2017 Re-inventing Japan Project (Short-term)
International Students Summit, RJP Internship

Federal Rural University of Amazonia ・Department of Forest Engineering・ 4th year

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As a student, I've always enjoyed being involved in all sorts of activities my university could offer, so when the opportune of participating in the Re-Inventing Japan Project came up, I felt very happy, since I had deep interest in taking part of something different, especially when I understood the program also involved the 17th International Students Summit (ISS) on Food, Agriculture and Environment in the New Century.

Therefore, besides having the academic and cultural experience, I would have the opportunity to join other people and share knowledge and points of view regarding problems related to food, agriculture and environment, as well as discussing their roles in the context of sustainable development.

To me, promoting the knowledge sharing amongst various students about a sustainable agriculture was the main goal of this exchange program, thus, I realized I could present a project we were executing in our institution, entitled "Biofertilizers: an alternative for sustainable agriculture in the Amazon region".

Interacting with the different points of view to be debated during the meeting certainly would be enriching in the social, economic and environmental contexts, areas which permeate our daily life in such a way that, not only we'd be presenting an alternative to be summed to others in face of the "sustainability crisis", but we would also have the chance to enhance such knowledge, highlighting its importance to our region.

We presented our study on how the accessibility of information and benefits of the *Trichoderma* sp. fungus, produced at the Plant Protection Laboratory in the Federal Rural University of Amazon, may contribute to a progress in the local sustainable agriculture. Considering that the use of chemicals in the agricultural production is a world problem, actions whose goal is to facilitate the access to information on alternative production are necessary, such as the use of biofertilizers in the local community and with the producers.

Besides, I intended to learn about new cultures, enhance my English skills and get to know the different educational systems adopted by foreign institutions.

The program was divided in two moments: one in Taiwan, which took place from September 22nd to September 26th, and another moment in Japan, from September 28th to October 3rd.

During the stay in Taiwan, I was able to join various activities organizes by the students from the National Chung Hsing University (NCHU). Among those activities, we highlight the following: field trips, discussions and the ISS (17th International Students Summit) event.

On the first day, our programme began with a visit to one of the local touristic sights, Sun Moon Lake, the largest body of water in Taiwan. We also were able to gaze at the stunning landscape, as well as visiting a tea farm, where we learned about its production and even get a taste of the tea produced there.

In the afternoon, we got to learn a bit about the dams and some experiment being developed about the subject, and then we watched a demonstration of such experiments. The first day ended with a delicious dinner, during which I was able to try the Taiwanese cuisine for the first time.

On the second day in Taiwan, I had the pleasure of discovering a little bit of the NCHU. On that day we began our first discussion moment about the ISS' topics. My work was located in the agriculture session, along with representatives from Taiwan and Thailand, who presented projects about wasted food recycling and about Thailand's agriculture, respectively. The discussion in our session was very productive, since our projects were quite connected.

Figure 1. Session 3.1 (Agriculture)

On the third day the discussion among the projects in our session continued, and considering everything we punctuated (negative and positive points, our difficulties, among other elements), we were able to set up a presentation about everything we learned during the two days, so we could report it to the other students and the professors at the ISS. On the same day, we visited the other sessions at the event, and the discussion about the general theme was expanded, thus we could obtain group results, which were presented during the ISS. Besides, we chose the theme for the 18th ISS, to take place in Japan.

The fourth and fifth day held the presentations of all students, each presenting the project they were implementing in their country, so we could learn more about each one. The presentation of the Federal Rural University of Amazon's project took place on 09/26. After our presentation, my work partner and I felt delighted to see that many people enjoyed our speech and got curious about our study on biofertilizers made from a fungus. That felt good, because we managed to achieve our goal and share information with other students.

Our stay in Taiwan ended with a lovely closing party organized by the students and professors, which involved cultural attractions, certificate granting and also great typical dishes.

Figure 2. Certificates being granted at the ISS closing party.

On September 27th, all of the Latin American students (Brazil, Mexico and Peru) left Taiwan and headed to Japan, where we got to visit the Tokyo University of Agriculture (NODAI) and experience the internship at the Institute of Environmental Rehabilitation and Conservation (ERECON).

On the first day in Tokyo, we had a tour in the NODAI Campus in Setagaya, where we visited the library, classrooms, dining hall and experimental fields. We also had our first class, entitled "Comparative Food Production Technologies", during which the professor spoke about the Miyakojima Island, and its production technologies. After that class, we had our Japanese class, taught by the coordinator Naomi Yamada, and it was quite interactive and fun, so we could learn the

basics in the Japanese language. It was very nice to be able to learn a bit of such language, even short phrases, because it created an interest in learning more about Japanese.

On the second day, we began our programme visiting some labs, such as the molecular genetics of plants, which by the way created great interest in me – it is an area I very much identify with, because I develop research about that subject in Brazil (with amazonic species), so it was productive to know how this kind of work is developed in Japan, which technologies and procedures are used, and mainly, get to meet the professor responsible for such research area in Nodai, professor Sakata. Another laboratory we visited was the Landscape Botany and Arboriculture, presented by Professor Suzuki, where we were able to learn more about the history of Japanese gardens and also learn about projects executed in this field.

In the afternoon we had two classes, the first one was about "Edo Aesthetics and Environmental Resiliency". Since it was the first class for the subscribed students, the professor briefly introduced the subject and then we stated our names. Our last appointment of the day was a class on Molecular Biology and Biotechnology, taught by Professor Sakata, which once again created great interest. The class discussed phyto-hormones and their importance and, even though I had studied about that before, it was quite productive.

Between September 30th and October 2nd, we, Latin-American students, had a training with ERECON about SDGs agricultural development projects (Sustainable Development Galds). And so, we had the opportunity to participate in the Global Festa Japan, taking place in Odaiba. During the first two days of internship, we had free access to the fair, in order to know and interview people developing some kind of project in different countries. Amongst the one I got to know, one of the most interesting – because it was related to my study area – was the "Children's Forest Program", projected by the OISCA (Organization for Industrial Spiritual and Cultural Advancement), which aims to educate children and scholar communities about the environment, through various environmental activities, such as tree planting. Besides that, there were various interesting projects in the environmental and agricultural fields.

Figure 3. Internship at ERECON booth of Global Festa Japan 2017

All of the project we knew worked as a base so that, in our last day of internship, at the ERECON office in Onojimachi, we could elaborate a project and discuss about the main problem faced in our country, which is the use of chemical fertilizers. Having said that, with the ideas we visualized at the Global Festa Japan as well as our experience in the ISS, we put together a project about the implementation of biofertilizers. Our main idea was to take all the knowledge we have inside the university to the outside community, especially to the small producers, since the majority of the food in Brazilian homes is produced by them.

Just like us, students from Mexico and Peru also presented their ideas, and at the end of all speeches, we received our certificates for completing the training.

In our last day in Japan we got to learn more about Japanese culture. We visited the Meiji Jungu Temple, a very known sanctuary which is appreciated by tourist, and shows a bit about Japanese religious culture. We also got to visit the Shinjuku Gyoen National Garden, a beautiful park located

in Shibuya, full of stunning landscapes. It was really amazing to know those places, and experience a closer look to Japanese art.

After our visits, Tokyo University organized a party, attended by the students already participating in exchange programs, besides professors and Japanese students who had been to Latin America. That was one of the few moments when we could directly contact Japanese students and exchange experiences, which was very good. We realized there are many latin-americans participating of long-duration programs or even graduating in Japan. We also learned there are several Japanese people who have knowledge on Portuguese and Spanish.

Figura 4. Confraternization party of exchange programs students

"Re-inventing" promoted many fantastic experiences, and I've been able, among other things, to meet new people from over 30 different countries, and make new friends. I also was able to visit two worldly recognized education institutions, the a National Chung Hsing University (NCHU) and the Tokyo University of Agriculture (NODAI), their teaching methodologies and their professionals. I got to learn new technologies and have new insights about my area of practice in research.

Also, I was able to communicate about how the agriculture in my country (Brazil) operates and what I, as a student, am doing to improve this production, through research and extension projects executes in my university. Besides, I got to know how the agriculture is like in other countries and learn a lot from them.

I joined an internship, which made me open my mind to so many new things, new projects in all areas I could imagine. It all led me to new ideas which could work as a base to implementation of new projects in my university, city or even states of my country.

I've learnt a bit about the Japanese culture, its language, its cuisine, its art. I got to visit incredible places, which maybe I could've never had to opportunity to do.

All of the above affected positively in my way of living, my student, citizen and professional point of view. Surely, everything I experienced is going to be carried on, because I will try, from now on, to be a professional with a more open mind, someone who thinks about the community, and tries to solve problems in my country.

I, as a future forest engineer, have the duty to know how to enjoy the environment benefiting society and at the same time take care of it, so that the new generations may enjoy it too. Therefore, the implementation of projects who aim to benefit society and environment are welcome, and everything I learned in this short-duration exchange program will be of great value in my way to accomplish those goals.

In conclusion, I'd like to offer a few suggestions so, in the future, the Re-inventing Project Japan is even better:

- Implementation of short-duration courses inside the university, which start and finish within the exchange period;
- Implementation of more practical courses;
- More moments of interaction between foreign and Japanese students, which could happen during the practical courses; and
- Visits to Japanese producer.