

2018 Re-inventing Japan Project
International Students Summit, RJP Program

Federal Rural University of Amazon • Department of Agronomy • UFRA

5th Year Maria Carolina Sarto Fernandes Rodrigues

My participation in the "Re-inventing Japan Project" program was extremely important to know and experience the sustainable use of natural resources and organic agriculture in Asia, especially in Japan. The visitations and activities held on September 22 and 23, 2018, provided a broad knowledge on how sustainable development is beneficial in the environmental, social and economical aspects. After these two days, there was a field trip to the Recycle Center and Takahashi Sweet Potato Farm in Myoshi-cho in Saitama Prefecture. Later, the 18th International Students Summit (ISS) started and I was able to exchange knowledge about sustainable agriculture with students from 32 countries.

On September 22, 2018, the following activities were carried out: Introduction of Internship program and Institute of Environment Rehabilitation and Conservation ERECON and visit of "Organic Lifestyle Expo". At first, the goals of the Internship were presented to the students, such as: know what is an organic product; answer questions about organic production — More expensive? More nutritious? Harder to produce? More ecological? —; discuss the consequent problems of high use of chemicals such as eutrophication (harmful to fish), biodiversity damages and human health problems.

Following this initial stage, there was a presentation on the projects developed by ERECON about the sustainable use of natural resources and organic production. It is important to highlight that this meeting was fundamental to know how the ERECON work is developed, and to understand the current paradigm of agriculture in Japan and other Asian countries.

The second activity of the day was a visit to the Organic Lifestyle Expo in Tokyo International Forum (Figure 01). In the event, it was possible to observe several foods and materials produced entirely with organic raw materials. The products traded at the fair met the categories:

1. Taste (raw materials and ingredients, fruits and vegetables, meat, fish, dairy products, processed fruits, beverages, cooking, kitchen utensils and restaurants with organic food.);
2. Nature (farming, gardening, baby and children products, pet breeding and other products).
3. Wear (apparel, fashion accessories, other products);
4. Care (organic and natural beauty);
5. Heal (alternative medicine, medical aromatherapy, self-care and wellness);
6. Live (housing and cleaning, washing supplies, energy-saving devices, protection against allergies);
7. Protect (tradition, nature, life and technology);
8. Sustainable (woodlands conservation, alternative energy and others).

With the visit to the fair I was able to verify that many products can be made in a sustainable way, without harming the environment. Regarding this day, it is important to emphasize that although the price of organic products are higher than conventional, the Japanese population was very receptive to those products, a fact that was observed by a large crowd who attended the event.

Another very interesting activity was choosing one of many fair organic products to make a presentation the following day in the city of Machida. In this activity, held on September 23, I chose organic ice cream. I explained how it was produced and made comments about how it would be a good alternative income for the Pará communities. In Pará (North of Brazil), there is a high annual temperature (around 26 °C) and it is a very appreciated product by the local population. At that presented project, I stated that organic ice cream could be made using local fruits, such as Açai (*Euterpe precatoria* Mart.) and the Soursop (*Annona muricata* L.).

In the end of the day, each student made remarks about the importance on going to the fair. The visit contributed significantly to clarify my knowledge about organic production and to assure that we can use a vast amount of products without harming the environment. Nonetheless, the challenge for

the future is the large-scale production of these products at a more affordable price, so that they can be purchased at all social levels.



Figure 01. The visit in The Organic Lifestyle EXPO. Tokyo, Japan, 2018.

On the second day of the Re-inventing Japan Project, on September 23, 2018, we were invited to the office of the Institute of Environment Rehabilitation and Conservation (ERECON) located in Machida. There was a lecture on the knowledge of the work carried out by ERECON, which the three main projects are:

1. Programs on environment rehabilitation and conservation in Asian countries;
2. Programs on sustainable use of natural resources in Asian countries;
3. Programs on illuminating campaign of environment in Asian countries.

On this day, we focus on a project carried out in Cambodia. This project promotes Education for Sustainable Development through the Food, Agriculture and Environment Education at Elementary Schools and Rural Communities. Participating of this project was an incredible experience. Besides contributing in a beneficial way to the environment (promoting organic agriculture, reducing and teaching the correct use of chemical products), it is also a modifying instrument of social-economical aspects of the local population, which has a sad history of war and loss. Therefore, this project was a practical experience on how sustainable agriculture can transform lives for the better.

After this stage, the group of students visited a Buddhist temple, where we could see the beauties of Japanese culture (Figure 02-A). We also went on a hike through Machida outskirts, where we could contemplate the natural riches of the place. In this hike, I was impressed by the unforgettable bamboo forest (Figure 02-B), the splendid landscape (Figure 03) and the cherry trees that made the "Re-inventing Japan Project" even more enjoyable.



Figure 02. A- Visit to the Buddhist temple. B- Forest of Bamboo. Machida, Japan, 2018.



Figure 03. The splendid landscape. Machida, Japan, 2018.

On September 24, 2018, there was a field trip to the Recycle Center and Takahashi Sweet Potato Farm in Myoshi-cho in Saitama Prefecture. In the Recycle Center I was able to live an unforgettable and distinct experience. It was wonderful to see how strongly the Japanese population cares about recycling and reusing of waste, directly assisting the environment. In addition, the visit to Sweet Potato Farm taught us to be concerned about soil management, biodiversity preservation and sustainable food production.

The 18th International Students Summit (ISS) began in the following day. I participated in session 1-1 (Figure 04), whose theme was 'Universities with Students Actions in the field of Agriculture'. There, we discussed and exchanged knowledge on sustainable agriculture in Brazil, China, Japan and Laos. After the debate, the following solutions were developed to establish a more sustainable agriculture in our countries:

1. More Technologies to help the system work more sustainably, less chemicals, increasing yields.
2. Concern of the youth against agriculture issues, being active of taking action by themselves.
3. Creating more projects and activities promoting the sustainable agriculture.

After an internal meeting, all the sessions were casted to formulate the theme for the 19th ISS — “Youth transforming thoughts on Sustainable Agriculture and Resource Management to connect local and global community”. I would like to highlight that the 18th ISS was an incredible experience in which I was able to exchange information and learn about the agriculture of 32 countries, as well as getting to know different cultures. Finally, I presented the paper “Youth Involvement in Agroforest Systems as Inexpensive Technology to Sustainable Agriculture in a Family Farm in Marajó Island, Amazonia Brazil”, whose main results were: improvements in the economy of Jagarajó community; recovery of unproductive giants coconuts; keeping of the rural youth and of the succession process in the family farm; increasing of crops' productivity.



Figure 04. Session 1-1 – “Universities with Students Actions in the field of agriculture”. Tokyo University of Agriculture, Tokyo, Japan, 2018.

In addition to the Re-inventing Japan Project and the 18th International Students Summit, I also had the opportunity to participate of the Comprehensive International Education Program (CIEP) in my first week in Tokyo. On those three programs that I attended, I had several experiences:

1. Visit to farms of Pear, Grape, Soil Bean, Sunroot, Sweet Potato and other species that adopt sustainable agriculture.
2. Lectures on various subjects, such as: biotechnology, economics, organic food production, sustainable agriculture, importance on preserving the environment, among other subjects.
3. Presentation and work elaboration, individually or by groups, on the environment, agriculture and food, along with principles of sustainability.
4. Garbage sorting and recycling in Japan, which in my opinion should be an example for all countries.
5. Visit to museums and historical centers that have provided an extensive knowledge on Japanese history and culture.
6. Socialising with fellow Japanese students, who accompanied us on visits to Tokyo, assisting us in events and helping us to learn more about Japanese culture (Figure 05).
7. Exchange of knowledge and learning agriculture with and among students of 32 countries about cultures of the world.

In addition to all the knowledge acquired, I would like to highlight the gatherings that were essential for the conviviality and bonding among students. Moreover, I was able to get to know the Shinjuku and Akihabara districts, where we visited shops and did several tours; a very enjoyable way to pass the day.



Figure 05. Moment of interaction among program students. Tokyo, Japan, 2018.

The experience I had in those 18 days I've been in Japan will be unforgettable. Many lessons learned on this trip I intend to put into practice in my profession as an agronomist. In addition, I want to propagate sustainable agriculture in the Brazilian Amazon in order to protect the Amazon rainforest and, at the same time, guarantee the productivity of crops. Another challenge is dealing more and more with the use of correct management of garbage and chemical products, thus we can reduce the pollution index of Brazil. In the case of cultural exchange, I have experienced even more the importance of sustainable development to the principles of sustainability triad: environment, economy and social aspects.

Regarding the suggestions, I believe that the program has many qualities and meets perfectly all the proposed objectives. In the following years, I hope that more and more countries participate of this event. One more suggestion related to the post-exchange period, in which the contemplated students should be guided to share ones academic experiences with a presentation in their own universities, so we can all put into practice and disseminate what we experienced with a largest number of students, improving the social economic realities of the participating countries.

At last, I would like to thank the Tokyo University of Agriculture (Tokyo NODAI) for this opportunity, I would like to thank the Federal Rural University of Amazon (UFRA) and I would like to thank all members of this program and everyone who made this opportunity possible. I'll never forget this experience.