

2018 Re-inventing Japan Project (Short-term)
International Students Summit, RJP Internship

Faculty of Agronomy *Horticulture Department *UNALM

5th year Milagros Anais Alberca Alberca

First of all, I am very grateful to NODAI for this more than rewarding experience, exceeding the expectations I had formed long before arriving in Japan. I set myself the objectives of first learning about Japanese culture as an example of order, development, harmony and resilience, second knowing about the economic, social and environmental situation of farmers in the country, their relationship with their government and with consumers, and how they manage the conservation of their resources, third, as Japanese students get involved in the field with the farmer, fourthly exchange with my peers our experiences brought from different parts of the world about agriculture and vision, our food, our customs and our traditions and fifthly observe and evaluate Japanese food and in general their diet and lifestyle, known to be one of the healthiest in the world.

From my point of view, the program began when I arrived at the airport and had the opportunity to talk with the coordinator and foreign students. We began to exchange information, generating and resolving doubts about our countries of origin and contrasting with the reality before us. We visited the facilities of the university and went to its dining room where I could see that the drinks were low in sugar and that products derived from soy and rice were the preference of the public. Officially the Comprehensive International Education Program started on September 15 and we moved to Shiroy farm, on the way we interacted among all participants and exchanged traditional sweets. Once in Shiroy we were taught about agroecological management of various annual crops such as peanuts, neji onions, soy covered with a layer to prevent attack of pests, and so on. In the afternoon we went to the National Museum of Japanese History where we learned a little about the history of Japan and learned to write our names with Kanjis. In the evening we stayed in the traditional hotel and had our first discussion session about three topics raised from which we had to choose one for groups of four people, they explained to us that we had to choose between the topics of food, environment and agriculture, identify a problem and find a possible solution. I had the opportunity to integrate a group with students from Scotland, Mexico and Japan.

On September 16 we visited Koshiko Farm and collaborated in the sowing of its national flower Chrysanthemum and the weeding, they showed us the organic fertilizers that they applied and the mulch that was formed from the rice husks, in the afternoon we were offered a series of different dishes based on vegetables and animal products mainly chicken and pork, there we were informed that beef was usually expensive in Japan In the afternoon we were guided to a field of production of Japanese pears Akizuki variety, whose most visible characteristic was that it did not present the form of a common pear but was round, but the most curious thing was the handling that was given to it. All the pears were grafted forming the same tree which facilitated the harvest, as far as irrigation was used rainwater and the whole area was covered by a mesh to prevent pest. Finally, we visited the Chiba Prefectural Museum Boso-no-Mura where we could appreciate the houses of the ancient Japanese, their clothing, recreation and agricultural technology, an example of the latter is its mill driven by the force of water

In the evening we dedicated ourselves to discussing what problem of Japan we identified in terms of food, so we chose the waste of food.

On September 17 we visited a pear selection plant of Nitaka and Akizuki varieties, where the fruits were separated into three categories: excellent, nice and good. Our group needed to collect information about food waste so this issue was investigated. We were told that there was only one percent loss in the plant, but in the field the loss amounted to twenty percent.

Back at Koshiko farm we were given a taste of products based on *Helianthus tuberosus*, a relative of the sunflower whose economic product is the root that is prepared in drinks, salads and as chips. The leaves are also used in the preparation of tea, and the branches are put to recycle and incorporate into the soil, so there is a maximum use of this resource.

On September 18 we visited Setagaya Campus where we were explained about the effect of different types of light on the flowering of *Phalaenopsis*. Later, in the animal science laboratory, the work on embryos in Holstein cows and the environmental effects on them were explained.

Kanagawa Prefecture is the third smallest prefecture in Japan, however, it is an active production area for greaps, japanese pears, apricot, and so on.

There is Kanagawa Agricultural Technology Center, where it is possible to see numerous greenhouses, with various types of crops such as tomato of indeterminate growth under drip irrigation and cyclamen, a costly but beautiful flower. The fields covered by nets housed the Japanese pears that were managed, as already mentioned, joining the trees which resulted in an increase in yield. It was also possible to observe persimmon and grapes.

On the 19th, 20th and 21st teachers explained to us about the environmental economic situation and agriculture in Japan.

Finally, the research and compilation of the situation of food waste in Japan was presented.

On the 22nd and 23rd The Institute of Environmental Rehabilitation and Conservation organized a program aimed especially at students from America. The first day was visited the international forum "Organic Lifestyle Expo", where they offered a wide variety of edible products, recreational, cosmetics, etc. mostly organic. The task that left the program to each one of us was to choose a product, the one we liked the most and to establish a conversation with the producers, who would absolve our doubts, then we would share the information with the rest of our colleagues. One of the most striking were the shirts made from Japanese cotton, until then I believed that the only cotton producing countries were located in the tropics. On the other hand, lire based on bamboo was sold for the entertainment of children at high prices. Organic vegetables were offered extensively at various stands and cosmetic stands based on pomegranate fruits were full of people. The stand I chose was the one belonging to a tropical fruit producer and processor that worked with pitahaya, granadilla, blueberries, avocados, etc. Many of them under greenhouse and always trying to reduce the use of pesticides.

The place we visited on the second day is known as Satoyama, and is the perfect combination between nature and civilization. There were many temples there in harmony with forests and mountains. We were told about the reforestation project in Cambodia, which was constantly threatened by violence. After the questions we toured the temples and appreciated the landscape. In the afternoon it was decided to tour the surrounding areas. Soy production areas were observed on hillsides and we walked in the middle of a bamboo forest whose management strategy proved to be sustainable over time as bamboos were extracted and reforested. To finalize the program each of us explained about the situation of organic products in our cities and developed ideas

about new products that we are working on or plan to make. I spoke a little about the organic market in Peru and explained the case of native potatoes on chip and how their consumption contributed to the conservation of these varieties.

On September 24th we visited Ishizaka Recycling Factory with the students who joined the program and who would accompany us until the final presentation of the ISS. This factory processed different types of materials such as paper, wood, brick and similar, metals, etc. and we were able to witness the transformation process of some of them. The roads connecting one processing plant to another were made of recycled material. The company was surrounded by dense forests, many of them native and as they explained to us one could find interesting fauna as well. In the afternoon we visited Takahashi farm, where five varieties of sweet potato were produced, it was great. I was surprised when the farmer said that one of the five varieties is planted only in that field, that is, nowhere else in Japan. The main problem they faced was insectile pests. On one side of the field was the production of compost that took about a year to be ready.

In the following days prior to the ISS, discussion groups were set up in sessions in four countries, where each country presented its own problems in the areas of agriculture, food and the environment, finding differences and similarities. We agreed on the similarity of the urgency of building bridges between young people and farmers and between farmers and information and identified as a problem the mistrust of the population in the face of a corrupt state. Finally, among all the students and by sessions we discussed the conclusions we obtained from the past topic and the proposal of a future one based on the identified needs. Based on this, it was established that the topic for Summit 2019 would be “Youth transforming thoughts on Sustainable Agriculture and Resource Management to connect Local and Global Community”.

It was really nutritious for me to be part of the program; I would dare say that four pages are insufficient to write it. As for the objectives I set myself, I have been able to corroborate that what I read in the reference to Japan is true, it is a country from which Peru has many things to learn in terms of order, respect for norms, cleanliness and human values, it motivates me to change myself. On the other hand, as for the subject of the feeding, it is amazing the balance that they make between soups, cereals, marine meats, salads and vegetable oils achieving with it high indexes of health between the settlers.

With the outings to different fields I have been able to appreciate widely the agriculture of Japan either traditional or the one that makes use of the most modern systems. I have learned about the use of new technologies, unknown to me, in fruit trees and their implication in costs and yields and the management of horticultural crops aimed at reducing the attack of pests in addition to promoting their resources by conducting nutritional research and consumption in its different forms.

I was able to form a global vision of the problems of the agricultural sector and how each country is facing them from their respective competencies. I was able to realize that a sustainable management of waste generated by human activity whether organic or inorganic, if possible and even more a balance between nature and human activity.

As an agronomy student, a very broad and diverse career, in terms of agriculture this program gave me the opportunity to travel through different and different fields of cultivation, talk with farmers, listen to their problems and learn from their knowledge, test their products, observe management, irrigation and pest control. It is important for me to mention that as a passionate about food using the native resources of each country, this experience offered me a concrete example of this, the Shokuiku program.

In the ecological-environmental field, I have always believed that it is possible to produce being self-sufficient, that is to say without the need to purchase external products of any nature and the visit to Koshiko Farm was one of the clearest examples I have seen, eliminating the use of pesticides that directly or indirectly affects the consumer, trying to make use of the elements generated in the production system. In addition to the use and reforestation of bamboo.

In the social field, the connection that I observe between students and farmers, being the first supports for the latter, is worthy of note.

In the economic-agricultural field I was able to observe various business ideas with organic products and consumer interest that finally promotes the development of these ideas. Everything I have learned here has worked as an engine of change in me, from the decision that might seem smaller as the choice of my food. My objective for the future is now to improve the nutrition of children, making them aware of choosing and consuming our own resources in a diversified and conscious way, thus promoting the conservation of our resources, identity and improving the nutritional level of the country, which for now is quite precarious.

The only suggestions I could offer is for the case of the ISS, unlike the CIEP I did not feel much integration among the students, it would be great if before the field trips give us thirty minutes to introduce ourselves and give small details about us.

I reiterate my deepest and most sincere thanks for this wonderful opportunity.



Preparation of typical Peruvian "causa" dish with Japanese students in Peru



Visit to Koshiko farm and soy weeding



Visit to Japanese pear field and explanation of its agronomic management.



Visit of the fields and surroundings of Satoyama



Discussion about the organic market in each country



Beginning of the discussions by sessions. Session 1. 2.



Closing Ceremony of the Summit



Radish dance at Tokyo University of Agriculture



General discussion of students about the theme of the next summit

