Proposal on an Innovative Transportation System Namiki Secondary School 8 June, 2019

Hello, everyone. Welcome to Japan and Tsukuba City, Ibaraki Prefecture. What we would like to propose to ministers today is "The Mottainai System". Mottainai is a Japanese word which shows our appreciation to food.

About 1.3 billion tons of food is thrown away around the world every year. It means that about 1/3 of the food in the world is discarded. About 28.5 million tons of food is wasted in Japan, 6.5 million tons of which are still edible. These include leftovers at retail stores and at home, and also nonstandard farm products left unshipped to supermarkets. This is a topic that has always drawn international attention because the various problems are behind food loss, such as environmental destruction, depletion of resources, and stagnation in poverty alleviation.

I currently work as a volunteer at a children's cafeteria. Food is provided from the food bank, and we cook and provide children with meals. We can only serve meals with long shelf lives, such as instant foods, seasonings, and rice due to preservation issues. However, nutritious ingredients such as vegetables and fruits are not provided from the food bank. This is very frustrating to me, and I've been wondering if there are any ways we could offer fresh products to children who need it most. About the same time, I learned about the problem of food loss in Japan, and thought that it would be better if we use this discarded food.

So we will introduce "The Mottainai System".

The national government will establish food banks in major cities in each region. Food banks will collect leftover food from households and from farmers in collection boxes, and deliver them to consumers using hyper-loops and drones. Drones will deliver and collect food domestically. Hyper-loop is a system that transports products underground in a fast speed. The food banks in the region are connected by the hyper-loop, and the surplus food in the region can be quickly circulated. It is necessary to improve drones by

installing an automatic stop system and a battery capable of flying for a long time, and making sure that the drones fly without being affected by weather.

The biggest difference from the conventional food bank is that it is controlled by AI. AI judges whether the collected food is safe and fresh from the outside without opening a collection box. If it determines safety and freshness, a QR code will be attached to the collection box so that users can see when and from where the items were collected and how fresh they are on the smartphone app. This smartphone app allows users to register by entering their own personal identification number and request food from food banks. You also get points for delivering food to the food bank. You can exchange your reward points for foods. ID numbers enables the system to know the users' income while maintaining their privacy. And it gives priority to sending food information to the poor so that people with low income can get food more easily.

If this system is realized, it will enable the quick transportation of fresh foods such as seafood by connecting the remote lands and islands in the world with the hyper-loop. When neighboring countries start working with our Mottainai System, they will be able to enrich the diet all together.

Many edible foods are discarded around the world. On the other hand, 820 million people are not eating enough today. There are not only adults but also many children who do not have satisfactory meals.

I believe that everyone will be able to eat food safely on an equal basis when our proposal comes true in your countries. We can be a pioneer in solving the problem of poverty, leading to the solution of "Zero hunger", which is one of the "Sustainable Development Goals".

Please enjoy your stay in Tsukuba. We hope that G20 Tsukuba will be a great success.

Thank you for your kind attention.