



Republic of the Philippines  
Autonomous Region in Muslim Mindanao  
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS  
Cotabato City



# STUDY TOUR GRANT REPORT

Japan Society of Civil Engineers (JSCE)



In coordination with

Philippine Institute for Civil Engineers (PICE)



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## **INTRODUCTION**

### **ABOUT JSCE**

Japan Society of Civil Engineers (JSCE) was established as an incorporated association in 1914 entrusted with the mission to contribute to the advancement of scientific culture by promoting the field of civil engineering and the expansion of civil engineering activities. Since its establishment, JSCE has endeavored to achieve its mission through extensive activities which includes scientific exchange among members, researchers, promotion of science and technologies relating to the field of civil engineering, social involvement, etc. Over the years, the JSCE membership has increased significantly from the initial 443 members to the presently 39,000 members, and is currently engaged in various wide-ranged activities around the world.

With the birth of the 21st century, JSCE has reconfirmed its goals to exert perpetual efforts with the following:

- 1) To propose an idea for social infrastructure development in the future from civil engineers' perspective;
- 2) To acquire a steadfast relationship of mutual trust with the society;
- 3) To promote scientific and technological researches/studies with a high degree of transparency; and
- 4) To evaluate public works from a neutral standpoint, and to reach a social consensus on those proper standards. (Source: JSCE Website)

### **ABOUT STUDY TOUR GRANT**

JSCE Study Tour Grant (STG), supported by the International Scientific Exchange Fund (ISEF), is a unique program for young civil engineers to learn Japanese civil engineering technology and projects. The STG program invites civil engineering students nominated by the Agreement of Cooperation (AOC) societies to Japan to stay for about a week. During their stay, students will visit project sites and research institutes, meet leading civil engineering professionals and academics, and share their projects with other students. At the end of the program, they will be requested to submit a report relative to the experiences they gained in Japan to JSCE and the AOC, to which they belong home. This program will give them a chance not only to see technological innovations but also to let them experience the environment they pursue to be achieved. (Source: JSCE Website)

I learned about the Study Tour Grant (STG) while I was browsing my Facebook feed last February 2017. Curious, I immediately opened the link that directed me to the official communication page of PICE NATIONAL that prompted me to inquire in-depth details to PICE Davao City Chapter. Preparing documents and completing the requirements while beating deadlines was a challenge but with the guidance of PICE Davao City Chapter, I was able to submit all the needed documents on time. Luckily, I passed the screening committee of PICE and was fortunate to be selected by the ISEF as the 2017 STG.

Participants of 2017 STG



Figure 1 2017 STG PARTICIPANTS From left to Right Tugce, Pau, Mai, Al, Aek, Ganzorig

- 1) Mr. Mai Hoang Bao (Vietnam - VFCEA)
- 2) Mr. Ganzorig Tsevelsuren (Mongolia - MACE)
- 3) Mr. Pau Sian Muan (Myanmar - MES)
- 4) Ms. Tugce Ceran (Turkey - JSCE Turkey Section)
- 5) **Mr. Al-Adzhar P. Usman (Philippines – PICE)**
- 6) Mr. Pornnarong Lueanpech (Thailand - JSCE Thailand Section)

#### **DAY 0- Arrival in Manila from Davao City**

Being selected as one of the participants of STG was an honor, but more so being the first and only Bangsamoro engineer from Mindanao was beyond the nobility. I had to face several stages of application to come this far. PICE chapters across the Philippines will be nominating their candidates respectively but only five (5) will be selected by PICE National. To say that I made it the easy way is an understatement; four of the nominees came from the prestigious school of Manila, while I was the only one from the islands of Mindanao. The thought of being the underdog in the competition played inside my mind, and the thought of failing again sunk in. But I had trust; I trusted, I believed, I prayed to the Almighty Allah – He knew what was inside my heart.

Before the results came in, I was reaching home, not in a hurry because I was nerve-wrecked. And yes I knew that I have a fifty-fifty chance between triumph and loss. So when I reached home, the wi-fi connection was already turned on, and with my smartphone, I checked my e-mail, and the slow connection made my heart pound heavier, and a loud roar surrounded the house, an exalt of happiness, of thanksgiving, of the feeling of being blessed – at long last I was able to receive a confirmation e-mail. Everybody in the house was shocked when I shouted, all they thought that I was in pain – I’m going to Japan – I said, I qualified. I hugged my wife tight – then my kids and my siblings. I thank the Almighty for everything, for the blessing.

Perhaps, it must be fate when the International Scientific Exchange Fund (ISEF) Committee of Japan Society of Civil Engineers (JSCE) found my research proposal and answers to the given STG Questionnaire unique and interesting. The JSCE, especially Mr. Koji-san, assisted me in making reservation for my round-trip air ticket from my hometown to Japan and my accommodation. Being the first participant from Mindanao, they arranged my flight from Davao to Manila on 9<sup>th</sup> of September 2017, and an accommodation at Heritage Hotel, Pasay City. I was able to stay overnight in Manila and met some of my acquaintance, while doing some preparations for the STG presentation. I was so excited that I was not able to sleep early.



*Figure 2 Superior Room at Heritage Hotel*



*Figure 3 Dinner with my classmate Engr. George Tan*

#### **DAY 1- Arrival at Narita International Airport**

My official itinerary started on September 10, 2017. I took my breakfast at around 7:00 in the morning before checking in my baggage for my 10:05 flight to Japan. As it was not my first time outside the country, the immigration process went well. We boarded the flight 30 minutes before departure and the fact that I am going to Japan was finally starting to sink in! The flight would only be about five (5)

hours long, so we would be landing in Japan in no time at all.



Figure 4 Check-in Counter at NAIA



Figure 5 Immigration Line

At around 3:20pm, the plane has landed at Narita Airport. I immediately connected my android phone via Wi-Fi to communicate with Mr. Koji-san, and from there, he instructed me that a Japanese man with a signage of Welcome STG 2017 will come to fetch me. The tour guide assisted me in riding the Airport Bus and he instructed me that Ms. Suzuki will be waiting for me in Tokyo. I arrived at the Japan Capital, Tokyo, at around 6:20pm. It was there that I came to know that I was on-board in the bus with my co-STG, Mr. Mai Hoang Bao, who came from Vietnam. While getting to know each other, we walked together with Ms. Suzuki for five minutes and we arrived at NISHITETSU INN Shinjuku. Ms. Suzuki made sure that we were able to check in before she leaves as she is still awaiting for the arrival of some other participants.



*Figure 6 With Japanese Tour Guide*



*Figure 7 Room at Nishitetsu Inn*

After putting all our luggages in our room, Mr. Mai and I sat down to talk about engineering related stuff over dinner; there I learned that Mr. Mai is a third year engineering student at Ho Chi Minh City University of Technology in Vietnam. We exchanged our views on different aspects of engineering and I also gave him some tips on how to pass a licensure exam to be a registered Civil Engineer. After dinner, we walked to different path; Mr. Mai went back to the hotel, while I met with a friend who is currently taking his master's degree in Tokyo University, and a scholar of Japan International Cooperation Agency (JICA), Mr. Ameen Camlian.

While both of us were quite exhausted, that didn't stop us from exploring the nearby area. We went to Shibuya which is known to be one of the busiest pedestrian intersections in the whole world. I knew right there and then, there are so many things to do in Shibuya beyond the famed pedestrian scramble. We took a lot of photographs behind the statue of Hachiko, located right in front of the train station. It was a great place to take a photo and commemorate the man's best friend.

At around 10:00pm, on our way back to the hotel, Mr. Camlian accompanied me and we planned to meet again on Friday; unfortunately, our schedules never seem to work together.



*Figure 8 Dinner with Mr. Mai*



*Figure 9 While waiting in crossing the street in Shinjuku*



Figure 10 Shinjuku Station



Figure 11 Statue of Hachiko





Figure 12 Shibuya Crossing Street (1)



Figure 13 with Mr. Camlian at Shibuya Crossing

**DAY 2- Visit Kajima Institute of Technology in Tokyo and moved to Fukuoka by airplane to attend Networking Reception ( JSCE Annual Meeting)**



*Figure 14 At Kajima Technical Research Institute Facility*

During our second day in Japan, we woke up extra early as we were told to assemble at the hotel lobby at exactly 7:00 in the morning in preparation for departure for our first technical visit to Kajima Technical Research Institute (KaTRI), Nishichofu Complex in Chofu City, Tokyo. We arrived at the facility around 8:00am via charter bus, and we were welcomed by Mr. Testsuya Yoshizawa together with Ms. Haruko Umehara, General Manager for International Division and one of the ISEF Committee Members, and a staff from Kajima for Research Planning and Management Group respectively.

During the lecture, we were able to grasp Kajima's brief history that was founded in 1840. Kajima's ultimate mission is to help build safe, secure, comfortable societies. What left me amazed during the lecture was how the Japanese Construction company conduct feasibility study before steering implementation. After the briefing, Ms. Haruko showed around their facilities. The Nishichofu Complex, the center of research and development, has an area of 20,000 square meters with eight (8) buildings for their test equipment and facilities. We were able to visit five (5) facilities, namely: (1) Shaking Table Laboratory, (2) Large-size Structural Testing, (3) Concrete and Wind-tunnel, (4) Construction and Fire Safety, and (5) Exhibit Area.

In the Shaking Table Laboratory, we were astounded by how they simulate earthquakes using two types of shaking table: one is 5x7m in size that can move at a velocity of up to 200 cm/sec and a displacement of 70cm horizontally, and a velocity of 100 cm/sec and displacement of 30cm vertically, both with acceleration of 2 g, while the other one is a small table 2.1x2.1m in size and reproduces

large displacements of up to 2m for the two horizontal directions when carrying a 5-ton specimen. It was a picturesque moment, however, we were prohibited to take any photos within the facilities.



*Figure 15 At Haneda Domestic Airport*

After our tour in KaTRI, we took our lunch at the session room and we prepared ourselves for the afternoon's flight. We went to HANEDA Airport by charter bus and left HANEDA Airport via flight ANA634 going to Fukuoka and arrived at 4:30pm. After getting our luggages, we moved to "Big Sand" at Kyushu University to attend the JSCE Networking reception. In the Big Sand, I was able to meet Mr. Tamio Shimogami. We had some talk, and he asked me about my research proposal, and I learned that back in the 80's he was able to visit my hometown, Cotabato City. I also met some of my 'Kababayans', Peter James Esmalla of Saitama University and Patrick B. Cerilo of Nagoya University, who are currently taking their master's degree in Japan. After the event, we went to Nishitetsu Grand Hotel, and took a rest to prepare for tomorrow's presentation.



*Figure 16 At Big Sand JSCE Networking Reception with Engr. Cerilo and Esmalla*



*Figure 17 At Nishitetsu Grand Hotel*

**DAY 3- 19<sup>th</sup> International Summer Symposium at Kyushu University and Technical Tour in Kumamoto Prefecture**



*Figure 18 During the 19th International Summer Symposium*



*Figure 19 Presentation about the Feasibility study on a proposed Hydropower Plant in Camp Abubakar Maguindanao*

At around 5:30am, we took our breakfast, checked out the hotel at around seven, and went to Kyushu by charter bus for the presentation. A mixture of excitement and tension was all over me as I was the last presenter. I was given 15 minutes to discuss my research proposal entitled, “Feasibility Study on a Proposed Hydro Power Plant in Camp Abubakar.” Despite all the nervousness, I was able to make it through notwithstanding my tension to speak in front of many people.



*Figure 20 Lunch at Kyushu Cafeteria*

After the presentation, we ate together at the University Cafeteria and left the university at exactly 1:00pm for Kumamoto Prefecture.



*Figure 21 Yabegawa Bridge Cable*

Mr. Yoshizawa and Mr. Katayama accompanied us and we arrived at our destination around 2:30pm in Yabegawa Bridge famous for its 3-Span continuous prestressed concrete cable stayed bridge. It is also known for having a length of 517 meter and has 261m main span (the largest in Japan), has a curvature radius of 1150m. The bridge is consequently rigid that they used innovative technology such as: (1) Innovative Design using Seismic Isolation Bearing, Damper and Stopper, (2) Deep Pneumatic Caisson Foundation (3) Sophisticated Design of Cross Section (4) Steel Anchorage Box in Pylon (5) Non-grout type Multiple Strand Stay Cable, and (6) Hybrid Ground Foundation of Abutment on the

Soft Ground. Because of its strength, the 2016 Kumamoto Earthquake did no harm to the bridge which has since been constructed in 2006 and was finished by 2009.



*Figure 22 At Yabegawa Bridge*



*Figure 23 Yabegawa Levee Breakdown Site*

At 3:00pm, we proceeded to Yabe-river levee houses were breakdown site. It was very well known to have a very rare soil erosion which caused 2,000 houses to be flooded five years ago.



Figure 24 Miike Coal Mine Site

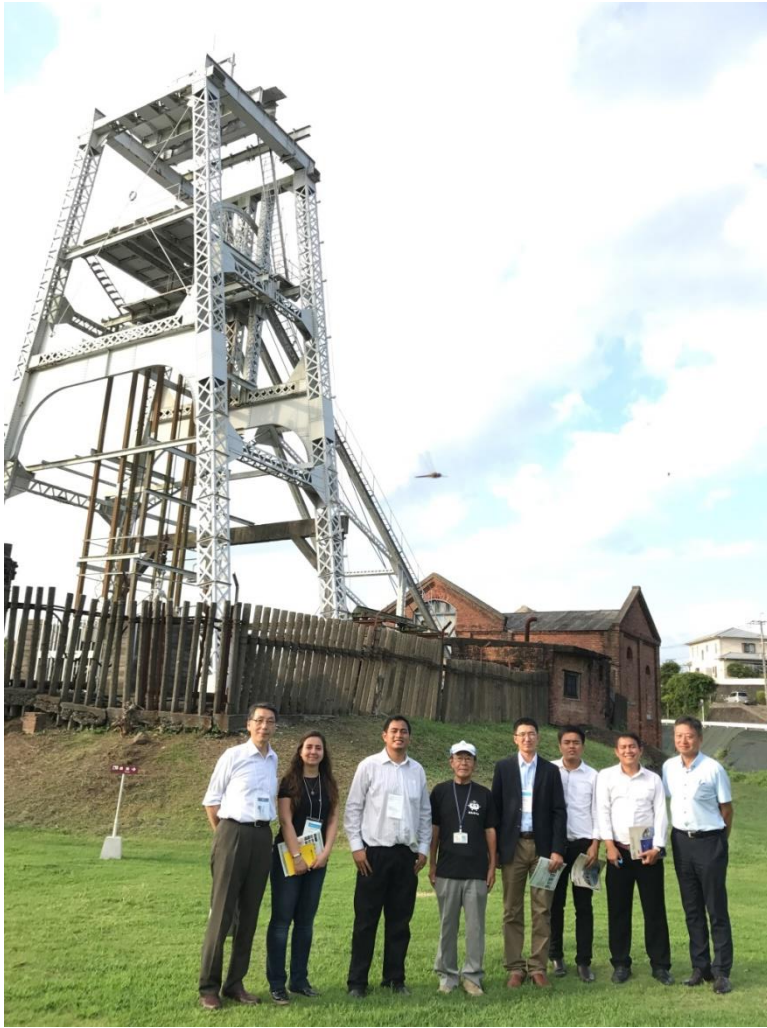
Immediately after we went to Miike Coal Mine Site, one of the world heritage sites of Japan's Meiji Industrial Revolution Iron and Steel, Shipbuilding and Coal Mining, we visited the Miyanohara Pit. The pit was one of the main pits at the Miike Coal Mine that produces 400,000 to 500,000 coals of tons per year from 1898 to 1931

We also experienced a virtual reality of coal mine site using a tablet provided to us.



Figure 25 At Miyanora Pit





*Figure 26 At Miike Coal Mine Site*

At 6:21 pm, we checked in at the Hotel Route Inn Kumamoto Ekimae, and after thirty minutes we were able to taste a delicacy in Kumamoto, raw horse meat, at a Japanese Restaurant.

**DAY 4- Technical Tour in Kumamoto (1) Kumamoto Castle (2) Tsujun Bridge (3) Daikanbou(Viewing Aso Mountain) (4) Aso Bridge**



*Figure 27 Kumamoto Castle after the 2016 Kumamoto Earthquake*



前(震災前 before the earthquake)

After three days of juggling new information, we were finally done with our nerve-wracking presentation so all we had to do was enjoy the tour. Before leaving the hotel, Mr. Tetsuya and I had a quick talk and he told me that one of the challenging moments of STG is the preparation and presentation of our proposal, and he also commended us for being able to deliver our reports on time. We left the hotel at 9:00am and arrived at Kumamoto-Castle around 15 minutes later. The castle was known to have been hit by an earthquake in year 2016 so the government allocated 60 Billion Yen for its reconstruction.



*Figure 28 At Kumamoto Castle*

At 9:50 am, we left the castle for Tsujun Bridge. Sometime in 1960, the bridge was built to supply rice field and other crops in Kumamoto, and presently, it now serves as a tourist attraction in Japan. Because we wanted to see as many attractions as we can, we took our lunch on the bus so we could not miss the tour to Daikanbou. Unfortunately, the time was ticking so fast that we were not able to follow our itinerary. On a lighter note, but Ms. Suzuki toured us in Shirakawa Fountain instead. At 2:03 am we left the area for Aso Ohashi Bridge reconstruction site. After witnessing the great effect of Kumamoto Earthquake in Aso Ohasi Area which led to closure of National Route 57 and the Houhi rail line, either of which is important as a transport link between Kumamoto prefecture and Oita prefecture, we immediately went to Kumamoto Airport to catch for our afternoon flight to Tokyo. At 6:00pm we arrived at Haneda Airport and went directly to our hotel Keio Presso Inn, which will be our hotel for the next three nights.



Figure 29 Tsujun Bridge



Figure 30 At Tsujun Bridge



*Figure 31 Lunch at the bus*



*Figure 32 At Shirakawa Fountain*

## DAY 5- Visit Tokyo-Gaikan Expressway:” TAJIRI-Area Project”, SHIMIZU Institute of Technology, JR Tokyo Station Site

During the last day of our technical visit tour, we had a very busy schedule ahead. We left the hotel at 9:00am to go to Tokyo-Gaikan Expressway Tajiri Project in Chiba Prefecture. There I learned that the project aims to accomplish five objectives which are: 1) shorter driving times, 2) Safer Residential Road, 3) Abundant Greenery, 4) Faster Disaster Response, and 5) Vital Utilities Stored Underground. Seventy percent (70%) of heavy traffic on the inner Circular Route is not bound for Tokyo City thus, this project will ease traffic in the city center by creating an alternative route for traffic passing by.



*Figure 33 Actual Site of Tajiri-Area Project*

I also learned that the East Nippon Expressway Company Kanto-Branch Ciba-Construction Office TAISEI-TODA-DAIHO Joint Venture used the following methodology for the project: 1) Cut and Cover Method, and 2) Tunneling method. The first method is to excavate from the surface and construct structure in the excavated space. To avoid corruption of surrounded soil, earth retaining wall is used to support ground pressure. Strut beams are used at each exaction step by step. The second one is to construct underground tunnel beneath the surface structure without disturbing existing structures. Shield tunneling method and pipe jacking method are the most popular method.

By the time it was 9:35 in the morning, we went to Shield Tunnel Site to view the actual project. We were amazed by what we saw and were pretty excited to put out our phones to get a scenic moment. Unfortunately, we were told by our Site Engineer, Kagata Kotaro-San, that photography is allowed for educational purposes only.



*Figure 34 Shield Tunneling at Tajiri-Area Project*

After spending almost three hours in Chiba Prefecture, we were on the roll to go to Shimizu Institute of Technology. We arrived at the Institute around 12:50 pm where our lecturer, Yutaka Nakamura, was waiting. He gave a brief introduction of Shimizu and we had a facility tour for about an hour and 30 minutes. Some of the facilities we were able to visit were 1) Earthquake proof research & methodology, 2) Wind Tunnel Testing Laboratory, 3) Shaking Table Test, and 4) Geotechnical Centrifuge Laboratory. The company's slogan, "Today's work, Tomorrow's heritage" was so captivating that it has made an impact to me to do better in what I do.

At 3:00pm, we went to Tokyo Railway Station which we came to know undergoes major rehabilitation for the preparation of Tokyo Olympics 2020 courtesy of Obayashi Corporation. Obayashi was founded in 1892 by Yoshigoro Obayashi, and as of March 2017, the company has 8,524 employees with a net sale of US\$ 11.6 Billion. It also has 12 Domestic offices, 15 overseas Offices, and 15 Overseas Subsidiaries and Affiliate. One of the rehabilitation being undertaken is the expansion of the pedestrian passage from 6.7meters to 12 meters.



Figure 35 At Tajiri-Area Project Office



Figure 36 Lunch at the office

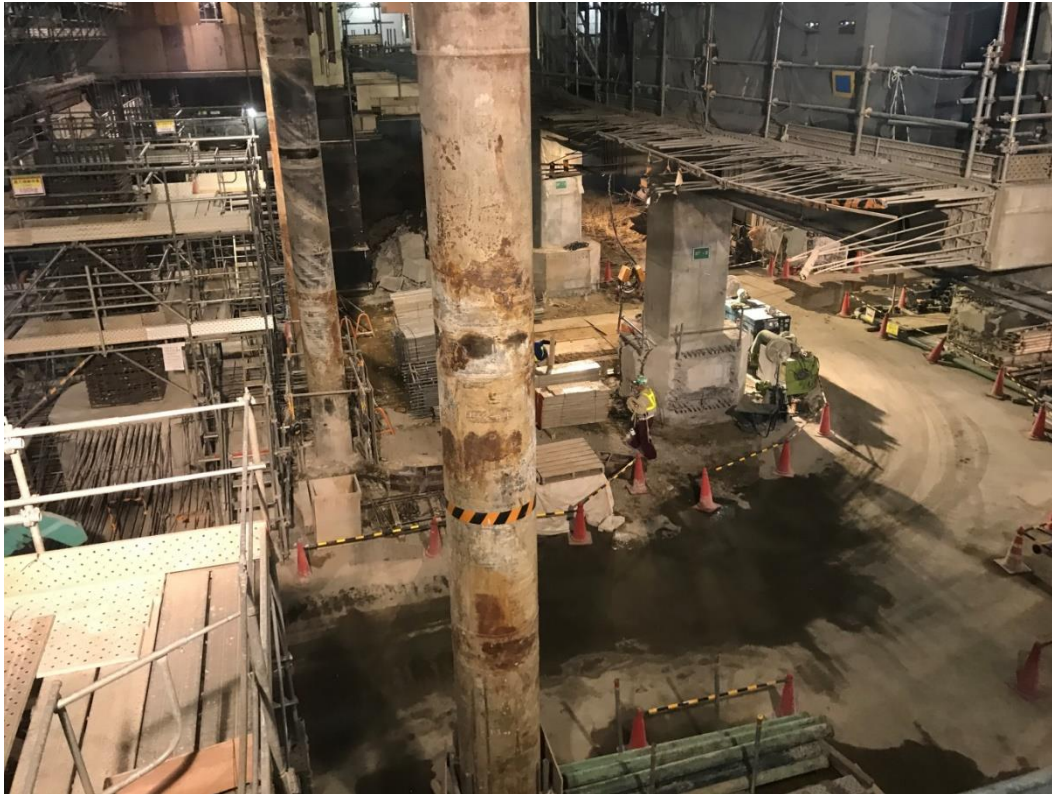




Figure 37 At the construction site Office



Figure 38 At Tokyo Railway Station Site



*Figure 39 At Tokyo Railway Station Underground Site*



*Figure 40 At Obayashi Construction Site Office*



*Figure 41 At Tokyo Station with Ms. Tugce and Ms. Shibuya*



*Figure 42 Dinner with the group at Budo no Mori- Godanya*



*Figure 43 At Budo no Mori- Godanya From left to right Mr. Yoshizawa, Mr. Katayama, Mr. Aek, Ms. Tugce, Mr. Gana, Mr. Al Usman, Mr. Mai, Mr. Asano, Mr.Kamata, and Mr. Pau*

During dinner, I got to have conversation with my fellow STG participants and some ISEF Committee members at “Budo no mori- Godanya”. I also met Ms. Shibuya, and we talked about the selection process of each country, and got some information on how JSCE works. At 7:00pm, we bid farewell to ISEF Committee Members and Secretariat to head back to the hotel.

#### **DAY 6- Sight-seeing in Tokyo**

They say that time flies so fast and yes, it truly is. Before leaving for Manila the next day, we have all the time in the world to explore Tokyo for a day to dazzle with its traditional culture and passion for everything new. In a nation as culturally rich as Japan, it can be hard to know how to spend your time there.

We took a gander around the Sumida River area. Sumida is just one of the major rivers in Tokyo - the others being Tama, Meguro (which flows right beside our office), Edo, Tone, Arakawa and Kanda. The nice thing about Sumida is that there is not much hustle and bustle to be encountered - just a nice and quiet walk. We also visited one of Tokyo's most colorful and popular temples, Senso-ji Temple. Legend says that in the year 628, two brothers fished a statue of Kannon, the goddess of mercy, out of the Sumida River, and even though they put the statue back into the river, it always returned to them. Consequently, Sensoji was built nearby for the goddess of Kannon.

The temple was completed in 645, making it Tokyo's oldest temple. When approaching the temple, visitors first enter through the Kaminarimon (Thunder Gate), the outer gate of Sensoji Temple and the symbol of Asakusa and the entire city of Tokyo. A shopping street of over 200 meters, called Nakamise, leads from the outer gate to the temple's second gate, the Hozomon. Alongside typical Japanese souvenirs such as yukata and folding fans, various traditional local snacks from the Asakusa area are sold along the Nakamise. The shopping street has a history of several centuries.

The tour will not be complete without Tokyo Skytree. Boasting a height of 634m, making it the world's highest stand-alone communication tower, the appeal of Tokyo Skytree lies in the fact that although it is a hi-tech structure, it also evokes a sense of traditional beauty, featuring forms that incorporate such techniques as the concave sori curves seen in traditional Japanese architecture, and the convex mukuri curves found in temple architecture, where the pillars feature a gentle outward swell at the midpoint; in addition, it features shimbashira-seishin, or center column vibration control, which was the world's first vibration control system, and an illumination design that expresses the Japanese spirit, through the patterns iki (chic) and miyabi (elegance).

It was indeed a wonderful experience being at the top of the world and until now, I still wonder how the Japanese Engineers made the tower possible. Someday, I look forward to see or even replicate such structure in my home country.

At 5:00 pm we left Tokyo Skytree and finally went back to our hotel. We knew from there, the inevitable departure has come.



*Figure 44 At Sumida River*



Figure 45 View from the boat



Figure 46 At Asakusa Temple



Figure 47 At Asakusa Temple



Figure 48 View from Tokyo SkyTree



Figure 49 Last Dinner with STG 2017 participants



## Day 7 – Departure for Manila from Narita Airport and also from Manila to Davao City

There's nothing like coming home, having the day off or morning off and doing errands. Apparently, having been used to the company of different nationalities and awe-inspiring beauty of Japan, coming home was not as exciting as it seemed to be.

I left the hotel at 5:50 in the morning and arrived at the bus station at six to go to Narita International Airport. Since the bus ride will take at least an hour and a half, I took the opportunity to doze off and gather some power nap. Although I was stuck in traffic, it helped a lot having recognized my gift of optimism. Thirty minutes before departure, I was able to check in while my heart was pounding so fast. I departed Japan around 9:30 am and arrived at NAIA airport around 1:10 pm. Since my flight to Davao City is at 9:00 pm, I had to wait for more than 8 hours in Manila. By 11:00 pm, I finally arrived home carrying and embodying a life-changing experience in Japan.



Figure 50 Narita Expressway



*Figure 51 Car accident at Narita Airport Expressway*



*Figure 52 Arrival at Davao International Airport*

## **CONCLUSION**

My seven day technical tour in Japan was one of most significant things that happened to my career. I will never forget everything I saw and learned about Japanese Engineering. It was my second time to visit Japan; my first one was when I was selected as one of the 12 Bangsamoro for HiPEC training held in Hiroshima Prefecture. During that time, I was amazed by how the most devastated place on earth famous for Atomic bombing was able to recover in such a short period of time.

Despite the challenges in the early centuries, that did not stop Japan from being innovative. Japan had already built up a sufficient industrial base, including capital stock, skilled workers and technologies, and was ready to take advantage of the new opportunities presented by the world market. The most important point to recognize about Japan's import of technology was that it was translated into industrial strength only because it was combined with domestic innovation.

As a young engineer, the improvements and modifications of technologies of Japan stimulated industries to develop an even more productive ways to grow the Japanese economy to compete in the international markets. It was engineering prowess that lifted their nation from post-war defeat to economic superpower. One of the most important things in construction is the toolbox meeting at the beginning of the day and also after finishing all the works and planning for tomorrow.

The STG program of JSCE was indeed very helpful to young civil engineers like me. It made me realized how big an engineer can be to this world. We make this earth more beautiful while making sure that in every structure we plan and implement, we can help the society.

## **ACKNOWLEDGEMENT**

I would like to extend my sincerest thanks and appreciation to those patient souls who helped me accomplish this study tour. It's really fortunate that I have benefited with such a good academic company and full family support for which I will always be thankful. In this acknowledgement, I would like to thank as many people and institutions as possible whose contribution has made it possible.

I wish to express my most sincere gratitude and appreciation to my mentors namely Engineers Erdsan Suero, Angel Torrejon and Cary H. Beatisula who nominated me as their 2017 STG from Davao City and for giving me guidance, patience and encouragement throughout this journey. My gratitude also goes to our 2017 PICE President Usec. Catalina Cabral; you are an inspiration, a living testament of women-empowerment, you made sure that the nominations will be well-represented from the three Major Island of the Philippines.

To the four Bangsamoro leaders who changed the image of ARMM, ARMM Regional Governor Mujiv S. Hataman, Department of Public Works and Highways (DPWH) Undersecretary Emil Sadain, Department of Social Welfare and Development (DSWD-ARMM) Assistant Secretary Dr. Darwin T. Rasul III, and DPWH-ARMM Regional Secretary Don Mustapha Arbison Loong, you have been very instrumental in getting me started with public service.

It also gives me immense pleasure to thank my Strategic Project Monitoring Unit and Communication Group (SPMU-COMGROUP) family headed by our chief Johary N. Panambulan, for their support, continuous guidance, meticulous suggestions, and astute criticism during the stages of my journey and for their inexhaustible patience for the past two years I have been part of the family. This group

of young professionals made me strive for greatness; it's been such a wonderful experience to have you in my life.

Special recognition also goes out to my family, for their support, encouragement and patience during my pursuit as STG contingent of the Philippines. To my lovely wife Jasmine Ayesha Maglinao-Usman, who inspired me and provided constant encouragement during the entire process, as well as never losing faith in me. To my two lovely children, Datu Khalid Tyrone (DK) and Bai Zhasha (BZ) Usman, who missed out on a lot of Daddy time while I sought intellectual enlightenment. I thank all three of you for your patience and love you more than you will ever know.

Finally, all praises and thanks belong to our creator for giving me this once in a lifetime opportunity which I will surely treasure for the rest of my life. I give glory and honor to Almighty God for his blessings, wisdom and guidance for enabling me to complete my STG in Japan.



*Figure 53 Breakfast with PICE National Officers from Left to Right Engrs. Suero, Al Usman, Torrejon, and Beatisula*



Figure 54 at DPWH-ARMM with Regional Secretary Don Mustapha Arbison Loong



Figure 55 at DPWH-ARMM Conference Room with SPMU-COMGROUP Family