

2018 Re-inventing Japan Project (Long-term)

Federal Rural University of the Amazon, major of forest engineering – 3rd Year Marcela
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1. Reason(s) for participating in the study abroad program

Before I began my major in the Rural Federal University of the Amazon I was interested in Japanese culture and I always researched about Japan through animes, mangas, TV shows, events by Japanese community in my city and documentaries. Then, one of these documentaries I watched about the forest crop in Japan and the techniques and methods for to development the field without to do many injuries in the soil and for environmental. From this, I decided to attend Forest Engineering for do a conscient management of environmental, principally for the forestry.

Thus, when I began my major I knew about the opportunity for study in Japan for five months. So, I prepared myself for travel to Japan, mostly, my academic career from my good grades, academic papers and events, workshops and personal science projects. First, in my laboratory core of cyber physical systems with my host professor José Felipe Souza de Almeida, who always encouraged my dream for go to Japan. In second, I started an internship in a Brazilian Company of Agricultural Research – Oriental Amazon (EMBRAPA – Amazônia oriental), there I worked in a Japanese community and that encouraged myself more for try the exchange.

Then, I also wanted to know more about Japan technologies and sustainable development for to improve myself who professional and transmit that in my academic environmental with excellence and theoretical background in one of the best countries in sustainable development through technology and intimate relationship with the nature. Japan is known for his arborization and landscaping in his cities, what involve an ecotourism and religious tourism in most of the districts.

Thereupon, I decided to do the exchange for Japan and now I want to use my knowledge for improve my university in the sustainable aspect, it is trying insert the methods that I learned in my classes in Japan and offer lectures about the actual scenario in the World around the 2030 agenda and the Sustainable Development Goals, starting there Brazil can have an excellent professionals with ecologic conscience. The exchange was an opportunity for improve me how a better professional and person, a chance for learned about independence and solidarity.

2. Activities you did during the program (both educational and cultural)

Make sure to mention the five elements of RJP:

- (1) Courses offered at Tokyo NODAI

I did five courses in Japan, between them are:

- Agricultural Scientific English for an International Cooperation

This class was instructing by Koshio Kaihei all the classes was based on the book with title “Plants, Genes, and Crop Biotechnology” second edition by authors Maarten J. Chrispeels and David E. Sadava. But the chapter that more took my attention was the class with theme “Food security: Why do hunger and malnutrition persist in a World of plenty?” because although of we have a lot crops and production the distribution of the food is inefficient, it result in a “food insecurity is widespread and pervasive in developing countries and is also found in developed countries”, the futures professionals need to find new ways for improve the food security development.

- Agro-Environmental Engineering

In this class we had a many lecturer, but my favorite was Dr. Toru Nakashima. He spoke about land-resources more specific in soil degradation area, all his research is based in the second goals, that aim “Zero Hunger” in the target 2.4. He applied no-tillage agricultural system wit focus to improve the crop production and to evite soil degradation in a big scale. This technic “has many benefits for agriculture which increases the amount of water holding capacity and increases organic matter retention and cycling of nutrients in the land”, according the Dr. Nakashima, it is also preventing a lot use of machine in the crop. He works with multi-rotations agriculture, and it can be implanted in Brazil crops for improvement of the fields.

- Comparative Developing Agriculture

Now I will begin to write about the class that I like more to. The speaker was Murari Suvedi he has some projects in Nepal on a small community. Which are: 1. Building an elementary school; 2. Constructing community drinking water supply; 3. Improving high school education in a village; 4. Initiating off season vegetables production and marketing; and 5. Promoting environmentally friendly agriculture. I liked a lot because it shows in the practice the result in the relationship between university, community and science, it is something amazing for improve to sustainable development in the World, not just in developed countries but also at developing countries, it demonstrates a social and class inclusion.

- Edo Aesthetics and Environmental Resiliency

I learned about Edo period and I did a lectures presentation with specifics themes, and I saw a little bit about or countries, like France, Brazil, Thailand, etc. But the focus was the Japan history, it helped us to see our different cultures and minds, but always with respect. Edo period represent a strong Japanese culture and, in that period, happened many challenges in Japan, for example, the move of the capital before in Kyoto and although Edo period in Tokyo. I learned about sustainability, costumes, religion, music, theater, classes, and everybody made lectures each class, it helped us to develop ourselves how speakers.

- Molecular Biology and Biotechnology

This class took my attention because it demonstrated the science reality and how scenario science is going in Japan. I saw different methodologies and technologies for to make the tests and it is aiming promote the improvement in the human life with ecologic conscience, less environmental degradation. The lecture I liked more was about new methods for treatments of a specific cancer type, but it could facilitate in the symptoms after finishing the treatment, because it doesn't use radiotherapy, in other words doesn't injury other parts of patient conditions.

(2) Japanese language class

I participated of two Japanese class, one on Tuesday and another on Thursday. I learned about introduce myself, useful greetings for an initial communication with Japanese people, asking for and offering assistance in some situations, like when I could need to get on a train or help someone lost. I learned about to make plan with my friends or someone, I learned about prices, numbers, hours and some kanji's. But I improve a lot my development with hiragana and katakana, and it help me in my daily in Japan.

(3) Interactions with students of Tokyo NODAI

For me it was one of the parts more important in the exchange, the involvement with different people of many countries, no just Japanese – what it was also very important for me. When I arrived in Japan I was good hosted, first Eduardo and after for Naomi and Azael. Then, in the next day we went in Odaiba with the other exchange students from France, German, Peru and Mexico, thus we began an excellent friendship.

The people that I knew in Japan they are very important for me each one have a space in my heart and I will take them with me. But, the thing that I thought more interesting between us how we every week went out for somewhere and talk a lot about our culture and reality, about our families and sometimes how we could make for promote the challenge in the World, for do that a better place to futures generations.



However, I had a nice friendship with some Japanese people, like Toshiki Sata who was always nice with us, he was helping to know the Japan and other Japanese's. He took us an area with rice crop and we learned how the Japanese people harvest a rice. He also introduces us for some laboratories in Nodai, what gave us the chance for talk with more Japanese people and master and PhD students of Nodai.

Although, I also met some nice people in my laboratory, who helped me in my Japanese language development and they told me some typical things where they from to, like food, sightseeing, religious, temples, shrines, events. But they also showered their researches and taught about Japanese ecosystem, everybody was nice. And my host professor was thoughtful about my interest in Japanese research and opportunities for foreign students. I participated of two celebration in my laboratory and these were very nice.



Finally, I will talk about the ex Nodai students from Brazil. They were and are very important in my exchange, without them it couldn't be the same. We had a nice time with them, celebrate and taught many things about the life in Japan, they gave me orientation in my first days, attention, support and more important friendship, they were my senpai's.



(4) Agricultural internships

In my internship I had the chance to know the ERECON – Institute of Environmental Rehabilitation and Conservation – founded in 2000, it is an international non-profit organization with aim of promote a sustainable research in Asia and, consequently, improve the environmental and the relationship between human and nature, it will result in a rehabilitation and conservation of environmental.

In that internship I learned about the ERECON projects in Asian countries, for example, Cambodia and Thailand, which involved the community with sustainable practices for improve their crop, one of the techniques was using granular composting which that was developing by ERECON. Then, the company begin the project with some farms and after day could have more farms in the projects because the greats results in the first.

We learned many things in that internship, between them how I could do granular composting and charcoal with rice, I also saw a compost deposit and how it functions, it interns cycle, how I can use that sustainable fertilizer in a crop and the benefits for environmental. Then, I learned more about Satoyama system its philosophy and contextualization, with an example in a community in around a Machida-shi.



In that opportunity a learned about sustainable development in Asian countries and how is important to be care about Sustainable Development Goals and Climate change, although we still have many difficulties with sustainable development, the current resources is demonstrating a improvement and a new form to management in agriculture, for example, the granular composting is a natural form to fertilizer the soil and improve the plantation growing, because has many nutrients (principally, Nitrogen, Phosphorus and Potassium, those is more important in the initial development in crop), and loses with more difficulty your nutrients through leaching during the rain.

(5) Visits to agricultural facilities

I did Satoyama tour to Kosuge Village with the others exchange and Japanese students, it was promoted by Mari Murahashi. In that experience I learned a lot about Satoyama system and the daily life in Japanese villages, how each one help for maintain the environmental equilibrium and how they suffer with rural depopulation. I had a practice in the jungle for clearing in forest area, which it aims prevent landslide in that region, what it is very common after the rural depopulation.

However, I had a trip by Comparative Developing Agriculture class. I visited a common farmers shop with products a hundred percent organic without agrochemicals and a vegetarian restaurant it located in Chiba near Tokyo, the restaurant has a variate menu and I had the change to try the food of there. Thus, after I went for Kikkoman company to learn about the process for shoyu, miso, ice cream fabrication. They gave for us a Kikkoman shoyu and tomato sauce.



3. Explain what you accomplished and learned through this program.

First, I write how this program help me to know more about myself. In this, I could learn more about independence, friendship and find some secrets inside me. When I arrive in Japan I would need to learn administer my financier life, the cleaning day with my roommates and control myself when something annoyed me. Then, I could make some special and important friends, which I will take for all my life in my heart and memory.

Second, it was very important for open my mind about the World problems and how can I improve my professional career for help too. The class always talked about Sustainable Development Goals, and what took more my attention was how each research had a based in one goal and specific target, I was imprinted how Japan universities care about sustainable progress in the World and it was a nice mark this program gave me. That subjects have a focus different of my university, and now I can see how important the sustainable development for the World is and for maintain the future generations.

Third, I learned more about Japan, the culture, religion, culinary, people, education, technology, climate, life philosophy. I dreamed with that trip for five years and I worked a lot for got it, I enjoyed Japan in its totality with trips inside and knowing the sightseeing. I visited Kyoto and learned about the organization, religion and tourism, in Osaka I learned more about Japan history at Osaka Castle and in Nara I saw the respectful with the nature through a harmony relationship between deer's and humans.

For last, I knew more about Japanese science through my laboratory. The new technologies and methodologies, for example, one of them is the technique for protect the city against tsunamis with a something like "green barrier", it is making with trees and can minimizing the impact of tsunami. Thus, that is something I thought very interesting, the association between community and university.

4. How did this program shape your career and how will you apply what you learned in the future?

I believe that I already explain how this program shape my career, so I will write how I want to apply what I learned. I am developing a project for promote the knowledge in the academic community of Federal Rural University of the Amazon about the World and Sustainable Development Goals, I want to repass the knowledge which this program gave me, because the actual students will be the future professionals, thus they need to know how care the World and nature management, this way we would be a good for the environmental and conserved the fauna and flora.

When I was in Japan I participated in the ERECON internship – I already wrote about that in the above – I did a questioner with UFRA students and I wanted to know about them Sustainable Development Goals, actual situation World, Climate change, if the university is sustainable, if they major has focus in sustainable development. However, I conclude that UFRA students don not have a lot knowledge about that.

Although that I want to apply a project with workshops and lectures for them conscientization. For me is important share the knowledge, but more important of that is promote the sustainable development, and I just can do it through my knowledge that I took in my classes in Japan. But we need to improve our future professionals, the Amazon jungle is the biggest tropical forest in the World, the professionals that work here they need to care about the management. We need the jungle more of the jungle need us.

But a personal level, I want to continue studying for improve the research in sustainable management forest area. So, I want to do my master and PhD in sustainable tropical forest and to help my region and my country for comply the 2030 Agenda and be a sustainable country, which incentive the science and sustainable systems, always aiming the ecologic preservation and conservation. And in the future I want to be like a "bridge" between my country and other countries to cried some projects which that can help to sustainable improvement in Brazil and also in my university.

5. Any advice for future RJP students

For the news Re-inventing Japan Program students, I wish you enjoy all the things that Japan can offer and the Nodai can offer. That university is very rich in knowledge and excellent professionals, improve your language skill, enjoy your independence and to do a good friend. See what you can of Japan, travel, study, eat, Japanese food is a best food that I already ate.

Then, when you take all this knowledge to incentive the dream of other people, inside your family, academic, community, scientist, everybody. Be a different and improve the environmental around you.

6. Any suggestions to improve the program

For me the program was very nice, and I really don't know what I can say for improve. But I think we could had more practices classes.



Thank you very much everybody for everything!