Japan's Vision for Sustainable Food Systems

1. Japan's contribution to the UN Food Systems Summit

- In order to address issues such as large-scale natural disasters associated with climate change, increase in world population, biodiversity loss, and the COVID-19 pandemic, among others, it is essential to transform our food systems to sustainable ones for achieving the SDGs. The UN Food Systems Summit (FSS) is an important opportunity to discuss concrete actions with participation of various stakeholders for the transformation of food systems as part of the "Decade of Action" toward achieving the SDGs.
- In order to promote the transformation of the food systems, it is necessary to transform the way of agriculture which is affected by natural conditions and to accelerate innovation in this field. In Japan, efforts are being made actively to develop and implement the latest technologies of agriculture, forestry and fisheries and food-related sectors, including smart agriculture, forestry and fisheries, which enables us to contribute to the transformation of global food systems. In addition, in Japan, diversified agriculture, forestry and fisheries have been practiced utilizing abundant nature and ecosystems of "Satoyama" and "Satoumi" and created food cultures making use of them, which we have inherited over the long history. In this regard, we have a lot of valuable knowledge for sustainable food systems coexisting with the global environment.
- On the other hand, Japan heavily relies on import food and therefore deeply connects with global food systems, recognizing that our food sourcing and consumption have a significant impact on the environment and natural capital in exporting countries. Therefore, it is necessary for us to contribute to the preservation of natural capital in those countries in a proactive manner along with the international community.
- Based on this recognition, we have held more than 50 Member State Dialogues with various stakeholders such as producers, food-related companies, and consumers to have lively discussions regarding how to build sustainable food

systems since November last year. In May 2021, Japan launched the "Measures for the achievement of Decarbonization and Resilience with Innovation (MeaDRI)", the medium-long term strategy to achieve SDGs and sustainable food systems. This strategy is a new initiative model for sustainable food systems in the Asian Monsoon region for realizing both increasing production potentials and improving sustainability in the food, agriculture, forestry and fisheries sectors through innovation.

- Based on these achievements, we will express Japan's vision for sustainable food systems as follows and contribute to the success of the summit in cooperation with other countries that share ideas.

2. Japan's vision for sustainable food systems

(1) Implementation of initiatives in light of regional differences based on the "MeaDRI"

Basic Concepts

- There is no one-size-fits-all solution for building sustainable food systems, and therefore it is necessary to take approaches customized to each country/region concerning the climate, the form of agriculture, forestry and fisheries, and their dietary patterns. Respecting diverse approaches towards a common goal by different countries is corresponding to the SDGs' basic philosophy of "leave no one behind."
- Regarding the greenhouse gases from agriculture, forestry, and other land use, its emissions from the Asian region account for about 40% of the world. Reducing greenhouse gas emissions in this region, such as methane generated from paddy fields, is an important issue. On the other hand, as the risk of pests and diseases is high in the hot and humid Asian monsoon climate, it is difficult for Asian countries to adopt the same approach to reduce the use of pesticides and fertilizers that is adopted in relatively dry regions such as Europe and North America.

- In light of the characteristics of this region, in May of this year, Japan launched the "Measures for the achievement of Decarbonization and Resilience with Innovation (MeaDRI)" as a new approach model for sustainable food systems in the Asian monsoon region which has different weather conditions and production structures from those of other regions like Europe and North America. Based on this strategy, we will promote domestic efforts and will contribute to building sustainable food systems in this region through extending methods and technologies applicable to the Asian monsoon region that shares common issues.

Implementation of policy efforts in the light of national/regional differences (i) Reduction of chemical pesticides and chemical fertilizers

In order to ensure the sustainability of the agriculture, forestry and fisheries, it is important to reduce the environmental load caused by the use of chemical pesticides and chemical fertilizers through the circulating use of organic resources and disseminating smart agriculture, forestry and fisheries, customizing to each region.

Through the above efforts, Japan aims to achieve:

- 50% reduction in risk-weighted use of chemical pesticides by establishment and dissemination of the Integrated Pest Management that does not solely depend on chemical pesticides, and newly-developed alternatives, by 2050.
- 30 % reduction in chemical fertilizers use, which are made of imported raw materials and fossil fuels, by 2050.

(ii) Promotion of organic farming

In order to promote organic farming, it is important to establish technologies relating to next-generation organic farming of main products while promoting approaches that are tailored to different regional characteristics including climate/geographical conditions and planting systems.

Through these approaches, Japan aims to achieve:

- Increase in organic farming to 1Mha (equivalent to 25% of farmland) by 2050.

(iii) Reducing greenhouse gas emissions

In order to reduce greenhouse gas emissions from the agriculture, forestry and fisheries and food sectors, it is important for each country to take appropriate approaches for achieving carbon neutrality, such as accelerating the shift from fossil fuels to renewable energy including that in rural areas, transition to facilities that do not use fossil fuels, establishment of technologies related to electrification and hydrogenation of agricultural and forestry machinery and fisheries vessels, conservation of forests as carbon dioxide sinks, and countermeasures against illegal logging.

Through these approaches, Japan aims to achieve:

- Zero CO2 Emission in the agriculture, forestry and fisheries sectors by 2050

(iv) Sustainable sourcing for raw materials

In corporate activities of the food industry, it is important to accurately grasp the current situations and promote a joint public-private response to realizing sustainable sourcing.

Through these approaches, Japan aims to achieve:

- Sustainable sourcing for import materials in the food manufacturing industry by 2030

(v) Reduction in food loss and waste

Around one-third of food produced worldwide is lost or wasted. SDGs targets include, by 2030, halving per capita global food waste at the retail and consumer levels and reducing food loss along production and supply chains, including post-harvest loss. In this regard, it is important for each country to set a goal of halving food loss and waste by 2030 in collaboration with various stakeholders.

In the light of the above approach, Japan aims to:

 halve food loss and waste generated from business and household by FY2030 (compared to FY2000). In addition, we will minimize food loss and waste at the business level by 2050 through the advancement of innovative technologies.

(vi) Promoting a balanced diet

In order to realize sustainable consumption, it is important to respect the food culture of each country or region and to promote a "balanced diet" that sheds lights not only on nutritional aspects but also on environmental points of views, and food and nutrition education for that purpose. For this reason, it is necessary to incorporate environmental factors into the relevant guidance and curriculum in food and nutrition education of each country, and to encourage individuals' efforts in line with their own dietary pattern through guidance and the like.

In the light of the above and while inheriting traditional WASHOKU (Japanese cuisine) culture, Japan will:

- Promote a "balanced diet" taking not only nutritional aspects but also environmental aspects into account, and food and nutrition education based on The 4th Basic Plan for the Promotion of Shokuiku (Food and Nutrition Education) formulated in March 2021 which incorporates environmental aspects.
- Accumulate scientific knowledge and evidence on diet and health and disseminate the information. We will also disseminate the health benefits of traditional local food in collaboration with the FAO and the international community.

(vii) Enhancing the sustainable production system for fishery products

Responding to the increase of the world-wide need for proper management of fishery resources based on scientific evidence, it has become more important to enhance the sustainable production system through strengthening the fishery resource management and eradicating Illegal, Unreported, and Unregulated (IUU) fishing.

Aquaculture is also an important sector that accounts for a half of the world's seafood supply. Therefore, it is essential to implement appropriate policies for this sector with a view to minimize the environmental load through proper management of fishing grounds and reduced load on natural resources.

With these in mind, Japan will:

- Increase the number of fish stocks managed under output control (i.e. Total Allowable Catch (TAC)) to around 80% on a production basis and strengthen the control of illegal fishing in the territorial waters and EEZ.
- Introduce a strengthened trade control measures against catches derived from IUU fishing in 2022, and strengthen measures against IUU fishing internationally in collaboration with the FAO and regional fisheries management organizations (RFMOs) including through the promotion of the Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing (PSM).
- Establish a sustainable aquaculture to reduce dependencies on natural resources by 2050 through the promotion of the use of hatchery-reared fry and the shift of feed from raw fish to nutritionally balanced formulated feed, and also promote removal of greenhouse gases through the fixation of carbon dioxide in marine ecosystems including sea grass and seaweed meadow (blue carbon).

(viii) Promoting innovation from rural areas

In order to create a new value in rural areas and secure local income and employment opportunities, it is important to enhance local industries and innovation utilizing rural resources, with the participation of diverse human resources, which contribute to the promotion of rural areas and the resilience of local supply chains.

In doing so, it is important that women and young people can participate in local businesses and policy making in incorporating their opinions and ideas.

Therefore, Japan will:

- Promote investment into the businesses that engage in innovation from rural areas.

(ix) Promotion of private investment

Since tremendous funds are needed to promote innovations for the transformation into sustainable food systems, it is important that private funds such as ESG investments and impact investments are appropriately directed to

the entities that need them. In doing so, we should recognize that the food system is carried by various entities such as small-scale producers, family farmers, small and medium-sized enterprises, start-up companies, as well as large enterprises and large-scale producers, and therefore, it is necessary to proactively improve an access to funds for these people.

In order to promote innovation, it is necessary to avoid unjustified outflow of intellectual property including agricultural production technologies.

With the above in mind, through the cooperation with the international community, Japan will:

- Promote ESG investments related to improvement of sustainability and environmental conservation
- Promote information disclosure of climate-related risks based on the Task Force on Climate-related Financial Disclosure (TCFD) recommendations. At the same time, we will appropriately work on protection of intellectual property.

(2) Implementation of policy approaches in collaboration with the international community

(i) Strengthening food supply chains based on the rules for the free and fair trade

For the realization of a sustainable food system, it is important not to cause excessive volatility in food prices in the global market and not to cause an adverse impact on global food supply chains, particularly on food security and nutrition of vulnerable people because of policies to restrict trade, such as the expansion of export restrictions due to the global pandemic of COVID-19.

Therefore, Japan will;

- Work in collaboration with countries around the world to strengthen smooth food supply chains based on free, open and fair trade rules.
 - (ii) International contributions to improving nutrition, eradicating poverty

and hunger, etc.

Nutrition, an integral part of healthy and sustainable food systems, is an important factor on which universal health coverage is based. Based on the concept of human security, Japan has been providing cooperation globally towards the establishment of healthy and sustainable food systems including those in developing countries in cooperation with international organizations.

From this point of view, Japan will:

- In order to stock-take the current situation and challenges of nutrition improvement in the world and to promote international efforts to solve these challenges, Japan will host the Tokyo Nutrition for Growth Summit 2021 while expecting synergistic effects with the UN Food Systems Summit.
- Continue to work on with the international community to eradicate global poverty and hunger and to address the issues related to global food security and nutrition improvement.

3. Commitments from Stakeholders

- Through domestic dialogues, many stakeholders agreed with the purpose of FSS and committed their efforts to build sustainable food systems.
- The total number of commitments is 69, and each commitment is as shown in the attached sheet.