2019 Re-inventing Japan Project (Long term)

Universidad Nacional Agraria La Molina. Department Of Agronomy. 5th Year. Jose Briam Sanchez Ponce

Tokyo NODAI Department: International Agricultural Development

1. Reason(s) for participating in the study abroad program

Going to the other side of the world to study abroad has been an unique experience of Life. Studying in another country makes you get involved in new situations and recognize different perspectives on things in people. The simple fact of being in a place to which you do not belong can give you a renewed mind in the long term.

Agriculture is one of the most polluting activities worldwide. Japan, the country where everything is possible, is developing new agricultural technologies to have a more efficient production, always taking into account the environmental part.

NODAI is considered as one of the best universities that contributes to agricultural development in Japan through its research. Therefore, when I knew in 2016 that there was the possibility of studying during an academic period in NODAI, I did not think twice and I began to prepare myself to apply to this opportunity. My colleagues who had already participated in this program (RJP), motivated me and reaffirmed the decision I had already taken some time ago.

Apart from academics, it is known that Japan is a country that stands out for values such as education, discipline, hard work and the prioritization of common objectives over personnel. So participating in this program and living in a society totally different from mine would prove to be enriching

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

I arrived to Narita airport, Japan on August 3rd. The RJP coordinators gave me a warm welcoming and I felt that my adventure in Japan had already started. The first week was not easy for me because it was the first time that I was alone far from home and everything was new for me. There were not classes in the first week, so I tried to go out by myself to get used to a new society. After a few time I got use to Tokyo, especially in its transportation system.

(1) Courses offered at Tokyo NODAI

Tokyo NODAI offered to all its visiting students many interesting courses. In my case I decided to take six of them.

1.1. Vegetable production technologies for international cooperation

This course was full of technical knowledge, since almost every week we could learn about different crops like Tomato, Cassava, Eggplant, Lettuce, Cabbage, Catermelon, etc. History,

Importance, Botanical description, Climate, Cultivation instruction and pests were de main topics that I could learn every week.

1.2.Food and Health 1

This course gave me a lot of knowledge about food and nutritional science. I was able to learn especially about the mode of action of the microorganisms that help the production of food that we consume daily. In addition, health problems that are being had due to poor nutrition.

1.3.Global Food Systems

In this course I could learn about the history of traditional Japanese foods from a cultural point of view. For example, how often they are consumed and how this has been changing over time, where they come from, how they usually eat, etc.

1.4.Food and Environment in Economic Development

In this course I was able to learn important economic aspects related to agriculture. as well as social problems that lead to low economic development in some countries worldwide.

1.5.Life History and Applications of Landscape Plants

This course has helped me to understand the landscapes in urban areas around Tokyo metropolitan. Tokyo is more than high buildings, there is also history, culture, traditions, customs that can be seen in many areas, which should be more relevant than other aspects.

1.6.Environment and Agriculture

This course was important to acquire technical knowledge about soil, water, as well as the current problems that arise in Japan. In addition, it was important to learn in a theoretical and practical way the use of different software to carry out research work applied to agriculture.

(2) Japanese language class

In my stay in Japan, I could take a Japanese course, which were very useful since the first class. Because the professor taught us expressions and grammar that we could use in our daily life in the supermarket, convenient store, restaurant, train station, etc. Moreover, I could practice the language with my friends in my laboratory; they were always willing to help me as well as my professors. Some of the members of my laboratory belong to the club of calligraphy and they taught me how to write some beautiful kanji with Fude (筆).



(3)Interactions with students of Tokyo NODAI

My interactions with students of Tokyo NODAI was practically from Monday to Friday (sometimes on weekends), from 9:00 to 22:00 (except for hours of classes). I spent almost all my time in my amazing laboratory, Tropical Plant Protection. Since I met my laboratory, I constantly looked for the professors to know if there were some activities in which I could take part. They gave me the opportunity to take experimental classes every week related to pests (Fungus, Insects and Virus). In addition, taking part of the different seminars given for students (Undergraduate and Postgraduate) was very useful, I could learn about their researches and current issues they are trying to solve, and points that a researcher must take into consideration as well. I really liked the seminaries because everyone could make questions and express their point of view.

In the month of May, Dr. Motohashi gave the opportunity to make my own experiments in topics related to Fungus. Therefore, it was one more motive to continue being in my laboratory almost all day. All the members (students and professors) were very gentle and helped me in any necessity I had. Every day I learned something new when they taught the procedures for my experiments or by helping in their own researches. I took advantage the free time that I had in my laboratory and started to socialize with them in a cultural way. Teaching each other about our traditions, religion, society, language, culture, etc, was amazing. We were always willing to learn about each other.





(4)Agricultural Internships

In the first week of August I took part of a short Intership at ERECON, which is an international non-profit organization that was established in April 2000. The organization focuses on environmental rehabilitation and conservation, as well as environmental education so that there is a harmony between various aspects such as agricultural and urban development and the natural environment.

Along all the days of the internship, we made many activities. The first day we received lectures about the organization and some interesting presentation of postgraduate students.

The second day we visited a small organic field where I could harvest some tomatoes and eggplants. We could learn more about the organic production that farmers use to do and its importance. After the lunch, we walked through the countryside and see many fields.



The day after we visited JICA, we could understand its mission and vision as well other current problems. In the fourth day we received lectures about BIOL and organic fertilizants, this day was really useful because the theory was very related with the practice. We could prepare our own BIOL as well as pellet compost. In the last day we had to make a presentation about some proposal related with what we have learned in ERECON.

I have could learn about the importance of the use organic fertilizer, since the organic fertilizer contributes to the bacterial life in the soil, indispensable for the nutrition of the plants. The dark color of the organic fertilizer allows sunlight to be absorbed much more effectively. There are many positive biological effects associated with the use of organic fertilizers, including the improvement of the structure and physical properties of the soil, as well as reducing its erosion and increasing water retention, essential to take advantage of rainy seasons or irrigation in times when water is often scarce, which happens in many places. I am going to promote the use of this kind of fertilizer in my country.

(5) Visits to agricultural facilities

Yamanashi Prefecture

I could take part of this trip thanks to Adati sensei, who invited me. The insect team and me went to Yamanashi Prefecture to do the insect collection, which have a research purpose. On this trip I was able to learn new methods of insect preservation once they are collected. In addition, thanks to the experience of Professor Adati, we could easily find the places where the different species of insects were. In addition, he kindly explained characteristics of the species such as: taxonomy, behavior and damage they cause.



Nagano Prefecture

Once the semester was over, I had the opportunity to go to Nagano, which is known for being an agricultural area for excellence, thanks to the invitation of a friend. His parents are farmers, who kindly explained to me about the different operations they make to the crops they have, such as: grapes, apples, rice, eggplant and tomatoes. In addition, they took me to know fields in which intensive agriculture is practiced, which were very different from those we have in my country.





Kanagawa Prefecture

This trips was organized by the course PDLA. I had the opportunity to go to Kamakura. Kamakura is a city that is surrounded by mountains in three directions and Sagami Bay in the fourth; this terrain made Kamakura a natural fort. During the Heian period, it was the main city of the Kantō region. Between 1185 and 1333, the shōgun of the Minamoto clan ruled Japan from Kamakura in the period known as the Kamakura shogunate, which was also the first shogun government in the history of Japan. The design of the city is largely due to the shōgun Yoritomo Minamoto.



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

I have learned about the Japanese agroeconomic reality, how this developing country, with advanced industry and engineering, boosts its agriculture in relation to the environment, using the alternatives of its technology in support of world food security.

In addition, I have also been able to learn about current problems that are occurring worldwide and how one can contribute in some way to solve them, always giving us a good theoretical basis in the courses offered by Tokyo.

Thanks to my laboratory I have been able to learn a lot in agricultural mycology, especially in the different methods and procedures to be carried out for the identification of phytopathogenic fungi at the molecular level.

Apart from academics, I have learned what it is to live alone and depend on oneself to face the various challenges that are presented day by day.

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

Thanks to my laboratory, I could see the immense work that is being done to avoid the use of chemical products, which are very harmful to health and the environment. I could realize the diverse alternatives that exist to avoid its use, and how these alternatives that are applied to small and large scale can be implemented in the rural areas of my country, which is where there is a greater problem in the inappropriate use of chemical products.

5. Any suggestions to improve the program

Advice for students

- 1) I advise students to manage their time well in Japan. To take advantage of all the opportunities that Tokyo NODAI is offering, there are many things to do in the university apart from taking courses.
- 2) I recommend that you take the opportunity to belong to a laboratory, which will provide many opportunities for growth both academically and personally.
- 3) If you want to go sightseeing, go as soon as possible because the time will pass fast.

4) It is advisable to go with previous knowledge of the Japanese language really helps a lot in daily life in Japan.

Advice for improving the program

- 1) I would have liked that the dates on which we would receive the financing from JASSO would be respected, since that way we could better manage our money.
- 2) It would be advisable to include more experimental classes related to agriculture for International students.