The second session of Talking with Fulbrighters Series was held on February 25, 2020 and Ms. Katie Wu, a 2019-20 Fulbright Fellow affiliating with Kyoto University, shared her idea under the topic of "Sustainable Agriculture: The Past, Present, and Future of Agriculture."

＜Outline＞

1. What does it mean for agriculture to be sustainable?
   * Practicality: Producing enough food to feed a growing world population (quantity, quality, variety, price)
   * Environment: Preserving ecosystems and protecting soil and water quality for future generations.
   * Logistics: Building a global food production and distribution system that minimizes waste and reliably supplies communities with food despite economic crises or natural disasters
2. Practicality: The role of science and engineering in modern agricultural practices
   * Scientific advances made it possible to efficiently feed a growing population
     - Biology (Supplying nutrients, use of plant hormones, GMOs)
     - Chemical Engineering (pesticides, fertilizers)
     - Mechanical Engineering (growing, harvesting, and processing)
     - Information Technology (artificial intelligence, robotics, computer vision)
3. Environment: The effect of agriculture on the environment
   * Water Quality: Pollution of water sources due to fertilizers (Colorado River)
   * Soil Quality: Depletion of nutrients in soil due to overfarming (Dust Bowl)
4. Logistics: Logistical challenges and crisis management in the agriculture industry
   * Economic viability of agriculture (in the US, the government created programs to financially support farmers)
   * Food security
     - Food deserts
     - "The last food mile"
     - The farm to table movement
   * Recent dietary trends and their far-reaching effects
     - Salad and food-borne illness
     - Avocados and conflict
     - Nut-based milk and drought

After introducing the situations of US agriculture, Katie invited the audience to discuss the development of the agriculture industry in Japan in comparative perspective, the agriculture industry's impact on global politics and trade, important issues related with agriculture in Japan, and how our food consumption is affected by current events or dietary trends.

Participants exchanged their concerns about agriculture's impact on the environment and our health based on Katie's points. Some of the heatedly discussed points were the long-term potential effect of genetically modified organisms (GMO), especially as Japanese agricultural population declines; and the situation of food desert on the socio-economic side and last-food-mile emission on the environmental side. Katie introduced us how difficult it is to reach an optimal answer based on the case of eco- or health-conscious eating trends. Almond milk is better than cow milk in terms of global warming, but it is unsustainable to produce during drought due to the large quantities of water required to produces almonds.

It was a very practical and philosophical occasion to reflect on our own lives.