# The 39th UNU Global Seminar Student Report by Tomoka Matsushima

### 1. Introduction

My name is Tomoka Matsushima and I am a student at the International Christian University. I applied to the UNU Global Seminar because I was intrigued by the topic of sustainable agriculture and food production. I believe that food security is an issue that is relevant to and affected by the actions of every person. I wanted to be better informed about what I could do as an individual for food sustainability by gaining new knowledge through the lectures, as well as discussions with other participants.

# 2. Keynote Speech Summary (Day 3; Dr. Gordana Kranjac-Berisavljevic).

Dr. Gordana Kranjac-Berisavljevic from the University for Development Studies gave an informative and interesting lecture about her experience working on sustainable agriculture in Northern Ghana. She explained how the population in Western Africa is growing exponentially, but many countries are still dependent on rainfed agriculture making communities vulnerable to rainfall patterns and climate extremes. Against this challenge, Dr. Kranjac-Berisavljevic and her team, working along with the farmers, developed an app that provided weather and climate information services. The importance of co-production of knowledge was emphasized throughout the lecture. Although using climate information services (CIS) was the chosen strategy, the farmers could not take full advantage of the technology because they had difficulties implementing the information from CIS. CIS was limiting as it was context-specific and the farmers often relied on traditional knowledge instead to forecast weather. Dr. Kranjac-Berisavljevic and her team collaborated with the farmers, combining their knowledge with research to create tailor-made information. She explained how this led to the farmers actually using the app, emphasizing the importance of keeping an open mind to citizen knowledge.

Through this lecture, I realized how making a difference requires efforts and collaboration of various people. Although discovering a solution is significant, implementing the solution is another challenge. It was also interesting to learn about how different farmers used the information in different ways. Dr. Kranjac-Berisavljevic spoke of how men often only wanted the information in relation to agriculture while women had different and diverse uses for the information, such as when to go to the market. I learned how significant it is to understand the context of individual experience.

# **3 Group Discussion Summary**

Our group focused on the theme Reimagining Sustainable Food Production and presented possible solutions to address some of the challenges facing sustainable agricultural systems.

As a group, we first shared insights from the World Café style discussion and listed challenges of the current system such as the lack of agrodiversity. We then listed some of the solutions that came up and discussed which would be the most effective. We categorized the solutions by who the main actor would be, sorting them into consumers, producers and leadership figures. We further discussed the effectiveness of the solutions by looking into the implementation challenges.

In our presentation, we discussed two types of solutions based on the area. For rural areas, we proposed incentivizing farmers to implement sustainable practices through contract farming and conditional funding. The producers would be able to receive government funding by switching to more sustainable methods such as those used at globally important agricultural heritage systems (GIAHS) sites. We also thought that developing an app to connect producers and consumers would be beneficial. Through the app, producers could upload their produce that have been grown in sustainable ways while consumers could look up local farmers that sell those products and buy directly from them. For urban areas, we presented vertical farming as a solution. Vertical farming is a way to grow plants in vertical stacked layers. It can be integrated into buildings and requires less water and land, making it suitable for city conditions. To address the financial limitations, we thought that the government could require successful businesses to implement vertical farming in their buildings. However, since we thought it would be difficult to rely on domestic production alone, we also came up with the idea of establishing a world trade system. Farmers that produce food in a sustainable way would be exempt from taxation such as tariffs.

It was interesting to see how each person had their own perspective and approach to the theme. I believe that the diversity in our solutions was the result of each person having their own insights, some of them based on experience.

#### 4. Overall Feedback

The seminar was an opportunity for discovery. Through the recommended readings and lectures, I learned a lot about biodiversity and sustainable food production systems. It made me realize how broad the topic of food security is and that it is related to so many other areas not limited to the environment. It caused me to be further interested in the state of the environment I am living in, ways to increase biodiversity, and how the food I am eating is produced. I was also able to discover new knowledge through the presentations given by other groups as well as by discussing with my groupmates. I learned new concepts and interesting practices that were already being implemented for sustainability.

The seminar allowed me to become more aware of the issue of sustainability in food production and better understand what must be done to achieve it. The discussions and presentations were an opportunity for me to learn from numerous people. I believe that in this seminar, looking out for new knowledge from others leads to discovery of new areas of interest.