presentation of matcha, powdered green tea. We were fortunate to experience another aspect of Japanese tradition and culture through the ceremony. Following the Sado, a small party commenced, which during Japanese souvenirs, such as keyholders and cups, were distributed to fellows who won the Amidakuji lottery organized by Kudo-san. At night, when the Wi-Fi signal became unavailable, we engaged in “Nominication”, combining “Nomi”, which refers to drinking in Japanese, with “Communication”, inside the darkened confines of the ferry, a practice taught to us by the Japanese Coast Guard (JCG) alumni from the World Maritime University (WMU).

Many of the Sasakawa fellows woke up early in the morning to a cloudless sky and indulged in baths and a sauna to dispel the effects of the alcohol accumulated from the Nominication. It was a wonderful experience to enjoy an open-air bath on the ferry while relaxing in the morning sun over the Sea of Japan. We had breakfast with coffee and gathered at the entrance to prepare for disembarking from Azalea.

Throughout the field study in Japan, we experienced three different modes of transportation: ferry, bullet train, and airplane. Each vehicle has its unique characteristics, but as we, Sasakawa fellows, engaged in the marine and maritime sector, vessels hold particular significance tools for us. This onboard experience reinforced my fondness for ships.

Sikini Falesiva (Tonga)

The Azalea has a total length of 197.5m with a total tonnage of 14,125 tons that can accommodate 600 number of passengers. The vessel can travel approximately a speed of 25 knots and of which it can serve 150 trucks with 22 passenger vehicles altogether.

However, upon boarding the Lavender Azalea we had been offered an opportunity to explore the engine room of the vessel learning about the technical aspects of how it operates. Through our observation, we had been noticed that the engine room mainly used to monitor the operation of the vessel while everything relating to the control of those operation are being control from the bridge.

Furthermore, the accommodation provided by the vessels has different cabins starting from twin suites to Tourist Room. The availability of inboard facilities such as the restaurant, grand bath with sauna, shop, barbeque garden, open deck, barbeque garden, information desk and vending machines which all allow easy access to the information provided by the vessel, provided souvenirs items needed by the customer but most importantly the availability of vending machines to be used by anyone at any time they want.

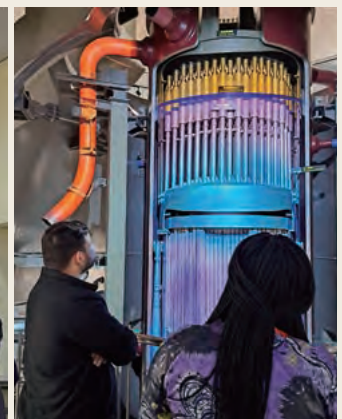
Overall, the services provided by the staff was exceptional, their calmness in serving the customers, assisting them in what they had inquire but most importantly their willingness to answer the ongoing questions from students satisfy our curiosity and learning about the technical aspects of the ferry's operation emphasized the complexity and importance of maintaining efficiency and safety in maritime transport.

Thursday, May 16, 2024

●Hokuriku-Shin'etsu District Transport Bureau



●Kashiwazaki-Kariwa Nuclear Power Station



Hokuriku-Shin'etsu District Transport Bureau

Brandon Ralph Potter (Antigua and Barbuda)

On the 16th of May 2024, the Sasakawa Fellows of the World Maritime University's Class of 2024 visited the Hokuriku-Shin'etsu District Transport Bureau (DTB). In the sessions with officials from the Hokuriku-Shin'etsu District Transport Bureau we learned that it is a regional branch of Japan's Ministry of Land, Infrastructure, Transport, and Tourism (MLIT). The bureau is responsible for managing transportation systems and infrastructure in the Hokuriku-Shin'etsu region. We learned of different aims of the Hokuriku-Shin'etsu Transport Bureau targeting safe, environmental sustainability, and management transportation systems within its jurisdiction, through the issuing of licenses, infrastructure and policy development, to name a few.

We were first greeted by the Director-General of the DTB, and given an introduction to the bureau, then we had a brief photo session.

Next, we went into a presentation about the Administration of the Maritime Administration of the DTB from the Director of the Maritime Department, Kazuhito Momma. In this presentation, we were able to view a map showing the distribution of Regional Head Offices of the DTB, 10 in total. We went on to hear about the different Bureaus of the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT); the DTB, the Regional Development Bureau, the Regional Coast Guard Headquarters, and the Local Meteorological Observatory. In this presentation, we also learned about the different prefectures covered by the Hokuriku-Shin'etsu DTB, the Niigata, Ishikawa, Toyama, and Nagano prefectures. We also got to hear about the different departments in the DTB. The DTB can be departmentalised as follows; General Affairs, Transport Policy, Tourism, Railway, Road Transport, Motor Vehicle Engineering and Safety, and Maritime. In the Maritime Department are the Maritime Industries Division, Seafarers Labour Division, Ship Safety and Marine Environment Division, Seafarers Labour Standards and License Division, with Safety Management and Labour Inspectors, Ship Inspectors, Ship tonnage Surveyors, Ship Officers Examiners, and Port State Control Officers (PSCOs).

In the presentation by Youhei Kunikane, a Safety Management and Seafarers Labour Inspector for the bureau, we learned about the duties of inspectors for Safety Management and Seafarers Labour. Inspectors in this department are to audit the safety management systems onboard ships by checking the vessels' safety management rules, and speaking with relevant personnel. They conduct the labour inspection by checking employment agreements, working conditions, and the watch schedule, to ensure

workers are fairly treated and have suitable working conditions. In the worst cases, the department may see it fit to go into criminal investigations and issue sanctions when standards are not met. All of this is to ensure safe navigation and to protect the working condition of seafarers in Japan. We also learned that there different scenarios that trigger inspections: normal inspections, inspections upon death or injury, inspection upon marine accident, inspection upon request, and inspections as result of criminal investigations.

In the presentation from Yasko Suzuki, a Principal Port State Control Officer (PSCO) at the bureau, we heard about the allocation of PSCOs in Japan, and were given a map to demonstrate this and the spread of Head, Branch, and Maritime offices. The presentation went on to focus on the seven PSCOs in the Kokuriku-Shin'etsu region, three at Hokuriku-Shin'etsu DTB, two PICs at the Ishikawa branch, and two more PSCOs at the Toyama branch. We got a statistic of the number of inspections in 2023, with a total of 167 inspections. We also learned of the prior working experience of PSCOs in Japan, with many having worked as Ship Surveyors or Safety Management and Seafarers Labour Inspector within the Japanese Government. The presenter went on to inform us of the seven ports in the region and some statistics of vessel calls at each port, with the highest of these being the Niigata Port and Fushiki-Toyama Port, with 751 and 790 vessel calls in 2021. We also got to learn a bit about the inland transportation of PSCOs working at the Niigata Port, taking 20 minutes by car to get to the West Port, and 50 to get to the East Port, when leaving from the office. We learned that the Niigata Port handled cargo from chemical carriers, LNG carriers, dry bulk carriers, and container carriers. The Niigata Port also handles scrap metal. We went on to learn about the process of a standard ship inspection that would be carried out by officials. We heard about the use of a database for inspectors to get information on ships before hand from seafarers, then a visual check of the vessel from shoreside to view any irregularities with the construct of the ship with regards to the rust and damage in the hull, and functioning lightings and indicators. Then the security procedures of the vessel are also checked to ensure standards are met, and that the ISPS Code is being followed. The inspector would then check the appropriate documents, such as Seafarers' Licenses and maintenance records, and check the condition of the bridge area to ensure proper navigation and communications equipment are being used, and life saving equipment is available. The accommodations are also checked to ensure proper conditions for labourers. Other areas looked into are the functionality of lifeboats, lifejackets, liferafts, and life buoys. The engine room, fire and safety equipment, and MARPOL equipment are also checked to ensure safety and environmental issues can be handled on the ship when at sea. Afterwards, the inspector, a PSCO writes a report on the finding of the ship. We were told that this entire process can take hours to complete, requiring diligence and patience on the part of the inspector.

All in all, much information about maritime safety and labour conditions was imparted on the group of Sasakawa Fellows that visited the Hokuriku-Shin'etsu District Transport Bureau in 2024. The detail

given and time taken by officials in the DTB in fulfilling their duties is an example to be followed by many countries with laxer rules and standards regarding seafarer safety and working conditions. The presentations on this day really drove home the importance of establishing systems to ensure safe maritime operations.

Md AI Hasnat (Bangladesh)

According to the program schedule for the Sasakawa Fellows, a courtesy visit to the Hokuriku-Shin'etsu District Transport Bureau located in Niigata was done on May 16, 2024. Activities that were carried out during the visit include the following. The group also got to meet with Mr Masato Sahashi the Director-General of the Hokuriku-Shin'etsu District Transport Bureau, who made a brief speech of welcome to the delegation from the World Maritime University. He introduced the Hokuriku-Shin'etsu District Transport Bureau as an institution under the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). He also advised that the delegation sample the hospitality and cultural flavor of Japan.

The event then continued with three presentations. The first was given by Mr. Kazuhito Momma, Director of the Maritime Department, Hokuriku-Shin'etsu District Transport Bureau, and focused on the outline of maritime administration. The second presentation, delivered by Mr. Youhei Kunikane, Safety Management and Seafarers Labour Inspector at the same bureau, covered the work of safety management and seafarers labour inspectors. The final presentation, by Ms. Yasko Suzuki, Principal PSCO of the Hokuriku-Shin'etsu District Transport Bureau, addressed the Port State Control (PSC) activities in Niigata.

Outline of Maritime Administration of DTB

There are 11 District Transport Bureaus (DTBs) under the umbrella of the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT). These are Hokkaido, Hokuriku-Shin'etsu, Tohoku, Kanto, Chubu, Kinki, Kobe, Shikoku, Chugoku, Kyushu, and the Okinawa General Bureau. Among these bureaus, the Hokuriku-Shin'etsu District Transport Bureau covers the Niigata, Ishikawa, Toyama, and Nagano prefectures and consists of several departments. The Maritime Department of the Hokuriku-Shin'etsu District Transport Bureau includes:

- Maritime Industries Division
- Seafarers Labour (Policy) Division
- Ship Safety and Marine Environment Division
- Seafarers Labour Standards and License Division
- Safety Management and Labour Inspector
- Ship Inspector
- Ship tonnage Surveyor
- Ship Officers Examiner
- Port State Control Officer

Work of Safety Management and Seafarers Labour Inspectors

This department oversees the audit and assessment of safety management to ensure safe operations are implemented both at the company and onboard ships. The legal bases for these audits are the Marine Transportation Act and the Coastal Shipping Act. During a typical audit, inspectors check whether ship operations comply with the submitted documents, such as Safety Management Rules. Even if detailed information is not included in the documents, the auditor guides improvement when necessary, during the on-site audit.

Flow of Safety Management Audit (Normal Audit):

Document Check:

Review statutory documents to gather information and understand the characteristics of the ship and labour conditions onboard. Documents include the Ship's Registry, Ship's Safety Certificate, Official Logbook, Official Record of Crew Employment, Seaman's Record Book, Licenses, Bargaining Agreements, Safety Officer's Record, and Health Supervisor's Record Book.

Interviews:

Conduct interviews with the operation manager and ship master to check compliance with the "Safety Management Rules," which describe the safety operation system of the company/ship.

Instructions and Improvements:

Provide a full explanation to seafarers on items that need instruction or improvement to avoid issues later. Unannounced audits are possible based on the laws, but usually the audit date and time are pre-scheduled.

Responsibilities of the Seafarers Labour Inspector:

The presenter also explained the responsibilities of the Seafarers Labour Inspector, who can inspect, advise, and impose sanctions on ships and companies to ensure Safety of navigation, Protection of labour conditions, and Prevention of accidents involving seafarers. Seafarers Labour Inspectors are considered labour inspectors in the maritime field. Their duties include:

- Inspecting ships
- Inspecting companies
- Investigating marine accidents
- Investigating deaths or injuries of seafarers
- Conducting inspections upon request (complaints)
- Carrying out criminal investigations (acting as judicial police)

These responsibilities are crucial for maintaining high standards of safety and labour conditions within the maritime industry.

Port State Control Activities in Niigata

In Japan, there are 107 Port State Control Officers (PSCOs) across 37 offices. Among these, there are seven PSCOs in the Hokuriku-Shin'etsu area. PSCOs in Japan are appointed from individuals with experience as Ship Inspectors (Ship Surveyors) or Safety Management and Seafarers Labour Inspectors for the Japanese government.

In the Hokuriku-Shin'etsu area, there are seven open ports, with approximately 2,500 foreign vessels visiting annually. Niigata port, the nearest port to the Hokuriku-Shin'etsu District Transport Bureau, sees various types of vessels, including general cargo, bulk carriers, chemical tankers, LNG carriers, woodchip carriers, and container ships.

The presenter detailed the Port State Control (PSC) inspection flow, starting with the APCIS database. The process involves selecting a ship from the database for inspection, followed by a visual check before boarding, a security check, document inspection, and thorough checks of the bridge, accommodation, deck (including Life-Saving Appliances and Fire Fighting Appliances), engine room, and MARPOL equipment. The process concludes with writing a PSC report.

During the visual check, inspectors examine the hull condition for rust, dents, and cracks, as well as hawsers, lighting, shapes, and traces of oil discharge. The security check includes examining gangway access control and security levels. Document inspection involves reviewing statutory certificates, crew licenses, mandatory records, maintenance records, and drill records. On the bridge, inspectors check navigational equipment and devices, charts/ECDIS, GMDSS/radio systems, firefighting systems, and lifesaving systems. In the engine room, they inspect propulsion systems, steering systems, pollution prevention equipment, fire safety appliances, firefighting systems, functional tests (e.g., alarms, OWS), escape routes, cleanliness, and crew familiarization.

Finally, the experts also discussed the duties of Ship Tonnage Surveyors and how they develop human resources for this role, providing a brief example of how they measure a new ship. Additionally, they gave an overview of Ship Inspector duties. The study tour at the Hokuriku-Shin'etsu District Transport Bureau concluded with a vote of thanks from one of our fellows.

Sovisal Srey (Cambodia)

1. On the 16th May 2024, Sasakawa Fellows (S24) made a courtesy visit to Hokuriku-Shin'etsu District Transport Bureau in Niigata as per the scheduled programme of the Japan study tour 2024. During the visit to the transport bureau, the group called on Mr. Masato Sahashi, Director-General of the Hokuriku-Shin'etsu District Transport Bureau. The Director-General also delivered a small speech in which he welcomed the delegations from World Maritime University (WMU) and shared the information about Niigata prefecture as well as briefly explained the roles and responsibilities of the District Transport Bureau as one of the nine regional branches of the Ministry of Land, Infrastructure and Tourism (MLIT). The Director-General also highlighted the group's visit MLIT on top of the regional office to comprehend on how the working is done at the both the national and regional level.
2. Hokuriku-Shin'etsu District Transport Bureau is an essential regional branch within Japan's MLIT. Located in Niigata, the bureau is an instrumental in overseeing the tourism, transportation, infrastructure development, and also a regulatory compliance in terms of maritime matter across the Hokuriku and Shin'etsu regions. The bureau overlooks the region of Hokuriku-Shin'etsu comprising prefectures such as Niigata, Toyama, Ishikawa and Nagano, which are strategically important due to its geographical diversity and economic activities. Niigata, in particular, serves as critical hub due to its coastal location along the Sea of Japan, port facilities and historical significance as a gateway for trade and cultural exchanges.
3. The visit introduced the group to the organizational structure and roles of the district transport bureau and the scope of work of the bureau especially on the working of Maritime Department, which is one of main objective of the tour to understand the Japanese maritime sector. In addition to that, the group received the opportunity to listen to the presentation by the divisions under the maritime department on the following subjects and matters such as ship inspector, ship tonnage surveyor, seafarers labour standard & labour inspector as well as the port state control officer.
4. Regarding the maritime department, it consists of nine technical division under its premise. Due to timely constraint and limitation, selected topics were to be presented for the group from World Maritime University. The presentation session began with speaker talking about the ship inspector. The speaker shared with the group on the role and task of the inspection of ship and marine pollution prevention equipment to be used on board for ship safety and management review. The second presentation was about ship tonnage surveyor. The speaker provided basic understanding about the role of surveyor as well as the criteria to become surveyor. For the third presentation of the day, the speaker shared the group on the topic of seafarer's labour standard and license division,

which most of the group was fully engaged on the topic especially on the matter of maritime labour. Another presentation on the topic of safety and labour inspector as well as port state control officer was presented by speakers respectively. Similar to the previous presenter, the speakers shared the group on the role and responsibility of their division as well as exchanging their experience and practice with the group on the best possible practice on the discussed matter. All presentation sessions were following up by questions from the group to enhance more understanding on each topic presented.

5. To sum up, the visit to Hokuriku-Shin'etsu District Transport Bureau was an enlightening experience that underscored the importance of how the work of IMO are being done at the regional level. In addition, it was a profoundly enriching experience for me personally as WMU's the Maritime Law and Policy specialization student to be able to hear the practical work, which bridged the gap between the academic learning and real-world application, equipped me with knowledge and skill necessary for the future endeavor.,

Livia Endozo (Philippines)

Niigata

16 May 2024

Hokuriku-Shin'etsu District Transport Bureau

On the 16th of May, 2024, Sasakawa Fellows (S24) from the World Maritime University (WMU) visited the Hokuriku-Shin'etsu District Transport Bureau in Niigata as part of the Japan study tour 2024. This report summarizes the key activities, insights, and experiences from the visit.

Meeting with the Director-General: The visit commenced by meeting Mr. Masato Sahashi, the Director-General of the Hokuriku-Shin'etsu District Transport Bureau (MLIT). Mr. Sahashi welcomed the delegation and provided a comprehensive overview of Niigata prefecture. He highlighted the bureau's pivotal role as one of the nine regional branches of Japan's Ministry of Land, Infrastructure, Transport, and Tourism (MLIT). He emphasized the significance of their operations, both within the national and regional levels of MLIT.

Role and Structure of the Bureau: The Hokuriku-Shin'etsu District Transport Bureau is the one of the key stakeholders in managing tourism, transportation, infrastructure development, and regulatory compliance including maritime matters across the Hokuriku and Shin'etsu regions. The bureau oversees Niigata, Toyama, Ishikawa, and Nagano prefectures, which are crucial due to their geographical and economic significance. Niigata, with its strategic coastal location along the Sea of Japan, plays a vital role in trade and cultural exchanges. The discussion also included the process of execution of administrative, law, and regulation in Japan, which is uniform and upholds a certain standard of execution across the country.

Presentations and Discussions: The visit provided an opportunity to look in-depth to the bureau's organizational structure and the Maritime Department's operations. The group attended several presentations from different divisions within the Maritime Department, which included:

1. Maritime Industries Division

This division focuses on the development and regulation of maritime industries, including shipbuilding, shipping, and marine equipment manufacturing. It promotes innovation and competitiveness in the maritime sector and ensures that Japan's maritime industries adhere to international standards. The division also works on policies to support sustainable growth and environmental protection in maritime operations.

2. Seafarers Labour Policy Division

The Seafarers Labour Policy Division formulates and implements policies related to the labour rights and welfare of seafarers. This division ensures that labour standards meet both national and international regulations, including those set by the International Labour Organization (ILO) and the International Maritime Organization (IMO). It addresses issues such as working conditions, wages, and occupational health and safety for seafarers.

3. Ship Safety and Marine Environment Division

This division is responsible for ensuring the safety of ships and the protection of the marine environment. It implements regulations and conducts inspections to prevent marine pollution and ensure the structural integrity and safety of vessels. The division's activities include overseeing compliance with international conventions such as MARPOL (International Convention for the Prevention of Pollution from Ships) and SOLAS (Safety of Life at Sea).

4. Seafarers Labour Standards and License Division

The Seafarers Labour Standards and License Division oversees the licensing and certification of seafarers, ensuring they meet the required standards of competency and safety. This division is responsible for the issuance of various maritime certificates and maintaining records of seafarers' qualifications. It ensures compliance with the Standards of Training, Certification, and Watchkeeping for Seafarers (STCW) Convention.

5. Safety Management and Labour Inspector

Safety management and labour inspectors play a critical role in monitoring and enforcing maritime safety and labour standards. They conduct regular inspections of vessels to ensure compliance with safety regulations and labour laws. These inspectors also investigate accidents and incidents to improve maritime safety and prevent future occurrences.

6. Ship Inspector

Ship inspectors are tasked with the detailed examination of ships to ensure they meet national and international safety and environmental standards. This includes inspecting hull integrity, safety equipment, and pollution prevention systems. Ship inspectors work to prevent marine accidents and environmental damage by enforcing compliance with stringent safety protocols.

7. Ship Tonnage Surveyor

Ship tonnage surveyors are responsible for measuring and calculating the tonnage of ships, which is crucial for regulatory, safety, and economic purposes. Tonnage affects port dues, safety regulations,

and ship design requirements. These surveyors ensure accurate measurement and reporting, complying with international measurement systems such as the International Tonnage Convention.

8. Ship Officers Examiner

Ship officers examiners conduct examinations and assessments for certifying ship officers, including captains, chief engineers, and other key positions on board. They ensure that candidates possess the necessary skills, knowledge, and experience to safely and efficiently operate vessels. Examiners evaluate practical skills, theoretical knowledge, and adherence to safety protocols.

9. Port State Control Officer

Port state control officers inspect foreign ships in national ports to ensure they comply with international regulations and standards. These officers play a crucial role in preventing substandard ships from operating and in enhancing maritime safety and environmental protection. Their inspections cover aspects such as safety, pollution prevention, and living conditions on board.

Each presentation was followed by an interactive Q&A session, allowing the group to enhance their understanding of the topics discussed.

Conclusion

I extend my gratitude to Mr. Masato Sahashi and the team at the Hokuriku-Shin'etsu District Transport Bureau for their warm welcome and informative presentations. Special thanks to the Sasakawa Peace Foundation and WMU for organizing this enriching study tour.

The various divisions within the Maritime Department of Japan's MLIT work collaboratively to ensure the safety, efficiency, and environmental sustainability of maritime activities. They play a critical role in regulating and supporting Japan's maritime industry, safeguarding the welfare of seafarers, and protecting the marine environment. Through stringent enforcement of regulations and international standards, these divisions contribute to the overall safety and prosperity of global maritime operations.

The visit to the Hokuriku-Shin'etsu District Transport Bureau was a profoundly enlightening experience, demonstrating the practical application of International Maritime Organization (IMO) standards at the regional level. As a student specializing in Maritime Law and Policy, this visit bridged the gap between academic learning and practical application, equipping me with essential knowledge and skills for my future career.

Overall, the visit not only provided valuable insights into the Japanese maritime sector but also underscored the critical role of regional transport bureaus in managing and regulating maritime activities.

Kashiwazaki-Kariwa Nuclear Power Station

José Miguel Jaramillo Mendoza (Ecuador)

After the warm welcome from the PR department representative and the emergency procedures indications in case of natural disasters, the presentation started with the following aspects:

Japanese energy situation

There are several countries that have to import energy being Japan the one with the highest need, among South Korea, Italy and others. Japan imports fossil fuels from around the world, which approximately 90% comes from the Middle East. After experiencing two oil crises, in 1970, Japan shifted the use of energy from oil to nuclear and natural gas, but after the Fukushima Daiichi Nuclear Power Station accident, imports of fossil fuels increased. Japan has diversified the import of different types of energy (nuclear, natural gas, oil, coal, hydroelectric, and others). Every day, thousands of tankers move around the country to provide energy to Japan, however in order to improve the energy situation, the state needs to be able to provide more nuclear power.

History of the Plant

The plant is located about 200 km northwest of Tokyo in the west coastline of Japan. The power plant's history started back in 1969 with the adoption of resolution for the plant. In 1978 the construction works started and the operation began in 1985. The plant has a coastline of 3.2 km. The total area is 4.2 km². The plant has 4 units (1-4) in the Kashiwazaki City area and 3 units (5-7) in the Kariwa Village area.

Fukushima Daiichi Nuclear Power Station Accident Overview

On March 11, 2011 at 2:46 PM an earthquake occurred near the coast, they had units 1, 2 and 3 in operation. Power supply system was damaged and offsite power supply was lost. The emergency diesel generators started automatically and began cooling the reactors. After 45 minutes a Tsunami hit the plant. Sea water reached altitudes of 10 meters in the plant. There was not electricity for back up in order to provide cooling to the system. Reactor cores were damaged by loss of power source and cooling for long period. Later, explosions occurred which ended in the emission of radioactive materials.

Current situation of the Plant.

The Boiling Water Reactor design has in the middle the reactor core. They applied heat to the uranium fuel and they also add water in order to produce steam. This allows the movement of a turbine in order

to activate the generator. The remaining goes to the condenser which allows to down flow it with recirculation of water in order to keep using it.

There are two types of units. The 1-5 units are BWR-5 and the units 6 and 7 are the most advanced with the ABWR type.

As mentioned earlier, after the accident, several safety measures were set in place at the Kashiwazaki-Kariwa Nuclear Power Station. The safety system to operate the plant relies primarily in the ability to shut down the plant in order the act accordingly, depending if you need to lower temperature or contain any spilling.

During the emergency the control rod is pushed upwards in order to shut down the reactor. For the cooling down system the process is simple, it only provides water to cool down the entire machinery. The system has a heat exchanger in order to get rid of the heat.

About the containment system, its main goal is to contain radioactive materials within fuel pellet, fuel tube, reactor pressure vessel and primary containment vessel to avoid any environmental impact. The system is made of 5 walls with different degrees of capabilities in order to contain the spill accordingly.

Improvement in the Plant.

The government implemented better design requirements from the lessons learned:

Prevent trouble, prevent escalation to accident, prevent core damage and mitigate impact after core damage.

To prevent flooding, they have built a wall by the coastline to protect the units from the water, as well as higher walls near the constructions and better drain system in case that water reaches the inside of the Units.

To secure power sources in case of emergencies they have air cooled capability vehicles and also high-pressure alternative cooling system as well as fire fighting vehicles, seawater alternative heat exchange and other generators.

As additional measures, in Unit 5, an emergency response control room was installed to be able to manage any emergency, 20 people are always on call. There is training conducted on this regard periodically.

After the presentation the delegation was split in two groups where they went around the visit hall as well as to a site tour.

During the visit hall the students learned how the nuclear reactor works from several scale replicas of the different components of the system. Many technical aspects were explained as well as how workers perform their duties in the plant.

The site tour started in the observatory with the view of the water reservoir. Then it went around all the Units, which are surrounded by impressive infrastructure,

Personal thoughts

It is impressive how Japan has properly assessed their geographic situation to run the nuclear power plant in order to take advantage of weather conditions in the area. The area where all the units operate is well spread out, this allows for a much better reaction time and space in case of an emergency. As a Navy officer, I paid close attention to security protocols and elements. I was impressed with the procedures in place as well as the different barriers throughout the entire facilities.

Andrew Lumbasi Barasa (Kenya)

Japanese Energy Situation Overview

After the 2011 Fukushima Daiichi nuclear accident, Japan has faced several energy difficulties and strategic reforms. Japan gets 70% of its energy from imported fossil fuels like LNG and coal. This substantial import dependence has prompted the country to diversify and protect its energy mix. Nuclear energy supplied 30% of the nation's power before Fukushima Nuclear Power Accident. However, the tragedy drastically reduced nuclear power consumption, which had just lately recovered. Nuclear energy generates 10% of Japan's power, with an aim of increasing it to decrease fossil fuel use and improve energy security. Solar, wind, and hydro provide 18% of Japan's power and are growing. The government has lofty goals to reach net-zero greenhouse gas emissions by 2050, including large renewable energy expenditures and a deliberate resurgence of nuclear power to supplement intermittent renewables. This change addresses environmental issues and boosts Japan's energy and economic security.

Kashiwazaki-Kariwa Nuclear Power Station outline.

One of the world's biggest nuclear power plants is the Kashiwazaki-Kariwa Nuclear Power Station in Niigata Prefecture and approximately 220km Northwest of Tokyo along the coast of the Sea of Japan. Tokyo Electric Power Company Holdings Inc (TEPCO) owns and operates the facility, which has seven reactors with energy output equivalent to 8,212 MWe of installed capacity. Since its operation in 1985, the plant has played a major part in Japan's energy infrastructure with five Boiling Water Reactors (Units 1,2,3,4,5) and two Advanced Boiling Water Reactors (Units 6 &7). After the 2007 earthquake and 2011 Fukushima accident, the plant was heavily inspected and upgraded.

Safety Enhancement Measures of the Station against Natural disasters.

To withstand earthquakes and tsunamis, the Kashiwazaki-Kariwa Nuclear Power Station has undergone extensive safety modifications. The facility is built to withstand 7.0 earthquakes immediately underneath it due to Japan's seismic activity. Advanced seismic isolators and shock absorbers protect important systems. The factory has tsunami-resistant seawalls and floodgates that can withstand 15-meter surges. These barriers are part of a flood control system that keeps essential infrastructure dry and operating during heavy floods. Multiple diesel generators and battery packs have been added to the facility's emergency response capabilities to maintain cooling and safety systems during power outages. Upgraded fire suppression systems, sprinkler systems, and fire-resistant barriers have been installed to safeguard the factory from fire threats. All of these safety measures meet Japan's Nuclear Regulation Authority (NRA) requirements, demonstrating a strong commitment to safety and regulatory compliance.

Kashiwazaki-Kariwa Plant Tour

On May 16, 2024, a site tour at the Kashiwazaki-Kariwa Nuclear Power Station covered operations, safety, and future goals. TEPCO personnel, Mr. Katsuhiko Hayashi who is the Deputy Superintendent at the facility gave a detailed history, status, and safety updates of the facility to start the day. This explanation presented the plant's technical advances and regulatory compliance initiatives. The tour began at the exhibition hall, where we explored the prototype room. This room showcased scaled models and interactive displays, offering a detailed overview of the plant's history, technological advancements, and safety measures. The exhibits provided valuable insights into how the plant operates and the various safety mechanisms in place to mitigate risks.

Following the exhibition hall, our group toured the plant via bus, allowing us to observe key facilities and infrastructure from a secure distance. Although we did not enter the control room or the reactor areas as the power plant was not in operation by that time, the bus tour offered a comprehensive view of the plant's extensive layout and the strategic placement of safety equipment. The guides provided commentary on the various sections of the plant, explaining the roles of different components and highlighting the importance of safety in each area. A notable part of the tour included a visit to the water reservoir. This reservoir is a critical component of the plant's cooling system, designed to provide a reliable water supply for reactor cooling and other essential operations. The reservoir is equipped with multiple layers of protection and monitoring systems to ensure water quality and availability, which are crucial for the plant's safe operation.

We also inspected the plant's fire-fighting equipment. The facility is equipped with a comprehensive array of fire safety systems, including high-capacity water tanks, advanced sprinkler systems, and specialized fire trucks. These resources are strategically located throughout the plant to provide rapid response capabilities in the event of a fire. The fire safety infrastructure is a key part of the plant's broader safety strategy, ensuring that fire hazards are promptly detected and effectively managed. The tour concluded with a discussion session, where TEPCO representatives answered questions about the plant's operations and safety protocols. This session provided an opportunity to delve deeper into the plant's safety measures and future plans, underscoring TEPCO's commitment to transparency and continuous improvement in nuclear safety.

Conclusion

The visit to the Kashiwazaki-Kariwa Nuclear Power Station on May 16, 2024, offered a comprehensive overview of one of the world's largest nuclear power plants and its advanced safety measures. The tour highlighted the plant's significant role in Japan's energy strategy, particularly in the context of enhancing energy security and achieving carbon neutrality by 2050. The insights gained from the prototype room

and the site tour emphasized the plant's robust commitment to safety and innovation, reflecting the broader efforts to ensure a safe and sustainable future for nuclear energy in Japan.

Patrick John Cabasag (Philippines)

Around 1:00 PM on May 16, 2024, Sasakawa Fellows arrived at Kashiwazaki-Kariwa Nuclear Power Plant - the world's fourth-largest electric-generating station and has been operating since 1985. After going through the company's security protocols, we had a briefing and a short presentation in the conference hall.

The activity was facilitated and welcomed by Mr. Katsuhiko Hayashi, Deputy Superintendent of the Kashiwazaki-Kariwa Nuclear Power Station. He started discussing the company's background and role in mitigating power costs and securing a stable energy supply in Japan. It underscored the facility's enhanced safety measures in response to the Fukushima Daiichi accident to prevent future occurrences of similar incidents. Additionally, strategies that seek to become the safest nuclear power plant were also presented, and the staff then facilitated an actual tour of the entire facility including outside the premises which house the seven power generating facilities.

Following the presentation, we were split up into two groups to go around the facility. To continue their building tour, Group A stays inside the main building. Outside the main building of the power plant, Group B will be given a tour of the premises.

We had the experience of seeing the actual facility outside from both areas and learned as discussed in the presentation particularly ways to have a safer facility such as **(1) Flood Prevention Measures:** By building a seawall that is fifteen meters high to shield the reactor from impact. Additionally, all locations that are lower than 15 meters above sea level have flood barriers constructed. **(2) Securing Power And Cooling Functions:** To store 20,000 tons of water 45 meters above sea level and utilize it to inject fresh water into the reactors if pumps are unable to function, a reservoir the size of thirty (30) Olympic-sized pools has been constructed. Additionally, we were able to witness the use of machinery such as water cannon trucks for injecting water into the spent fuel pool. **(3) Measure to Prevent the Spread of Accidents:** TEPCO has installed filter vents that remove 99.9% of radioactive particles to further prevent incidents that could result in fuel damage. It protects against damage to the container as well as contamination of the surrounding soil. **(4) Compliance with Regulatory Standards from Terrorism to Natural Disaster:** The Japanese Nuclear Regulatory Committee adopted new regulations in July 2023, and since then, measures have been taken against acts of terrorism and major natural catastrophes like earthquakes and tsunamis. **(5) Safer People by Strengthening its Workforce on the Ground:** TEPCO increased the number of operators for promptly restoring critical facility services like electricity, water injection, and debris removal from 205 to 260, as well as emergency personnel from 324 to 850. **(6) Continuous Training and Emergency Drills:** Continuous emergency drills are conducted under the assumption that earthquakes and tsunamis may occur to improve organization preparedness for

emergencies. These include operator simulation exercises and plant-wide drills conducted in the event of a complete power loss. **(7) *Training for Emergency Vehicles*:** The ability to operate a range of vehicles safely is essential for handling emergencies. Employees have earned certifications by regularly conducting training in high-area water injection and debris removal with heavy vehicles. **(8) *Connecting with nearby residents from the Website to the Service Hall*:** The power plant proactively shares information on getting ready for emergencies. These include the TEPCO website, a public relations booklet, and the Service Hall, where employees provide an update on Kashiwazaki-Kariwa's present state of affairs. Further, we also get to see up close and discover more about a prototype power reactor housed inside the building.

Our overall tour experience and the information we learned will be useful to us going forward, especially when dealing with important facilities like the Kashiwazaki-Kariwa Nuclear Power Plant. When it comes to facilities management, the company should be imitated to guarantee the safety and security of both employees and visitors. The entire visit was a success which gave us insights into the essential role of this Nuclear Power plant in Japan's Future.

Finally, in appreciation for the worthwhile experience we had at the facility, the group gave the facilitators a small gift on behalf of World Maritime University (WMU) and Sasakawa Fellows of Class 2024.

Friday, May 17, 2024

●Hotel Nikko Niigata Observation Room / Niigata City Aquarium Marinepia Nihonkai



●Tokyo Port



Tokyo Port

Md. Rasel Pradania (Bangladesh)

On 17th May 2024, I along with a group of thirty Sasakawa Fellows and staff had the privilege of visiting the Port of Tokyo, one of the largest and most technologically advanced ports in the world. This visit was organized by the Sasakawa Peace Foundation, a prominent organization dedicated to promoting international understanding and cooperation. The purpose of the visit was to gain insights into the operational aspects, technological advancements, and environmental initiatives at the port.

The Port of Tokyo, located in the central part of Tokyo Bay, is a major hub for maritime trade in Japan and the world. It handles a significant volume of international and domestic cargo, contributing substantially to the economy. The port is equipped with state-of-the-art facilities, including container terminals, logistics centers, and advanced IT systems for efficient port management.

The primary objectives of the visit were:

1. To understand the operational framework of the Port of Tokyo.
2. To observe the technological advancements implemented in port management.
3. To learn about the environmental and sustainability initiatives undertaken by the port authorities.

Upon arrival at the Port of Tokyo, we were warmly welcomed by the representatives of the port authorities. The visit commenced with onboarding naval ship to see the port terminals, port operations, and landscape of overall port area. We were provided with an overview of the port's history, infrastructure, and strategic importance. The briefing highlighted the following key points:

Historical Significance and Growth

The Port of Tokyo has a rich history dating back to the early 20th century. Over the decades, it has evolved from a small regional port to a global maritime hub. The port's growth has been driven by Japan's economic expansion, technological advancements, and strategic investments in infrastructure.

Infrastructure and Facilities

The port boasts an extensive range of facilities, including:

- Container Terminals: Equipped with advanced gantry cranes and automated systems for efficient handling of containers.
- Bulk Cargo Terminals: Specialized facilities for handling bulk commodities such as coal, grain, and oil.
- Logistics Centers: Modern warehouses and distribution centers supporting seamless cargo movement.

- **Passenger Terminals:** Facilities to accommodate cruise ships and passenger ferries.

Technological Advancements

One of the most impressive aspects of the Port of Tokyo is its integration of cutting-edge technology in port operations. Key technological advancements include:

- **Automated Container Handling Systems:** These systems reduce human intervention, increasing efficiency and reducing errors.
- **Real-Time Tracking and Monitoring:** Advanced IT systems enable real-time tracking of cargo, enhancing transparency and security.
- **Smart Port Initiatives:** Implementation of IoT (Internet of Things) and AI (Artificial Intelligence) for predictive maintenance and operational optimization.

Environmental and Sustainability Initiatives

The Port of Tokyo is committed to minimizing its environmental impact through various sustainability initiatives. Some notable initiatives are:

- **Green Port Program:** A comprehensive program aimed at reducing carbon emissions and promoting eco-friendly practices.
- **Waste Management Systems:** Advanced waste management and recycling facilities to minimize waste generation.
- **Renewable Energy Integration:** Utilization of renewable energy sources, such as solar and wind power, to reduce reliance on fossil fuels.

Container Terminal Operations

During the visit, we had the opportunity to watch live container terminal operations which was a hive of activity, with numerous gantry cranes effortlessly lifting and moving containers with precision. The automated systems in place significantly enhance the efficiency of cargo handling operations.

Bulk Cargo Handling

The bulk cargo terminal was another area of interest during the visit. This terminal handles a wide variety of bulk commodities, including coal, iron ore, and agricultural products. The handling process involves the use of conveyor belts, grab cranes, and automated stackers and reclaimers. The terminal's design ensures minimal spillage and dust generation, which are critical for maintaining environmental standards.

Logistics and Distribution

The logistics centers at the Port of Tokyo are designed to facilitate efficient cargo movement and storage. These centers are equipped with automated storage and retrieval systems (ASRS), which enhance the speed and accuracy of cargo handling. The use of robotics in warehousing operations was demonstrated, showcasing how these technologies improve operational efficiency and reduce labor costs.

The logistics centers are strategically located to ensure seamless connectivity with road and rail networks, enabling efficient distribution of goods to various parts of Japan and beyond. The integration of IT systems for inventory management, order processing, and shipment tracking further enhances the efficiency of logistics operations.

Smart Port Initiatives

The Port of Tokyo is at the forefront of adopting smart port technologies. The use of IoT and AI in port operations has led to significant improvements in efficiency and productivity. Some of the key smart port initiatives include:

- **IoT-Enabled Equipment:** Sensors and IoT devices installed on cranes, vehicles, and other equipment provide real-time data on their status and performance.
- **AI-Based Analytics:** AI algorithms analyze data from various sources to optimize port operations, predict equipment failures, and enhance decision-making.
- **Digital Twin Technology:** The port has developed a digital twin, a virtual replica of the physical port, to simulate and optimize operations, plan infrastructure developments, and improve resource management.

Potential Areas of Collaboration

There are some areas of collaboration between the Port of Tokyo and other international ports. Some potential areas for collaboration include:

- **Technology Transfer:** Sharing of technological innovations and best practices in port management and operations.
- **Environmental Initiatives:** Joint initiatives to promote environmental sustainability and reduce carbon emissions in the maritime industry.
- **Training and Capacity Building:** Exchange programs for port personnel to enhance skills and knowledge in advanced port operations and management.

The visit to the Port of Tokyo was an enlightening experience, providing valuable insights into one of the world's most advanced and efficient ports. The port's commitment to technological innovation, environmental sustainability, and operational excellence is truly commendable. The knowledge gained

from this visit will undoubtedly contribute to the ongoing efforts to enhance port operations and promote sustainable practices in the maritime industry.

I extend my heartfelt gratitude to the Sasakawa Peace Foundation for organizing this visit and to the Port of Tokyo authorities for their warm hospitality and comprehensive tour. The insights gained from this visit will be instrumental in fostering international cooperation and advancing the development of ports worldwide.

Tiffany Andrea Skinner (Guyana)

On May 17, 2024, the Sasakawa Fellows class of 2024 participated in a boat exhibition at Tokyo Port. Representatives from the Port Bureau of Tokyo provided a comprehensive overview of the port, emphasizing its primary function of handling containerized cargo for international import and export. The Port of Tokyo was commissioned on May 20, 1941, as an international trading hub and plays a significant role as a gateway to the global city of Tokyo for maritime trade. The port connects the Izu and Ogasawara treasure Islands of Tokyo.

The port has been classified as a multifunctional urban port that facilitates the distribution of goods imported into Japan which are essential to the industrial community, the metropolitan region, and the lives of the citizens.

The Port of Tokyo is situated between the Arakawa and Tamagawa estuaries where vessel calls dominate. The imports handled within the port account for two-thirds of Japan's incoming and outgoing cargo. Tokyo port has several major containers and break-bulk terminals, where the Oi Container terminal has been identified as the largest terminal in the metropolitan region of Japan.

The Oi terminal was developed between 1971 and 1975 and plays a critical role in the logistics system of Japan. The terminal comprises sixteen container berths with an overall length of 2,354 meters. The Oi container terminal handles vessels with capacities from 12,000 TEU to 20,000 TEU. This terminal has 20 large ship-to-shore cranes and handles approximately half of the Japanese container cargo routing from Asia, Singapore, and America.

In 2022, the terminal handled over 46 million containers with a total volume of 23.45 million tons. However, over the last 30 years, the government and Oi operators made extensive changes to the port. The number of docks was reduced, and the berth length was extended. The depth alongside the quay was also increased to 15 meters and piers were moved to 35 meters to create space for operations commencing from the quay leading to the yard before being transported to the customers. Three berths within the port were modified to be earthquake-resistant since Japan is prone to natural disasters. The Oi terminal is now classified as Japan's number one high-standard port.

Furthermore, the port of Tokyo has always been the base for ferryboats which links the city with other parts of Japan. The ferry terminal commenced operation in 1984, where passengers and vehicles are transported between Shikoku and Kyushu. Over the years, improvement works were carried out on the terminal to increase the berth occupancy rate and make the terminal natural disaster resistant. A total of 24 berths is located at this terminal, where the western terminal is identified specifically for the RO-RO

cargos. The western terminal has a total of 5 berths, and a length of 1570 meters, where 20 percent of cargo coming into Tokyo port is handled at this terminal. Vessels routing from China and Asia utilize these berths.

Tokyo Port also has a central breakwater landfill site which is technically the latest container terminal in the region which was established in March 2020 to handle the impending volume of goods coming from Asia. This region is split into two areas. Area 2 (Y2) consists of 3 gantry cranes and an overall length of 400 meters. This area facilitates vessel routing from China and Asia and is the only container berth throughout the port of Tokyo with a covered water depth of 16 meters. While Area 1 (Y1) was developed in November 2017, with a depth of 15 meters alongside the quay, and is opened to Chinese route vessels. There is also a forest of the sea site within the port of Tokyo which is not accessible to humans. This area was marked as a site for the scheduled 2020 Olympic games. The area is well maintained and transformed by planting trees and recycling materials. There is exceptional cooperation and collaboration among the government and residents of Japan for the protection of this site.

In conclusion, the government of Japan opened the newly established Tokyo International Cruise Terminal in September 2020 to accommodate the world's largest cruise ships. The operation at this terminal is carried out on a single-berth basis. During the year 2023, the cruise terminal witnessed a total of 29 port calls compared to previous years. When there aren't cruise ships at the terminal, exhibitions, and other recreational activities are conducted at this terminal such as concerts, etc.

Jattu Bridget Koroma (Sierra Leone)

The field study trip to Japan was organized for the Sasakawa Peace Foundation fellows of WMU class of 2024. The trip took place from May 11th to May 19th, 2024.

The WMU Sasakawa Peace Foundation class of 2024 visited the Tokyo port on the May 17th, 2024. We had a ferry ride tour around the port. It was such an amazing experience having to view the largest port of over 25 terminals in Japan, although we weren't able to do a full tour around the facilities of the port because of time constraint.

On May 20th, 1941, the Port of Tokyo opened to international trade. It grew in tandem with Japan's economy after World War II and is now an important link in the global transportation network that links Tokyo to the rest of the world. The battle against COVID-19 has hit the world economy hard, and the Port of Tokyo has felt the effects as well. Furthermore, our guide went on to say that the port is now confronted with a plethora of formidable obstacles, such as the climate emergency, an energy crisis, and worldwide instability. But as the world becomes more interconnected, the Port of Tokyo will become even more vital.

Their top priority as a port is to improve its functionality for the sake of more efficient port operations and the smooth distribution of goods. To achieve this he said, they will be making strategic use of cutting-edge technologies, including advancements in information and communications technologies like AI and the Internet of Things (IOT) they will also be working to make the port more carbon neutral.

In an effort to alleviate traffic congestion, improve the road network, and construct a new container terminal at the Outer Central Breakwater, the Tokyo Metropolitan Government is presently engaged in a number of initiatives. Redevelopment of existing terminals and efforts to make container terminals more efficient will remain priorities for them. In addition, by consistently implementing actions based on the Port of Tokyo's long-term vision, which extends into the 2040s, which will help Japan's economy grow, and improve the lives of Tokyoites and industrial activities.

The Tokyo International Cruise Terminal, located in Tokyo Waterfront City's Aomi neighborhood, was inaugurated in September 2020. Even the largest cruise ships in the world can fit into the terminal. The port was reopened to international cruise ships in November 2023, despite the fact that the COVID-19 pandemic severely limited the operations of cruise liners, which transport people worldwide. In an effort to reduce the spread of disease, the Tokyo Metropolitan Government is collaborating with other groups to make domestic and international cruise ships more welcoming. Meanwhile, they are making great

efforts to entice passenger ships so that the Port of Tokyo can become one of Japan's most important cruise ports.

The Port of Tokyo provides an exciting view of the Rainbow Bridge and container terminals set against the background of the central Tokyo skyscrapers. Taking advantage of the port's prime waterfront location, the goal is to promote Tokyo Waterfront City's development into a first-rate MICE and tourist destination so that it becomes well-known and contributes to Tokyo's growing global profile, creating a sustainable, pleasant, and aesthetically pleasing community that blends nature with convenience, as well as collaborating with local businesses to introduce cutting-edge technology and breathe new life into the area.

He further went on to say the Great Kanto Earthquake marks a century since it occurred this year. In terms of catastrophe preparedness, they have taken steps like increasing the height of tide embankments to protect against, among other things, future sea level rise due to climate change and making structures more earthquake resistant, based on scenarios that assume the worst possible events, so including the strongest earthquakes. This is how they ensure the safety of citizens, their property, and the capital of Japan. The ecologically rich "treasure islands" of Tokyo are the Ogasawara and Izu islands, which are linked to the Port of Tokyo. The port will continue to strengthen disaster resilience while improving port and airport facilities to guarantee the safety and livelihoods of residents and to support the growth of industry. Only with the help and understanding of Tokyo's residents will the city be able to recover from the pandemic,

An interesting observation about the port is that, from the perspective of the ferry we were on, it is evident that Tokyo port is completely automated, giving the impression that Japan is ahead of time in term of new technology/ digitalization

Our visit to the port was truly memorable, particularly for experts in the port service sector from different countries who were present. We are deeply grateful to Dr. Sasakawa, the Nippon Foundation, and the Sasakawa Peace Foundation for providing us with this extraordinary opportunity.

Anusorn Orachorn (Thailand)

On the 17th of May 2024, as part of the Japan Field Study Trip for Sasakawa Fellowship Students, we embarked on a boat tour around the Port of Tokyo. This excursion provided a unique perspective on the port's infrastructure and operations, offering insights into its significance as a hub for maritime commerce and tourism. During the tour, we had the opportunity to listen to a lecture focusing on key facilities within the port, including the Oi Container Terminal, Outer Central Breakwater Container Terminal, and Tokyo International Cruise Terminal.

Oi Container Terminal:

Our tour commenced with a closer look at the Oi Container Terminal, one of the primary container handling facilities within the Port of Tokyo. Situated strategically along the waterfront, this terminal plays a vital role in facilitating the import and export of goods, serving as a crucial link in Japan's international trade network. As the lecture highlighted, the Oi Container Terminal boasts state-of-the-art infrastructure, including advanced cranes and automated handling systems, optimizing efficiency and throughput. We learned about the terminal's operational processes, from vessel berthing and cargo handling to customs clearance and inland transportation connections. The lecture emphasized the terminal's contribution to Japan's economy and its role in supporting global supply chains.

Outer Central Breakwater Container Terminal:

Continuing our tour, we navigated towards the Outer Central Breakwater Container Terminal, another key facility within the Port of Tokyo. Positioned strategically to accommodate larger vessels, this terminal serves as a vital gateway for containerized cargo traffic. The lecture provided insights into the terminal's design and development, highlighting its deep-water berths and advanced quay infrastructure capable of accommodating mega-container ships. We learned about the terminal's role in enhancing the port's capacity and competitiveness, enabling seamless handling of international cargo flows. Additionally, the lecture touched upon environmental initiatives undertaken at the terminal, emphasizing sustainability practices and eco-friendly operations aimed at minimizing ecological impact.

Tokyo International Cruise Terminal:

Our tour concluded with a visit to the Tokyo International Cruise Terminal, a prominent landmark within the Port of Tokyo catering to the burgeoning cruise industry. As we approached the terminal, its modern architectural design and waterfront location made a striking impression. The lecture provided insights into the terminal's role as a gateway for cruise tourism, welcoming thousands of passengers annually to experience Japan's vibrant culture and attractions. We learned about the terminal's facilities, including passenger embarkation areas, customs and immigration facilities, and amenities

for visitors. The lecture also highlighted the economic significance of cruise tourism for Tokyo, generating revenue and employment opportunities while showcasing the city as a premier destination in the Asia-Pacific region.

Conclusion:

The boat tour around the Port of Tokyo offered a comprehensive overview of its key facilities and operations, enriching our understanding of maritime logistics and tourism. The lectures provided valuable insights into the role of the Oi Container Terminal, Outer Central Breakwater Container Terminal, and Tokyo International Cruise Terminal in driving economic growth and connectivity. As we disembarked from the tour, we gained a newfound appreciation for the Port of Tokyo's importance as a dynamic gateway to Japan and the world. This experience underscored the significance of maritime infrastructure in supporting global trade and tourism, leaving a lasting impression on our field study journey.

●Fum monents of the Japan Filed Study Trip 2024







Overall Impression on Field Study Trip to Japan

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Brandon Ralph Potter (Antigua and Barbuda)



On the first day of visits, the Sasakawa Fellows of the World Maritime University (WMU) of the Class of 2024, were in Tokyo, where we visited the Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT). There we heard from the General Director of the Maritime Bureau and the Director of International Planning and Coordination Office of General Affairs Division of the Maritime Bureau of the MLIT. From what we heard about the MLIT and its Maritime Bureau, the importance of the organisation to the country of Japan was made known to us on the first day, ensuring safety, development, efficiency and effectiveness in the nation's maritime sector.

On the second day, the Sasakawa Fellows had the pleasure of visiting The Nippon Foundation. There we were met by Dr. Sakaguchi, President of the Ocean Policy Research Institute (OPRI) of the Sasakawa Peace Foundation, who impressed upon us the importance of the oceans to our world. We also got the opportunity to meet Dr. Sasakawa, the Chairman of The Nippon Foundation. During this meeting, all of the Fellows were allowed to make brief statements to the Chairman about their professional intentions after studying at WMU. It was interesting to hear from the other Fellows, their goals after graduation.

On the third day, we caught a plane to go to the Hokkaido Prefecture, where we visited the Hakodate Research Center for Fisheries and Oceans. Here we learned about the effects of climate change on the ocean ecosystems of Japan, and how higher temperatures at sea, resulted in the migration of marine animals important to the fishing industry in Japan. We also learned that the changes in sea temperature have caused a reduction in the cover of seaweed along the coast. At this site we got to learn about the spawning of fish for food. We also got to view several tanks with different marine animals, such as tuna, crabs, some tropical fish, and squid to name a few.

We also spent the following day in Hokkaido, visiting the Hakodate Shipyard. Here we got to see ships in various stages of construction and refurbishment. We got to learn about the aspect of ship building, such as the timeframe for construction, the process for cutting and bending large panels of steel, and welding, to name a few. We also walked around the shipyard and were able to see a large crane for moving compartments of ships' structure while in the yard. During the presentation, we were also able to see a video of a new vessel being slid into the sea from the shipyard.

For our last visit in Hokkaido, we visited the Nippon Steel Corporation (North Nippon Works). Here we learned about the steel production process, from the raw materials used, to the necessary temperature, to some of the finished products produced. We also walked about the factory and saw red hot steel

moving around the factory to be shaped, cut, and stored. We also learned about how the steel can be distributed regionally and globally, via the maritime cargo terminal on the site. We ended this day by boarding the Shin Nihonkai Ferry, where we spent the night, while on our way to Niigata. While on the ferry, some of the Fellows of 2024 got to enjoy some traditional Japanese tea with Reiko-san, Miyo-san, and Emi-san. After enjoying freshly made tea, we got to play a game with Kudo-san, where prizes were won by many of the Fellows, making the night onboard the ferry very enjoyable.

On our sixth day in Japan, we arrived in Niigata where we heard many presentations from different officials of the Hokuriku-Shin'etsu District Transport Bureau of the MLIT. Here we learned about the different departments of the MLIT and the work of the DTB. We heard about what it takes to ensure safety in the nation's maritime sector and the inspections that go into enforcing standards.

On our seventh day in Japan, we visited the Kashiwazaki-Kariwa Nuclear Power Station. At this site, we learned about nuclear power and how it generates thermal energy via the heat from a nuclear reactor. We heard about different safety measures put in place to prevent destruction during and after natural disasters. These measures include, water transportation vehicles, disaster resilient construction, and a disaster management plan. While at the site, we also got to see a model of a nuclear reactor, a reservoir for cooling of the reactors, and learned about how the reactors are started and turned off.

For our last day in Japan, we were back in Tokyo, where we visited a shrine and witnessed a traditional Japanese wedding. After leaving the shrine, we were able to walk around Tokyo City, during the Sanja Matsuri. During the festival we were able to see mobile shrines, one carried by children, and another carried by adults. There were also large statues of different Shinto gods in the Asakusa Shrine, the venue of the main event. The entire festival was full of energy, and we could see people in local dress, men and women operating pulled rickshaws, and various Japanese street cuisine. We left the festival to go on a pleasure craft ride that ended with us landing at a huge public garden. In the garden are many different types of plants, one of which was the bonsai tree. We also got to go on another ferry tour where we were able to experience the Port of Tokyo from the seaside. We were able to see different ships in the nation's waters along with the equipment along the shoreside of the terminals of the port.

Overall, the experience in Japan was one to remember, from the infrastructure, culture of respect, food, and festivals. It was a trip of both professional development and personal amazement. I would definitely say that the trip to Japan was filled with opportunities to be exposed to local culture, and all the organisations visited provided insights to the importance of shipping and oceans in the development and growth of Japan's economy and some of the Fellow of 2024 are good models for developing countries to emulate.

Akbar Akbarov (Azerbaijan)



Before leaving for Japan, I was very excited about this field trip. Because it would be completely different from other trips. We would not go to any European country, but to a country located at the end of the world and distinguished by its unique culture. To be honest, if it wasn't for The Nippon Foundation, I didn't think I would ever have the chance to go to Japan. So I thank them very much for creating this chance.

As I said in our conversation with Mr. Kudo, not all foundations that provide scholarships to students are interested in them later, but one difference of being a Sasakawa Fellow is that we always feel the attention of The Nippon Foundation. This is a great thing.

In general, our trip to Japan was very memorable for me. The program was carefully prepared to the smallest detail. The orientation session on the first day of our arrival in Japan was very helpful and gave us a very clear idea about the rest of the program. Although I wasn't able to fully explore Tokyo due to exhaustion that day, the sightseeing program for the following days solved that problem.

The following day, the meeting with Dr. Yohei Sasakawa at The Nippon Foundation was the most formal and important part of the program. I was amazed at how he managed to have a short conversation with every student during the introduction part, and how he was knowledgeable about each student's country (sometimes even more than the student himself). It was an honor to have the opportunity to meet Dr. Yohei Sasakawa, who made it possible for us to study at WMU. On the same day, in the next part of the program, a meeting was held at MLIT and we had the opportunity to get information about Japan in general, its geography, ports, the problems it faces, the innovations they apply in seafaring, coast guard and many other topics. The last program of the day was the reception. The reception also went well, most importantly, we managed to perform the WMU song well as a group. Also, during the reception, I was introduced to a Japanese student who was admitted to WMU for the next academic year and is a Sasakawa Fellow. He will also study MLP. I praised the city of Malmö and wished him success.

Early in the morning on May 14, we flew to Hakodate on the island of Hokkaido. I was surprised to see that there were signs in Russian as well as English and Japanese at Hakodate airport, but I understood the reason when I thought about the location of Hokkaido island near the Russian border and Russian tourists coming to the island for vacation.

That day we visited Hakodate Research Center for Fisheries and Oceans and Hakodate Dock. Both our visits were very interesting and informative. It was very well thought out that every place we went we were provided with booklets that gave us complete information about the place.

The next day we visited the largest steel plant in Japan and the 4th largest in the world located in Muroran. The total area of the plant was almost the size of a city. We toured the area by bus and got acquainted with the production process. What was very interesting to me was what the factory employee who accompanied us said about "kai zen". "Kai zen" is a Japanese phrase that means "constant self-improvement". That employee also used this phrase to indicate that the factory workers were constantly working on themselves. This was very interesting to hear as I knew about it even before I went to Japan. Then we left for Otaru port to go to Niigata city and boarded the ferry there. In the meantime, I must say that I am once again grateful to The Nippon Foundation for allowing us to use various vehicles during our stay in Japan. Plane, ferry, bullet train (shinkansen)... It was an incredible experience. Having been on a cruise ship before on my way to Oslo, the experience was not unfamiliar to me, but it was still interesting. The sunset was also very beautiful while on the ferry.

In the morning of May 16, we arrived in Niigata, the largest city of Japan located on the coast of the Sea of Japan and the rice center of the country. Here we visited Hokuriku-Shin'etsu District Transport Bureau and Kashiwazaki-Kariwa Nuclear Power Station. Since I myself worked in the administration, the work they did as a regional bureau on the regulation of maritime transport was interesting. Our visit to the Nuclear Power Plant was also very exciting. We saw how precautions were taken after the 2011 earthquake and tsunami disaster at the Fukushima Nuclear Power Station.

The next day, we watched the view of the city at the Niigata Observation Room and visited the aquarium. Watching the dolphin show was one of the memorable moments of the day. Then we returned to Tokyo by bullet train and we came to the end of the official part of the program by visiting the port of Tokyo. We spent the rest of our time in Japan walking around in Tokyo and of course shopping. Overall, I can say that our trip to Japan was very memorable and made me think about coming to this beautiful country at least once again.

Md Al Hasnat (Bangladesh)



Introduction:

Ever since my early learning in school, based on my geography book, Japan is famously called the Land of the Rising Sun. Living in Bangladesh, I have also realized that Bangladesh has the similar flag as that of Japan. The day I got the scholarship from The Nippon Foundation of Japan, I was very much thrilled to hear that there would be a field study trip to the beautiful country Japan.

As I write this article a month after I visit Japan, the excitement has not fade at all. I still feel privileged to be selected as one of the students of the Sasakawa Fellowship 2024. This field study has provided knowledge and experiences into a new culture and has produced lifelong friendships.

As part of our visit, we visited several institutions, ports, factories, governmental offices and a nuclear power station. We also visited tourist sites in various cities, using all modes of transportation, including air travel, buses, bullet trains, and cruise ships. It was a packed and thrilling experience that created unforgettable memories for me. The knowledge and experience gained about Japan, especially its maritime sector, were excellent.

Visiting The Nippon Foundation and meeting Dr. Yohei Sasakawa:

Among all the memorable moments of the trip, the most significant was meeting with Dr. Yohei Sasakawa at The Nippon Foundation. Despite his busy schedule, he took some time to grace us with his presence. Dr. Sasakawa listened attentively as each student gave brief comments, followed by a photo session. It was truly amazing to witness how kind, calm, and humble his demeanor was for such an important man.

Food and Hospitality:

This was my first time visiting Japan, and as such it was a good chance to taste Japanese foods. In a nutshell, Japanese food is tasty. Of all the foods, I liked sushi most, then salmon and the well-known ramen noodles. Japanese sweets also are very delicious.

Throughout our field study tour in Japan, we got to go to Tokyo, Hakodate, Otaru, as well as Niigata. The hotels provided for our stay were good and there was a hint of automated and digital solutions around every corner. Japanese people are one of the most hospitable people I have ever encountered in my life.

Language, People and Culture:

In most offices we visit, almost all of the experts in different maritime fields present their presentations in Japanese, using translators to translate into English. This is an example of how they hold their language in high regard.

Japanese people are renowned for their humility and modesty. Bowing often sends the message, "I am not above you; I hold you in high regard." Respect is shown by bowing more deeply and for a longer time. Additionally, Japanese people practice both Buddhism and Shintoism simultaneously. We visited both Buddhist and Shinto temples in Tokyo: Meiji Shrine and Sensoji Temple in Asakusa. We were lucky to enjoy the Sanja Festival.

Conclusion:

In conclusion, I can state that my experience of the field study trip to Japan was more than pleasant, it can be described as quite extraordinary. The kindness of the Japanese people, the opportunity to taste and see a lot about their culture and fascinating educational tours are the main reasons to consider this field study unforgettable. I would like to express my sincere appreciation to our professional and friendly tour guides, Miyo San, Emi Shimada San, Reiko Naito San and Kudo San for the great work done and for making our trip enjoyable. Furthermore, I would like to extend my sincere appreciation to the Sasakawa Peace Foundation and The Nippon Foundation for making such an opportunity available to me. They made this inestimable learning opportunity possible through their support and visions.

Md. Rasel Pradania (Bangladesh)



The Japan Field Study Trip 2024 was an immersive and educational experience designed to provide participants with comprehensive insights into Japan's maritime industries, energy sectors, and cultural heritage. The itinerary, spanning from May 11 to May 19, included visits to various cities and significant locations. This report summarizes the activities, highlights, and overall impressions of the trip, with a special focus on the visit with Dr. Yohei Sasakawa, organizational and coordination aspects, educational value, cultural impressions, logistical considerations, networking and engagement opportunities, and industrial and research visits.

Visit with Dr. Yohei Sasakawa

The visit with Dr. Yohei Sasakawa, Chairman of The Nippon Foundation, was one of the trip's most significant highlights. Dr. Sasakawa's extensive experience and deep commitment to maritime issues were evident during the meeting. Participants gained valuable insights into the foundation's role in promoting sustainable maritime practices and addressing global maritime challenges. Dr. Sasakawa emphasized the importance of international collaboration and innovation in maritime policies. His passion for ocean policy research and development inspired participants and underscored the critical role of leadership in advancing global maritime initiatives. The visit was not only educational but also motivational, leaving a lasting impression on all attendees.

Organizational and Coordination

The Japan Field Study Trip was a testament to excellent organizational and coordination skills. From the initial departure from Copenhagen Airport on May 11 to the return on May 19, every detail was meticulously planned. The itinerary included specific times for each activity, ensuring a smooth flow of events. The clear instructions on dress codes, meal arrangements, and transportation logistics contributed to a seamless experience. The provision of JPY 27,000 for each participant at the orientation on May 12 demonstrated foresight in financial planning, allowing participants to manage their expenses effectively. The thoughtful arrangement of accommodations in Tokyo, Hakodate, Niigata, and Shimbashi ensured comfort and convenience throughout the trip.

Educational Value

The trip was rich in educational value, offering participants a diverse range of learning experiences. The courtesy visits to The Nippon Foundation and the Maritime Bureau of MLIT provided in-depth insights into Japan's maritime policies and industry practices. These visits were complemented by presentations and discussions with industry leaders, enhancing participants' understanding of key issues

and innovations in the maritime sector. The itinerary also included visits to industrial and research facilities, such as the Hakodate Research Center for Fisheries and Oceans, Nippon Steel North Nippon Works Muroran Area, and Kashiwazaki-Kariwa Nuclear Power Station. These visits allowed participants to observe advanced technologies and industrial processes firsthand, fostering a deeper appreciation for Japan's contributions to global maritime and energy sectors.

Cultural Impressions

Cultural immersion was an integral part of the itinerary, providing participants with a well-rounded experience of Japan. Visits to historical and cultural sites such as Meiji Jingu, Asakusa, and Hama-rikyu Gardens offered participants a glimpse into Japan's rich cultural heritage. The Tokyo Cruise Ship ride to Hama-rikyu Gardens added a scenic dimension to the cultural exploration, enhancing the overall experience. These cultural visits were thoughtfully integrated into the itinerary, balancing the professional and educational activities with opportunities to appreciate Japan's history, architecture, and natural beauty. The cultural immersion helped participants develop a deeper understanding of Japanese traditions and values, enriching their overall experience.

Logistical Considerations

The logistical considerations of the trip were handled with exceptional care and attention to detail. The itinerary included specific instructions on dress codes for different activities, ensuring that participants were appropriately attired for each event. The provision of transportation, including buses, taxis, flights, and a bullet train, was well-coordinated, ensuring timely arrivals and departures. The arrangement for baggage transfer on May 13, with instructions to separate luggage for four nights, demonstrated thoughtful planning to minimize inconvenience for participants. Meal arrangements, including the provision of lunches on certain days, were also well-planned, ensuring that participants were well-nourished throughout the trip. The smooth execution of these logistical aspects contributed significantly to the overall success of the trip.

Networking and Engagement

The trip offered numerous opportunities for networking and engagement with industry professionals and officials. The courtesy visits, presentations, and welcome receptions facilitated interactions with key figures in Japan's maritime and energy sectors. These events provided a platform for participants to engage in meaningful discussions, exchange ideas, and build professional relationships. The visit to The Nippon Foundation, in particular, allowed participants to engage with Dr. Yohei Sasakawa and gain insights into his vision and initiatives. The networking opportunities extended beyond formal meetings, with informal interactions during lunches and receptions further enhancing the experience. These engagements were invaluable in fostering connections and facilitating knowledge exchange on critical topics relevant to the field of study.

Industrial and Research Visits

The itinerary included several industrial and research visits that provided participants with a comprehensive understanding of Japan's technological advancements and industrial capabilities. The visit to the Hakodate Research Center for Fisheries and Oceans offered insights into marine research and conservation efforts. The tour of Nippon Steel North Nippon Works Muroran Area showcased advanced steel production technologies and industrial processes. The visit to the Kashiwazaki-Kariwa Nuclear Power Plant highlighted Japan's expertise in nuclear energy and safety measures. These visits were complemented by detailed presentations and guided tours, allowing participants to observe operations and interact with experts. The hands-on learning experiences at these facilities were instrumental in deepening participants' knowledge and appreciation of Japan's contributions to global industry and research.

In conclusion, the Japan Field Study Trip 2024 was a resounding success, offering participants a blend of professional, educational, and cultural experiences. The itinerary was thoughtfully designed to maximize learning opportunities and provide a comprehensive understanding of Japan's maritime and industrial sectors. The highlight of the trip, the visit with Dr. Yohei Sasakawa, was particularly impactful, offering deep insights into global maritime issues and policies. The trip's organization and coordination ensured a smooth and enjoyable experience, while the educational value, cultural immersion, logistical considerations, networking opportunities, and industrial and research visits enriched participants' knowledge and understanding. Overall, the trip was an enriching and memorable experience for all participants, fostering professional development and cultural appreciation in the context of Japan's dynamic and innovative landscape.

Jasmine Deneen Bellini (Belize)



The Class of 2024 Sasakawa Fellows at the World Maritime University (WMU) embarked on an unforgettable eight-day field study trip to Japan in 2024. The trip was an enriching experience, encompassing a blend of educational opportunities, cultural immersion, and the creation of enduring memories. A pivotal moment of the trip was the opportunity for the Fellows to personally engage with our patron, Dr. Yohei Sasakawa, who serves as the Chairman of the Nippon Foundation. The itinerary was thoughtfully crafted to provide the Fellows with a comprehensive understanding of Japan's maritime sector, offering us first-hand insights and experiences across diverse regions of the country.

Our journey began with a warm welcome at Haneda Airport in Tokyo, where we were greeted by Miyo and Emi from the Sasakawa Peace Foundation support staff. Their exceptional time management skills and detailed explanations of various cultural practices in Japan were instrumental in our full immersion into Japanese customs. They taught us simple yet profound phrases such as "good morning," "how are you?" and "thank you," which not only helped us communicate but also deepened our appreciation for Japanese culture. Their guidance, coupled with the traditional bow and its significance in conveying respect, left a lasting impression on our group and enhanced our interactions with each other and everyone we met. It was a remarkable way to introduce us to the culture and express gratitude for Japanese customs.

Networking and cooperation are not just important but absolutely vital in the maritime industry, particularly for Japan. This was a key theme of our trip, as we had the privilege of visiting various key maritime sectors in Japan, scattered across the country. We had the opportunity to meet with representatives from the Maritime Bureau of the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT), The Nippon Foundation, Hokkaido University Fisheries Sciences, Hokuriku-Shin'etsu Transport Bureau and the Port of Tokyo. These visits offered us a glimpse into the importance of their work and how it contributes to Japan's maritime sector. The interaction included question and answer sessions, where we delved into best practices and Japan's progress in the maritime sector. The key takeaway from these visits underscored that the maritime industry is a complex network of interconnected entities, including shipping companies, port authorities, logistics providers, and regulatory bodies. Effective networking enables these stakeholders to collaborate, share information, and coordinate activities, leading to smoother operations and improved efficiency, which is particularly vital for Japan as a maritime nation. In the face of global challenges such as piracy, environmental concerns, and economic fluctuations, cooperation among maritime stakeholders is not just beneficial but absolutely essential for addressing these issues collectively, and this holds true for Japan as well.

By sharing best practices, intelligence, and resources, the industry can enhance safety and security while promoting sustainable practices, which is of utmost importance for Japan's maritime activities.

Continuous and growing connections through networking play a crucial role in fostering innovation and knowledge exchange, driving technological advancements and operational improvements that are vital for Japan's maritime industry to maintain its competitive edge. Collaboration among maritime professionals, researchers, and policymakers can lead to developing industry standards, regulations, and initiatives that benefit the entire sector, including Japan. As students, we are grateful for the opportunity to contribute positively to our own countries and the global maritime industry. Through this scholarship, we can gain knowledge and skills that can be applied to address maritime challenges in our respective nations and beyond, including Japan. In addition, the chance to visit and witness first-hand Japan's work in the maritime industry through site visits adds a new dimension to our learning experience. This scholarship presents us with a challenge to contribute positively to reducing the negative impacts on our planet, which is particularly significant for Japan's role in the global maritime industry and the well-being of our own countries.

After completing the formalities of the trip, we had a full day to appreciate and explore the beauty of Japan. First, we were taken to see the shrines and give explanations about the sacredness of the location. As a group, we participated in the purifying and wishing rituals at the shrines, which was an amazing experience. While in Tokyo, we had the opportunity to attend the Sanja Matsuri Festival, one of Tokyo's most famous festivals held on the grounds of the Asakusa shrine. We could walk around and view the different activities during the festival and purchase souvenirs to commemorate our trip. After the festival, we went on a lovely ferry cruise through the city to the Japanese Gardens. The garden was absolutely breathtaking, allowing us to experience the natural and age-old beauty of the garden and its contrast with the more modern building construction in the background. Our time in the garden provided great relaxation and was a fantastic way to end the trip. The tour allowed us to appreciate Japan's rich culture and natural beauty profoundly. Every moment was a testament to the country's unique allure, from the sacred shrines to the lively festivals and serene Japanese Gardens. The memories of this trip will forever be etched in our hearts, serving as a reminder of Japan's captivating beauty and experiences.

This trip allowed the fellows to witness Japan's work in the maritime industry, adding a new dimension to their learning experience. The experience presented a challenge to contribute positively to reducing the negative impacts on the planet, emphasizing the significance of their roles in the global maritime industry and the well-being of their respective countries. In addition to the educational aspects, the trip provided opportunities for cultural immersion and appreciation of Japan's rich heritage and natural beauty, leaving enduring memories for the fellows. Finally, the personal engagement with Dr. Yohei Sasakawa, Chairman of the Nippon Foundation, was a pivotal moment, highlighting the significance of

his patronage and the impact of the Sasakawa Fellows program on the maritime community. This experience will be engrained in our hearts, adding a renewed sense of purpose for our positive contributions to the global community. Arigato!

Da Ly (Cambodia)



I am grateful to be a part of the World Maritime University Sasakawa fellowship program as a student in the class of 2024. I would like to thank The Nippon Foundation for providing us with the wonderful opportunity to participate in a field study trip to Japan from May 11th to May 19th, 2024. During the trip, we had the chance to visit various sites in Japan, which was an incredibly enriching and enlightening experience for the students of World Maritime University. It offered valuable insights into the country's culture, port operations, technological advancements, and environmental practices. The trip provided a well-balanced mix of educational, cultural, and experiences of the maritime sector, making it a truly transformative journey for all of us.

As a Port Management student, the site visit to Tokyo Port provided us with a comprehensive and enlightening experience. It significantly enhanced our understanding of modern port operations, management practices, and technological advancements. The visit offered an in-depth look at one of Japan's busiest and most efficient ports, highlighting both its operational excellence and innovative approaches. In addition, the visit highlighted Tokyo Port's commitment to sustainability and environmental protection. We learned about various green initiatives implemented at the port, such as shore power systems to reduce emissions, energy-efficient machinery, and comprehensive waste management programs. These practices underscored the growing importance of sustainability in port operations and management. During the field study, we visited Tokyo's Ministry of Land, Infrastructure, Transportation, and Tourism. The program also included visits to other parts of Japan, such as Hakodate and Niigata. As Sasakawa Fellow Students, we had the opportunity to meet with professionals in the maritime industry to exchange experiences.

During our visit to Hakodate, we toured the Hakodate Research Center for Fisheries and Oceans to learn about their role in promoting research and development and fostering collaboration between industry, academia, and the government in the fisheries and oceans sectors. Additionally, we also visited The Hakodate Shipyard to gain insight into the shipbuilding process and the operations of the Nippon Steel Company. In Niigata City, we visited the Hokuriku-shin'etsu District Transport Bureau to learn about the various divisions such as Ship Inspector, Ship Tonnage Surveyor, Seafarers Labour Standards & License Division, Safety Management & Seafarers Labour Inspector, and Port State Control Officer. We also went to the Kashiwazaki-kariwa Nuclear Power Station, located in Kashiwazaki city and Kariwa village, approximately 220 km northwest of Tokyo along the coast of the Sea of Japan. We examined the plant's operations and observed the design features of their BWR

and ABWR. Additionally, we studied the safety measures in place to protect the plant against earthquakes and tsunamis.

During our field study trip, we not only visited various sites to gain knowledge of the maritime sector in Japan, but we also explored many famous places to understand Japanese culture and society. These included the Meiji Jingu Temple and Asakusa, which are popular tourist destinations. We also had the opportunity to taste some of the best food in Tokyo, visit the beautiful Hama-rikyu Gardens, take a Tokyo Cruise Ship tour, and explore the Niigata City Aquarium, Marinepia Nihonkai, to learn more about the marine animals' life.

As we go back to our paths, let's remember the knowledge, experiences, and values we have gained. Let's strive to embody the spirit of innovation and resilience we have witnessed in Japan. Let our time here empower us to make meaningful contributions to the maritime industry and international cooperation. I would like to express my gratitude to Chairman Yohei Sasakawa and the Sasakawa Peace Foundation for making this amazing opportunity possible. Let's look forward to a future where our shared experiences will guide us towards a more sustainable and interconnected world.

Sovisal Srey (Cambodia)



From the 11th to 18th May 2024, the World Maritime University's Sasakawa Fellowship student (S24) had the opportunity of visiting Japan. As a student coming from developing countries, a trip to Japan was a great chance for me and my colleagues from other countries to visit the country. Japan is a developed country, especially in terms of technological advancement. Hence, a visit to learn about maritime industry related was a great experience that allowed me and my colleagues to see the deep connection between Japan and the sea.

From public institution to ports where large numbers of containers are loaded to shipyard incorporating the most advanced technology, these facilities embody how Japan's capabilities and dedication to the maritime sector. Apart from the business sector, we also had the chance to visit some research facilities related to marine science to see how marine life and ocean ecosystems should be protected. In connection to the business and environment-related maritime, we also had the chance to visit shipyard (Ship building) and Nippon steel factory. These may not be directly related to maritime; however, the steel produced in Japan is being used to build vessels that contribute to the maritime sector. One of the main highlights of the visit was a trip to the headquarters of the Ministry of Land, Infrastructure, Transport and Tourism, and Hokuriku-Shin'etsu District Transport Bureau in Niigata in which we had the opportunity to learn more on how Japan is dealing with maritime matters at both the National Level as well as regional level. In addition, we also had a chance to visit Nuclear Power Plant.

The trip gave us a chance to travel a wide part of Japan from Tokyo to Hakodate and Niigata before returning to Tokyo, which we experienced to travel with all modes of transportation in Japan ranging from flight, Ferry, and Bullet train (Shinkansen). During the trip, we had the greatest honor to pay courtesy call on Chairman Dr. Yohei Sasakawa at The Nippon Foundation Headquarters. Beyond the academic aspect, this field trip also provided an opportunity for personal growth, cultural enrichment as well as building a strong bond of friendship among the Sasakawa Fellowship. Food and cultural experience were also one of the best experiences from the trip. We had many Japanese cuisines as well as sightseeing at the famous tourist sites in Tokyo. This gave us a unique experience to foster a deeper understanding and appreciation of the rich culture of Japanese society.

Last but not least, I would like to acknowledge the generosity of the Sasakawa Peace Foundation for providing us the necessary resources to support our study at World Maritime University and to make this trip possible. The financial support, logistics and overall organization of the trip were seamless, allowing us to focus on achieving the two main objectives of the trip, which is one to explore and

understand about the maritime sector in Japan as well as the chance to spend more than valuable week with Sasakawa Fellowship colleagues. It enabled us to exchange ideas, opinion as well as getting to know who we had previously interacted and with who we have not had much of a chance before.

Once again, I would like to express my thank to the Foundation for making this program possible, as well as the various site-visiting contributing public and private entities for their support. I also would like to personally thank the organizing team; they have been very incredible in helping and supporting us during the trip. I believe that the experience and networks we achieved during our trip will surely contribute to the future development of the global maritime industry.

José Miguel Jaramillo Mendoza (Ecuador)



THE NIPPON FOUNDATION

The highlight of the trip was meeting Mr. Yohei Sasakawa, Chairman of The Nippon Foundation. He addressed the WMU delegation and was able to share his knowledge and experience. He highlighted the objectives of the field study: understand how Japan manages the maritime sector and most importantly, to create and strength links and connections with Sasakawa Fellows and maritime workers in general.

He had few exchanges of words with some of the students, showing his understanding of the reality of each country that he has being able to visit throughout his life.

MARITIME BUREAU OF MINISTRY OF LAND, INFRASTRUCTURE, TRANSPORT AND TOURISM (MLIT)

Introduction by Ryu Nara, International Planning and Coordination office, General Affairs Division, Maritime Bureau,

The General Director gave introductory remarks and welcomed all the WMU delegation and highlighted the work is done by the University, plus he talked about what Japan is doing in the maritime sector in general terms.

Overview of Japan

Japan has a population of 123 million. The country is surrounded by the sea. With a land are of 378,000 Km² with 66% forest and a coastline of 34,000 Km.

Challenges Facing Japan

Japan experiences major natural disasters every year, such as typhoons and earthquakes. The country does not have natural resources. It also has a low birth rate and high aging population in addition to problem with seafarer retention.

Organization of MLIT

The ministry is one of the largest in Japan with 11 bureaus and 4 external institutions such as the Coast Guard.

On the questions and answers stage

It was asked about how the country manage their large forest area as well as the coastlines from an environment and sustainable aspect.

As a clarification the topic of employment and food security are responsibilities of other ministry, however answering the question, there is an issue with job opportunities between the rural and urban areas.

About the forest industry, there are 3 policies related to this aspect. One talks about the protection of lumber in order to have a sustainable use from it. The second talks about preservation of the environment by designating different areas and prohibiting chopping down trees in them. With this, some challenges are created related to managing the growing population that Japan has.

About safety of the coast line, the Coast Guard has eleven districts which are in charge of providing safety to the nation in maritime. And about food security, fish is the major source of food, and how Japan protects this is by ensuring fisherman have the right directions in order to obtain fish on a sustainable manner.

Introduction of Port and Harbours in Japan by Masayuki Tanemura, Director of International Planning Office, Ports and Harbours.

Overview of Japanese's ports

More than 99% of Japan's trade is done by maritime transport. Most people that live in Japan, are located near by ports.

Japan has 5 strategic international Hub ports, 18 International hub ports and 102 major ports, mainly in the south of coast.

Port development, management and operation scheme in Japan

Japan has 3 types of Port Management Body:

Municipal Government

Administrative association

Port Authority.

The national Government develops the policy, the Port Management Body develops the Port Plan, however it is reviewed by the Government.

Recent topics on port policies

Disaster prevention

On average, 3 typhoons hit Japan every year causing flooding, containers drifting and other problems related. Counter measures have been implemented such as wind resistant container stacking, lashing of empty containers, mobile guard fences, rising electrical equipment to prevent electrical problems.

About managing climate change, Japan's policy is developed by following these steps: Predict future external forces, then conduct vulnerability assessment, select adaptive measures and implement those measures.

Carbon neutral port (CNP)

Japan wants to achieve zero net carbon emissions by 2050. The CNO has to parts. The first one is about decarbonation of terminal operation and the second is about decarbonization of industries located in poor areas.

On the questions and answer part, many questions were asked related to the zero carbon emissions in Port Operations. The general answer about this, is that Japan has just started this project with different

PMBs and are working towards getting data on how it is working. Japan is working together with USA to develop the right technology to achieve common goals.

In terms of autonomous ports, Japan is behind compared to more advanced countries, specially because there are challenges related to policies regarding labour.

Japan Coast Guard

The presentation was done by CAPT. Hayashi.

JCG is a law enforcement agency, no military function and looks forward to more cooperation opportunities.

About history, the stage after World War 2 it was called “The Sea of Darkness” because of the state of the country. Maritime security was inexistent. The JCG was established in May 1958 in order to deal with these challenges with the motto Humanity and Justice. JCG is prohibited to engage in military actions and even train as such.

Japan’s jurisdictional waters are 10 times bigger than the land territory. The JCG has more the 455 vessels. In 2016 a permanent patrol near the Senkaku Islands was stablished due to its importance to the nation. The service deals with maritime threats from illegal fishing and potential terrorists. They conduct rescue operations, being the Special Rescue Group the main asset to do so. JCG also works protecting the environment by developing different programs and acting with the National Strike team in order to response to oil spills. The service also manages the traffic control system in different areas of the country.

The Coast Guard has 97 aircrafts between fixed wings, rotatory and remotely piloted aircrafts. There are 14,788 personnel in the service. The service is part of the North Pacific Coast Guard Forum and the Heads of Asian Coast Guard Agencies Meeting. They also came up with the idea of having a Coast Guard Global Summit with countries all over the world, aid by The Nippon Foundation.

Nomunication

Combination of NOMU “drink” and Communication. The goal is to improve collaborate with each other by bonding outside the formal working environment.

During the questions and answer’s part:

About holding ships that participated in criminal acts, the coast guard holds the vessels as evidence during the duration of the trial.

The Coast Guard does not deal with IUU fishing directly but its officers can cooperate with the Fisheries Ministry to deter this activity.

The JCG does have a war time law where it will fall under the Ministry of Defense. Currently it falls under the Ministry of Transport.

Maritime Policy toward achieving Carbon Neutrality, by Shinnosuke HADA, Deputy Director, International Negotiation Office, Ocean Development and Environment Policy Division, Maritime Bureau, MLIT.

Introduction

International shipping has a very complex structure. Many stakeholders are responsible to what ever happens or will happen in the maritime sector. About the GHG emission from international shipping the IMO has adopted a non discrimination and no more favorable position. Globally, international shipping is responsible for 2% of the GHG emissions and Japan is almost 3%.

Overview of the IMO

The IMO is a specialization agency of the United Nations which is responsible to create measures to improve the safety and security of international shipping.

Initiatives of the IMO

The main initiative is the 2023 IMO GHG Strategy on reduction of GHG emissions from international shipping. The targets are by 2030 a 30% reduction, 2040 is to have 70% reduction and by 2050 reach zero or near zero emissions.

The measures introduced are economic related on the basis of maritime GHG emissions by a pricing mechanism and also technical element measures by regulating the phased reduction of the marine fuel's GHG intensity. Its key to have a combination of both measures, the goal can not be reached by implementing only one. On this matter, Japan proposed a feebate mechanism.

The expectation is to transition from HFO to LNG and then to zero emissions fuels such as hydrogen and ammonia.

International Framework

Japan signed the Clydebank declaration at the COP 26 Transport Day in order to support the establishment of green shipping corridors.

The country is also working to establish low and zero emission shipping corridors for Quad countries in the Indo Pacific.

In the G7 meeting, it was promised to support the establishment of at least 14 green shipping corridors.

Technology Development

In order for ships to be able to use low or zero emissions fuels, they need the proper facilities to function properly. Japan is developing technology such as hydrogen and ammonia fueled engines as well as fuel tanks and fuel supply systems. The shipyards need to also participate in the technology development.

On this matter, Japan is developing safety guidelines to manage properly the ammonia and hydrogen-based fuels.

Coastal Shipping

In order to reach the established goals is important to pursue further energy saving on ships and support the advancement of technology.

There are other examples that can be analyzed such as: battery propulsion ship, LNG fueled ship, hydrogen fueled ship and hydrogen fuel cell ship.

During the question-and-answer part:

Japan has identified 3 issues when talking about creating policies regarding the GHG emissions cycle. When asked about considering nuclear energy the answer was that Japan stopped considering nuclear energy on ships 40 years ago and most likely will not be using it soon as alternative energy for the zero GHG emissions targets.

HAKODATE RESEARCH CENTER FOR FISHERIES AND OCEANS

The concept of international fisheries and ocean city.

Hakodate is a city very close to the sea, not only in location but also in culture and economy. The concept was developed by thinking in 3 areas: geographical and natural conditions, cumulation of academic and research institutions and cumulation of fisheries and marine related industries.

Due to the warm and cold currents that interact in the region, Hakodate is privilege with good fishing areas which also allows to conduct academic research. The dynamic is to bring together all the stakeholders in the town to improve the different sectors economy but having a sustainable use of the living resources.

Hakodate Research Center for Fisheries and Oceans.

The final objective is to allow the community to interact with the sea and science. The center has facilities that allows sea water to flow in and study the different species. It also has 3 research vessels and a large experimental tank to conduct the research, mainly of Japanese squid and Kings Salmon.

Hakodate Mariculture Project

The project was initiated due to the reduction of fish in the region which had a negative impact in the fishing industry. They need marine products that can be obtained systematically and transition to a sustainable fishing industry. In the project, the first complete king salmon farming technology of Japan was established.

This project helps to improve carbon neutrality and create strong and high profitable industry structure. It also focuses in enhance the local population education and research institutions.

THE HAKODATE DOCK CO., LTD.

Introduction

The company was established in November 7th, 1896 by Viscount Eiichi Shibusawa. The current President is Makoto Hattori. The company has two locations, Hakodate and Muroran, both in Hokkaido and it's motto is made of 3 parts:

Let's make good work at reasonable cost.

We will do our best to develop Hokkaido and Japan.

Let's build company where our employees will be happy.

Products

Currently the main product of the company is the High Bulk 40E/40SE which is a 40,000 DWT handy size carrier with LOA of 182.9 m and beam of 31.6 m. The company builds all kinds of ships, such as: passenger ships, ferries, car ferries, etc. It also repairs ships due to different casualties or accidents. The most remarkable aspect is that it provides services to the Navy ships, which means that they need to follow very strict security protocols. For the repair part there are 3 docks.

The company has also built bridges and customized industrial machinery such as cranes. For the ship building aspect, the company follows the basic process which is: basic design, detail design, building, launching, outfitting and sea trial.

NIPPON STEEL

The formal presentation covered the general aspects of the company. It is the biggest steel company in Japan for several years and is currently number four in the world. It provides a wide range of products to its costumers depending on the needs. It has over 5,000 employees in all of the different facilities.

The explanation of how steel is produced is that after getting the raw material, it goes through different processes at high and low temperatures with added alloys in order to strength the material at the required characteristics or needs. Then it is shaped accordingly and set apart for shipping.

After the presentation, the delegation visited different facilities where the steel was being processed at different stages. It was noticed that many processes were automated, however people need to verify that different parameters are met for safety and quality reasons. The company facilities also have a port where the steel is loaded and shipped to different parts of the world.

The steel manufactures is used in all kinds of industries; shipping, cars, construction, machinery, etc.

HOKURIKU-SHIN'ETSU DISTRICT TRANSPORT BUREAU

Introduction / Maritime Department

The visit started with the Director General opening remarks, welcoming the delegation, followed by a presentation of the Maritime Department by Kazuhito Momma. The information was about how the institution operates and the different locations in both the east and west coast of the Regional offices.

The Maritime Department is divided in 9 divisions covering the safety, environmental and personnel aspects of shipping.

Different Inspectors

The following presentations where about the different inspectors that the department has in order to fulfill its duties. The ship inspectors basically perform the flag state surveyors in order to register ships according to the different international and national regulations.

The ship tonnage surveyors have to verify that new and existing ships comply with the regulations. The Safety Management & Seafarers Labour Inspectors verify that seafarers are getting all their rights from the company. The inspectors verify not only the ship, but also the companies. They conduct a Safety

Management Audit to confirm the safe operation of the ship by following companies' policies. The inspectors rely on the Marine Transport Act and the Coastal Shipping Act as legal resource.

When it comes to Port State Control Officers, the situation is more complicated because the agency only has 7 inspectors. However, they have trainees and have the legal tools to bring tonnage inspectors and safety inspectors to perform PSC inspections after proper training. During the presentation it was stated that Japan has a relative high number of ships detained, even though there has been a ship in mentality from being very strict to being more understandable of certain situations. The most important concept for an inspector is to understand when an observations should end in detention.

KASHIWAZAKI-KARIWA NUCLEAR POWER STATION

Japanese energy situation

There are several countries that have to import energy being Japan the one with the highest need, among South Korea, Italy and others. Japan imports fossil fuels from around the world, which approximately 90% comes from the middle east. After experiencing two oil crises, in 1970, Japan shifted the use of energy from oil to nuclear and natural gas, but after the Fukushima Daiichi Nuclear Power Station accident, imports of fossil fuels increased. Japan has diversified the import of different types of energy (nuclear, natural gas, oil, coal, hydroelectric, and others). Every day, thousands of tankers move around the country to provide energy to Japan, however in order to improve the energy situation, the state needs to be able to provide more nuclear power.

History of the Plant

The plant is located about 200 km north west of Tokyo in the west coast line of Japan. The power plant's history started back in 1969 with the adoption of resolution for the plant. In 1978 the construction works started and the operation began in 1985. The plant has a coast line of 3.2 km. The total area is 4.2 km². The plant has 4 units (1-4) in the Kashiwazaki City area and 3 units (5-7) in the Kariwa Village area.

Fukushima Daiichi Nuclear Power Station Accident Overview

In March 11, 2011 at 2:46 PM an earthquake occurred near the coast, they had units 1, 2 and 3 in operation. Power supply system was damaged and offsite power supply was lost. The emergency diesel generators started automatically and began cooling the reactors. After 45 minutes a Tsunami hit the plant. Sea water reached altitudes of 10 meters in the plant. There was not electricity for back up in order to provide cooling to the system. Reactor cores were damaged by loss of power source and cooling for long period. Later, explosions occurred which ended in the emission of radioactive materials.

Current situation of the Plant.

The Boiling Water Reactor design has in the middle the reactor core. They applied heat to the uranium fuel and they also add water in order to produce steam. This allows the movement of a turbine in order to activate the generator. The remaining goes to the condenser which allows to down flow it with recirculation of water in order to keep using it.

There are two types of units. The 1-5 units are BWR-5 and the units 6 and 7 are the most advanced with the ABWR type.

As mentioned earlier, after the accident, several safety measures were set in place at the Kashiwazaki-Kariwa Nuclear Power Station. The safety system to operate the plant relies primarily in the ability to shut down the plant in order to act accordingly, depending if you need to lower temperature or contain any spilling.

During the emergency the control rod is pushed upwards in order to shut down the reactor. For the cooling down system the process is simple, it only provides water to cool down the entire machinery. The system has a heat exchanger in order to get rid of the heat.

About the containment system, its main goal is to contain radioactive materials within fuel pellet, fuel tube, reactor pressure vessel and primary containment vessel to avoid any environmental impact. The system is made of 5 walls with different degrees of capabilities in order to contain the spill accordingly.

Improvement in the Plant.

The government implemented better design requirements from the lessons learned:

Prevent trouble, prevent escalation to accident, prevent core damage and mitigate impact after core damage.

To prevent flooding, they have built a wall by the coastline to protect the units from the water, as well as higher walls near the constructions and better drain system in case that water reaches the inside of the Units.

To secure power sources in case of emergencies they have air cooled capability vehicles and also high-pressure alternative cooling system as well as fire fighting vehicles, seawater alternative heat exchange and other generators.

As additional measures, in Unit 5, an emergency response control room was installed to be able to manage any emergency, 20 people are always on call. There is training conducted on this regard periodically.

After the presentation the delegation was split in two groups where they went around the visit hall as well as to a site tour.

During the visit hall the students learned how the nuclear reactor works from several scale replicas of the different components of the system. Many technical aspects were explained as well as how workers perform their duties in the plant.

The site tour started in the observatory with the view of the water reservoir. Then it went around all the Units, which are surrounded by impressive infrastructure,

TOKYO PORT

The visit was conducted in a small vessel in order to visit the different terminals that the port manages. The port is in charge of the major cargo handling in Japan, which relates to one of the biggest influences

in the country's economy. It has over two hundred berths where more than 4 million of TEUs are handled every year. It also has ferry and cruise passenger's facilities and services.

The terminals are separated from each other in order to allow ships to properly maneuver and conduct operations in a safely manner. The port has the ability to provide the different services such as towing, fuel, electricity, etc. In the channel there are dredging works happening constantly in order to maintain safe navigation characteristics.

Aji Keway Bangura (Gambia)



As part of the arrangement for WMU Sasakawa sponsored candidates, we had a field study visit to Japan. We departed from Copenhagen Denmark on the 11th of May, 2024. The trip started typically with our arrival at Haneda airport Tokyo on Sunday the 12th of May, 2024. We were received and checked in to our hotel room at the Toshi Center Hotel. We rested and prepared for the official visit slated for the next day.

The visits started with a courtesy call to Mr. Yohei Sasakawa our generous host and sponsor and founding father of The Nippon Foundation, sharing a brief moment of pleasantries and introduction with him at The Nippon Foundation Headquarters, the brief moment spent with him and the humility displayed by him was captivating and really served as a major reminder on why irrespective of our position in life, helping others and remaining humble is the only true path to eternal happiness.

We proceeded on a courtesy visit to the Maritime Bureau where we were received by Mr. Atsushi Kaiya the Director general of MLIT, his team made various presentations from overview of the agency to specific departments such as the maritime bureau, the port and the coast guard presentations which were more applicable to our program.

We were treated to a welcome reception by our honorable hosts where numerous dignitaries were in attendance and we were able to build our networking opportunities with senior diplomatic representatives from our countries to top industry players who all came in honor of the invitation of our host.

We departed Tokyo the next morning for Hakodate by flight and after checking in to Premier Inn hotel, we paid a visit to Hakodate research center for fisheries and oceans where we saw different processes from researches on sustainable fishery, hatchery and fish farming with researches on how to improve fishing production in different experimental tanks and we were also introduced to the ongoing Hakodate Mariculture project where there is plan of building a new city from the oceans due to decreasing rate of catch of fishes in the ocean.

The Hakodate Dock Co. Ltd. where we were exposed to part of the ship building process showed us a long history of a strong shipbuilding yard with specification in bulk carriers with unique capabilities, the years of experience gathered in the yard shows in the quality of vessels they continue to build, the expertise displayed by the yard workers from design to construction phase could be seen with different

vessels under construction during our visit, other services such as dry docking are also rendered in the yard. The yard has also been able to serve as one of the major reasons for the rapid development of the city providing employment opportunities to citizens and development of infrastructure for the inhabitants.

On Wednesday we visited the Nippon Steel factory at the Nippon Works Muroran Area where we were taken round the facility and introduced to the steel making process, the important usage of the steel from the factory in the automobile industry from engine parts to braking systems and other usages such as suspension bridges was emphasized and the application of the finished products which goes through a robust production means ensuring quality of highest standards are obtained through state of the art technologies and quality control check in the factory. We departed to the Otaru port from where we went onboard the Shin Nihonkai Ferry cruise on a trip to Niigata.

On Thursday on arrival at Niigata, we visited Hokuriku-Shin'etsu District Transport Bureau and Kashiwazaki-Kariwa Nuclear Power Station where we were given a detailed brief on the operations of the plant, from the necessity to have a nuclear plant due to Japan energy situation to safety measures against earthquakes and tsunamis, to a site tour including visit to seismic isolated building, power supply vehicles and water reservoirs before checking in at the hotel JR-EAST HOTEL METS NIIGATA.

On Friday we made a stop at the Hotel Nikko Niigata Observation Room and Niigata City Aquarium before departing later by a bullet train back to Tokyo where we visited the Tokyo port and checked back into our hotel Daiwa Roynet Hotel SHIMBASHI. Saturday was a site seeing tour day where we were taken round Tokyo and visited some quite interesting places from religious houses to Gardens and explored the beautiful sceneries of Tokyo.

This was such a memorable experience for me personally as I get to experience first-hand the culture of Japanese people, their way of life and the dedication they put into their work. I am extremely honored to be part of the lucky few who get to experience these amazing unforgettable moments and build long lasting memories.

I would like to extend my heartfelt sincere gratitude to Mr. Yohei Sasakawa and his team for the endless effort they continue to put into this program and supporting our journey, this means a whole lot to us, and we can never take this for granted. I cannot wait to start giving back to my community no matter how little I have to start from. Mr. Sasakawa's story is truly an eye opener and encouraging. His story will serve as motivation to me that nothing is not achievable with proper dedication and hard work. I remain eternally grateful.

Tiffany Andrea Skinner (Guyana)



This report summarizes the field study conducted in Japan. The primary objective of this field study was to gain insights into Japan's maritime and logistics infrastructure, and industry practices. This objective was accomplished and understood, making the Sasakawa Fellowship Study Trip 2024 exceptional. It was an amazing opportunity to be part of such a diverse group. The knowledge gained about Japan's maritime sector and culture will always be remembered. Visiting unique places and agencies provided valuable insights into Japan's maritime industry. The ports play an integral role in Japan's economy. These ports are equipped with state-of-the-art facilities and technologies to handle cargo efficiently. They serve as vital hubs for Japan's import and export activities, contributing significantly to the national economy. The steel industry was quite a remarkable experience and its contribution to Japan's economy and its industrial and economic framework was very interesting. Sustainable practices they used and innovations to reduce environmental impact are quite something. The approach to business and the country's interest in ocean research is outstanding. The other agency's visit gave us insights into the maritime industry, including its organizations' roles, functions, and influence on the country. These agencies are mostly interlinked with each other. All the agency plays a remarkable role in Japan's maritime cluster from the Maritime Bureau to the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). They highlighted Japan's commitment to innovation, sustainability, and international collaboration in the maritime sector. The cooperation and coordination among different sectors for the transparent flow and exchange of information are exemplary, it makes Japan outstanding and is worth emulating by other countries. The cooperation between the agencies and its people creates an interesting maritime sector for Japan. The Networking, learning, and sharing of insights on the industry from other officials were truly remarkable. The places visited in and around Japan, meeting Dr. Sasakawa and his amazing team is one that will always be remembered.

The culture, accommodations, clothing, dishes, and tourist sites were all fascinating. Learning about Japan's cultural history and the way of Japanese living was truly enriching.

The delightful treats provided a pleasurable experience, from the renowned Japanese sake to the delectable sushi. The Japanese festivities were amazing, seeing the various dresses, and all the sweet delicacies that the market had to showcase was truly emulating. The country is filled with amazing opportunities and fascinating things that are remarkable for one to learn.

In conclusion, the days in Japan were well spent. Every agency and place visited has its uniqueness and interest. The extraordinary and diverse culture of the country, its maritime industry, and other agencies,

along with its people all play an integral role in shaping Japan's economy. Additionally, the level of knowledge learned, and the fun and laughter shared among an amazing group of people will surely be cherished and remembered.

One keynote, "Time is an important component of Japanese culture".

有り難う御座います

Simranjeet Singh (India)



12 May

Ahoy Tokyo

As the airplane approached Tokyo, an overwhelming sense of excitement and anticipation filled me and made me forget twelve hours of the flight. As the airport approached, I could barely contain my enthusiasm. Looking out the window, I caught my first glimpse of the Japanese landscape - a patchwork of lush green fields, modern cityscapes, historical landmarks, and distant mountains. I felt a profound appreciation for the opportunity to experience a country renowned for its technological advancements and rich cultural heritage. The anticipation of new experiences, learning opportunities, and cultural immersion made the approach to Haneda Airport an unforgettable moment. This wasn't just a field trip; it was the beginning of a transformative experience that would shape my understanding of the global maritime industry and Japan's unique role within it.

Stepping off the plane, I was immediately struck by the efficiency and organization of the airport. It was a fitting introduction to a country known for its precision and attention to detail. Awaiting outside, was the Sasakawa Peace Foundation staff and Miyo-san, our Japanese guide, who welcomed us with her unforgettable smile.

Our journey began in earnest as we boarded the bus that would take us to our first destination. As the cityscape unfolded before us, I knew that the next few days would be filled with discoveries, challenges, and unforgettable moments. The excitement of that first day set the tone for what would prove to be an extraordinary and enlightening field study trip. We were helped with an orientation programme to have a basic understanding of do's and don'ts, which came in very handy during the subsequent days.

13 May

Sasakawa Peace Foundation

For some students who took motivation from the words of Mr. Unno, the Executive Director of The Nippon Foundation, during his visit to WMU, Malmo, the day started a bit earlier than the rest of their friends. Following Kudo-san, a man with a big heart, smile, and umbrella, this group of WMU students made their way through busy morning trains to the Sasakawa Peace Foundation Office. The Global Ocean Literacy Initiative (GOLI) was introduced to interested staff members and Dr. Hide Sakaguchi, Executive Director of the Sasakawa Peace Foundation, by these WMU students who were interested in ocean literacy activities. Their polite suggestions and sincere interest in our initial progress were greatly appreciated.

The Nippon Foundation

During the visit to The Nippon Foundation, the WMU students had the honor of meeting Dr. Yohei Sasakawa, who delivered an inspiring speech. He elaborated on the foundation's goals, emphasizing their commitment to maritime safety, environmental protection, and educational advancement. He expressed his delight in seeing Sasakawa fellows achieving remarkable success worldwide. Students also got the chance to introduce themselves to Dr. Sasakawa, while engaging warmly with the students, he shared his vast wisdom and knowledge, recounting fond memories of their respective countries and fostering a sense of global camaraderie. He passionately spoke about the importance of lifelong collaboration among Sasakawa Fellows, encouraging them to continue building strong, supportive networks to drive positive change in the maritime industry.

Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

Director General of the Maritime Bureau, MLIT, Mr. Atsushi Kaiya, welcomed all WMU students and briefly discussed Japan's present maritime sector policies. Mr. Ryu NARA from the International Planning and Coordination Office, General Affairs Division, Maritime Bureau, MLIT, provided an introduction to Japan and MLIT. The MLIT, administers four external organs (including the Japan Coast Guard) and 11 bureaus (including maritime-related institutions such as the Maritime Bureau and Port and Harbours Bureau).

The second presenter, Masayuki Tanemura, Director of International Planning Office, Ports and Harbours Bureau, emphasised the importance of Japan's ports, with maritime transport accounting for over 99% of trade and the majority of the population residing near these ports. Japan has 5 strategic ports, 18 international hub ports, and 102 major ports, mostly along its southern coast. Municipal governments, administrative associations, and port authorities control the ports, with policy development overseen by the national government. Current port policies prioritise catastrophe prevention, climate change management, and becoming carbon neutral by 2050. Recent initiatives include wind-resistant container stacking, elevating electrical equipment, and collaborating with the United States on zero-carbon technology. Despite being behind in autonomous port development due to labour policy problems, Japan is aggressively working on sustainable port operations and decarbonising terminal and industrial activity in port areas.

The third speaker, Captain Hayashi, emphasised the Japan Coast Guard's (JCG) status as a law enforcement organisation with no military functions. JCG was created in May 1958, during the post-World War II "Sea of Darkness," with the goal of restoring maritime security based on the ideals of humanity and justice. Japan's territorial waters, which are ten times the size of its land, are monitored by over 455 boats, with a permanent presence near the critical Senkaku Islands since 2016.

Finally, Shinnosuke Hada, Deputy Director, International Negotiation Office, Ocean Development and Environment Policy Division, Maritime Bureau at MLIT, discussed Japan's maritime policy towards

carbon neutrality. Japan is planning its transition from heavy fuel oil (HFO) to LNG, and eventually to carbon-neutral fuels such as hydrogen and ammonia.

Evening Reception

After the formal interactions and presentations during the day, the evening reception provided the venue to interact informally with various guests over dinner. The pure essence and meaning of *Nomunication* as brought out by Captain Hayashi during day was experienced at the Toshi Centre Hotel. The atmosphere was colourful and joyous with WMU students donning their traditional dresses, the occasion became electrifying with WMU students presenting their WMU song to the guests. I can evidently say the song was not only sung by the students but also made the WMU alumni hum along harmoniously and the other guests also enjoyed it to their core.

14 May – Hakodate

The Hakodate Research Center for Fisheries and Oceans

On arriving Hakodate via domestic flight, we directly headed for the first site, the Hakodate Research Center for Fisheries and Oceans. During the tour of the research facilities, we learned about the latest advancements in fisheries science and oceanographic research. The centre's focus on sustainable fisheries and marine biodiversity conservation was particularly insightful. The concept of opening the research centre as a marine museum for the local populace, especially children, is a good step that helps to keep people connected to nature and imparts crucial knowledge to young inquisitive minds.

The Hakodate Dock Co., Ltd.

Hakodate Dock Co., Ltd. is a revered institution in Japan's shipbuilding sector. This institute was founded by Mr. Eiichi Shibusawa in 1896 and has developed into a pillar of Hokkaido's maritime industry. We visited the Hakodate Dock and learned about ship maintenance and construction. We were pleased by the dock's broad range of capabilities, from shipbuilding to refit of ships, including that of Naval ships. The company's credo, which strongly emphasizes producing high-quality work with employee welfare resonates strongly with its commitment to contribute to local and national growth. The combination of cutting-edge engineering and traditional craftsmanship that has maintained Hakodate Dock Co., Ltd. at the forefront of maritime technology for more than a century was showcased during this visit, which offered insightful information on Japan's shipbuilding sector.

15 May

The Nippon Steel North Nippon Works in the Muroran Area and the Shin Nihonkai Ferry Cruise

In the morning hours, we arrived at the North Nippon Works, which is a key production facility of Nippon Steel Corporation. It is Japan's largest steelmaker and the world's third-largest crude steel producer. After a presentation by the staff and a safety briefing, we toured the facility and gained first-

hand experience of the steel-making process which is the backbone of the shipbuilding and automotive industries. The guided tour showcased Blast Furnace Operations, Steelmaking and Casting, Rolling Mills and quality control procedures. The use of digitalisation and technology was noteworthy in every aspect of the industry. The plant's "Integrated Manufacture Controlling System," which covers the whole process from order to delivery is an example of utilizing technology prowess.

We departed the Nippon steel plant and reached Otaru port, where we embarked on a overnight cruise onboard Shin Nihonkai ferry. We were acquainted with the technical aspects of ship operation via a tour of the ship's machinery control room. Post-dinner, we witnessed a traditional Japanese tea ceremony on board, which highlighted the importance of cultural preservation in modern settings.

16 May – Niigata

The Hokuriku-Shin'etsu District Transport Bureau

After arriving at Niigata Port, we went to the Transport Bureau of Hokuriku-Shin'etsu District. We learned about the diverse structure and functions of the Maritime Department, which includes managing various important facets of shipping, such as environmental issues, personnel affairs, and safety. The department employs a variety of inspectors, all of whom are essential to upholding marine regulations.

The Kashiwazaki-Kariwa Nuclear Power Station

Our visit to the Kashiwazaki-Kariwa Nuclear Power Station offered a fascinating glimpse into Japan's intricate energy landscape. Established in 1969, this facility has grown to become one of the world's largest nuclear power stations, reflecting Japan's strategic shift towards nuclear energy and natural gas in response to past oil crises. The plant's history is marked by significant events, including the 2007 Chūetsu offshore earthquake, which led to an extended shutdown and comprehensive safety upgrades. The 2011 Fukushima Daiichi accident further reshaped Japan's energy policies and nuclear safety measures, resulting in all units at Kashiwazaki-Kariwa being shut down.

We learned about the plant's advanced Boiling Water Reactor design and the extensive post-Fukushima safety improvements, including enhanced flood protection and emergency response capabilities. The visitor centre provided insightful explanations and scale models, while the site tour showcased the impressive infrastructure and stringent safety protocols.

Currently, the plant remains idle and is preparing to be operational, as TEPCO has received permission to restart units 6 and 7. This situation underscores the ongoing debate in Japan about balancing energy needs, safety concerns, and environmental goals being a seismically active region. The tour offered a perspective on Japan's energy strategies and stringent nuclear safety protocols.

17 May – Sightseeing in Niigata and Travel to Tokyo

Hotel Nikko Niigata, the Niigata City Aquarium, Marinepia Nihonkai and Tokyo Port

Our day began with a breathtaking view of Niigata from the observation room at Hotel Nikko Niigata, which offered a panoramic vista of the city and the Sea of Japan. This luxurious hotel, situated near the mouth of the Shinano River, provided an excellent starting point for our day.

Next, we explored the Niigata City Aquarium, Marinepia Nihonkai, immersing ourselves in the region's marine biodiversity and enjoying a captivating dolphin show. This experience highlighted the rich aquatic life of the Sea of Japan.

In the afternoon, we boarded the Shinkansen at Niigata Station for a high-speed journey to Tokyo. This travel on the renowned bullet train ticked one item off my bucket list. Upon arrival in Tokyo, we embarked on a ferry tour of Tokyo Port, one of Japan's busiest maritime hubs.

During the port tour, we gained insights into the port's crucial economic role and its diverse facilities serving various maritime operations. Tokyo Port has extensive infrastructure, including over 200 berths capable of handling more than 4 million TEUs annually. The strategic layout of the port's terminals, designed for safe ship maneuvering and efficient operations, was particularly noteworthy and well explained. This comprehensive day offered a unique blend of natural beauty, technological marvels, and maritime operations, providing valuable context to previous visits to shipbuilding and regulatory institutions.

18 May – Tokyo

Meiji Jingu

Meiji Jingu, a serene Shinto temple that provides a peek into Japan's spiritual past, is where our cultural experience started. This hallowed area, which honours Emperor Meiji and Empress Shoken, is tucked away in a verdant woodland and provides a calm haven in the middle of Tokyo's busy city. With more than 100,000 trees representing 365 different kinds, the shrine's grounds contrast with the busy city outside. Shinto values of harmony and purity are embodied in the shrine's architecture, which is distinguished by its simplicity and elegance. The structures, which are built in the traditional Nagare-zukuri style, are mostly made of copper and Japanese cypress.

Asakusa

After our serene experience at Meiji Jingu, we ventured into the bustling district of Asakusa, where I found myself transported to the vibrant atmosphere of old Tokyo. The centerpiece of our visit was the iconic Sensoji Temple, Tokyo's oldest Buddhist temple, with a history dating back to 628 CE. As I approached the temple through the imposing Kaminarimon or "Thunder Gate". The temple's vibrant red structures and the lively Nakamise-dori shopping street leading up to it created a completely different ambiance. I was fortunate enough to witness a traditional walking ceremony around the temple grounds, adding to the cultural richness of the experience. The temple's survival and reconstruction after the

World War II bombings also symbolized Japan's resilience and commitment to preserving its cultural heritage.

Hama Rikyu Gardens

As the afternoon waned, we boarded a Tokyo cruise ship bound for Hama-rikyu Gardens. The cruise, lasting about 35 minutes, provided a scenic route from Asakusa to the gardens. Upon disembarking at Hama-rikyu, I stepped into a world of tranquil beauty that seemed far removed from the bustling metropolis. These gardens, once the private sanctuary of the Tokugawa shogun, are a masterpiece of Japanese landscape design. As I strolled through the grounds, I was captivated by the meticulous attention to detail in the seasonal plantings and the seamless integration of water features. I was particularly struck by how the design harmoniously incorporated views of the surrounding skyscrapers, creating a captivating juxtaposition of old and new Tokyo.

This experience left me with a profound appreciation for Japan's ability to preserve its cultural heritage while embracing modernity. The day's journey from the ancient Sensoji Temple to the historical Hama-rikyu Gardens, all set against the backdrop of contemporary Tokyo, beautifully encapsulated this unique aspect of Japanese culture.

19 May

This was the time we bid our adieu to the learning and culturally rich experience of Japan. We departed from Haneda airport for our journey, but I can say that the trip left an indubitable mark on my mind, and I left a part of my heart in Japan. I grew a deeper mark of respect for the Japanese people, their culture and professionalism. I met people who are beyond perfect in their work and made some lifelong friends.

Personal reflection

Reflecting on my journey through Japan, I'm struck by the harmonious blend of ancient traditions and modern marvels. From the serene Meiji Jingu shrine to the bustling streets of Asakusa, every experience offered a unique glimpse into Japanese culture. The efficiency of the Shinkansen and the tranquility of Hama-rikyu Gardens showcased Japan's ability to balance progress with preservation. Sampling local delicacies like okonomiyaki and witnessing traditional ceremonies deepened my appreciation for the country's rich heritage. Our visits to maritime-related facilities, such as MLIT, the Hakodate dock, the research centre for fisheries and oceans, the steel plant and the nuclear power plant, provided valuable insights into Japan's maritime industry and technological advancements. The journey along Tokyo's waterways provided a fresh perspective on the city's evolving landscape. This trip has left me with a profound respect for Japan's cultural depth and its graceful navigation of the past and present. I extend my sincere gratitude to the Sasakawa Peace Foundation for giving me this opportunity to observe and learn from the best and generously hosting us throughout the trip in Japan.

Ryo Hiwatashi (Japan)



Overview

First of all, my heartfelt gratitude to the Sasakawa Peace Foundation (SPF), including Mr. Eisuke Kudo, Ms. Reiko Naito, and Ms. Emi Shimada for coordinating the excellent field study and warmly welcoming us from our arrival at Haneda International Airport for eight days. I often saw you talking with the Sasakawa fellows during the break time, making the experience even more memorable for us. I am also deeply appreciative of Ms. Miyoko Wada not only for guiding us throughout the field study with her expert knowledge of Japanese culture and history but also for providing us the opportunity to learn some Japanese conversation phrases through easy-to-understand lessons. Her speaking skills and kind guidance enabled us to have a more wonderful field study and enjoyable sightseeing experience. Further, I thank Ms. Elin Sigurjonsdottir for her kind support. Before traveling to Japan, she served as a bridge between the SPF and Sasakawa Fellows 2024 and answered our many questions about the field study promptly.

The comprehensive visits in the field study in Japan included stops in Tokyo, Hokkaido, including Hakodate and Otaru, and Niigata, offering a holistic view of both Japan's maritime and marine industry. Our journey was a blend of maritime professional exploration (e.g., Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT), the Hakodate Dock Co., Ltd., and Tokyo Port), ocean research institutions (e.g., Hakodate Research Center for Fisheries and Oceans), technical facilities (e.g., Nippon Steel and Kashiwazaki-Kariwa Nuclear Power Plant), and cultural immersion (e.g., Aquarium Marinepia, Meiji Jingu, and Asakusa), utilizing three different modes of transportation: airplane, bullet train, and ferry. Particularly, I remember being excited when I first checked the itinerary because we could embark on the ferry *Azalea* operated by Shin Nihonkai Ferry. *Yukari*, one of the ferries operated by Shin Nihonkai Ferry, provided me with the trigger to explore the seafaring industry when I boarded the vessel for the first time in junior high school.

13th May (Monday)

Only Global Ocean Literacy Initiative (GOLI) WMU members visited the Ocean Policy Research Institute in the SPF office, including President Dr. Hide Sakaguchi, to introduce our activities and objectives. After our presentation, he provided us with guidance for future program implementation, which contributed to expanding the international network we aimed to build. Then, Sasakawa fellows met Dr. Yohei Sasakawa, chairperson of The Nippon Foundation, and introduced ourselves within one minute considering his tight schedule. Surprisingly, he had just returned to Japan from Myanmar in the early morning. We were able to spend a wonderful time with Dr. Yohei Sasakawa and take group photos.

In the afternoon, we went to the maritime bureau in the MLIT, and attended the lectures about the introduction of MLIT, maritime policy regarding digitalization and decarbonization, and Japan Coast Guard (JCG). We gained an understanding of the comprehensive approach to addressing global maritime and ocean issues from the perspective of the Japanese government whereas I felt that public organizations had a very strictly hierarchical structure, as seen in the question and answer sections. The last event of the day was a great WMU reception. Professor Dr. Takeshi Nakazawa and President Mr. Noriaki Tajima of the Japan Agency of Maritime Education and Training for Seafarers (JMETs), which I belong to, and some executives participated in the reception. It had been a while since we were able to talk. We spent a great time talking with them and performed a WMU song we had practiced several times.

14th May (Tuesday)

Mari-san, who works at the maritime bureau in the MLIT, participated in the field study with us. Her smile made us brighter. During the flight from Tokyo to Hakodate, we saw the beautiful Mt. Fuji, the highest mountain and one of the famous symbols of Japan. After arriving at Hakodate airport, the scenery of Hakodate was completely different from Tokyo, with more nature, fewer people, and traditional Japanese buildings. At the Hakodate Research Center for Fisheries and Oceans, we observed a large aquarium experiment, conducted in collaboration with Hokkaido University and some private sectors, aimed at developing innovative technologies and new industries in the ocean and marine fields. In the afternoon, we visited the Hakodate Dock, which not only builds bulk carriers and ferries but also repairs JCG vessels and maritime self-defense ships. Surprisingly, we had the opportunity to visit inside of a dry dockyard and see the ship's bottom from below.

15th May (Wednesday)

We went to Nippon Steel North Nippon Works Muroran Area, which is the largest steel manufacturer company in Japan and is essential for producing cars and ships, significant exports for Japan. Some experts guided us through the actual steel process and steel manufacturing facilities by bus. We experienced first-hand the intense heat required for producing and bending steel there. The way he spoke directly to us, sometimes without the use of interpreters, conveyed his enthusiasm for his work. Then, we left Hakodate, heading to Otaru to embark on the ferry *Azalea*. Otaru is different from Hakodate in that it still retains its ancient features, with many historical buildings and stone warehouses built during the Meiji period (1868-1912). During our stay on the *Azalea*, we had the opportunity to enter the Engine Control Room (ECR). We would like to thank Kudo-san and Shin Nihonkai Ferry for providing us with this valuable opportunity and answering many of our questions. Additionally, Miyo-san, Reiko-san, and Emi-san invited us to participate in a Japanese tea ceremony known as Sado. We were fortunate to experience another aspect of Japanese tradition and culture through the ceremony.

16th May (Thursday)

We visited the Hokuriku-Shin'etsu District Transport Bureau, one of the local maritime bureaus. I was very happy to see Ms. Yasko Suzuki, who was my boss when we worked at the Port State Control (PSC) head office in MLIT three years ago. In the afternoon, we went to the Kashiwazaki-Kariwa Nuclear Power Station, which has seven nuclear reactors and sends electricity to major cities including Tokyo. We attended a lecture about safety measures being taken against natural disasters, such as earthquakes and typhoons, in the wake of the 2011 Tohoku earthquake and tsunami. After arriving at the hotel, Ms. Suzuki presented PSC activities in general because we did not have enough time to cover them in the morning even though many of the Sasakawa fellows were looking forward to it. We would like to express our gratitude to Suzuki-san for taking the additional time to come to the hotel to introduce PSC matters and to the SPF for adjusting the schedule.

17th May (Friday)

We had an enjoyable time at Niigata City Aquarium Marinepia Nihonkai with the Sasakawa fellows. As we visited many organizations and traveled long distances every day starting from Sunday in Malmo city, I was very grateful to have time to relax and interact with marine animals, particularly during the dolphin shows. Then, we took the Joetsu bullet train back to Tokyo. The lunch box provided during the ride was luxurious and extremely delicious. After arriving in Tokyo, we embarked on a tour boat to explore the ports of Tokyo, guided by explanations from Port Authority staff. During the boat tour, we observed Tokyo port facilities, passage routes, and cargo operations closely at sea.

18th May (Saturday)

We spent the day sightseeing in Tokyo. As I am Japanese, I am proud that the center of Tokyo has traditional parks and gardens. We enjoyed a refreshing time surrounded by greenery and birdsong at Meiji Jingu. After praying for our hopes in the traditional Japanese manner, we had around three hours of free time in Asakusa City. Surrounded by many tourists, we each bought our favorite gifts, ate our favorite lunches and Japanese sweets, and spent our time as we liked. Everyone gathered at the meeting place on time, and we went to our final destination, Hama-rikyu Gardens by Tokyo cruise boat. Once returning to the hotel, we each spent our last night in Tokyo.

Last but not least, I would like to express my gratitude to everyone and all the Japanese organizations involved in this field study. It was a memory that I will never forget, and I am proud to have received the Sasakawa Scholarship once again.

Miki Yanagisawa (Japan)



The one-week field study in Japan, which started on 12 May, was a valuable opportunity to deepen my understanding of Japanese culture, industry and research projects, including those of the traditional food, nature, religion and development of maritime technology. I would like to take this opportunity to express my gratitude to Sasakawa foundation, the companies, administrative bodies involved in this field study program, and to the organisation I belong to that have supported me.

At The Nippon Foundation, which we visited on the first day, Dr. Yohei Sasakawa kindly took time out of his busy schedule to meet us. We learned from him about previous projects and efforts in which Dr. Sasakawa was involved and his vision for the future of the shipping industry, and we renewed our determination to apply what we have gained from the WMU to further development when we return to our home countries. On the same day, we also visited the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Kasumigaseki, where we received the word of welcome from the Director General of the Maritime Bureau. Officials from the Maritime Bureau, Port Authority and Japan Coast Guard gave us an overview of their operations, ongoing projects and their involvement with overseas maritime development.

This was a unique opportunity to learn about Japan's current position in the maritime industry and to gain a deeper understanding of maritime industry based on what I have learned from class in WMU. I was impressed to hear about the GHG policy and security measures in Japan, as I am usually involved in safety-related duties and was unaware of many aspects. Each presenter kindly made the most of their time to answer questions from students. I was especially interested to learn that there are so many differences in direction and characteristics between countries that are close to each other since I had just visited South Korea the other day and visited so many authorities and research centres.

At the Hakodate Research Center which we visited on the second day, we were given an opportunity to look around several aquaculture experimental water tanks. I'm sure we were all impressed by the sustainable initiatives the research center is involved in. At the Hakodate Dock, which we visited on the same day, we were able to observe ship manufacturing operations from a very close distance, and this was a new experience especially for me.

On the third day, we visited Nippon Steel to see how steel is made. The tour was conducted amidst the roar of the factory, but the staff in charge kindly explained everything to us in a raised voice, almost

without the use of an interpreter. At the end of the visit, we were presented with a tiny and very cute objet d'art made from screws.

On Thursday, we visited the Hokuriku Shin'etsu Transport Bureau, where we were introduced to the various tasks handled by the maritime departments of the regional transport bureaus. Although we did not have enough time to finish the scheduled explanation of the work of the ship inspectors, we were glad of their hospitality as we were able to have the lecture again later in the hotel venue. The lectures were very practical and will be very useful in the future. At the Kashiwazaki-Kariwa Nuclear Power Station, which we visited that afternoon, we were given detailed explanations in small groups about everything from the processing of raw materials to accident prevention measures done by the plant, and the tour allowed visitors to experience the sheer scale of the market for nuclear power.

The final part of the field study was a ride tour on a small vessel to see the facilities at the Port of Tokyo. Ports involve a variety of stakeholders, and the students asked a wide variety of questions, so the person in charge may have had difficulty answering, but it was a worthwhile time.

Other programmes, such as the welcome at the reception on the first day, the visit to the aquarium, the Meiji Shrine and sightseeing in Asakusa, allowed the students to spend the week in a moderately relaxed atmosphere and experience the hospitality from Japan. In particular, dinner plans were rarely fixed, so most of the students including me went out and ate a lot of favorite Japanese cuisine. This moment would help to curb my craving for Japanese food for a while.

In conclusion, the experience from this field study was a valuable source of knowledge and opportunity for interacting with students from other specialisation courses and Japanese officials. Once again, I would like to express my gratitude.

Andrew Lumbasi Barasa (Kenya)



The 30 S24 Cohort of Sasakawa fellows embarked on a one-week field study to Japan on Saturday 11th May 2024. Annually, The Nippon Foundation provides sponsorship to students hailing from many countries across the world to study at the World Maritime University in Ocean research and maritime affairs. The University representatives, Ms. Elin Sigurjonsdottir and Professor Johan Hollander joined us on our field excursion. Throughout our week-long field study, we had the privilege of meeting with the chairman of The Nippon Foundation, Dr. Yohei Sasakawa where we acknowledged his kind support by sharing our resolutions and what we intend to carry back to our countries.

On Sunday 12th May 2024, the group landed in Japan at Haneda airport at around 9:30am where we were warmly welcomed by Mrs. Miyo and Mrs. Emi and left by bus to the hotel. Orientation session was conducted by the Sasakawa Peace Foundations. This was followed by the arrangement of hotel accommodations and the provision of guidance on the expectations for our stay.

On Monday 13th May 2024, we started with a visit to The Nippon Foundation headquarters where we met with the Chairman of The Nippon Foundation, Dr. Yohei Sasakawa. This was followed by a visit to the Maritime Bureau of the Ministry of Land, Infrastructures and Tourism, and the day concluded with a welcoming reception organized in our honor. The visit to MLIT was intriguing as it provided insights into Japan's advancements in transportation, land management, infrastructure, housing, and tourism. These areas are crucial for the country's overall progress and development of Japan's maritime policies and infrastructure emphasizing on sustainable maritime practices and technological integration in shipping.

14th May 2024, Tuesday, we left the hotel by bus and arrived at Haneda Airport to Hokkaido Prefecture of the Northern Japan. Upon arriving at Hakodate District, our guide, proceeded to provide us with valuable information about the culture and heritage of the Hakodate communities. We visited the Hakodate Research Center for Fisheries and Oceans and the Hakodate Dock Co. Ltd. The Hakodate Research Center for fishing and Oceans plays a crucial study of marine biodiversity, fisheries management, and oceanographic research. We visited the ship Dock where Examination of shipbuilding techniques and maritime safety protocols. The dock's integration of modern technology for efficiency and safety was impressive.

On Wednesday 15th May 2024, we travelled to Muroran district where we visited the Nippon Steel North Works where we toured the steel production facilities, focusing on innovative steel-making

processes and environmental management strategies. Emphasis on energy-efficient technologies. After that, we headed to Otaru Port where we boarded a ferry for an overnight trip towards Niigata prefecture of Japan. The primary objective of the Nippon Steel North Works in the Muroran region was to provide a thorough comprehension of the steel production procedures, the plant's capacities, and its impact on the steel industry in Japan. The tour guide, Mr. Eiji Beppu took us through the Blast Furnace to see the steelmaking facilities, rolling mills and finishing lines.

On Thursday 16th May, 2024, we arrived Niigata port and visited the Hokuriku-shin'etsu District Transport Bureau and the Kashiwazaki-Kariwa Nuclear Power Station. The purpose of the site visit to the Hokuriku-shin'etsu district Transport Bureau was to get a comprehensive understanding of the Bureau's operations, regulatory activities, and its responsibility for administering and supervising transportation in the Hokuriku and shin'etsu region in ensuring safety and enforcing regulations in maritime activities. From the Bureau, we visited the Kashiwazaki-Kariwa Nuclear Power station, which is renowned as one of the biggest nuclear power plants globally. We acquired comprehensive knowledge of the plant's operations, safety standards, and its the general overview of Japan's energy situation.

On Friday, 17th May 2024, the day started by viewing Niigata Port and other sceneries of the Niigata city from the observatory of Hotel Nikko Niigata and there after headed to Marinepia Nihonkai aquarium in Niigata city. We enjoyed the displays, educational initiatives, and conservation endeavours of the aquarium, offering valuable knowledge about marine life and promoting environmental consciousness. At the aquarium, we witnessed a diverse species of marine life, including numerous types of sharks, rays, and huge fish. Additionally, we witnessed bright coral reefs and tropical fish in the tropical fish display, as well as the penguin enclosure. Finally, we attended the dolphin show that showcased the cognitive abilities and physical flexibilities of dolphins. Using a bullet train, we departed from Niigata and returned to Tokyo. After arriving in Tokyo, we took a Tokyo cruise ship for the round tour of the Tokyo Port. The port has a total of 4 terminals with 17 berths and 39 cranes. Tokyo Port is a landlord port with some terminals being operated by private entities.

Saturday 18th May 2024, was our last day of the trip and was specifically for touring the Tokyo city. We started our tour with some significant cultural sites and landmarks such as the Meiji Jingu Shrine which is a notable religious site with the Meiji Jingu temple that is situated in Shibuya. We explored the shrine structure, which emanates a tranquil and sacred ambiance. Afterwards, we explored Asakusa, a historic and lively area in Tokyo, known for its famous Senso-ji Temple. We headed to Asakusa and boarded a Tokyo cruise ship bound for Hama-rikyu Gardens where we explored Hama-rikyu Gardens, an exquisite landscape park situated in chou. The excursion to Meiji Jingu, Asakusa, and Hama-rikyu gardens provided a profound exploration of Tokyo's cultural and historical legacy.

The journey to Japan was an exceptional excursion and travel encounter. I personally experienced exceptional cuisine and infrastructure and the immense culture of the Japanese people that in one way or another changed my perception of living. From the interior part of a poor village in the Western Kenya, I never imagined of exploring such an amazing architecture of one of the leading economies of the world. Special thanks to the Chairman of The Nippon Foundation, Dr. Yohei Sasakawa, the Sasakawa Peace Foundation Family and WMU for such an amazing and non-forgettable chance in my life.

Lucy Garmai Varnie (Liberia)



On Saturday, May 11, 2024, the S24 Cohort of Sasakawa Fellows set off from Malmö, Sweden, embarking on a one-week field study to Japan. These fellows, sponsored by The Nippon Foundation, are students at the World Maritime University. The foundation, led by Dr. Yohei Sasakawa, receives annual support from The Nippon Foundation to sponsor students from around the globe, particularly those from developing countries. We owe immense gratitude to the World Maritime University, The Nippon Foundation, the Sasakawa Peace Foundation, Dr. Yohei Sasakawa and his team, and the various institutions we visited in Japan. Our field trip was overseen by Ms. Elin Sigurjonsdottir and Professor Johan Hollander. Throughout the week, we had the honor of meeting Dr. Yohei Sasakawa and expressing our gratitude for his support. Additionally, we toured several maritime facilities across Japan. This report summarizes my overall impressions of the trip.

Sunday, May 12, 2024

We arrived in Japan on Sunday, landing at Haneda Airport. From there, we were warmly welcomed by Miyo-san and Emi-san. The day's main event was an orientation session conducted by the Sasakawa Peace Foundation, during which we checked into our hotel and received guidance on what to expect from our visit.

Monday, May 13, 2024

Our first full day in Japan began with a visit to The Nippon Foundation, where we met our sponsor, Dr. Sasakawa. Following this, we visited the Maritime Bureau MLIT, and the day culminated with a welcome reception in our honor. Meeting Dr. Sasakawa in person was a dream come true for me. I was overjoyed to thank him personally for this life-changing opportunity to enhance my professional development. The visit to the MLIT was also fascinating as it highlighted Japan's advancements in transportation, land management, infrastructure, housing, and tourism, which are crucial to the country's growth and development.

Tuesday May 14, 2024

On Tuesday, we departed the hotel by bus and flew from Haneda Airport to Hakodate in northern Japan. Upon arrival, Miyo-san provided insights into Hakodate, which looked distinctly different from Tokyo. We visited two significant sites:

The Hakodate Research Center for Fisheries and Oceans

The Hakodate Dock Co., Ltd

The Hakodate Research Center plays a crucial role in advancing marine science, promoting sustainable fisheries, and protecting marine environments. Our visit to the Hakodate Dock Co., Ltd was highly informative and engaging. We gained an overview of the company's operations, facilities, and contributions to the maritime industry. We toured the dry docks, observing various stages of ship construction, from keel laying to launching. This was my first-time witnessing shipbuilding, and it was a remarkable experience.

Wednesday May 15, 2024

On Wednesday, we visited Nippon Steel North Nippon Works in the Muroran area and Otaru Port. Later, we enjoyed a ferry ride, which was a fun and novel experience. At the Nippon Steel North Works, we gained a comprehensive understanding of the steel manufacturing process, the plant's capabilities, and its contribution to the steel industry in Japan. The guided tour included:

- Blast Furnace and steelmaking facilities
- Rolling mills and finishing lines
- Environmental and safety initiatives

The experience was enlightening and provided valuable insights. The ferry ride, where we also spent the night, was particularly memorable as it was my first time sleeping on a ferry. We ended the day with a traditional Japanese tea ceremony.

Thursday May 16, 2024

On Thursday, we arrived at Niigata Port. The day's visits included the Hokuriku-Shin'etsu District Transport Bureau and the Kashiwazaki-Kariwa Nuclear Power Station. The visit to the Hokuriku-Shin'etsu District Transport Bureau aimed to provide insights into the Bureau's operations, regulatory functions, and its role in managing transportation within the Hokuriku and Shin'etsu regions. The guided tour covered:

- Administrative Offices
- Transportation control center
- Inspection control center
- Inspection and certification facilities
- Maritime safety and regulations

The day concluded with a visit to the Kashiwazaki-Kariwa Nuclear Power Station, one of the largest nuclear power plants in the world. Here, we gained an understanding of the plant's operations, safety protocols, and its role in Japan's energy infrastructure.

Friday May 17, 2024

Friday's itinerary included a visit to the Hotel Nikko Niigata observation room and the Niigata City Aquarium Marinepia Nihonkai. At the aquarium, we explored various exhibits, educational programs,

and conservation efforts, which provided insights into marine life and environmental awareness. We saw different marine species, including sharks, rays, and large fish in the marine tank. The tropical fish exhibit showcased vibrant coral reefs and tropical fish, and we also visited the penguin enclosure. The highlight of the visit was the dolphin show, which demonstrated the intelligence and agility of dolphins. It was an amazing experience, and after the show, we returned to Tokyo.

Saturday May 18, 2024

Our trip concluded on Saturday, May 18, 2024, with tours of major cultural sites:

- Meiji Jingu Shrine
- Asakusa, followed by a Tokyo cruise ship to Hama-rikyu Gardens

At the Meiji Jingu Shrine, located in Shibuya, we toured the shrine building, which exudes a serene and spiritual atmosphere. Next, we visited Asakusa, one of Tokyo's oldest and most vibrant districts, centered around the iconic Senso-ji Temple. Finally, we visited Hama-rikyu Gardens, a beautiful landscaped garden located in Chuo. These visits were enriching and offered a deep dive into Tokyo's cultural and historical heritage. Each site provided unique insights into Japan's traditions, spirituality, and natural beauty.

CONCLUSION

The trip to Japan was the best field study and travel experience I have had so far. The food and infrastructure were amazing, and the trip served three remarkable purposes:

1. It was a learning experience that enhanced my professional knowledge of the maritime industry.
2. It provided the opportunity to meet Dr. Sasakawa in person and express my gratitude for his support towards my professional development.
3. It allowed me to understand the beautiful culture and people of Japan.

Japan is the most beautiful country I have ever visited, and its people are uniquely humble and kind. This experience has profoundly impacted my personal and professional growth.

Stephen Yekeson Kamara (Liberia)



INTRODUCTION

The Sasakawa Fellows from the World Maritime University Class of S24 embarked on a comprehensive field study tour to Japan from May 12 to May 19, 2024. This tour aimed to provide the fellows with in-depth exposure to Japan's maritime and industrial sectors, facilitating a deeper understanding of the country's advancements and practices in these fields.

TRAVEL

The journey commenced with the fellows traveling from various parts of the world to Japan. Upon arrival, the group was warmly welcomed and provided with detailed itineraries for their week-long study tour. The primary modes of transportation during the tour included chartered buses and trains, ensuring efficient and comfortable travel between different locations.

SITES VISITED

Day One (13th May 2024)

The Nippon Foundation

The tour began with a visit to The Nippon Foundation, where the fellows were briefed on the foundation's various initiatives and contributions to maritime education and research. The session included presentations on current projects and plans aimed at enhancing maritime safety and sustainability.

Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

At MLIT, the fellows learned about Japan's policies and regulations governing maritime affairs. Discussions focused on the country's strategic initiatives to promote maritime infrastructure and logistics.

Welcome Reception

A formal welcome reception was held in honor of the Sasakawa Fellows, providing an opportunity to network with Japanese maritime professionals and academics. The reception featured traditional Japanese performances, offering a cultural glimpse into the host country.

Day Two (14th May 2024)

Hakodate Research Center for Fisheries and Oceans

On May 14, the fellows visited the Hakodate Research Center for Fisheries and Oceans. The center's experts provided insights into Japan's advanced research on marine biology, fisheries management, and oceanographic studies.

Hakodate Dock Co., Ltd

The tour continued with a visit to the Hakodate Dock Co., Ltd, where the fellows observed shipbuilding processes and learned about the company's role in Japan's maritime industry.

Day Three (15th May 2024)

Nippon Steel North Nippon Works Muroran Area

On May 15, the group visited Nippon Steel's North Nippon Works in Muroran. This visit highlighted the steel manufacturing processes critical to shipbuilding and maritime infrastructure.

Technical Tour of the Shin Nihonkai Ferry

The fellows took a technical tour of the Shin Nihonkai Ferry, where they studied the ferry's operational and safety features, gaining practical knowledge about passenger and cargo ferry services.

Day Four (16th May 2024)

Hokuriku-Shin'etsu District Transport Bureau

The fellows at the Hokuriku-Shin'etsu District Transport Bureau explored regional transport management and the integration of maritime and land transport systems.

Kashiwazaki-Kariwa Nuclear Power Station

The visit to the Kashiwazaki-Kariwa Nuclear Power Station provided insights into the role of nuclear energy in Japan's power supply, focusing on safety protocols and energy efficiency measures.

Day Five (17th May 2024)

Hotel Nikko Niigata Observation Room and Niigata Aquarium Marinepia Nihonkai

On May 17, the fellows enjoyed panoramic views from the Hotel Nikko Niigata Observation Room and explored marine life exhibits at the Niigata Aquarium Marinepia Nihonkai.

Tokyo Port

The tour included a visit to Tokyo Port, where the fellows examined port operations, logistics, and the handling of international cargo.

Visit to the Tokyo Bodhisat Temple

A cultural visit to the Tokyo Bodhisat Temple gave the fellows an understanding of Japan's religious heritage and architectural styles.

Visit to the Shrine (18 May 2024)

The fellows visited a traditional Japanese shrine, offering a spiritual experience and a deeper appreciation of Japan's cultural practices.

Boat Ride

The tour concluded with a scenic boat ride, allowing the fellows to relax and reflect on their experiences while enjoying Japan's coastal beauty.

FEEDINGS

Throughout the tour, the fellows were treated to a variety of Japanese cuisines, including sushi, sashimi, tempura, and other traditional dishes. Meals were organized at local restaurants, providing an authentic culinary experience.

ACCOMMODATION

The fellows stayed at well-appointed hotels in different cities, including Tokyo, Hakodate, and Niigata. These accommodations offered comfortable lodging and modern amenities, ensuring a pleasant stay for all participants.

JAPANESE CULTURE

The study tour focused on maritime and industrial insights and immersed the fellows in Japanese culture. From traditional tea ceremonies to visits to historical sites, the participants gained a profound understanding of Japan's rich cultural heritage and contemporary lifestyle.

The Sasakawa Fellows Field Study Tour to Japan was an enriching experience, blending professional development with cultural exploration. The knowledge gained and connections made during this tour will undoubtedly contribute to the fellows' future endeavors in the maritime industry.

LESSONS LEARNT

The following were important takeaways from the tour to Japan, sponsored by Dr. Sasakawa:

- (a) The immense work, contributions and achievement of Dr. Sasakawa around the world by positively impacting life.
- (b) The immense work, contributions and rich culture of the Japanese People encourage everyone to know the importance of greeting and respect for the older people.
- (c) The utilization of all the Japanese mediums of transportation by the fellows daily was incredible.

- (d) The smooth coordination of the fellows' trip to and fro Japan between the organizers is memorable.

CONCLUSION

The tour to Japan by Sasakawa fellows was impressive and fantastic. It widened the minds of the fellows on the Operations Sasakawa Peace Foundation and the selection process to be a fellow of the foundation. It also provides the opportunity for most especially interaction with their sponsor, Dr. Sasakawa in person. Touring the selected areas in Japan was a dream come true for the fellows, providing the enabling environment for the fellows to experience Japanese Culture. Consequently, as maritime experts across the different specializations offered at the World Maritime University, the fellows were opportune to visit the Port of Tokyo, the Hakodate Research Center for Fisheries and Oceans, and the Hakodate Dock just to mention a few. Lastly, the fellows learned a few basic Japanese language for easy communication while in Japan in appreciation of the Japanese Culture.

RECOMMENDATIONS

While it is convincing that S24 enjoyed the tour to Japan, the following is recommended:

- (a) A day or two should be kept solely for the fellows to explore Japan, individually.
- (b) The duration of the tour should be at least 14 days.
- (c) The future fellows should be provided the privilege of meeting the immediate families of Dr. Sasakawa in his hometown.

Nadarajan Perumal (Malaysia)



The trip to Japan was eagerly anticipated by everyone, including myself. It was my first visit to Japan, and it was an unforgettable experience that I will cherish forever. As Kudo-san mentioned during our visit, the field trip had two main objectives which are to deepen our bonds and to learn about Japan. I am confident that we have successfully achieved both. This 7-day trip provided us with a lot of exposure and helped us to strengthen relationships with batchmates who were previously hard to get to know each other as we were from different specializations. During our stay in Japan, we visited Tokyo, Hakodate, and Niigata. We had the opportunity to visit agencies and industries involved in the maritime sector, which are not easily accessible to everyone. This rare opportunity has truly enriched our understanding and appreciation of Japanese culture and their advancements, especially in the maritime sector. We are very grateful to Dr. Sasakawa and the Sasakawa Peace Foundation for organising our field trip to these fascinating places, where we learned many things.

Additionally, this trip became even more memorable as we had the chance to travel across Japan using various modes of transport such as aeroplanes, ferries, buses, and bullet trains. Traveling by bullet train was particularly special to me because I had read a lot about Japan's impressive development of bullet trains to connect places quickly, and I never imagined I would get to ride one. Throughout the seven days, we managed to visit almost 14 places, giving us a comprehensive understanding of Japan. Some of the places that made a significant impact on me include meeting Dr. Sasakawa in person, the Hakodate Dock, the Kashiwazaki-Kariwa Nuclear Power Station, and Nippon Steel.

Despite Dr. Sasakawa's heavy schedule, he managed to spend a few hours listening to everyone's introductions and sharing his wisdom. This was a great moment that showed how down-to-earth he is, even though he has achieved so much in his life. The Hakodate Dock tour was another highlight, reminding me of my previous work involving shipyards for dry docking and ship lifting. Additionally, the expertise at Hakodate Dock in building bulk carriers was exceptional, as we witnessed how every shipbuilding project was done with precision. I was deeply moved by the visit to the Kashiwazaki-Kariwa Nuclear Plant, the largest nuclear generating station in the world by net electrical power rating. The bus tour to the generating station and the exhibition hall showcasing the nuclear power plant model deepened my understanding of how advanced and experienced Japan is in the field of nuclear power generation. Last but not least, the visit to Nippon Steel was another significant experience that deepened my understanding of how the steel industry contributes to Japan's domestic economy and GDP. Nippon Steel, Japan's largest steelmaker and one of the world's leading steel producers, offered us the privilege of touring their facilities, and we were mesmerised by the size and scale of the company.

Apart from all the site visits, we also created many memories and strengthened our bonds during the trip. One memorable moment was our welcoming dinner, where we met representatives from the embassy and people from various organisations, allowing us to talk and make new friends. Personally, I connected with officers from the Japan Coast Guard, which was very helpful for my dissertation. Another highlight was the day we spent on the ferry from Hakodate to Niigata. It was a night to remember as we learned about the Japanese tea ceremony, and later, some of us spent time with Kudo-san, who shared his experiences and emphasised the importance of field trips like this in strengthening our bonds even further.

There are many key takeaways from this trip. Beyond the visits to various places, I personally learned a lot from Japanese culture, particularly about punctuality. Throughout our trip, we were constantly reminded of the importance of being punctual and respecting time. Another lesson was the respect shown to others, regardless of age or status. Everywhere we went, we were treated with great respect. Even during our free time, we noticed that people in Japan are very respectful and kind, always willing to help others.

I surely will visit Japan again in the future, and now I have many friends there whom I can visit, especially Kudo-san, Emi-san, Reiko-san and Mari-san. A simple thank you would not suffice to express my gratitude to Dr. Sasakawa and his team for making this trip successful and memorable for us. It is always a privilege to be a Sasakawa Fellow and I am happy to be part of this global network.

Peter Tamarakro Orubebe (Nigeria)



On May 11, 2024, the Sasakawa Fellows 2024 cohort from World Maritime University (WMU), Malmo, Sweden and I departed for Japan on our annual Japan Field Study trip. After a 13-hour journey, we safely arrived at Haneda International Airport in Tokyo, Japan on May 12, 2024. We were warmly received by representatives of the Sasakawa Peace Foundation and then attended an orientation session. Following the session, we had lunch and then retired to our hotel rooms to rest.

On the 13th of May 2024, I was part of the Global Ocean Literacy Initiative (GOLI) team that made a presentation to the team at the Ocean Policy Research Institute (OPRI) of the Sasakawa Peace Foundation (SPF) led by its President- Dr Hide Sakaguchi. We informed him of the need for founding such an initiative that seeks to leverage a multidisciplinary and transnational approach in tackling the three planetary crises through the tool of Ocean Literacy. We also informed him of how the utilization of the Sasakawa Fellowship network and the WMU students' alumni network informed the conceptualization of the idea as it readily provided the reach and coverage to truly coordinate and implement the programs of the initiative in various countries of the world.

In his response, the President of the OPRI informed us of the uniqueness of the initiative in leveraging the multidisciplinary, transnational approach and in utilizing the Sasakawa Fellows Network and WMU students' Network in advancing the cause of Ocean Literacy in the face of aggravated and negative anthropogenic impacts on the ocean. He also promised to collaborate with GOLI in ensuring the success of the initiative.

Subsequently, we paid a courtesy visit to the Chairman of The Nippon Foundation, Dr. Yohei Sasakawa who received us and informed us of all of his life's work in most of the countries represented as each fellow introduced themselves. It was truly remarkable to listen to the 85-year-old chairman detail his experiences in the various countries he had worked in through the exemplary contributions of the Nippon Foundation especially in the maritime, ocean, agricultural, and humanitarian fields globally.

After these visits, we were hosted to a lecture session by the Maritime Bureau at the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). Following a brief photo session with the Director General of the Maritime Bureau, Mr. Atsushi Kaiya, we listened to comprehensive presentations explaining the mission of the MLIT, as it relates to integrated and systematic land conservation, infrastructure development, implementation of transport policies, and the maintenance of marine safety, ports functions and security.

The day ended with the welcome reception where fellows were treated to excellent hospitality by our hosts- the SPF. The reception provided a forum to network with diplomats from different countries and professionals from the Japanese maritime sector. The night ended with the rendition of the WMU song by the students and speeches by representatives of the WMU and the President of the OPRI.

On May 14, 2024, we departed Tokyo for Hakodate. In Hakodate, we visited the Hakodate Research Center for Fisheries and Oceans and the Hakodate Dock. The former is a huge research facility committed to promoting fisheries and marine science and its community applications, establishing the nexus between academia and the locals of Hakodate. The former is a Ship-building company, established in 1896, and specializes in shipbuilding and ship repair of different types of vessels. We were conducted around the facilities; their operations were explained, and the facilitators did well to provide answers to all the questions students posed.

Following a visit to the Nippon Steel Works, which is a steel manufacturing company, and after a detailed tour of the facility to experience the different stages of steel manufacturing as well as sitting through a lecture in class were again all our questions were answered as best as our handlers could, we departed Otaru by ferry for Niigata. The visit to the Muroran Area, where the Nippon Steel Works is located was made by a road trip which allowed students to experience the scenic landscapes of Japanese country. The preceding encapsulates events for the 15th of May 2024.

The 16th of May 2024 saw the cohort visit the Hokuriku-Shin'etsu District Transport Bureau and the Kashiwazaki-Kariwa Nuclear Power Station, both in Niigata. These visits would linger in my memory for a long time as I gained valuable insights into the workings of a Nuclear Power Plant and appreciated the role of the district bureau in administering its functions in a very technologically advanced country like Japan.

From May 17 to 18, 2024, we visited the Niigata Aquarium, Tokyo Port, the Meiji Jingu, Asakusa, and the Hama-rikyu Gardens. These visits provided a unique opportunity to experience Japanese culture as a tourist and to understand the role of the Tokyo Port in facilitating maritime logistics and trade for the city of Tokyo.

The cohort departed Japan for Sweden on 19 May 2024 and arrived safely. I will forever be indebted to the genuine hospitality and kind courtesies of our handlers from the SPF- Kudo san, Emi san, Reiko san, and Miyo san. Special thanks to the Chairman- Dr. Yohei Sasakawa for making this trip a reality. I am bold to say that I am proud to be a Sasakawa fellow and privileged to be part of such a special family!

Adetayo Yusuf Adesokan (Nigeria)



Background

The Master's program at the World Maritime University (WMU) includes a variety of field study trips to maritime-related institutions worldwide to complement the theoretical training of various specializations. Notably, the Sasakawa fellowship students across the various specializations are particularly privileged to have an additional field study trip to Japan. This trip provides the opportunity for the students to meet their donors, experience Japan's unique heritage and rich maritime culture, and build meaningful connections that strengthen the bonds of friendship and cooperation among fellows and industry practitioners. Accordingly, the Japan Field Study Trip was the most anticipated for me, and I had very high expectations.

Trip to Japan

Our trip to Japan commenced on Saturday, 11 May 2024, with a direct Scandinavian Airline System flight from Copenhagen Airport to Haneda Airport, Tokyo. The twelve-hour journey was hassle-free and pleasurable because we did not have to experience flight connections, as was often the case. This made a great first impression for me. Upon our arrival, Ms. Emi and our tour guide, Ms. Miyo, warmly welcomed us and swiftly transported us by bus to our hotel accommodation. The 30-minute bus ride was quite engaging, thanks to the amiable Ms. Miyo. As we arrived at the Toshi Center Hotel, Mr. Kudo, whom I regard as the father of all Sasakawa fellows, welcomed us warmly. Ms. Emi and Reiko then conducted an orientation session for us to set the tone for the week-long activities before we all had lunch together and checked into our respective rooms.

Visits to Facilities and Tourist Destinations

We began our tour with a visit to The Nippon Foundation, where we had the privilege of interacting with Chairman Sasakawa. His great sense of humor and ability to share his experience and some contemporary events in the countries of most students' as they introduced themselves to him were fascinating and admirable. Upon completion, we proceeded to the Ministry of Land, Infrastructure, Transport, and Tourism, where we received extensive briefings on the maritime bureau, ports and harbours bureau, and coast guard, which were the maritime-oriented agencies under the Ministry. Our day concluded with a dinner reception in our honor, attended by representatives from The Nippon Foundation, the Sasakawa Peace Foundation, diplomats, government officials, and industry leaders. It was indeed an excellent night of networking and bonding.

Our visits in the following days were at facilities out of Tokyo. First, we flew to Hokkaido and visited the Hakodate Research Center for Fisheries and Oceans, observing significant research efforts in fishery technology. Thereafter, we visited the Hakodate Dock and witnessed shipbuilding processes. Afterwards, we toured the Nippon Steel Works in the Muroran area to observe the production of steel, from iron ore and coal to steel plates, coils, and metal bars serving various manufacturing requirements of Japanese industries. After the second day's activity at Hokkaido, we travelled to Niigata by overnight ferry. The ferry ride included a technical tour of the machinery control room and a memorable Japanese tea ceremony after dinner. In Niigata, we visited the District Transport Bureau, where we received several presentations on their activities, particularly maritime administrative roles, ship inspections, and regulatory enforcement. This resonated well with me, as it complemented classroom activities and offered a different perspective on maritime administrative activities from which one could draw many lessons. We also visited the Kashiwazaki-Kariwa Nuclear Power Station, where we received a presentation on the nuclear power generation process, toured the outer perimeters of the facility, and got in-depth briefings with nuclear plant simulators and models.

We commenced the following day with visits to tourist sites like the Hotel Nikko Observation Room, the tallest building in Niigata, offering a fantastic view of the port city. We then toured the Niigata City Aquarium, home to a collection of over 30,000 organisms across 600 marine species. The highlight of this visit was the dolphin show, which was a sight to behold. Thereafter, we returned to Tokyo via bullet train and toured the Tokyo Port by ferry. This afforded us the opportunity to witness the carefully planned terminals of the Tokyo Port and the efficient cargo operations in progress, while the port official provided adequate briefings as we sailed through the channel. Our visit to the Tokyo port marked the end of our official site visits. The next day, we indulged in tourism of Tokyo, exploring sites such as Meiji Jingu Shrine, taking a ferry cruise to Hama-rikyu Gardens, and experiencing a guided tour of the garden while immersing ourselves in its rich history. We departed Japan the following day, which was Sunday, 19 May 2024, and arrived in Malmo on the same day, marking the end of a successful field trip.

Overall Impression

We received unparalleled warmth, recognition, and hospitality from the point of arrival till departure from Japan. The visit was well-planned and executed, seamlessly integrating academic visits with tourism, thus eliminating any possibility of fatigue from the overload of professional engagements. The facilities we visited were carefully selected to provide valuable insights into Japanese maritime industry and practices, and this largely broadened my perspectives, enriched my knowledge, and would likely shape my future endeavors in maritime affairs. Our transportation to the various sites covered the various modes of travel in Japan, including flights, bullet trains, subways, roads, and ferries, ensuring comprehensive exposure for us without sparing cost. Similarly, our accommodation and meals in the

four hotels we lodged and while on transit were all of the highest standards. Also important is that the visit strengthened the bond among the Sasakawa Fellows of the Class of 2024 and our relationship with the remarkable staff of the Sasakawa Peace Foundation, as well as other key personnel in the Japanese maritime industry. I can thus conclude that the Japan field study tour was a fantastic experience in terms of learning, networking, and tourism, thus exceeding my expectations in all aspects.

Carlos Manuel Mosquera Athanasiadis (Panama)



The Nippon Foundation (Day 1):

Sasakawa fellows gathered in the conference room at 1000 hrs to receive the Chairman of The Nippon Foundation Mr. Yohei Sasakawa. Firstly, Mr. Sasakawa started the meeting by addressing essential topics related to the latest activities in which he was involved such as the impact of COVID-19 on global trade, the Scandinavia-Sasakawa foundation, the peace-related research, the importance of cooperation between Sasakawa alumni and the peacemaker conference held in Jakarta, Indonesia. Afterward, Mr. Sasakawa closed his speech by stressing how crucial the networking of the Sasakawa fellowship is, which leads to cooperation between countries of different regions that might be the key to solving the world's various problems.

After Mr. Sasakawa's closing remarks, Professor Hollander addressed the chairman to extend his sincere appreciation for receiving Sasakawa fellows and WMU guests. Following Professor Holland's speech, the students introduced themselves to Mr. Sasakawa sharing with him relevant information about their academic and professional experience such as major degree, previous background, current position, and further professional aspirations. Furthermore, it is important to mention that Mr. Sasakawa shared personal experiences related to the students' countries. Once the students finished their introduction, Sasakawa's fellow representative Ms. Jasmine Bellini gave the final appreciation speech to Mr. Sasakawa.

Maritime Bureau, MLIT (Day1):

Sasakawa Fellows gathered in the conference room at 1330 hrs. The meeting started with the introduction of the Ministry of Land, Infrastructure, Transport and Tourism. Furthermore, governance aspects of the ministry such as institutional, organizational, and legal framework are explained. Then, the presenter explained how digitalization and decarbonization are implemented in Japan. Afterward, the Japan Coast Guard representative, a WMU Alumni, shared with the students important information regarding the resources, infrastructure, and policy of the Japan Coast Guard. Finally, the meeting finished at 1630 hrs.

Welcome Reception (Day 1):

Starting at 1800, the welcome reception party (Nomunication) took place. Students could expand their networking and share professional knowledge with several Japanese stakeholders. In addition, Sasakawa fellows demonstrated their talent in singing the WMU song. Finally, the welcome reception party was finalized at 2000 hrs.

Hakodate Research Center for Fisheries and Oceans (Day 2):

Sasakawa fellows arrived at the conference room at 1000 hrs. The presentation started with an introductory video. Then, the presentation covered important aspects such as the historical background, foundation of the institution, cooperation between academics and government, goals, and achievements. Moreover, the presenter showed us important resources such as research vessels, experimental tanks, and human resources. Later, the Questions and Answers session was opened. After the Q&A session finished, the students were split into two groups to explore the facilities and see some of the marine species and infrastructure. Finally, the meeting finished at 1130 hrs.

Hakodate Shipyard (Day 2):

Students Gathered at 1330 hrs in the conference room of the shipyard where safety instructions and a field visit brief were given. Furthermore, students have the unique opportunity and experience to witness the construction phase of ships, including the steel plate assembly. Most of the ships under construction were handy-sized bulk carriers but students had the chance to visit the slipway and see the latest phase of construction of a ferry. In addition, Q & A took place both during the field trip and after the field trip. Finally, the field visit finished at 1530 hrs.

Nippon Steel Corporation (Day 3):

Sasakawa Fellows gathered at 1000 hrs in the conference room. The presentation started covering important topics such as the chronological history of the institution, the process of making steel, Japan's position in the market (top 4), resources, and infrastructure. After the presentation finished, the students split into two groups. Then, Students had the opportunity to visit several essential infrastructures and households involved in the process of raw materials, steel processing, and rolling of steel. Afterward, the students gathered back in the conference and the Q & A session opened. Finally, the meeting finished at 1230 hrs.

Shin Nihonkai Ferry (Day 3):

Sasakawa fellows boarded the ferry at 1700 hrs. Some of the students experienced the cast-off maneuvering of the ferry. Afterward, the students split into groups to visit the engine room of the ferry. Moreover, the engineers of the ferry gave a brief explanation of the engine control room. The meeting finished with a Q & A session. At 2100 hrs some of the students had the experience of observing the traditional "Japanese Tea Ceremony". Then, the next day the ferry arrived at Niigata Port at 0915 hrs.

Hokuriku-Shin'etsu District Transport Bureau (Day 4):

Sasakawa fellows gathered at 1000 hrs in the conference room. The meeting started with an opening speech from the Director-General of DTB. Afterward, students proceeded to the adjacent room for a photo session. Then, the presentation of the DTB started with introductory aspects like the location of

the District Transport Bureau of MLIT, prefectures covered by the DTB, the organizational structure of the Hokuriku-Shin'etsu District Transport Bureau, and regional organization of the DTB. Then, five presenters representing the ship inspector, ship tonnage surveyor, Seafarers' Labour Standards & License Division, Safety Management & Seafarers Labour Inspector, and Port State Control Officer division shared their experience and overview with the students. During these presentations, most of the questions asked were aimed at taking input so students could implement Japanese initiatives in their countries. Finally, the meeting finished with the PSC presentation at 1800 hrs in the conference room of the JR-East Hotel Mets Niigata.

Kashiwazaki-Kariwa Nuclear Power Station (Day 4):

Sasakawa fellows gathered at 1330 hrs in the conference room. The first part of the presentation covered relevant aspects such as the current energy situation in Japan, the importance of energy import in the country, and the historical two crises that hit Japan. The second part of the presentation was about safety measures and mechanisms that were implemented after the Fukushima Daiichi NPS accident. Moreover, impressive infrastructure that protects the nuclear plant in case of earthquakes was shown to the students. In addition, resources and infrastructure related to the safety of the plant and personnel were explained as well. After the presentation finished, students split into two groups to take part in the site tour and exhibition hall visit. During the site tour, students were able to see all the infrastructure, resources, and seaside of the nuclear plant. Q & A session was opened during the tour. Then, the students visited the exhibition hall where a small copy of one of the nuclear components was witnessed. Also, the students were able to see an exact copy of the pump and pipeline system of the nuclear plant. Finally, the meeting finished at 1630.

Tokyo Port (Day 5):

Sasakawa fellows boarded the service boat at 1500 hrs. During the tour, the presenter showed and explained the different types and sizes of ships that call Tokyo port. The main features of the port such as draft, width, and length of the port were explained by the presenter. Also, the presenter explained the plans for the expansion of Tokyo ports. Moreover, the functionality and importance of dredgers were explained. Q & A were opened during the tour. Finally, the tour finished at 1700 hrs.

Livia Endozo (Philippines)



Tokyo

12 May

Orientation

We were greeted by the warm smiles of the Sasakawa Peace Foundation staff and our gracious guide, Miyo-san. The sense of hospitality was immediate, setting a welcoming tone for our stay. During the orientation, we were introduced to Japan's rich culture and briefed on the field study schedule. The first day was dedicated to practicing the WMU Song, which we were to perform at the Welcome Reception. Later, some of the students rehearsed their presentations for the Global Ocean Literacy Initiative (GOLI), adding a layer of academic rigor to our visit. These moments of preparation and performance underscored the blend of cultural immersion and educational pursuit that defined our trip.

Tokyo, with its seamless blend of modernity and tradition, offered a captivating backdrop for our journey. From the towering skyline to the serene presence of Mount Fuji, every moment in this city was a testament to its unique charm and beauty. Our experiences were enriched by the warmth of the people we met and the cultural insights we gained, making our visit to Japan truly unforgettable.

13 May 2024

The Nippon Foundation

Mr. Yohei Sasakawa, Chairman of The Nippon Foundation, addressed the WMU students, emphasizing the importance of understanding Japan's maritime sector and fostering collaboration with Sasakawa Fellows and maritime professionals. His personal engagement with students highlighted his extensive global experience and approachable demeanor.

While pondering upon his book, I was astonished and fascinated by the magnitude of his kindhearted, determination and compassion towards the mission and goal of global eradication of leprosy. I am overwhelmed with the numerous opened doors and created opportunities he shared and kept on sharing to many lives especially to those less fortunate ones. It truly inspired me and taught me the essence and importance in navigating the journey called "life" be a helping hand to someone no matter the race and color.

Ministry Bureau of Land, Infrastructure, Transport and Tourism (MLIT)

Director General Atsushi Kaiya welcomed the WMU visitors, providing insights into Japan's maritime sector. Presentations covered the country's maritime policies, port and harbor operations, Japan Coast Guard functions, and efforts toward carbon neutrality by 2050. The comprehensive overview included Japan's strategic hub ports, disaster prevention initiatives, and maritime law enforcement.

Welcome Reception

Held at Toshi Center Hotel, the reception highlighted Japanese 'Nomunication' blending social bonding with professional interactions. Students and Japanese fellows sang the WMU song, fostering cultural exchange and camaraderie.

Hakodate

14 May 2024

Hakodate Research Center for Fisheries and Oceans

Students visited the Hakodate Research Center, learning about marine research and sustainable fishing practices, showcasing government-industry-academia cooperation.

Hakodate Dock Co., Ltd.

The visit to this historic shipbuilding company provided insights into Japan's shipbuilding industry, combining traditional craftsmanship with modern engineering. The company's diverse capabilities and commitment to quality and regional development were emphasized.

Visit to Muroran and Departure from Otaru Port

15 May

Nippon Steel North Nippon Works and Shin Nihonkai Ferry Cruise

At Nippon Steel, students explored the scale of modern steel production and its global distribution network. This visit underscored the importance of steel in various industries. The subsequent ferry cruise from Otaru Port included a technical tour of the ferry's engine room, enhancing understanding of maritime engineering.

Niigata

16 May 2024

Hokuriku-Shin'etsu District Transport Bureau

Detailed regulatory aspects of maritime operations and human resource management, emphasizing safety and environmental concerns.

Kashiwazaki-Kariwa Nuclear Power Station

Offered insights into Japan's energy strategies, nuclear power's role, and stringent safety measures post-Fukushima.

Tokyo

18 May 2024

Meiji Jingu

The serene Shinto shrine provided a deep understanding of Japan's spiritual heritage.

Asakusa

Immersion in the vibrant district, exploring Sensoji Temple and local culture.

Tokyo Cruise Ship and Hama-rikyu Gardens

The cruise highlighted Tokyo's blend of modernity and tradition, while the gardens showcased Japanese landscape design.

Personal Reflection

The enriching experiences during the field study trip to Japan, sponsored by the Sasakawa Peace Foundation, left a lasting impact. The visits provided profound insights into maritime practices and Japanese culture, enhancing the students' understanding and appreciation. The hospitality and meticulous arrangements by the foundation and local guides significantly contributed to the success and enjoyment of the trip.

As a Filipino student from the Mindanao Region, this opportunity means a great blessing, and I am truly honored. Your generosity and support have opened doors that I could only dream of. With this grant, I will be able to broaden my horizons, gain valuable knowledge, and contribute to my field of study. I promise to work diligently and make the most of this incredible chance. Once again, thank you from the bottom of my heart. Your kindness has made a significant impact on my life, and I am excited to represent our country as I embark on this educational journey.

As I reflect on my personal goals and aspirations, I find myself enveloped in a whirlwind of dreams, uncertainties, and the exciting potential of paths yet taken. Creating a trajectory that aligns with my deepest ambitions requires not just self-reflection but also the courage to traverse the vast landscape of opportunities ahead.

Patrick John Cabasag (Philippines)



11 -12 May 2024 – Departure from Malmo to Copenhagen until arrival at Haneda Airport Tokyo, Japan

The travel from Malmö to Haneda Airport, Tokyo in Japan was full of excitement. I traveled along with 29 other S24 Sasakawa fellows together with Professor Johan Hollander, WMU Nippon Foundation Chair, and Ms. Elin Sigurjonsdottir, Senior University Assistant. This is not my first time to visit Japan, but it always feels like it is my first time. Personally, Japan was my first country to visit outside my country and I enjoyed and fell in love with the beauty of the places and the hospitality of the Japanese people. After a long flight, we safely arrived at Haneda airport and were warmly welcomed by Ms. Emi Shimada and Ms. Miyo Wada. From the airport, we traveled together by bus straight towards our hotel (Toshi Center Hotel, Tokyo) to formally be oriented on the activities that we were going to have for the rest of the week before checking in. The orientation lasted for an hour and while waiting for the check-in time, Ms. Miyo, the official tour guide invited us voluntarily to see and walk around the area. On the following day the courtesy visit to Mr. Yohei Sasakawa, Chairman of The Nippon Foundation in the morning and a courtesy call to Atsushi Kaiya, Director-General of the Maritime Bureau, MLIT, followed by a welcome reception in the evening.

13 May 2024 – Monday: Visit to The Nippon Foundation and MB-MLIT, Welcome Reception Night

This day was memorable for all of us to finally meet Chairman Yohei Sasakawa, a philanthropist and the author of the inspiring book entitled “Making Things Impossible, Possible”. We are greatly honored and fortunate to talk and thank him for his support and sponsorship for making this journey as a master’s student at World Maritime University (WMU) into reality. In the afternoon, we visited Atsushi Kaiya, Director-General of the Maritime Bureau, MLIT, and afterward presentation about MLIT was delivered by Ryu Nara, International Planning and Coordination Office, General Affairs Division, followed by the presentation of Ports and Harbours in Japan by Masayuki Tanemura, Director of the International Planning Office, Ports and Harbours Bureau, MLIT. The next presentation discussed Maritime Policy toward achieving Carbon Neutrality by Shinnosuke Hada, Deputy Director, International Negotiation Office, Ocean Development and Environment Policy Division, and finally, the Japan Coast Guard (JCG) gave an overview of their organization. In the end, the visit to the Maritime Bureau of the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT) was very informative and educational, we learned to understand their organization mandates and role in Japan's maritime industry. Interestingly, as part of the Philippine Coast Guard (PCG) organization, working with the Japan Coast Guard in several joint maritime activities was highlighted in the presentation, knowing that both countries share the vision to make the ocean safe and secure.

After the visit to MLIT, we proceeded back to the hotel for the evening Welcome Reception activity. The reception was warmly welcomed by the Executive Director, Dr. Hide Sakaguchi and attended by personalities from the Sasakawa Peace Foundation, representatives from various maritime institutions, WMU alumni, some delegates from different countries, and some stakeholders. It was a fantastic night that gave us the chance to showcase our talent through lively singing of the WMU songs and finally, the experience of meeting new people and exchanging conversation was the main objective of this welcome reception.

14 May 2024 – Tuesday: Travel to Hakodate to visit the Hakodate Research Center for Fisheries and Oceans and The Hakodate Dock Co., Ltd

On this day, we had to travel from Tokyo to Hakodate to visit the Hakodate Research Center for Fisheries and Oceans, we had the opportunity to see how the research center works and its management to the facility. The Center is a rental research institute that provides laboratories and other facilities to researchers. Researchers can also dock their research vessels at the pier next to the Center and use seawater collected from outside the port of Hakodate for their experiments. The Center has a large experimental aquarium, an observation lobby with a panoramic view of the port, a practice room with seawater, and conference rooms. The Hakodate Marine Observation Center is a symbol of international fisheries and ocean research cooperation.

We had a site visit to the shipbuilding firm the Hakodate Dock Co., Ltd. in the afternoon. This company built bulk carriers, ferries, and repaired merchant and military vessels. We use the opportunity to observe the building of ships as well as some ongoing facilities and ship maintenance. We stayed and rested in a hotel in Hakodate (Premier Hotel Cabin President Hakodate) following the visit.

15 May 2024 – Wednesday: Visit the Nippon Steel North Nippon Works Muroran Area and Travel via ferry to Niigata

We left Hakodate on this day to visit the Nippon Steel Corporation in Muroran, where we learned about the services they offer, including the manufacture of premium steel that is vital to both shipbuilding and industrialization in general. Some highlights include learning about the modern facilities and the vital role that steel manufacturing plays in the maritime industry.

A tour of the Shin Nihonkai Ferry, which serves as our means of transportation to Niigata, is one of the afternoon's activities. We visited the Monitoring Control Room (MCR) on the ship to get a look at the different types of equipment that were being monitored. We also went to observe the engine room in operation. To promote Japanese culture, The Nippon Foundation team, led by Mr. Kudo, initiated a tea ceremony at night.

16 May 2024 – Thursday: Arrival at Niigata Port, Visit to Hokuriku-Shin'etsu District Transport Bureau and Kashiwazaki-Kariwa Nuclear Power Station

We began our day at the Hokuriku-Shin'etsu District Transport Bureau which is primarily responsible for maritime safety enforcement in Japan, after arriving at the port of Niigata. The bureau presented the responsibilities of ship surveyors and how the bureau regulates and supports the maritime sector by ensuring compliance with the safety and seaworthiness of vessels.

At the Kashiwazaki-Kariwa Nuclear Power Station later in the afternoon, we were given an explanation of Japan's aspirations to use nuclear power as a sustainable energy source. It was a valuable experience to see the overall operation of the facility, I am deeply impressed with how they manage and keep the facility safe and environmentally sustainable facility. In the discussion about future energy policy and the significance of safety and innovation, Japan's creative response to energy challenges was highlighted. Our final activity was a visit to the Tokyo Port, which is home to the Oi, Harumi, and Tokyo International Cruise Terminals. The Tokyo Port is situated in the heart of Tokyo, the political, economic, and cultural hub of Japan. Through a ferry tour, the port authorities allowed us to explore the Port of Tokyo and provided us with an overview of the port's operations, ranging from cargo processing to passenger services. A full understanding of the port's role in supporting international trade and transportation can be obtained by observing the many types of ports and their unique activities.

17 May 2024 – Friday: Visit Hotel Nikko Niigata Observation Room, Niigata City Aquarium Marinepia Nihonkai, and Shinkansen (Bullet Train) experience

Our exciting day began with a visit to the Hotel Nikko Niigata Observation Room, which provides a panoramic view of the city's skyline, complete with tall skyscrapers and stunning architecture, making the visit worthwhile. Our next stop was the Niigata City Aquarium Marinepia Nihonkai, where we experienced to see many underwater creatures and a dolphin show that transported us back to our early years. After that, we're going to return to Tokyo by bullet train. I have never traveled by bullet train before, and I think it's wonderful how countries like Japan have progressed to upgrade their transportation infrastructure to provide greater comfort for their residents as well as greater economic prospects.

18 May 2024 – Saturday: Visit Meiji Jingu, Asakusa, and Hama-rikyu Garden by Tokyo cruise ship

We got the opportunity to spend a day at several popular Tokyo tourist attraction as part of the trip. We learned about the history of Japan and got to see some of their traditional landscapes and temples when we went to one of their Shinto shrines, the "Meiji Jingu." We also had the chance to visit the well-known "Asakusa", Japan's busiest shopping district, where we could try Japanese foods and shop for souvenirs. We board the Tokyo ferry to see Hama-rikyu Garden's breathtaking beauty as our final getaway of the day.

19 May 2024 – Saturday: Departure from Tokyo to travel back to Malmo via Copenhagen Airport

We are returning to Malmo, Sweden today via Copenhagen airport, capping off a week of exciting and informative visiting around Japan.

In summary, our week-long trip to Japan was incredibly educational and unforgettable, featuring visits to various facilities and maritime organizations that make sure regulations are followed and support Japan's economic growth. The most important things that happened to me during my vacation, aside from getting a taste of Japanese tradition and culture, were meeting unfamiliar people and connecting with them with the shared goal of promoting good governance and maritime development. This visit would not have been possible without the efforts of Mr. Kudo, Friends of WMU, Japan Secretariat, and the organizers of the activities. Allow me to sincerely thank each one of them for sharing their knowledge with us and for giving up their time and patience.

Finally, without Chairman Yohei Sasakawa, who makes opportunities and desires come true, my experience would be worthless. Words cannot explain how much I appreciate your kindness and support during my academic adventure at World Maritime University (WMU). May God continue to bless you abundantly and keep you safe at all times. Greetings and best wishes, Mabuhay ang Japan, Mabuhay ang Pilipinas!

Jattu Bridget Koroma (Sierra Leone)



The annual field study trip to Japan for Sasakawa Peace Foundation Fellows took place from May 11th to May 19th, 2024. On May 11th, we departed from Malmo and arrived in Tokyo on May 12th 2024.

During the orientation ceremony, the organizer provides a comprehensive overview of the weekly activities for the trip, allocates our allowances, and arranges for a shared lunch at the hotel. The objectives of the trip were explained before checking in to the hotel. These objectives included building a bond between the students and the fellows, as well as promoting understanding of Japan's maritime transport. We embarked on a brief excursion to explore a significant historical shrine. Observing the various elements depicted left me feeling overwhelmed. Subsequently, we proceeded to check into our hotel, and I must say, the hotel was exceptional.

Monday

As part of our formal agenda, we had the opportunity to meet with Dr. Sasakawa at The Nippon Foundation headquarters. He conveyed contentment and emphasized his dedication to assisting individuals in reaching their life goals. He emphasized his contributions to global peace and the institutions he supports through scholarships on a yearly basis. Nevertheless, the plans for students to travel to Japan for field study were temporarily put on hold due to the Covid-19 pandemic. However, they were able to resume last year. Dr. Sasakawa discussed his extensive connection with WMU and IMLI, providing assistance to students from diverse nations. A representative from WMU expressed gratitude for the invitation and acknowledged Dr. Sasakawa's significant contributions to the university and his dedication to empowering students globally. He emphasized the importance of maximizing the opportunity to visit different maritime facilities for our future career. Every student conveyed their gratitude and discussed their post-graduation plans at WMU. The ceremony ended with a gift presented to Dr. Sasakawa, a chance to take a group photo, and a friendly exchange of kind words. We had a delightful Japanese lunch and enjoyed some quality time together before our upcoming office event.

Upon arrival at the Maritime Bureau, the students were welcomed by the director, who has been hosting Sasakawa fellows annually for several years. The administration expressed their satisfaction in hosting the students and praised the institution for its ongoing collaboration with SPF to welcome students from WMU and its efforts to promote ocean preservation.

A representative from the International Planning and Coordination Office, General Affairs, Maritime Bureau, Mr. Ryu Nara, gave a rundown of Japan's short history, highlighting issues affecting the nation such as a lack of natural resources, natural catastrophes, an ageing population, sustainable economic

development, and climate change effects. He concluded by stating that the use, development, and conservation of Japan's lands are the MLIT's statutory obligations.

The Ports and Harbours division in Japan is responsible for managing the country's ports, which account for 99% of its trade volume. The national government and port management work together to plan and develop these ports, with federal laws being the department's overarching policy. Measures taken to prevent future disasters like Typhoon Jebi, climate change adaptation, storm surge protection, and decarbonization initiatives like the Carbon Neutral Ports (CNP) initiative are also discussed.

The leader of the Japanese Coast Guard gave a speech, stating that the Coast Guard is a post-war law enforcement organization established in 1948 to protect marine life, property, and the marine environment from harm. They maintain an asset of 474 vessels and craft, 97 aircraft, and 14,788 personnel across Japan. The Coast Guard adheres to principles of "Multilateral Cooperation," International Cooperation, and "Nomunication," ensuring effective communication and collaboration.

Later that evening, the Sasakawa Peace Foundation Fellows class of 2024 gathered for a welcome reception hosted by The Nippon Foundation and the Sasakawa Peace Foundation Secretariat. The event aimed to familiarize participants with the Japanese workplace, facilitate networking, and improve communication. The evening was graced by various dignitaries from Japan and ambassadors from different countries of the fellows.

Our field study trip continues on Tuesday to Hakodate, another Japanese city where we had unforgettable experiences during our overnight stay. The Hakodate Dock and Fisheries Research Center were our stops.

Hakodate Research Center for Fisheries and Oceans

Hakodate, a picturesque city in Hokkaido, boasts abundant fishery resources. Over the course of its 20 years of operation, the Hakodate Research Center for Fisheries and Oceans has been instrumental in promoting sustainable fishing practices and expanding the field of marine science. Academic institutions and private enterprises collaborate in its laboratories, which are part of the rental research institute. Seawater samples can be collected for aquarium experiments by researchers thanks to the nearby pier, where research vessels dock directly. The center's observation lobby and expansive experimental aquarium offer a bird's-eye view of Hakodate Ports, highlighting the importance of the area to the idea of an "Ocean City" and international fisheries.

Hakodate Dock

The first Japanese port to be officially recognized as an international port in Japan, has been operating for more than 180 years. Every year, it produces out four ships. I was able to see firsthand the complex shipbuilding and maintenance processes. From cargo ships to fishing trawlers, enormous vessels were painstakingly put together by skilled artisans and engineers. The dry docks were large enough to hold ships whose hulls towered over me. As workers welded, painted, and examined each component, the shipyard resounded with the rhythmic clanging of metal. I was captivated by the way old shipbuilding techniques were seamlessly integrated with state-of-the-art machinery.

Wednesday

Nippon Steel North Nippon Works Muroran Area

Nippon Steel is the frontrunner in the Japanese steel industry, was established in 1909 as one of the nation symbols of modernization, in keeping with the pioneering spirit of the Meiji Era, which is a testament to the country's industrial might. Construction, automotive, and shipbuilding industries all benefit from the high-quality steel produced from North Nippon Works Muroran Area expansive steelworks. The world's infrastructure was shaped by steel slabs that were transformed from molten iron that flowed from tall blast furnaces. Cranes, conveyor belts, and smelting furnaces were all in perfect harmony, creating a symphony of progress, and the sheer magnitude of the production amazed me. The lasting impact of Nippon Steel's dedication to sustainability and innovation is immense.

Technical Tour of the ferry (Engine room)

The experience was brief, but crucial. I learned a lot by visiting the ferry's engine room and asking the engineers questions like how many generators they use, how many engineers were onboard, and whether or not they experienced technostress with the invention of new technology in the maritime industry.

Thursday

Hokuriku-Shin'etsu District Transport Bureau

The Director General of the Hokuriku-Shin'etsu District Transport Bureau warmly welcomed us and expressed his delight at our visit. He thanked the SPF for providing us with the chance to learn from various Japanese maritime transport associations and gave us a quick rundown of the DTB's activities. The DTB provided us with a wealth of knowledge, including the role of a ship tonnage surveyor, who measures a ship's dimensions in accordance with regulations such as the international convention on tonnage measurement of ships and determines its volume or weight; the role of the safety and seafarers labour inspection, which ensures the safe navigation of ships and safeguards the working conditions of seafarers; and the PSC activities in Niigata, where we learned that PSCOs are approximately appointed among those who has working experiences in all the above experts , our time at the DTB was invaluable

to our future in the maritime industry. The incredible Niigata rice is the crowning glory of the Niigata rice plantation, and I enjoyed it.

Kashiwazaki-Kariwa Nuclear Power Station

The Tokyo Nuclear Power Station was both enlightening and thought provoking. Amidst the controversy surrounding nuclear energy, the plant exemplified stringent safety protocols and rigorous inspections. The control room resembled a futuristic cockpit, where operators monitored reactor conditions with unwavering focus. The hum of turbines and the glow of control panels underscored the delicate balance between energy production and environmental responsibility. The plant's commitment to transparency and disaster preparedness left me pondering the complexities of our energy choices.

Friday

Hotel Nikko Niigata Observation Room and Niigata City Aquarium Marinepia Nihonkai: Both events left us with memorable experience, gazing at the cityscape and the Sea of Japan and diving into the underwater world at Marinepia Nihonkai that showcase marine life from the Japan sea including playful dolphins was incredible. And we later left for Tokyo on the bullet train. It was my first time on the bullet train and the experience was wonderful.

Tokyo Port

The port was opened as an international trading port in 1941, developed along with the post-war growth is today a crucial role as a gateway to the international city of Tokyo, which draws people, goods and information from around the world. During our ferry ride, we got a tour of the port. Our guide informed us that there are up to 25 terminals there, but we only got to see a few because of time constraints. The sea forest, which covers an area of 149 acres formed by recycling items buried there, astounded me. From 2000 to 2023, the residents of Tokyo worked together to plant trees, addition to housing the Olympic Games and other events. The Tokyo Bridge, which was completed in 2022 that links the city's west and east sides, greatly enhances transportation and communication between the two halves of the metropolis. Everything about it was absolutely fantastic.

Saturday

We had a blast learning about Tokyo's history on Saturday, after wrapping up all of our official visits on Friday. We went to the following sites:

We went to Meiji Jingu, a Shinto shrine dedicated to Emperor Meiji and Empress Shoken, offers a serene escape from the city's hustle and bustle. We explored the historic district of Asakusa, where the iconic Senso-ji Temple stands. Nakamise Street, lined with traditional shops, leads to the temple's grand entrance. We bought beautiful souvenirs from these shops, showcasing the environment's beauty, The Hama-rikyu Gardens, a tranquil oasis amid Tokyo's urban sprawl, offer a serene stroll through

landscaped gardens, admire a teahouse by a pond, and enjoy the harmony of nature and architecture. We had a great experience visiting those wonderful places in Tokyo.

Overall, the Japan field study has been the best field study experience among all the field study trip here at WMU in terms of logistics and organizing, the memories derived from this trip will live with me forever and for that I end up by saying to all organizers, Arigatou gozaimasu!!!.

Prasanna Rajapaksha (Sri Lanka)



I am writing to express my sincere gratitude towards Dr. Yohei Sasakawa The Nippon Foundation and the Sasakawa Peace Foundation for giving me this opportunity to visit incredible Japan with lots of memories starting from 11th to 19th May 2024. We were warmly welcomed at the Haneda Airport and proceeded to Toshi Center Hotel for the orientation program of the field visit. Everything was well arranged, and clear instructions were given for the field study program by providing allowances for personal expenses. We understood the importance of time and how to respect Japanese people by being 10 minutes before the scheduled time. First day evening was relaxing, and we explored the wonderful Tokyo city with full of excitements.

13th May 2024: It was the time for courtesy call on Dr. Yohei Sasakawa and exactly 10.00 am in the morning we started the meeting with Dr. Sasakawa at The Nippon Foundation. It was a great time for all of us to stay with Dr. Sasakawa by sharing our views and listening his powerful thoughts. After the lunch, we visited Maritime Bureau MLIT and learned about overview of Japanese maritime sector, vision and mission of MLIT, key responsibilities, present and future challenges of maritime sector, overview about Japanese ports, port development projects, maritime policy toward net zero emission and Japanese coast guard operational structure. The session was very interesting and lots of questions answered with great translation process carried out to have a better understanding about maritime sector in Japan.

14th May 2024: We visited Hakodate Research Center for Fisheries and Oceans and understood the process of ocean research and hybrid species generation process. Then we visited Hakodate Dock Co. Ltd and understood the process of ship building from design, plasma cutting, bending, welding, fabricating, testing and inspection, assembling, painting. Hakodate is mainly building bulk carriers and additionally the do ship repairing activities also. They have several dry docks, ship ways and berth to cater all these ships building and repair activities.

15th May 2024: We visited Nippon Steel Cooperation which is considered as Japanese largest steel producing company. They produce steel from Iron ore to finished products such as steel plates, steel sheets, round and square bars, structural steels, pipes and tubes, railway and automotive machinery parts etc. It was a great opportunity to visit such massive factory and understand the operation, safety, quality and sustainable practices, digital transportation, continues development, carbon neutrality practices and future research they used while producing steel.

16th May 2024: We visited Hokuriku-Shin'etsu District Transport Bureau and learned about the maritime administration system in Japan specially about the prefecture such as Ishikawa, Toyama, Nagano and Niigata. It was a great opportunity to learn about the safety management of seafarers, labour inspection and specially the presentation given by Ms.Yasko Suzuki who is a WMU Sasakawa alumni by contributed here extra attention coming to the hotel we stayed. During the afternoon time, we visited Kashiwazaki- Kariwa Nuclear Power Station. It was a lifetime opportunity for me to visit a nuclear power plan which is highly engineered designed to produce energy using Uranium. I understood the process of importing Uranium ore up to Uranium extracting process to make reactor. Uranium reactors use to boil water and produce steam that will use to rotate steam turbine producing electricity. They explained us the safety precautions of the power plant to prevent from Tsunami, flood an earth quick. The very tall concrete wall has constructed at the end of sea area which will prevent future Tsunami waves which can affect to the reactors. They have awareness programs for people who live around the power plant and the school children by educating the nuclear reaction process and what are safety precaution they have taken to avoid disasters.

17th of May 2024: We visited Nikko Niigata observation tower in the morning and had a chance to see the great view of Niigata. After that we visited Niigata Aquarium which was very attractive by managing different varieties of sea life in display together with unforgettable and enjoyable dolphin show. After than we visited around the whole Tokyo port in a cruise with very informative explanation about port activities. Tokyo port is the largest container port in Japan and the same is own by Tokyo Ports Authority. The ports handle approximately 4.5 TEU per year.

18th May 2024: That was the last day of field trip and in the morning, we visited Meiji Jingu Forest area and Asakusa shrine. After that we had our own time to enjoy the street shopping and Sanja Matsuri festival in Japan. Later we had a tour around the Tokyo city and visited the Hama-rikyu Garden and finished the field study as scheduled.

During the whole journey, I enjoyed all varieties of Japanese culinary dishes with great feeling of Japanese culture. But unfortunately, I could not manage chopsticks but every time they serve cutleries. Accommodations were brilliant during the whole stay and all the hotel staffs were very friendly. Transportation arrangements were very well planned and relaxing during the whole journey. Finally, I must say that the whole field visit from the beginning to the end was new experience for me and I learned lots of valuable things to develop maritime industry in my home country.

I wish Dr. Yohei Sasakawa together with Kudo San, Emi San, Miyo San, translators and other staff to have a healthy life and bright future to be with ever growing maritime industry. I am always proud to be a Sasakawa fellow.

Arigatou Gozaimasu

Shripathy Thirunavukkarasu (Sri Lanka)



I have visited to Japan from 11th May 2024 to 19th May 2024 with the great opportunity of Sasakawa Foundation, I would like to express my sincere appreciation to Dr. Sasakawa and The Nippon Foundation. It was the great pleasure that we were welcomed by Emi san, Miyo san at the Haneda Airport and it was my first visit to Japan then proceeded to Toshi Center Hotel for the orientation of the study visit. In the orientation we met Mr. Kudo and the Sasakawa foundation staff and we clearly understand the whole programme with the advancement of 10-minute time schedule for the whole Japan visit with the daily allowance for the expenses on 12th May 2024.

Then on the very first day of the official meeting on 13th May 2024 participated with the GOLI introduction meeting and followed met Dr. Sasakawa at The Nippon Foundation with the great excitement. It was the great full day and explained our inspirations after the WMU education. Then in the afternoon it was the pleasure to attend the sessions at MLIT and able to learn about overview of Japan, Challenges facing by Japan, Mission of MLIT and the roles, responsibilities in the first session. In the second session it was interested to learn about Overview of Japanese ports, Port development and management/operation scheme in Japan and port policies, Maritime Policy toward Achieving Carbon Neutrality and the one of interesting session delivered by WMU Sasakawa alumni from the Japan coast guard on the operational activities of Japanese coast guard.

Another fruitful day on 14th May 2024 it was able to understand the ocean researches, hybrid species at the Hakodate Research Center for fisheries and oceans followed it was the great opportunity to visit the Hakodate dock to understanding the Hakodate dock company history, ship building, ship repair, and the innovative operations.

Then on 15th May 2024 we visited the Japan's largest steelmaker and one of the world's leading steels producing company Nippon Steel Corporation. Its operating in the four pillars such as 1) rebuilding our domestic steel business and strengthening our group's management, 2) promoting a global strategy to deepen and expand our overseas business, 3) taking on the challenge of carbon neutrality and, 4) promoting digital transformation strategies. With the aim of continually growing to become the "best steelmaker with world-leading capabilities." Nippon steel company produce Plates and construction products, flat products, bars and wire rods, pipes and tubes, railway, automotive & machinery parts, titanium and stainless steel.

It was also another good day on 16th May 2024, visited to Hokuriku-Shin'etsu District Transport Bureau and met the port administration expert WMU Sasakawa alumni Ms. Yasko Suzuki with her official

colleagues. It was able to understand outline of the maritime administration of DTB, It's prefectures such as Ishikawa, Toyama, Nagano and Niigata was explained and the outline of the organization by Mr. Kazuhito Momma, Director for the Maritime Department further sessions from Mr. Youhei Kunikane on Safety management and seafarers labour inspectors and it's unforgettable memory with Ms. Yasko Suzuki, Principal PSCO and WMU Sasakawa alumni who came to the hotel in the evening and explained the PSC activities in Hokuriku-Shin'etsu District Transport Bureau. Same day in the afternoon visited to Kashiwazaki-Kariwa Nuclear Power Station and able to understand the Japanese energy situation, chronology of the Kashiwazaki-Kariwa NPS, design of boiling water reactor, concept of safety at nuclear power plants, regulatory requirements, prevention mechanisms from flooding, tsunami, and earthquake.

Furthermore, on 17th May 2024 morning visited to Nikko Niigata observation tower and able to see the view of Niigata from the tower and visited to Niigata Aquarium there were approximately 600 varieties and 20,000 specimens of the sea life on display, the facility is one of the most prominent aquariums on the Sea of Japan coast. The aquarium introduces aquatic life forms from around the world with an emphasis on the wondrous environment of Niigata and the nearby Sea of Japan enjoyed the unforgettable memory of popular dolphin show.

On the final day of the official field study visit on 18th May 2024, in the morning visited to Meiji Jingu and enjoy the forest area and prayers, then enjoyed the Asakusa before the cruise trip during the Cruise Ship in the Tokyo port we learnt that The Port of Tokyo, the marine gateway to Japan's capital Tokyo, is one of the largest international trade ports of Japan with large-scaled container terminals. As one of world-leading ports, it plays key roles in supporting social and economic activities in the Tokyo Metropolitan Area with a population of 40 million people. Tokyo Port Terminal Corporation (TPTC) was founded in 2008 through the succession of business of Tokyo Port Terminal Public Corporation. In the afternoon the field visited concluded with the Hama-rikyu Gardens visit. During the whole visit the translation was excellent.

Food

Thank you very much for all varieties of culinary delicious foods for the whole week in the way of buffet lunches, packet lunches with the Japanese flavour, Thai and Indian. Every day it was a new experience and taste. The Sasakawa Peace Foundation's commitment to providing a comprehensive and culinary feel us to understand the cultural significance of Japan.

Accommodation

The whole week accommodation from the starting day to end including the cruise the facilities were excellent, and I have enjoyed very well and first time in my life used the automated toilet facilities.

Every day new accommodation brings the new lifestyle in the Japan and the logistical arrangement to the accommodation very ideal with the field study sites every day.

Transportation

The Sasakawa Peace Foundation's planning and the day-to-day operation transportation were excellent. It was included all modes of transportation in air, land, bullet train and cruise were amazing with on time.

Finally with all memories and the excellent professional arrangement of field study visit to Japan is a new learning of my life in relation to maritime affairs, planning of the programme and logistical arrangement and Sasakawa fellowship is the best fellow ship at WMU and with all memories of Japan visit until visit Japan ARIGATOH.

My wishes to Dr Sasakawa, Mr. Kudo, Emi san, Miyo san and Reiko san as the WMU Sasakawa fellow and your excellent arrangement for the trip and the contribution to the world for the sustainable maritime development. O-DA-IJI NI.

Tanapit Petchmunee (Thailand)



Tokyo

12 May

As our plane from Copenhagen began its descent towards Tokyo, a sense of anticipation swept through my mind. Peering out of the window, I was greeted by a breath-taking panorama of the Land of the Rising Sun - Japan. As we descended, Tokyo gradually revealed itself. The city stretched endlessly beneath us. Tokyo Tower and Mount Fuji, seen side by side, came into view. The juxtaposition of Tokyo Tower and Mount Fuji came into view. It was a sight to behold, a harmonious blend of the urban and the natural, the modern and the timeless. As the plane descended further, the city came into sharper focus. I could see the intricate network of streets, parks, and rivers that made up the fabric of Tokyo. Somehow my eyes kept drifting back to those two landmarks, feeling as though they were personally welcoming me to this remarkable land. Stepping outside, the Sasakawa Peace Foundation staff and Miyo-san, our Japanese guide, awaited. I was eager to explore, to learn, and to immerse myself in the unique and beautiful culture of Japan.

During the orientation, we were introduced to an overall Japan information, particular its culture and key information of the field study schedule. The WMU students spent the first arrival day to practice WMU Song aiming to perform at the Welcome Reception. We shared a joyous moment with the foundation staff who cheered on us and recorded the practice. Some of the students also prepared their final rehearsal on Global Ocean Literacy Initiative (GOLI)'s presentation after the official schedule.

13 May

Sasakawa Peace Foundation Office

Through the lead of Kudo-san and his big umbrella, a group of WMU students could follow through a bustling morning urban train and safely arrived at Sasakawa Peace Foundation Office. A group of representatives of WMU students who interested in ocean literacy activity conducted Global Ocean Literacy Initiative (GOLI)'s Introductory Presentation for Dr. Hide Sakaguchi, Executive Director of Sasakawa Peace Foundation and interested staff. We were grateful for their keen interest and kind suggestion on our initiation development.

The Nippon Foundation

Meeting with Mr. Yohei Sasakawa, Chairman of The Nippon Foundation, left an indelible impression on the WMU students. In his address to the WMU students, he generously shared his inspiring wisdom and insights. He emphasised the goals of this field study – to learn more about Japan, particularly

maritime sector, and to extend and strengthen friendship with Sasakawa Fellows and other maritime professionals for further collaboration. As the students individually greeted the Chairman, he engaged in brief conversations with some students demonstrating his extensive familiarity with the unique circumstances in each country he has had the opportunity to visit or some WMU alumni he had a chance to reunite. His warm and down-to-earth demeanour put the excited students at ease, creating an atmosphere of genuine connection.

Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

Mr. Atsushi Kaiya, Director General of the Maritime Bureau, MLIT made a welcome remark for all WMU visitors and briefly mentioned Japan's current conduct in maritime sectors. MLIT provided 4 presentations: the overview introduction, introduction of ports and harbours, Japan Coast Guard, and maritime policy toward achieving carbon neutrality.

Through Introduction, Mr. Ryu Nara, International Planning and Coordination office, General Affairs Division, Maritime Bureau, MLIT, explained about Japan and MLIT. Japan is an island nation with a population of 123 million. Encircled by the sea, Japan boasts a land area of 378,000 square kilometers, with 66% of its terrain cloaked in forest and a 34,000-kilometer coastline. Despite its natural beauty, the country faces frequent natural disasters, such as typhoons and earthquakes, and impacts of climate change, and grapples with a scarcity of natural resources. Compounding these issues are a low birth rate, an aging population, and difficulties in retaining seafarers. Moreover, the MLIT, one of Japan's largest ministries, comprises 11 bureaus (including maritime related institutes: Maritime Bureau, and Port and Harbours Bureau) and oversees 4 external organs (including the Japan Coast Guard).

For Introduction of Ports and Harbours in Japan by Mr. Masayuki Tanemura, Director of International Planning Office, Ports and Harbours Bureau, the second presenter highlighted the critical role of Japan's ports, with over 99% of trade conducted via maritime transport and most of the population residing near these ports. Japan features 5 strategic international hub ports, 18 international hub ports, and 102 major ports, primarily along the southern coast. Port management is divided among Municipal Governments, Administrative Associations, and Port Authorities, with the national government overseeing policy development. Current port policies focus on disaster prevention, climate change management, and achieving carbon neutrality by 2050. Recent initiatives include wind-resistant container stacking, elevating electrical equipment, and partnering with the USA on technology for zero-carbon emissions. Despite trailing in autonomous port development due to labour policy challenges, Japan is actively working on sustainable port operations and decarbonising terminal and industrial activities in port areas.

For Japan Coast Guard (JCG) presented by Captain Hayashi, the third speaker emphasized its role as a law enforcement agency devoid of military functions. Established in May 1958 amidst the post-World

War II "Sea of Darkness," JCG was founded to restore maritime security under the principles of Humanity and Justice. Japan's jurisdictional waters, ten times the size of its land, are patrolled by over 455 vessels, with a permanent presence near the crucial Senkaku Islands since 2016. The JCG operates 97 aircraft and employs 14,788 personnel. It participates in international forum i.e. the North Pacific Coast Guard Forum and the Heads of Asian Coast Guard Agencies Meeting. Moreover, JCG has proposed a global Coast Guard summit, supported by The Nippon Foundation.

Lastly, Mr. Shinnosuke Hada, Deputy Director, International Negotiation Office, Ocean Development and Environment Policy Division, Maritime Bureau at MLIT, discussed Japan's maritime policy towards achieving carbon neutrality and its role in the international forum – the meetings of the International Maritime Organization (IMO). Japan advocates a feebate mechanism and transitions from heavy fuel oil (HFO) to LNG, and ultimately to hydrogen and ammonia.

Welcome Reception

The evening reception at Toshi Center Hotel was a delightful event, where we experienced the true essence of Japanese 'Nomunication' - the art of bonding over drinks and communication in a more casual atmosphere without formal working context. That night, we joined voices with our Japanese fellows to sing the WMU song, a moment of unity that transcended cultural boundaries. As a conductress, I enjoyed the view seeing all performers enjoyed their group singing and dancing moment. The event was a good opportunity to make new friends and strengthen our bonds with our old friends.

Hakodate

14 May

The Hakodate Research Center for Fisheries and Oceans

We took a domestic flight from Haneda Airport to Hakodate. Our first stop was the Hakodate Research Center for Fisheries and Oceans, where we learned about marine research and sustainable fishing practices. The research center reflects good example of integrative policy planning and the government-industry-academia cooperation.

The Hakodate Dock Co., Ltd.

In the afternoon, we visited the Hakodate Dock Co., Ltd., gaining insights into shipbuilding and maintenance. The Hakodate Dock Co., Ltd. is a venerable institution in Japan's shipbuilding industry. Established in 1896 by Viscount Eiichi Shibusawa, this company has grown to become a cornerstone of maritime engineering in Hokkaido. The Hakodate Dock Co., Ltd. impressed us with its diverse capabilities, from constructing various types of vessels to providing repair services for ships, including those of the Navy. Their flagship product exemplifies their engineering prowess. The company's commitment to excellence is evident in their motto, which emphasizes quality work, contribution to

regional and national development, and employee welfare. This visit provided invaluable insights into Japan's shipbuilding industry, showcasing the blend of traditional craftsmanship and modern engineering that has kept the Hakodate Dock Co., Ltd. at the forefront of maritime technology for over a century. It was a privilege educational visit for maritime students from various background to witness the real ship dock in Japan.

Visit to Muroran and Departure from Otaru Port

15 May

The Nippon Steel North Nippon Works in the Muroran Area and the Shin Nihonkai Ferry Cruise

Our educational journey continued to the Nippon Steel North Nippon Works in the Muroran Area which may be regarded as a cornerstone of Japan's steel industry. This facility, part of Japan's largest steel company and the world's fourth largest, showcased the impressive scale and sophistication of modern steel production. The visit began with an informative presentation outlining the company's global standing, diverse product range, and substantial workforce of over 5,000 employees. We were given a comprehensive overview of the steel-making process, from raw material processing through various high and low-temperature treatments, to the final shaping and shipping stages. Our tour of the facilities provided a first-hand look at the various stages of steel production. The high degree of automation was notable with limited human oversight for maintaining safety standards and quality control. The on-site port facility, used for global distribution, underscored the company's ability for international market. This visit illuminated the vital role of steel in numerous industries, from shipbuilding and automotive to construction and machinery. It complemented our earlier experiences, particularly our visit to The Hakodate Dock Co., Ltd., by providing insight into the raw materials that form the backbone of shipbuilding and many other industrial sectors.

Later, we departed from Otaru Port on the Shin Nihonkai Ferry Cruise, where the technical tour of the ferry's engine room provided a fascinating glimpse into the engineering machinery in maritime sector.

Niigata

16 May

The Hokuriku-Shin'etsu District Transport Bureau

We arrived at Niigata Port and visited the Hokuriku-Shin'etsu District Transport Bureau. We learned that the Maritime Department, with its 9 divisions, oversees crucial aspects of shipping including safety, environmental concerns, and personnel matters. The presentation detailed the various types of inspectors employed by the department, each playing a vital role in maintaining maritime standards. This visit provided valuable insights into the regulatory aspects of maritime operations, human resource management, and the district's policy implementation assessment and evaluation for improvement in Japan.

The Kashiwazaki-Kariwa Nuclear Power Station

The day's highlight was the tour of the Kashiwazaki-Kariwa Nuclear Power Station, offering a profound insight into Japan's complex energy landscape. We learned about Japan's heavy reliance on imported energy and the strategic shift towards nuclear power and natural gas following past oil crises. The plant's history, dating back to 1969, and its current status as one of the world's largest nuclear power stations were detailed. The presentation included an overview of the 2011 Fukushima Daiichi accident, which has significantly influenced Japan's energy policies and nuclear safety measures. We were briefed on the plant's advanced Boiling Water Reactor design and the extensive safety improvements implemented post-Fukushima, including enhanced flood protection, backup power sources, and emergency response capabilities. Our tour of the facility, split between the visitor center and a site tour, provided a comprehensive understanding of nuclear reactor operations and the stringent safety protocols in place. The scale models and technical explanations in the visitor center, coupled with the impressive infrastructure observed during the site tour, underscored the complexity and significance of nuclear energy in Japan's power generation strategy.

Sightseeing in Niigata and Travel to Tokyo

17 May

Hotel Nikko Niigata, the Niigata City Aquarium Marinepia Nihonkai and Tokyo Port

We started our day with a visit to the observation room at Hotel Nikko Niigata, which provided a beautiful view of the city. Our next stop was the Niigata City Aquarium Marinepia Nihonkai, where we explored marine biodiversity and enjoyed the dolphin show. In the afternoon, we travelled via the Japanese bullet train from Niigata Station to Tokyo Station, marvelling at the speed and efficiency of the Shinkansen. We concluded the day with a ferry sightseeing tour of Tokyo Port, offering us an experience to see one of Japan's busiest maritime hubs.

During our ferry tour, we observed the port's extensive infrastructure, including over 200 berths handling more than 4 million TEUs annually. The port's layout, with strategically separated terminals, ensures safe ship manoeuvring and efficient operations. We learned about the port's crucial role in Japan's economy, its diverse facilities serving cargo, ferry, and cruise operations, and the continuous dredging works maintaining navigational safety. This experience provided valuable insights into the scale and complexity of modern port operations, complementing our earlier visits to shipbuilding and regulatory institutions.

Tokyo

18 May

Meiji Jingu

Our cultural immersion began with a visit to Meiji Jingu, a serene Shinto shrine. We then explored the bustling streets of Asakusa and took a Tokyo Cruise Ship to Hama-rikyu Gardens, enjoying the scenic beauty and historical significance of the gardens.

Our cultural immersion began with a visit to Meiji Jingu, a serene Shinto shrine that stands as a testament to Japan's rich spiritual heritage. This sacred space, dedicated to Emperor Meiji and Empress Shoken, offered us a profound glimpse into the heart of Shinto, Japan's indigenous faith. The tranquil forest surrounding the shrine, with its towering trees and peaceful pathways, provided a stark contrast to Tokyo's urban landscape, allowing us to experience the deep connection between Shinto beliefs and nature. As we passed through the massive gates and approached the main shrine buildings, we were struck by the simplicity and elegance of the architecture, reflecting the Shinto emphasis on purity and harmony.

The opportunity to participate in traditional Shinto rituals, such as the cleansing ritual of temizu, deepened our appreciation for the living traditions that continue to shape Japanese culture.

Asakusa

Our journey then took us to the vibrant district of Asakusa, where we were immersed in the lively atmosphere of old Tokyo. The iconic Sensoji Temple, with its centuries of history, offered a fascinating counterpoint to Meiji Jingu, showcasing the harmonious coexistence of Shinto and Buddhism in Japanese society. As we temporarily split to roam around the street, I had a chance to try Okonomiyaki, the Japanese savoury pancake and witnessed a traditional walking ceremony around the temple area.

The Tokyo Cruise Ship and Hama-rikyu Gardens

At late afternoon, we took the Tokyo Cruise Ship journey to Hama-rikyu Gardens. As we glided along Tokyo's waterways, we marvelled at the city's seamless blend of modernity and tradition. Upon reaching Hama-rikyu Gardens, we were transported to a world of timeless beauty. These meticulously maintained gardens, once the private retreat of the Tokugawa shogun, exemplify the Japanese art of landscape design. Walking through the Gardens, we were struck by the detailed attention to seasonal changes in the plantings and the harmonious integration of water features. This day of cultural exploration left us with a deep appreciation for Japan's ability to preserve its rich heritage while embracing modernity.

19 May

Our enriching trip came to an end as we departed from Haneda Airport, bound for Copenhagen. The experiences and knowledge gained during our field study in Japan left an indelible mark on us, fostering a deeper understanding of maritime practices and Japanese culture.

Personal Reflection

I would like to extend my sincere gratitude to the Sasakawa Peace Foundation for their generous sponsorship and support throughout our enlightening field study trip. The arrangements made by the Foundation were impeccable, ensuring smooth logistics and enriching experiences at every step of our journey. I am deeply thankful to the foundation's staff for their warm welcome and unfailing assistance, which made us feel at home in Japan. Special appreciation goes to Miyo-san, our local guide, whose positive guidance and interesting storytelling skills enhanced our understanding of Japanese culture and history.

I also extend my appreciation to the hosting sites and translators whose expertise and hospitality enriched the learning experience. Lastly, my Japanese friends from MLIT, the foundation, and WMU, for their invaluable support and thoughtful recommendations, which added immeasurable value to our memorable trip. This opportunity has broadened my understanding of Japan and maritime sector. The cherished memories still resonate long after my return to Sweden.

Anusorn Orachorn (Thailand)



The Japan Field Study Trip for Sasakawa Fellowship Students, spanning from May 11 to May 19, 2024, offered a unique and comprehensive look into various aspects of Japan's infrastructure, industry, and culture. The carefully planned itinerary provided a balance of professional engagements, educational visits, and cultural exploration. Here is a detailed account of the trip and my overall impressions.

11 May: Departure from Copenhagen Airport

The anticipation was palpable as we gathered at Copenhagen Airport, embarking on our journey to Japan. Excitement and curiosity about the experiences ahead energized our group, setting a positive tone for the trip.

12 May: Arrival in Tokyo and Exploration

Upon arriving at Haneda Airport, we were greeted by the bustling energy of Tokyo. That evening, we ventured into Shinjuku, a vibrant district known for its towering skyscrapers and neon lights. The highlight of the evening was visiting Tokyo Skytree, where we marveled at panoramic views of the city, capturing the vast urban landscape that would be our home for the next week.

13 May: Engaging with Japanese Leadership and Policy

Our formal engagements began with a visit to The Nippon Foundation, where we had the honor of meeting Dr. Yōhei Sasakawa, Chairman of the foundation. Dr. Sasakawa's insights into the foundation's philanthropic activities and vision were truly inspiring. In the afternoon, we attended lectures at the Ministry of Land, Infrastructure, Transport and Tourism, gaining valuable knowledge about Japan's infrastructure policies. The day concluded with a welcome reception at our hotel, where we connected with other fellows and reflected on the day's learnings.

14 May: Insights into Fisheries and Maritime Industries

Traveling from Tokyo to Hakodate, we visited the Research Center for Fisheries and Oceans. The visit provided us with a deeper understanding of Japan's commitment to sustainable fishing practices and marine research. We then toured The Hakodate Dock Co., Ltd., witnessing firsthand the advanced shipbuilding techniques that contribute to Japan's maritime prowess.

15 May: Industrial Visits and Overnight Ferry Experience

Our visit to the Nippon Steel Corporation in Muroran was a highlight, showcasing the cutting-edge technology and processes involved in steel manufacturing. The evening was spent aboard a ferry from

Otaru to Niigata, an overnight journey that allowed us to experience a unique aspect of Japanese travel and hospitality.

16 May: Transport Bureau and Nuclear Power Station Tour

Arriving in Niigata, we started our day with a visit to the Hokuriku-Shin'etsu District Transport Bureau. The session provided insights into regional transportation policies and infrastructure projects. In the afternoon, we toured the Kashiwazaki-Kariwa Nuclear Power Station. The tour was particularly enlightening, highlighting Japan's approach to nuclear energy and safety measures in place post-Fukushima.

17 May: Niigata Exploration and Return to Tokyo

The day began with a visit to the Hotel Nikko Niigata Observation Room, offering stunning views of the city. This was followed by a trip to the Niigata City Aquarium Marinepia Nihonkai, where we learned about marine conservation efforts. In the afternoon, we boarded the Shinkansen for a return trip to Tokyo, marveling at the efficiency and comfort of Japan's high-speed rail. The day ended with a relaxing boat tour around Tokyo Port.

18 May: Cultural Exploration in Tokyo

A free day allowed us to immerse ourselves in Tokyo's rich cultural tapestry. We visited Meiji Jingu, a Shinto shrine surrounded by lush greenery, offering a peaceful retreat from the urban hustle. Asakusa, with its historic Senso-ji Temple and bustling Nakamise Street, provided a glimpse into Tokyo's traditional side. A cruise through Hama-Rikyu Gardens showcased the harmonious blend of natural beauty and historical architecture in the heart of the city.

19 May: Departure

As our trip concluded, we departed from Tokyo, carrying with us a wealth of experiences and knowledge. The field study trip provided an invaluable opportunity to learn about Japan's infrastructure, industry, and culture, fostering a deeper appreciation for the country's advancements and traditions.

Conclusion

The Japan Field Study Trip was an enriching experience that broadened our perspectives on various aspects of Japanese society. From high-level meetings and industrial visits to cultural explorations, each day was filled with learning and discovery. This trip not only enhanced our academic and professional understanding but also fostered personal growth and cross-cultural appreciation.

Sikini Falesiva (Tonga)



This field trip was one of the main trips that I had been looking forward to since the time I got to know about the opportunity to visit Japan. It was not only about the interesting activities and places that we were about to visit, but because it was also the first time for me to visit one of the Asian countries.

Upon arrival, the courtesy given to us by our hosts was far more exception, as I had aware of their good faith and courtesy but being experienced it and witness it was really surprise for me. However, these visits offered profound insights into Japan's maritime industry, cutting-edge research, and cultural heritage. This report outlines the overall impressions from the various site visits and interactions.

Firstly, the opportunity to meet Mr. Yohei Sasakawa, the founder of the fellowship, was a remarkable experience. His mission itself has had a positive impact on my life, as being one of the fellows. His vision inspired us to reflect on our individual missions, not only for our future career, but for the future of the maritime industry and reinforced our commitment to the goals of the fellowship as a whole. His dedication to maritime education and research for all students around the world were truly motivating, which strengthened our bond as Sasakawa fellows.

Further on, through visit to the Maritime Bureau of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), we gained a comprehensive understanding of their mandate and operations within Japan's maritime industry. The detailed presentations on regulatory frameworks, safety protocols, and the integration of technology highlighted Japan's robust approach to maritime governance.

Moving forward, at the Hakodate Research Center for Fisheries and Oceans, we observed ongoing research projects aimed at sustainable fisheries and marine conservation. Witnessing their innovative approaches to marine biology and resource management was particularly impressive, showcasing Japan's commitment to environmental stewardship.

Nevertheless, the most interesting site visit for myself was the Hakodate Dock, which provided a firsthand look at ship construction processes. Learning about the materials used, and the meticulous craft skills involved in building ships deepened our appreciation for the maritime engineering field. The advanced techniques and precision in shipbuilding were truly impressive.

Additionally, at the Nippon Steel Corporation, we explored the variety of services they provide, including the production of high-quality steel essential for not only shipbuilding but for the overall

industrialization. Understanding the integral role of steel manufacturing in the maritime industry and observing their state-of-the-art facilities were key highlights.

Consequently, the tour of the Shin Nihonkai Ferry operations offered insights into the management and monitoring of ferry operations. Visiting the engine room and learning about the technical aspects of ferry operations emphasized the complexity and importance of maintaining efficiency and safety in maritime transport.

Also, my most interesting site to visit was the Hakodate Dock, which provided a firsthand look at ship construction processes. Learning about the materials used, and the meticulous craft skills involved in building ships deepened our appreciation for the maritime engineering field. The advanced techniques and precision in shipbuilding were truly impressive.

In the case of the Hokuriku-Shin'etsu District Transport Bureau introduced us to the role of ship surveyors and the bureau's contributions to the maritime industry. Their work in ensuring the safety and seaworthiness of vessels underscored the critical nature of regulatory oversight in maritime operations.

At the Kashiwazaki-Kariwa Nuclear Power Station, we learned about Japan's plans for nuclear power as a sustainable energy source. The discussions on future energy strategies and the emphasis on safety and innovation highlighted Japan's forward-thinking approach to energy challenges.

Additionally, Tokyo Port illustrated the diversity of port operations, from cargo handling to passenger services. Observing the different kinds of ports and their specific functions provided a comprehensive view of the port's role in facilitating international trade and transportation.

Lastly, our journey also included several cultural and recreational experiences, by touring historical sites in Japan and offered a deep dive into the country's rich cultural heritage. The observation room provided a breathtaking view of Niigata City from Hotel Nikko Niigata Observation Room, allowing us to appreciate its urban landscape. Niigata City Aquarium Marinepia Nihonkai, where we observed live marine organisms and enjoying the dolphin show were delightful experiences that highlighted Japan's marine biodiversity. Meiji Jingu, walking around this serene temple and making wishes was a peaceful and reflective experience. Asakusa Street Festival, the vibrant festival atmosphere on Asakusa Street immersed us in local traditions and festivities. Hama-rikyu Gardens experiencing nature in these beautiful gardens offered a refreshing contrast to the bustling city environment.

To sum up, the Japan Field Trips for the Sasakawa Fellows of the Class of 2024 provided a balanced mix of professional development and cultural enrichment. The visits to various maritime institutions,

research centers, and industrial facilities were highly educational, while the cultural and recreational activities offered a deeper understanding of Japan's heritage. Overall, the trip was a valuable and inspiring experience, reinforcing our commitment to our future endeavors in the maritime industry and this will be the trip I will remember for the rest of my life. Arigatou gozaimasu !!

Kathy Ann Young (Trinidad and Tobago)



Saturday May 11

Departure from Sweden and Copenhagen airport to Tokyo Japan.

Sunday May 12

Arrival in Japan

We arrived at Haneda Airport Tokyo after a long flight, tired but extremely excited to begin our adventure and field trip in Japan generously hosted by The Nippon Foundation. We were greeted by our enthusiastic host Emi-san and tour guide Miyo-san who we soon learnt would be on this journey with us over our stay. We started our journey on the first of many comfortable bus rides from the airport through the city of Tokyo and our tour began instantly with descriptions of the area and attractions that we could see and visit in the days to come.

Our group arrived at the Toshi Center Hotel where we would stay for the next two nights. We went for an informative orientation session where we met the rest of the team including Mr Kudo-san who would be with for the rest of our journey. During the orientation further details were shared about the days to come and it was followed by a wonderful lunch.

Monday May 13

GOLI Presentation at SPF office

Ten of the fellows were given the opportunity to present a new association that had been formed from the 2024 student body to the Sasakawa Peace Foundation. The group is enthusiastic about Ocean Literacy and believes that it is the foundation on which ocean sustainability can be built globally. It aims through its members to bring not just a message back to the vast network of countries and organisations represented at WMU but is keen to foster action towards building understanding and capacity for ocean conservation, management and sustainability through the different sectors represented by the maritime specialisations of WMU.

The group was warmly received, our ideas enthusiastically listened to and we were offered sound advice for the way forward and support for the furthering of our initiative through the SPF. We were pleased to offer the CEO of a tee shirt with the logo of GOLI and welcome him to our membership as a mentor.

Visit - The Nippon Foundation

The Sasakawa Fellows were given the honour to visit The Nippon Foundation and meet Mr. Yohei Sasakawa, Chairman of The Nippon Foundation who addressed us and explained the vision of the foundation to build a strong network of fellows and friends across countries in the maritime sectors and

the purpose of the field study. Professor Hollander gave a speech on behalf of the World Maritime University and each of the fellows was given the opportunity to introduce themselves to Mr Sasakawa who amazed us all with his wealth of knowledge about each of our countries, important visits and meetings he had with our governments and the many adventures he had all around the world.

Visit - The Maritime Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

We were welcomed by Ryu Nara, International Planning and Coordination office, General Affairs Division, Maritime Bureau and the General Director also welcomed the WMU delegation. Japan is an island nation and has a population of 123 million. The country has a coastline of 34,000 km, with a land area of 378,000 km² covered by 66% forest limiting the land area and resources available for use. Japan experiences major natural disasters every year, such as typhoons and earthquakes.

Organization of MLIT

The ministry is one of the largest in Japan with eleven bureaus and four external institutions. This is a central government agency responsible for a wide range of policies related to land, infrastructure, transport, and tourism. The regulation of maritime transport and ports facilities for safe and efficient maritime operations falls under the transportation section. It was noted that there were fewer and fewer Japanese people joining the maritime sector as seafarers.

One fellow asked how the country managed their large forest area as well as the coastlines to ensure a healthy and sustainable environment. We were told about the protection of the forest and lumber and sustainable harvesting procedures that are in place, while in other forested areas it is prohibited to cut trees, which ensures effective watershed management and clean rivers and water sources. The Coast Guard is responsible for securing the coastline and jurisdictional waters and as fish and seafood is the major source of protein, Japan protects its food security by ensuring that fishers have support and the right information and procedures to catch fish in a sustainable manner.

Introduction of Port and Harbours in Japan by Masayuki Tanemura, Director of International Planning Office, Ports and Harbours.

Overview of Japanese's ports

More than 99% of Japan's trade is done by maritime transport. Japan has 5 strategic international Hub ports, 18 International hub ports and 102 major ports, mainly in the south of coast. Most people that live in Japan, are located on the coast and live near ports.

Japan has 3 types of Port Management Bodies: the Municipal Government, the Administrative Association and the Port Authority. Policy is developed by the national government. The Port Management Body develops the Port Plan, which is reviewed and agreed by the Government. Port policies are related to all aspects of the day-to-day activities that take place in the port as well as policies on dealing with natural disasters, innovative technologies to prevent or overcome natural disasters such

as wind resistant container stacking, lashing of empty containers, mobile guard fences, rising electrical equipment to prevent electrical problems.

and more recently policies are being developed to adapt to or mitigate the impacts of climate change.

Carbon Neutral Port (CNP)

Japan wants to achieve zero net carbon emissions by 2050, to do this there is a focus on decarbonization of port and terminal operations and the decarbonization of industries located in the port areas.

Japan Coast Guard

Captain Hayashi presented the Japan Coast Guard and let us know that he is a graduate of the World Maritime University.

The Japanese Coast Guard (JCG) falls under the Ministry of Transportation ensures the safety, security and environmental protection of the jurisdictional waters of Japan. Its headquarters are in Tokyo but has regional headquarters in eleven districts. It does not have any military function but instead is a law enforcement agency, which tries to foster cooperation and compliance with those in the marine sector. The JCG was established in May 1958 to deal with maritime insecurity and other related challenges. The motto of the JCG is Humanity and Justice. It also has specialised units such as the Special Security Team trained to manage high-risk law enforcement operations and another team specialised in search and rescue operations.

The Japan Coast Guard (JCG) is in charge of Japan's territorial waters and Exclusive Economic Zone (EEZ), which is about ten times bigger than the land area of Japan. They have over 455 vessels and 14,788 personnel. In 2016, they set up a permanent patrol near the Senkaku Islands/Diaoyutai Qundao because of its national importance. The JCG tackles maritime threats like illegal fishing and potential terrorist activities. They conduct rescue operations, with the Special Rescue Group being their main team for this. The JCG also protects the environment through various programs and works with the National Strike Team to manage oil spills. They manage traffic control systems in various parts of the country. The JCG initiated a Coast Guard Global Summit with countries from all over the world, supported by The Nippon Foundation.

Delegates were given the opportunity to ask questions, some of which related to the detention of ships found to be non-compliant or undertaking criminal acts. It was explained that the coast guard holds the vessels as evidence for the duration of the trial. It was also noted that the JCG does have a war time law where it will fall under the Ministry of Defence during these periods, however, currently it falls under the Ministry of Transport.

Nomunication, it was explained that this word is a combination of NOMU “drink” and Communication. It is customary to get together informally to bond and improve collaboration outside the formal working environment. We would have the chance to practice this at the reception that evening.

Maritime Policy toward achieving Carbon Neutrality, by Shinnosuke HADA, Deputy Director, International Negotiation Office, Ocean Development and Environment Policy Division, Maritime Bureau, MLIT.

It was explained that many stakeholders play a role in the maritime sector's current and future developments. With regards to greenhouse gas (GHG) emissions from international shipping, the International Maritime Organization (IMO) has adopted a stance of non-discrimination and no special treatment. International shipping contributes about 2% of global GHG emissions, while Japan's share is 3%. The goal is to transition from heavy fuel oil (HFO) to liquefied natural gas (LNG), and eventually to zero-emission fuels like hydrogen and ammonia.

Japan also signed the Clydebank Declaration at the COP 26 Transport Day to support the creation of green shipping corridors. The country is working to establish low and zero-emission shipping routes for Quad countries in the Indo-Pacific region. During the G7 meeting, Japan pledged to help set up at least fourteen green shipping corridors.

In order for ships to be able to use low or zero emissions fuels, they need the proper facilities to function properly. Japan is developing technology such as hydrogen and ammonia fuelled engines as well as fuel tanks and fuel supply systems. The shipyards need to also participate in technological development. Furthermore, Japan is developing safety guidelines to effectively manage ammonia and hydrogen-based fuels.

To reach these established goals is important to pursue further energy saving on ships and support the advancement of technology through battery propulsion, LNG fuelled, hydrogen fuelled and hydrogen fuel cell ships.

Reception

That evening a welcome reception was held for the delegation and it was an excellent event that allowed us to network with diplomats from different countries as well as persons from the private and government maritime sectors.

Tuesday May 14

On our way to Hakodate by plane

Visit - Hakodate Research Center for Fisheries and Oceans

The concept of International Fisheries and Oceans City.

Our delegation was welcomed at the Hakodate Research Center for Fisheries and Oceans where the Director and staff met us. We first had a presentation of the center to learn about their mission and objectives, followed by a tour of the facilities, including the research laboratories and got to meet some of the scientists.

Hakodate is a coastal city where the people have close cultural, social and economic ties to the sea that they live next to. The Hakodate International Fisheries and Oceans City Initiative was launched in 2003 and was developed by the local industry, government and academia to create and support sea-based community development, fisheries and ocean research and marine related industries through partnerships and joint collaborations. Hakodate is known for its good fishing grounds and rich marine biodiversity due to the warm and cold currents that interact in the region. The goal of the concept is to bring together all the stakeholders to improve the lives of the community and industry through economic, education and research advancements while sustainably using marine resources.

Hakodate Research Center for Fisheries and Oceans.

The Hakodate Research Center for Fisheries and Oceans was built to support this concept. This research base allows the community to interact with the sea and science, brings together industry and researchers to investigate commercially focused projects in fish breeding, aquaculture and seafood products. To support the community and industry, research is centred around new seafood products that can build the economy and increase employment.

The center has laboratories, facilities and equipment that allow experiments to be conducted, fresh sea water for tank experiments to study different marine species. A large experimental tank that can hold three hundred tons of water where water temperature and flow can be controlled to conduct fish behaviour experiments which is open for viewing by the public and a display area for public outreach and education. Past experiments include the spawning experiment for the Japanese squid and a spawning and behaviour experiment on the Atka mackerel. In addition, the center welcomes and rents space and facilities to researchers from different universities to conduct their own experiments. Research is not only conducted on fisheries, but on marine mammals, sound and noise, bathymetry and other aspects of the marine environment.

The center also has 3 research vessels for monitoring and collecting samples in the field. It also has meeting rooms and other facilities to allow for presentations and workshops. The center also believes in building community capacity and hosts events for young people, and people of all ages to share knowledge and inspire innovative ideas and initiatives.

Hakodate Mariculture Project

The Hakodate Mariculture Project is a subsidiary project that was developed in an attempt to not be fully dependent on wild caught fish. It was initiated due to the reduction of fish in the region due to changes in the marine environment which had a negative impact on the fishing industry. These declines were seen in the targeted species of squid and kelp. The impacts of the decline in these fisheries has been felt in the decrease in the number of primary and secondary industry workers and a decline in the local economy.

What was observed by industry and scientists was a 70% reduction in the squid catch and a 40% reduction in landed volume of kelp. These negative impacts have been accredited to

- No specific conservation methods to support an increase in squid catch.
- Climate change is the main cause of the decline as sea water temperatures increase there is a change in the occurrence and migration of target species.
- The species of fish that are being caught are changing, however, local fishers do not have fishing knowledge for these new species and training will be needed.

The Mariculture Project aims to support the production of marine products that can be obtained systematically and transition to a sustainable fishing industry. In the project, the first successful breeding of 60 wild caught King salmon and hatching of fry was established in Japan. This project is expected in the future to help build a new aquaculture industry that will improve carbon neutrality and help create a strong and highly profitable industry.

Visit - The Hakodate Dock Co Ltd

We were welcomed to the Hakodate Dock Co Ltd where we would spend time understanding the company and what they do through a presentation and then visit the dockyard to see the manufacture process of a high bulk carrier ship being built. The company was established in 1896 and has two locations, Hakodate its first and main location in the North and Muroran. The Hakodate Dock is the size of ten baseball stadiums.

The company employs more than one thousand people and is focused on the construction, repair and inspection of ships and vessels and building bridges and land-based machinery.

Currently the core business of the company is

- Building new ships – 4 ships annually. The most popular ship manufactured is the bulk cargo ship 40E/40SE which is a 40,000 DWT handy size carrier that has a shallow draft and can access various ports. The company also builds other types of ships, such as: passenger ships, ferries, car ferries and an eco-ship with energy-saving technology. For the ship building process the company provides a full service from basic design, detail design, building, launching, outfitting and sea trial.
- Ship repair and maintenance – The company also repairs and maintains ships of different sizes due to its advanced technology and equipment. There are three docks to conduct this work. It provides these services to the Navy ships under extremely strict security protocols.
- Building of bridges and industrial machinery - The company is the first steel bridge manufacturer in Hakodate and also designs and builds industrial machinery for clients' needs.

We then toured the shipyard facilities where we got to witness the construction process for a new container ship from fabrication of the sections of the ship's hull and body to the lifting of one of the enormous, fabricated pieces by the crane and the successful placement and securing of a section like a

giant jigsaw puzzle. Our guide had a real passion for what he does, and it really came across how much care and expert skills go into making these large vessels that we all rely on.

Wednesday May 15

Visit - Nippon Steel North Nippon Works Muroran Area

We were welcomed at the Nippon Steel North Nippon Works Muroran Area steel plant. The field visit was divided into two parts a presentation about the company, their steel production and the future of steel, followed by a tour of the facilities and plant.

The steel industry was especially important for the development and modernization of Japan in the last 150 years. Nippon Steel is the largest steel company producing 43% of steel in Japan. It is a global company for over one hundred years and is world ranking in crude steel production by volume. It receives its raw material from Australia, Brazil and Africa and it dominates half the market worldwide and currently number four in the world. It provides a wide range of products to its customers in Europe, Canada, Asia. It has over 1500 employees in all of the different facilities. Training and development is offered to employees to help retain staff. The factory runs 24 hours a day every day with three shifts for the workers. We were given a detailed explanation about how steel is produced in two stages, the upstream process of turning the raw materials – iron ore which is heated to 1500°C and then cooled to make crude steel and then the downstream processing where the crude steel is put into an aster to make high quality steel. The slag, a by-product from the blast furnace is put in contained areas in the sea and used to help seagrass grow as it still contains iron. To help support the 2050 target of carbon neutrality the company is looking at research on how to use hydrogen instead of carbon to remove oxygen from the ore which would give a clean by product of water instead of carbon dioxide. Currently one ton of steel equals two tons of carbon dioxide. After the presentation, the delegation visited different facilities where the steel was being processed at various stages. Many processes were automated as the production and resulting products were at exceedingly hot temperatures, however people were needed at different stages to verify safety and quality of the products. The company facilities also have a port where steel is loaded and shipped to various parts of the world.

Otaru Port and Overnight Ferry

Thursday May 16

Niigata Port

Visit - Hokuriku-Shin'etsu District Transport Bureau

Introduction / Maritime Department

The Director General welcomed the delegation with warm opening remarks and was followed by a number of presentations from the staff of the Maritime Department about how the institution operates and the various locations of the regional offices in both the east and west coast.

We were introduced to Niigata as a region and were told that it has the longest river in Japan and boasts clean water that is important for its high-quality rice and sake. The river also plays a significant role in the culture of the people and the different seasons experienced in the region make it an ideal place for visiting with cherry blossoms in the spring, fireworks in the summer, winter sports, hot springs and good seafood.

The Hokuriku-Shin'etsu District Transport Bureau is one of nine offices and is responsible for seaborne transport, tourism by railway, administration and implementation of IMO. The Maritime Department is divided into nine divisions covering the safety, environmental and personnel aspects of shipping. The administration processes are the same across all regions or districts, which is important for continuity. There are seven departments in the Hokuriku-Shin'etsu District Transport Bureau with the Maritime Department being one of them. Within the Maritime Department there are nine divisions to fulfil the duties of the bureau.

- Maritime Industries Division – responsible for ship building and maritime administration.
- Seafarers Labour (Policy) Division – employment situation of the seafarers.
- Ship Safety and Marine Environment Division
- Seafarers Labour Standards and Licence Division – licenses to seafarers' onboard ships
- Safety Management and Labour Inspector – administration of the labour environment of ship officers.
- Ship Inspector – overlooking building and inspection of Japanese ships.
- Ship Tonnage Surveyor – decide the tonnage amount of newly built ships.
- Ship Officers Examiner
- Port State Control Officer – inspection of foreign vessels

Details of Inspection and Surveying Divisions

Safety Management and Labour Inspectors – Their duties include the development of requirements and rules for crew members to perform duties, administers national exams for mariners, checks all credentials and associated documents to licence a mariner, inspects credentials of crew members dependent on the size of the ship the mariner is working on including validity of licence, contract of mariner and number of mariners working on a ship.

The Ship Inspectors perform many duties some of which are similar to the flag state surveyors in order to inspect ships according to the different international and national regulations including the ship safety law, marine pollution prevention law, law to ensure the security for ships engaged in international voyage and international port facilities, passenger ship regulations, audit of Japanese small ships, as well as certification of factories that repair and maintain equipment of ships. All inspections are done on the spot, annually and sometimes without announcement to ensure conformity. The most important job of an inspector is to understand when observations should end in detention.

The Ship Tonnage Surveyors – 40 officers are hired under this division and are spread around the eleven regional transport bureaus. However, due to the demand of their duties ship inspectors and the port state control officers support them. To become a ship tonnage surveyor the person must already be on staff of the bureau and undergo training that can take one to a few years depending on the number of ships available for them to survey and further on the job training. A domestic law is applied that follows international standards – to operate or sell a ship in Japan the ship must be registered. These duties include on-site inspections, determination of the tonnage value of a ship to be notarized and they also perform measurements for small fishing boats to verify that new and existing ships comply with the regulations.

The Safety Management & Seafarers Labour Inspectors verify that seafarers are getting all their rights from the company. The inspectors verify not only the ship, but also the companies. They conduct a Safety Management Audit to confirm the safe operation of the ship by following companies' policies. The inspectors rely on the Marine Transport Act and the Coastal Shipping Act as legal resources.

Visit - Kashiwazaki-Kariwa Nuclear Power Station

Staff and the communications personnel of the Kashiwazaki-Kariwa Nuclear Power Station warmly welcomed our delegation. Our tour began with a briefing about the **Japanese energy situation**. It was noted that Japan is highly dependent on imported energy resources such as fossil fuels from around the world, and approximately 90% of crude oil comes from the middle east. After experiencing two oil crises in the 1970's, Japan diversified its energy to nuclear and natural gas, but after the Fukushima Daiichi Nuclear Power Plant accident, imports of fossil fuels again increased. Since there are no pipelines between the islands, tankers are used to move fossil fuels around the country to provide energy to the islands, however, to improve the energy situation and become more self-sufficient, Japan is looking at increasing its nuclear power supply.

History of the Kashiwazaki-Kariwa Nuclear Power Station

The nuclear power station is located in the Niigata Prefecture in Kashiwazaki City and Kariwa village about 220 km northwest of Tokyo on the west coast of Japan. The development of the power plant started in 1969 with the adoption of resolution for the plant by the Kashiwazaki City Council. Following a signed agreement with the fishers in the area, the construction works started in 1978 and the operations began in 1985 with Unit 1. It took 12 years for all 7 Units to become operational.

The total area of the plant is 4.2 km² with a coastline of 3.2 km. The plant has 4 units (1-4) in the Kashiwazaki City area and 3 units (5-7) in the Kariwa Village area. The plant employs 1,204 persons and contracts 4,531 persons. The plant outputs 8,212Mwe when all Units are operational.

Fukushima Daiichi Nuclear Power Station Accident Overview

Our presenter then told us about the safety features of the nuclear power station and how they were upgraded following the unfortunate Fukushima Daiichi Nuclear Power Station Accident which occurred on March 11, 2011. The accident was triggered by an intense earthquake at 2:46 pm on that day, when units 1, 2 and 3 were in operation but were automatically shut down and Units 4 to 6 were in operation and being inspected. The power supply system was damaged and offsite power supply was lost which caused the automatic start-up of the emergency diesel generators to begin cooling the reactors. However, at 3:35pm a Tsunami hit the plant and sea water inundated the plant reached levels of 10 – 15.5 meters at different areas affecting the Units and shutting down the emergency generators and batteries and the cooling to the system was lost. Reactor cores were damaged by loss of power source and cooling for extended period. Later, explosions occurred which ended in the emission of radioactive materials. From this incident lessons were learnt and safety measures against earthquakes and tsunamis were improved. New safety regulations and requirements were put in place in 2013. These include;

- Sea wall and embankment of 15m above sea level along the coastline to prevent flooding, and protect units 1 to 4 from the water, as well as higher embankments near units 5 to 7.
- Flood barrier walls to prevent water flowing into the reactor buildings if the tsunami surmounts the sea wall or embankment waterproofing important rooms.
- In case a flood could not be prevented power sources were diversified to include internal alternative supplies as well as external power supplies including mobile air-cooled gas turbine generator and other generator vehicles
- Other cooling mechanisms and tools incorporated into the safety include high-pressure alternative cooling system as well as fire fighting vehicles, seawater alternative heat exchange and other generators.
- Earthquake reinforcement measures to critical pipelines, machinery and buildings.
- As additional measures, in Unit 5, an emergency response control room was installed to be able to manage any emergency, twenty people are always on call.
- Training of personnel for emergency situations conducted periodically.

After the presentation, the delegation was split into two groups to tour the visitor center and the nuclear power plant site.

During the center visit we got to further understand from our knowledgeable guide technical details of how the nuclear reactor works from several scale replicas of the different components of the system. The site tour was guided from a bus that took the group to view the station and the Units as well as the different areas and reactors that we learnt about and we saw the safety and emergency equipment, vehicles and infrastructure first hand.

Friday May 17

Visit - Hotel Nikko Niigata Observation Room

We visited the Hotel Nikko Niigata Observation Room where at the top of the observatory we got to see breathtaking views of the city and take photos.

Visit - Niigata City Aquarium Marinepia Nihonkai

Our trip to the Niigata City aquarium was so close to my heart and I could not help but take my time at each tank and compare the fish that I know from the Caribbean and Indian Ocean through my work with those found in the Japan Sea and Pacific Ocean. I could not be happier to see the life stages of a species of jelly fish which I had never witnessed before but had only read about in books.

Niigata to Tokyo by bullet train

Visit - Port of Tokyo by boat

We had the privilege of being welcomed and touring the Port of Tokyo on a small vessel which allowed the group to see the different terminals that the port manages and layout of the facilities in that area. The Port of Tokyo was established as an international trading port in 1941. It is a multi-functional urban port that plays a significant role in Tokyo and surrounding areas. The port manages the major international and domestic distribution of goods for Japan, and the transportation of people from Tokyo to neighbouring cities and is particularly important to the country's economy. It has over two hundred berths where more than four million TEUs are handled every year. It also has ferry and cruise passenger's facilities and services.

The port has undergone changes over the years to accommodate greater demand and larger vessels. The container terminal was expanded to manage up to seven large container ships in a row. The harbour was deepened and a larger container area on piers was put in place in the water to increase the area of storage. The port also manages domestic container ships for the movement of goods between smaller local ports instead of using trucks. Other improvements over time include safety measures where the buildings were made earthquake proof. And new 115m terminal established to support the rising trade with Asia. The terminals are separated from each other in order to allow ships to properly manoeuvre and conduct operations in a safe manner. The port has the ability to provide different services such as towing, fuel, electricity and many others. In the channel there are dredging works that occur every 3 to 5 years in order to maintain safe navigation.

Recently the Port developed a plan to become a carbon neutral port; by 2030 to reduce carbon emissions by half and by 2050 to be carbon neutral. To reach these goals the Port does not manage chemicals, is looking into subsidiaries for the use of hydrogen fuels, projects that reclaim land and generate soil for reforesting areas by planting seedlings through cooperation and collaboration with citizens.

Saturday May 18

Visit - Meiji Jingu, Asakusa and Hama-rikyu Gardens

Our final day in Japan was spent taking in the rich Japanese culture in the city of Tokyo where we visited the temples Meiji Jingu and Asakusa and then spent time exploring the bustling Saturday streets with food, shops and items on sale everywhere. We ended the day peacefully in the Hama-rikyu Gardens after taking a canal boat where we got to sit back and see Tokyo from the water. It was a perfect end to an amazing trip. Thank you, Tokyo!

Sunday May 19

Departure to Copenhagen and onwards to Sweden.

I left Japan after our whirl wind visit, in awe of the people, landscapes, food and culture and with a desire to see and know more. This was an amazing opportunity that left me planning my next visit in the near future. Thank you to everyone who made this experience unforgettable the team at Sasakawa Foundation are second to none, they really took care of us, thought of our comfort and gave us an experience that we cannot forget as they were so much a part of making it successful. My gratitude to each and every one of them. And I must say a few words about Mr Kudo-san who has the energy of a twenty something year old, is a wealth of knowledge and has a warmth and generosity of spirit.

Asela Peneueta (Tuvalu)



This report is an account on the precious opportunity provided by the Sasakawa Peace Foundation to student whom they sponsored to study at the World Maritime University (WMU) in Malmo Sweden for the year 2024.

The students left Copenhagen Airport on the 11 May 2024 for Japan and arrived at Haneda Airport Japan 12 May and greeted by the Sasakawa representatives Ms. Emi Shimada san and Professional Tour Translator and Tour Guide Ms. Miyo san. We were then taken to the Toshi Center Hotel Tokyo, followed with an orientation on arrival at the hotel. Lunch and whole remaining day was to explore little bit of Tokyo.

Second Day 13 May 2024, as part of the Global Ocean Literacy Initiative (GOLI), we managed to left early to present the GOLI new initiative to Dr. Hide Sakaguchi the President of the Ocean Policy Research Institute SPF and their staff accompanied by Emi san and Kudo san. Dr. Hide san shared a few insights on Ocean Policy Research Institute SPF past activities which brings in communities and school and provide them with incentives on how to be more responsible on the Ocean and other related matters with the organization's activities and future works. After a productive discussion between GOLI and Ocean Policy Research Institute SPF, we take a few photo shots to be included in the report of actions in the new GOLI initiative.

From Ocean Policy Research Institute SPF, we then proceeded to The Nippon Foundation to meet His Excellency Dr. Yohei Sasakawa. An opportunity to meet in face to face with Dr. Yohei Sasakawa, whom he shared his many adventures in his life, from climbing Mt. Kilimanjaro, Africa's highest mountain. I am so touched with Dr. Yohei Sasakawa's commitment reading his story from THE NIPPON FOUNDATION webpage "Title: *At age 85, WHO Goodwill Ambassador Yohei Sasakawa successfully climbs Mt. Kilimanjaro*" a good example for all to note from a person who despite his age and health still pursue such a challenge.

During a short visit to The Nippon Foundation, meeting His Excellency Dr. Yohei Sasakawa, we managed to introduce ourselves, what Specialization we were engaged in our studies, country we came from and Occupation. We also extend our heartfelt appreciation to Dr. Yohei Sasakawa for his helping hand with a trust for each of us to take up the SPF Scholarship to study in WMU. An opportunity for each individual to gain the knowledge

and skills to enhanced ourselves for more challenges in our respective workplace on completion of the program at WMU.

After the visit to The Nippon Foundation and interaction with His Excellency Yohei Sasakawa, we visited the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). On arrival at MLIT the visit was experienced with rainy day, and on arrival we were greeted by Staff of MLIT and directed to one of MLIT's conference room. Introduction of the WMU team and staff from MLIT and then continued with some few introductions on the works of MLIT.

MLIT plays a crucial role in the comprehensive and systematic use of national land especially Land Use and Development, in which MLIT oversees the development and conservation of national land. MLIT is also responsible for consistent infrastructure development, implementing transport policies, ensuring efficient transportation systems, and ensuring safety and security in maritime activities.

MLIT aims to create a safe, smart, and sustainable infrastructure that supports regional development. Also focusing on promoting best practices, technological exchange, and urban development while at the same time ensuring maritime safety and disaster resilience.

During the Japan Sasakawa Peace Foundation Field Trip, we were privileged to visit the wonderful places in Japan and one of the places that was arranged by the Sasakawa Peace Foundation (SPF), is to visit the Ministry of Land, Infrastructure, Transport and Tourism (MLIT). This particular visit to MLIT is to learn from what they are doing especially from the Maritime perspective of the Administration of MLIT.

Ryu Nara provides us with the first Presentation of the Day, on the Introduction of MLIT from the International Planning and Coordination Office, General Affairs Division, Maritime Bureau, MLIT, providing in his presentation the Overview of Japan, and the Challenges faced by Japan from the Ministry's perspective and then continue to the Mission of MLIT and Organizational Structure of the Ministry of Land, Infrastructure, Transport and Tourism.

Japan a country of around 123 million people consists of 378,000km square with around 66% of forest all over Japan, with a Coastline of around 34,000km. Japan consists of 47 Prefecture and Hokkaido is the biggest Prefecture of all the 47 Prefectures of Japan. It is really interesting to know that Japan is an island surrounded by the ocean. With the limited resources it has Japan through MLIT is working towards its mission of utilizing, developing, and conserving its land area in an integrated and systematic way, developing infrastructure, implementing transport policies, and at the same time promoting the progress of meteorological tasks; and maintaining the marine safety and security.

The second part of the presentation was presented by the Director of the International Planning Office, Ports and Harbours Bureau, MLIT Mr. Masayuki Tanemura. Mr. Tanemura talks about the Overview of the Japanese Port, the Port Development and Management/Operation Scheme in Japan, and recent topics on Port policies. Like most countries Japan most of its trade volume is through maritime transports via ports which accounts for 99.5%. Mr. Tanemura also added the main challenges faced by the Japan Port concerning the damage to Port facilities and operations from Typhoon as of 2018 (Typhoon Jebi). The damage not only caused damage to the Port area but it flooded the city center, containers were drifting in the port of Kobe, cargoes scattered in the container terminal of Kobe, plus Containers were caught on fire due to flooding at the Port of Kobe. From the past typhoons, MLIT explored countermeasures to ensure that they could be fixed or address future unpredicted phenomena. Mr. Tanemura also shared Japan's Carbon Neutral Port Initiative (CNP), by decarbonizing the terminal operation and supporting zero and near-zero emissions for ship fuels. All these measures are also important as well to realize the "Green Shipping Corridor" Initiative that was signed in Glasgow, London in November 2021. The Carbon Neutral Ports Initiative not only focuses on Ports but extends its focus on decarbonizing the industries located in Port areas.

The third Presenter of the day was the Deputy Director of the International Negotiation Office, Ocean Development and Environment Policy Division Maritime Bureau, MLIT, Mr Shinnosuke Hada. Mr. Hada presented the Maritime Policy toward achieving Carbon Neutrality, the presentation provided some insight into MLIT actions concerning GHG emissions from international shipping and also domestic shipping. Also reflects the IMO 2023 IMO GHG Strategy on Reduction of GHG Emissions from International Shipping, plus measures like the pricing mechanism; and marine fuel standard aiming to achieve "GHG net-zero emission by or around 2050".

The last Presenter of the day was from the Japan Coast Guard presented by Captain Ryoji Hayashi the Senior Research Officer for International Cooperation also known as (Mr. 20,000). Capt. Hayashi presented the roles and duties of the JCG keeping the Japan oceans safe and enjoyable for future generations. Operations like guarding Japan's territorial sea and the EEZ and protecting the marine environment. Capt. Hayashi also mentioned operations like saving lives and protecting assets threatened by disaster. The JCG continues to implement various measures to ensure the safety of maritime traffic, which brings 'safety' and 'peace of mind' to the sea surrounding Japan.

In the afternoon we were accorded with a Dinner Reception and we managed to meet Ambassadors for each country who were invited also to attend this wonderful reception night. Unfortunately, I do not have an ambassador but just blend in with the night flow. A wonderful time to interact with SPF Staff and other stakeholders during the reception.

Third Day 14 May 2024, we woke up early for flight from Haneda airport for Hakodate in Hokkaido the largest Prefecture in whole of Japan. On arrival we were taken to visit Hakodate Research Center for Fisheries and Oceans and we learnt many things from culturing of Salmon species and other sea life forms. Hakodate Research Center for Fisheries and Oceans, is a research institute with laboratories where academic examining bodies and private enterprises can move in as residents. The purpose is to share the valuable opinions with many people as possible especially on problems that faced by the oceans. The Research Center was established and activated in 2014 and called the Hakodate Research for Fisheries and Oceans. As per the Presentation provided, the Research Center main goal was the Cumulation of academic research institutions, Collaboration between the local community and academic research institutes, Integration of tourism and research institutes and Harmony between fisheries, maritime and livelihood of Hokkaido citizens.

The Hakodate Research Center for Fisheries and Oceans carried out researches on the spawning of the herring, and community interactions of exhibiting their researches experiments in large aquariums. They also have a Mariculture Project whereby they are building a sustainable fishery/ocean city centered on fish and algae cultivation, and a vision towards establishing aquaculture that contributes towards regional carbon neutrality. A fantastic Project that embedded in many participants on how to be more cautious on the biodiversity in the fisheries and ocean perspectives.

After the Hakodate Research Center for Fisheries and Oceans visit, we managed to visit the Hakodate Port after lunch. Greeted by Hakodate staff we were guided through some important works carried out by the Hakodate Dock. The Company Motto embedded on three important things as follows:

1. Let's make good work at reasonable cost.
2. We will do our best to develop Hokkaido and Japan, and
3. Let's build a company where our employees will be happy.

From the perspective of a Small Island Developing States, I concur the above mottos as we must consider our people at the same time when doing business. The services we provided had both negative and positive impact on what we provided. Therefore, I would say this is a take away lesson learnt from Hokkaido Dock to apply in my country workplace on prioritizing people/citizens, because they are the end users of our services and product we provided.

Our time at the Hakodate Dock was a lifetime experience as we managed to witness the process in which how the Hakodate Dock/Company build ships and also have the chance to step in the slipping dock where one of the ship they build is in its final stage and are doing the exterior painting works. Wonderful tour and guide provided by the staff and Engineers of the Hakodate Dock. I would extend

my sincere thanks for their wonderful open up for us to visit their reputative company. Thank you Hakodate Dock and I salute you, keep up the good work.

On the 15 May 2024, we left the Hakodate Premier Hotel Cabin and head for the Nippon Steel North Nippon Works Muroran Area. At the Muroran Nippon Steel we have the privileged to visit this place, greeted by the staff and we have the privileged to interact with them on various works and safety measure they adhered to ensure that they provide their products and even considering at the same time the safety of their workers.

We have the chance to visit the steel factory, and I also managed to ask questions on what are the amount of dirt that was piled up next to the factory site. Interestingly the mount of dirt is the slag from the factory and are being bagged and put alongside the coastal area of Muroran. In this way they found the progressive blooming of algae which is also contributed on the people of Muroran food.

A wonderful highlight of the trip is that though there are some externalities as mentioned in terms of carbon release but the company is working to adopt new clean fuels and further their research on the possibility in providing Muroran clean and sustainable environment for all the Muroran Community.

We departed Nippon Steel North Nippon Works Muroran Area and head to Otaru Port to take the Ferry to Niigata City. On the ferry we managed to take an insight on the Ferry's engine room and then enjoy the rest of the trip of getting together until rested for the night before reaching Niigata.

16 May 2024 we arrived Niigata Port and we head to Hokuriku-Shin'etsu District Transport Bureau by bus. Greeted by staff of the Hokuriku-Shin'etsu District Transport Bureau and then we go through a few Presentations on the works of the Transport Bureau. During the interactions with staff of the Niigata Transport Bureau they shared the uniqueness of Niigata in connection with the rice. The rice as the main uniqueness of the people of Niigata, from food to drinks made from rice. Thank you, Niigata, for your wonderful hospitality rendered to us during our visit to your beautiful shores.

From Niigata Area we proceeded to the Kashiwazaki-Kariwa Nuclear Power Station. On arrival we were greeted by the staff of the Kashiwazaki-Kariwa Nuclear Power Station, and we go through a few slides on the Kashiwazaki-Kariwa Nuclear Power Station before we have the opportunity to visit the Kashiwazaki -Kariwa Nuclear Power Station and even through the exhibition area on how the Station is operating.

With the Kashiwazaki-Kariwa Nuclear Power Station, they serve separately providing energy to both district in which they are situated on. The Company has been prioritizing safety and security within its

boundary of operations, from gate check up to providing machineries and other equipment that can assist in the spread of the disaster to all communities nearby.

Japan has been engaging in nuclear power for so many years and they have learned a lot from previous disaster which enables them to provide more or innovate some new measure to ensure that the disaster will be lessen when happens. Gratefully would like to acknowledge the guidance and hospitality rendered during the tour at the Kashiwazaki-Kariwa Nuclear Power Station.

Day 6. 17 May 2024 Leaving the hotel by bus heading to the observatory room before we head for the Niigata City Aquarium Marinepia Nihonka, enjoying the scenery of the different fishes in the aquariums, and then the dolphin show, just a wonderful and beautiful moments of my life and I really enjoyed the tour and site visit.

We were then proceeding to the Tokyo Port, another wonderful interaction between the students and the staff from Tokyo Port. We have the opportunity to cruise through the Tokyo Port and witnessed the works of the Tokyo Port on the new development of the Port of Tokyo. Interestingly, though the Port of Tokyo is expanding its development, still the Tokyo Port brings positive glance for the green future of the Port area by providing restoration and preservation of the natural environment and developments of marine parks for the people to use for fishing, birds watching, and other recreational activities. Tokyo Ports also engaged in the coastal erosion in which it will protects it coastal areas from storm surges etc. Though they engaged in expansion and other development of the Ports the Tokyo also engaged in using clean energy investing for the future of its people and contributing to the clean future of its people.

On the second last day of the Field trip in Japan we have the opportunity to visit the Meiji Jingu, Asakusa, we were managed to buy a few items for memories of Japan. Asakusa was packed with many people and full of many kinds of store alongside each other, souvenir shops and other food and drinks small shops. Time was limited and we then headed to the dock to get the cruise ship to Hama-Rikyu Gardens, exploring the Hama-Rikyu Gardens on our own before we hopped on the bus to get back to the hotel. The trip was a wonderful, Interesting Field Study Trip in Japan, learning the culture, the people and many areas visited enriches our mind on the future development of Japan and its people. The take away from this trip for me on my own opinion is that I will treasure every new idea, strategies, especially to contribute ourselves in protecting the environment as whole not only in maritime but from many other sectors like agriculture, aviation etc.

Thank you, Sasakawa Peace Foundation, for the wonderful opportunity and I am reaffirming that this SPF field study helps a lot in my study and even I can figure many important lessons learned to assist and help in the development of my country. I am also His Excellency, Dr. Yohei Sasakawa san that this

SPF Field Trip is a fruitful way to teach the future leaders of the World on how we will look into our planet. We need to take lessons from your beautiful country Japan and spread it all over the globe. We destroy, but we need to fix our own mess. Every hand can mend, build and restore our beautiful planet so that we can live harmoniously as embedded in one of Hakodate Research of Fishery and Ocean goal of the concept is to live in harmony. I am seeking your good and reputative your Excellency Yohei Sasakawa that with your great support to ensure that this SPF Field Trip to be continued in future.

Thank you.

Acknowledgments

The Japan Field Study Trip 2024 was completed safely and successfully thanks to the cooperation of every student.

We are grateful to Mr. Kazuya Nakao, Director of International Planning and Coordination Office, General Affairs Division, Maritime Bureau of MLIT and his team for their great effort in managing the Japan Field Study Trip.

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We express our sincere thanks to Ms. Miyoko Wada for her exceptional hospitality and interpretation.

Lastly, we always thank Mr. Yohei Sasakawa and The Nippon Foundation for their continued support of our program.

Friends of WMU, Japan Secretariat

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