

Ministry of Agriculture, Forestry and Fisheries' Intellectual Property Strategy 2025

-- Towards Creation, Protection and Utilization of Intellectual Property in
Agriculture, Forestry, Fisheries and Food Sector --

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Ministry of Agriculture, Forestry and Fisheries

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I. Basic Approaches

1. Introduction

Japanese agricultural, forestry, and fishery products, and food have special qualities and strength that are unequaled anywhere else in the world, owing to “intellectual property,” such as: technologies and know-how for creating high quality, high-value added products, held by agriculture, forestry, fisheries, food and other businesses or by persons involved in local governments or research institutes; and Japanese food and traditional culture.

Economic globalization has activated the cross-border distribution of large amounts of goods, including agricultural, forestry and fishery products and food. Amid this situation, coupled with increasing overseas interest in Japanese ingredients, foods and dietary culture, global demand expansion has led to an expansion of export of Japanese agricultural, forestry and fishery products and food. Increased demand in overseas markets has led to various business developments targeting overseas markets, which has then increased situations where intellectual property needs protection. In particular, there were cases where counterfeit products of a Japanese brand were distributed in an overseas market or where an excellent variety developed in Japan and leaked abroad competed in an overseas market with the same variety produced in Japan. A case was also identified where wagyu beef genetic resources were illicitly carried overseas. Infringement or leakage of intellectual property in the agriculture, forestry, fisheries, and food sector of Japan compromises the brand values of genuine Japanese products, which will not only result in significant losses of profits or rights that should otherwise be obtained by local agriculture, forestry and fisheries businesses or research institutes that have made efforts, but may also result in losses of promising overseas markets that these businesses and institutions have been able to secure.

The recent COVID-19 pandemic has caused a rapid progress in digitalization and data utilization in society at large. In the course of development of more sophisticated agricultural technologies designed to improve productivity and quality in the agricultural sector, research and development of software and other solutions is underway to convert know-how, or implicit knowledge, of Japanese skilled farmers to explicit knowledge by utilizing AI. An understanding is being established that these efforts are important for the development of Japanese agriculture, including the improvement of productivity and income. However, some are concerned that if such know-how, products, and other intellectual property are leaked overseas against the will of persons involved in agriculture, and if these are combined with excellent Japanese varieties or other intellectual property carried out of Japan in an unauthorized manner, this will further intensify the competition faced by products exported from Japan. If we fail to develop an environment where agricultural know-how is appropriately protected and utilized as intellectual property, the development of Japanese

agriculture may be hindered by such competition.

Therefore, it is important to strengthen the international competitiveness of the Japanese agriculture, forestry, fisheries, and food industries by strategic creation, protection, and utilization of intellectual property in the agriculture, forestry and fisheries sector and the food industry sector in Japan.

2. Background of the development of past Ministry of Agriculture, Forestry and Fisheries' intellectual property strategies

In March 2007, the Ministry of Agriculture, Forestry and Fisheries (hereinafter referred to as the “MAFF”) established its first “Ministry of Agriculture, Forestry and Fisheries’ Intellectual Property Strategy” (hereinafter referred to as the “First Strategy”) as the MAFF’s comprehensive strategy for intellectual property in order to develop “aggressive agriculture, forestry and fisheries” by actively utilizing intellectual property. This was followed by the establishment of the “Ministry of Agriculture, Forestry and Fisheries’ New Intellectual Property Strategy” in March 2010 (hereinafter referred to as the “Second Strategy”) and the “Ministry of Agriculture, Forestry and Fisheries’ Intellectual Property Strategy 2020” in May 2015 (hereinafter referred to as the “Third Strategy”). Under these strategies, the ministry has developed measures for the appropriate protection and utilization of intellectual property.

Looking back the past three intellectual property strategies of the MAFF, the First and Second Strategies systematized measures based on three pillars: promotion of the creation and utilization of intellectual property; enhancement of the protection of intellectual property; and dissemination and awareness promotion, and human resources development.

On the other hand, the Third Strategy, based on the individual policies set up by the Second Strategy, clarified that encouraging innovation through creating new intellectual property requires specific profound consideration to have consumers choose Japanese agricultural, forestry and fishery products and food, by putting ourselves in the shoes of consumers. This is based on an approach similar to the viewpoint of market oriented agricultural production advocated in the Basic Plan for Food, Agriculture and Rural Areas approved by the Cabinet in March 2015.

Based on the previous strategies, systemic measures were taken in relation to so-called *nousui chizai*, or intellectual property of agricultural, forestry and fisheries sector, such as the enactment and two amendments of the Act on Protection of Names of Specific Agricultural, Forestry and Fishery Products and Foodstuffs, an amendment of the Plant Variety Protection and Seed Act, and the enactment of the Act for the Prevention of Unfair Competition Involving Livestock Genetic Resources. These measures have raised the public and private sectors’ awareness of the importance of *nousui chizai*.

The “Intellectual Property Promotion Plan 2020” (decided in May 2020 by the Intellectual Property Strategy Headquarters) calls for enhanced efforts to protect and utilize

intellectual property in the agriculture, forestry and fisheries sector through such means as developing a new intellectual property strategy, in response to the fact that the Third Strategy was to come to an end in 2020. In developing a new intellectual property strategy of the MAFF, it is important to take the current policy challenges into consideration, which makes it necessary to first organize the current challenges related to intellectual property in the agriculture, forestry and fisheries sector.

3. Key measures and environmental changes that should be taken into account in considering this strategy

In light of the current economic and social situations and policy challenges, listed below are key relevant measures and environmental changes that should be taken into account as confirmed in 2 above where a new intellectual property strategy of the MAFF is considered.

- (i) Strengthening the international competitiveness of agricultural, forestry and fishery products, and food

Currently, the national government is working together to expand the export of agricultural, forestry and fishery products and food. This effort is given advantages by: Japan's excellent new plant varieties and cultivation techniques that can maximize their high potential; high quality of products supported by advanced food processing and packaging technologies; the attractiveness of distinctive products rooted in unique local dietary cultures, etc.; and brand power nurtured by these factors. On the other hand, there are challenges faced by the government such as: overseas leakage of new plant varieties and wagyu beef genetic resources; damage to the brand value of Japanese products overseas due to the distribution of counterfeit products; and movements towards standardization which could be disadvantageous to Japanese products in international competition. It has been pointed out that the export of Japanese agricultural, forestry and fishery products and food etc. may be negatively affected by delays in protective measures for intellectual property or in strategic response to standardization.

In order for the Japanese agriculture, forestry, fisheries, and food industries to make profits from overseas markets, it is likely that with the expansion of export-related businesses, overseas expansion will increasingly take place where part of the production, processing or other services take place in export destination countries, as well as exporting purely domestic products whose production processes take place entirely in Japan. To deal with these changes in businesses and to prevent overseas development from causing leakage of know-how and other sources of the international competitiveness of Japanese agricultural, forestry and fishery products and food, it is necessary to expand overseas affiliated businesses by making effective use of intellectual property and by appropriately utilizing overseas subsidiaries in export destination countries, and to increase total profits from overseas markets by such means as executing appropriate agreements for the use of

intellectual property rights with reliable partners to generate licensing income.

(ii) Increase in the number of foreign tourists to Japan

Before the COVID-19 pandemic, the number of foreign tourists to Japan was on an increasing trend year by year. Food and rich nature were listed among the purposes of trips by these tourists, whose trip destinations were extending from mainly large cities to rural areas. Once the number of foreign tourists to Japan recovers in due course, their visits are expected to lead to increases in consumption of Japanese agricultural, forestry and fishery products and to increases in income in rural areas. An increase in the number of foreign tourists is also expected to have a positive impact on the expansion of export, such as through purchases of Japanese products by these foreign tourists after their return to home countries, triggered by their experiences in Japan during their trips.

On the other hand, there was a case where a product trade name printed on multilingual brochures prepared for inbound tourists resulted in a misappropriated trademark application in an export destination country. This indicates the necessity to consider, in an integrated manner, product development for inbound tourists and the protection of intellectual property in overseas markets.

(iii) Responding to diversified consumer behavior

The COVID-19 pandemic has dramatically accelerated movements towards online food purchase, which had been in progress due to, among other things, changes in social structure and lifestyle caused by the population decrease resulting from the falling birthrate and the aging population and by the increase in the number of single person households and double-income households. Online transactions have also expanded rapidly in overseas markets, with a rapid expansion of export through cross-border e-commerce.

In online sales, consumers and producers have a closer relationship with each other, with the latter being expected to appropriately provide information on the production of their products on the market. In order for the Japanese agriculture, forestry and fisheries to maintain and expand production in response to changes in markets in Japan and abroad, it is essential to: develop production systems and value chains tailored to changing needs and consumer behavior by strengthening cooperation with related businesses; and continue to promote efforts to secure consumer trust in food, by securing food safety and appropriately providing information.

In addition, complicated sales channels in online markets may make it difficult for producers to protect their brands and intellectual property through reliable partners as they have done thus far. This makes it more important to obtain intellectual property rights in overseas markets and to monitor these markets for protecting intellectual property rights.

(iv) Promotion of Smart Agriculture, Forestry and Fisheries

The front lines of the agriculture, forestry and fisheries face serious aging and

shortage of labor power. Improving productivity is essential to compensate for the labor shortage.

The front lines of the agriculture, forestry and fisheries still have many tasks that have to be done manually or can only be done by skilled workers. As a means to improve the quality and production efficiency of agricultural, forestry and fishery products, Smart Agriculture, Forestry and Fisheries that utilize ICT (Information Communication Technology) and other advanced technologies have been considered promising. In October 2020, the MAFF put together comprehensive measures to accelerate Smart Agriculture in the “Smart Agriculture Promotion Comprehensive Package,” under which the ministry has been working to promote Smart Agriculture.

In the past, it has not been easy to transfer know-how held by skilled farmers and other workers as implicit knowledge to other persons. Utilizing AI, data, and other technologies makes it theoretically possible to convert this know-how to explicit knowledge. On the other hand, there is concern that if know-how incorporated in robots or other machines is leaked overseas and is utilized in competitor production areas, the advantage of Japanese agriculture, forestry and fisheries may be compromised. It is necessary to have a point of view where Smart Agriculture, Forestry and Fisheries should be promoted while dealing with this concern by appropriately protecting know-how and other intellectual property.

(v) Response to technology development and international standardization based on SDGs

Since the adoption of the “Sustainable Development Goals (SDGs)” at the 2015 UN summit, the SDGs have been receiving increasing attention worldwide. An increasing number of private businesses and other entities are making efforts to develop and provide goods and services that are environmentally friendly or of a similar nature. In light of this movement in Japan and abroad, it is necessary to promote sustainable consumption where goods and services sympathetic of the philosophy of the SDGs are supported by consumers’ purchasing activities. This promotion is currently run under the “SCAFFF 2030 Project -- Sustainability Consortium for Agriculture, Forestry, Fisheries and Food.” Furthermore, in order to appropriately promote the response to the SDGs in the food, agriculture, forestry and fisheries sector as well, the MAFF is considering the “Green Food System Strategy” which intends to realize, through innovation, the compatibility between productivity improvement and sustainability in the food, agriculture, forestry and fisheries.

In implementing these strategies, individual businesses are expected to work on economic, social, environmental, and other issues in an integrated manner in the whole food chain from production to distribution and consumption, and to *visualization* (“*Mieru-ka*” in Japanese) the value created from their efforts. As tools for this visualization, international standardization and certification businesses are being

developed.

- (vi) Developing a system and human resources to appropriately protect and utilize intellectual property

Recent years have seen rapid improvement of the legal system for protecting intellectual property in the agriculture, forestry and fisheries sector. On the other hand, the front lines of the agriculture, forestry and fisheries face a shortage of human resources who are able to appropriately utilize intellectual property in the front lines, because people working in the front lines have rarely been conscious of intellectual property.

For this reason, it is necessary to develop a system for enabling a wide range of persons, in stages from research and development to production, distribution and consumption, to understand and appropriately protect and utilize the intellectual property system. To do this, the MAFF considers it necessary to create an environment where researchers, agricultural technology leaders, agriculture, forestry and fisheries businesses, food and related businesses, and consumers are able to learn about intellectual property in ways that are appropriate for their respective natures.

4. Assumptions for considering this strategy

- (i) This strategy is a comprehensive one for intellectual property in the agriculture, forestry and fisheries sector and the food industry sector.
- (ii) Intellectual property covered by this strategy includes not only that protected under the existing system but also a wide range of information property of value, including brands, old plant varieties, livestock genetic resources other than those of wagyu beef, and know-how of agriculture, forestry and fisheries businesses.
- (iii) This strategy intends to appropriately protect intellectual property by utilizing not only the variety registration system and the geographical indication protection system (hereinafter referred to as the “GI Protection System”), which are the intellectual property systems under the jurisdiction of the MAFF, but also the patent and trademark systems, the trade secret protection system, contract management, and such other means.
- (iv) This strategy covers a wide range of measures related to intellectual property in the agriculture, forestry, fisheries, and food fields, as well as covering (international) standardization which is closely related to intellectual property.

II. Key Future Initiatives for Intellectual Property in Agriculture, Forestry and Fisheries Sector

1. Protection and utilization of intellectual property in the global era

In December 2020, the Strategy for Agriculture, Forestry, Fishery products and Food Export Expansion was established, which presented a policy to achieve the goal of increasing the amount of export of Japanese agricultural, forestry and fishery products and food to “5 trillion yen by 2030.” The strength of Japanese agricultural, forestry and fishery products and

food lies in their high quality and high added values. In expanding the export of agricultural, forestry and fishery products and food, we must also consider protecting and utilizing intellectual property overseas, which is the source of the high quality and high added values of these products.

Currently, we are facing the issue of counterfeit goods of Japanese products being distributed in overseas markets and the issue of overseas leakage of plant varieties and wagyu beef genetic resources, etc. Since these issues will lead to compromise of the values of Japanese intellectual property, it is important not only to deal with these issues appropriately but also to utilize Japanese intellectual property that is highly appreciated overseas. In taking these measures, it is also effective to promote the international protection of intellectual property and to strengthen countermeasures against counterfeit goods in overseas markets, by making good use of Economic Partnership Agreements and similar arrangements.

In addition, preventing the overseas leakage of new plant varieties and wagyu beef genetic resources by appropriately applying the amended Plant Variety Protection and Seed Act and the two wagyu beef-related acts described below is likely to serve as a deterrent to the overseas leakage of these categories of intellectual property.

Furthermore, it is also important that intellectual property users understand the different characteristics of different efforts to protect intellectual property, such as the protection through geographical indication (GI) registration and the protection through obtaining intellectual property rights overseas (which allows right holders to receive licensing income from overseas), and that these users strategically use different efforts depending on the intellectual property to be protected and depending on the situation.

(1) New plant variety protection system

(i) Prevention of overseas leakage of new plant varieties

Regarding new plant varieties, a framework for their protection under the breeder's rights as one type of intellectual property right has been developed overseas as well, under the International Convention for the Protection of New Varieties of Plants (more commonly known as the UPOV [International Union for the Protection of New Varieties of Plants] Convention). Even though Japan has developed a large number of excellent varieties, it has rarely focused on overseas markets and has not provided sufficient protection of new plant species overseas. For this reason, there have been identified issues where Japanese new varieties are cultivated overseas without permission and where, for some varieties, production areas have actually been formed. The existing Plant Variety Protection and Seed Act was designed to protect rights in Japan, and was unable to prevent even registered varieties from being carried overseas and was thus unable to control intellectual property that should be protected.

In order to deal with these issues, the Bill Partially Amending the Plant Variety Protection and Seed Act, whose purpose was to prevent the overseas leakage of excellent

Japanese new plant varieties and to protect the breeder's rights of developers of new varieties, was approved by the Cabinet and was submitted to the Diet in March 2020. The amended act was enacted and promulgated on December 2 and December 9, respectively, of the same year.

This legal amendment not only allows restrictions to be imposed on the carrying of registered varieties overseas but also sets up such measures as subjecting personal proliferation to the permission of the breeder's right holder. Dissemination and awareness programs towards the promotion of use of these measures will take place, in order to utilize these measures to protect intellectual property in new plant varieties, in which Japan has an advantage, and to form production areas.

New plant varieties developed in Japan and highly appreciated in Japan and abroad may face the risk of being carried abroad and being cultivated and sold there without permission. Measures to deal with this risk include the acquisition of breeder's rights by breeder's right holders for themselves in foreign countries or regions, in order to allow themselves to seek an injunction of distribution of their varieties in overseas markets or to claim damages for unauthorized cultivation. However, to register a new plant variety overseas, the breeder's right holder must make an application for itself to each country or region in which the holder wants to protect the variety, and must have the variety examined by the authorities before having it registered. The major obstacles here are: the necessity for advanced professional knowledge, such as different documents required for different countries or regions; and considerable costs and time. The amended act thus provides for the national government's support to promote the smooth registration of varieties overseas.

Another issue is that the Southeast Asian countries, which are potentially important markets for Japan, are not members to the UPOV 1991 Convention except a small number of countries such as Vietnam and Singapore, which creates challenges in the appropriate protection of varieties in those non-member countries. To deal with this issue, the MAFF will encourage relevant East Asian countries to accede to the UPOV Convention, through cooperation with the East Asia Plant Variety Protection Forum's activities and the UPOV and other organizations. The MAFF will also further cooperate with overseas authorities for protecting and examining plant varieties to accelerate the registration of new plant varieties overseas, by such means as utilizing the results of variety registration examinations in Japan in overseas examinations through the active use of the East Asia Plant Variety Protection Forum, and reducing paperwork for making overseas applications through cooperation with the UPOV online application form tool (PRISMA).

Furthermore, the MAFF will develop a database which will allow farmers to easily search information on the characteristics and terms of use of varieties in distribution, including not only registered varieties but also common ones.

(ii) Establishment of the proper valuation of intellectual property

An intellectual property system is designed to protect legitimate holders of rights in intellectual property, which has been created by innovation or other activity and whose value has been recognized, from counterfeit goods or other infringing products by permitting others to use the intellectual property only if the right holders have received necessary consideration or if otherwise the right holders have agreed to such use. However, the Plant Variety Protection and Seed Act, which is an intellectual property system designed to protect new plant varieties, does not distinguish the production of plants as materials from the intellectual property values of new varieties. In particular, national varieties are often inexpensive in terms of pricing of seeds and seedlings or license fee, because of assistance to the development of these varieties from public funds. This has resulted in a reality where there are few opportunities for users to recognize the values of these varieties as intellectual property. This insufficient recognition of the value of intellectual property has led to users' poor awareness of the need for protection of varieties and other property, and also to a reality where the Plant Variety Protection and Seed Act has not really been made full use of.

For instance, when estimating the amount of damage caused by infringement of a breeder's right, the value of the breeder's right as intellectual property is calculated based on, among others, the price of seeds or seedlings that could have been sold had the infringement not occurred. For this reason, a person who has developed an excellent new variety needs to set the license fee and other terms and conditions for cultivation by estimating the economic value of the variety.

Prefectural governments and other public agencies often set low license fees for registered varieties for the benefit of local producers, in order to promote local agriculture or to accelerate the spread of those varieties. In this case, if a breeder's right is infringed such as by the spread of cultivation of a variety to geographical areas not intended by the holder of the breeder's right, only a very small amount of damage may be awarded. With this in mind, prefectural governments and other public agencies should strive to set appropriate license fees in order to ensure that an appropriate amount of damage will be awarded in the event of infringement.

Overseas, one often sees cases where license fees are collected not at the seed or seedling stage but from proceeds from harvests and are used to cover expenses incurred for new varieties for promotional, quality control, infringement handling, and other purposes, eventually enhancing the value of these varieties and bringing high income to producers. Although such cases are still small in number in Japan, this method should be considered as one way to manage registered varieties, since it involves individual license agreements between the breeder's right holder and producers or producer organizations, which has advantages such as making it easy for the breeder's right holder to identify, and seek an injunction of, illegal cultivation and to recover damage in the event of infringement. In particular, in case of items like orchard trees that do not produce income at the introduction

stage of a new variety, this method of spreading new varieties would be one of the most convincing ways for producers in that it reduces burden on producers at the seed or seedling stage by instead collecting license fees according to proceeds at the stage where trees are old enough to bear fruit and produce harvests.

When collecting license fees from proceeds from harvests, it is easy to use shipping volume or sales as the basis for calculation if all products are consolidated for quality control or other purposes. In other cases, setting a fixed license fee per unit growing area or per unit number of bearing trees, which would allow producers' efforts to generate further income, would be a useful approach that is helpful in making good use of intellectual property.

(iii) Enhancement of protection as intellectual property

The value of a new plant variety increases if the variety is appropriately protected as intellectual property. This requires efforts towards appropriate protection not only by the breeder's right holder but also by producers and producer organizations using the variety.

Under the Plant Variety Protection and Seed Act, the breeder's right holder is exclusively entitled to the right to use the variety for business purposes for a certain period of time. However, the value of the variety is realized only when harvests of the variety have been produced by producers or producer organizations which use the variety, or in production areas where the variety is used, and have been appropriately evaluated in the market. While the breeder's right may be exercised to restrict growing areas or personal proliferation of the variety by producers, the Plant Variety Protection and Seed Act does not preclude a license with relaxed restrictions from being granted if necessary to produce the variety, nor does the act preclude the breeder's right holder from granting such a license in order to increase the value of the variety.

On the other hand, it had been pointed out that the Plant Variety Protection and Seed Act before amendment was not sufficiently effective when the breeder's right holder wanted to create production areas, for the following reasons among others: it was difficult to take countermeasures against overseas leakage of new varieties; it was difficult to restrict seeds and seedlings from being personally proliferated against the will of the breeder's right holder; and the breeder's right holder was not allowed to restrict persons without a license to cultivate the variety from personally proliferating the variety as long as it was used in their own farming.

There is also a current situation where, in the case of a variety developed by a prefectural government or other public agency, the breeder's right holder is reluctant to grant licenses to cultivate the variety to parties outside the prefecture, because doing so would make it difficult to manage the quantity and quality of cultivated products, even though granting those licenses to permit cultivation in areas outside the prefecture would make it possible to secure the lot size requested by the distributor or to extend the shipping season.

For the reasons described above, the amended provisions of the Plant Variety

Protection and Seed Act which came into force in April 2021 provide more effective protection to breeder's rights. This is expected to make it easier to create production areas centering on new varieties.

(iv) Improvement of system infrastructure

Intellectual property systems are intended to support actions taken by right holders to protect their rights. However, particularly in the agriculture, forestry and fisheries, a notion has been established that the national government should protect businesses in these industries, and this notion has become one of the factors for the insufficient exercise of intellectual property rights in these industries. The agriculture, forestry and fisheries sector need improvement of the system infrastructure for providing technical support and other assistance to make it easier to exercise these rights. It was pointed out that particularly the scope of a breeder's right needs to be clarified in terms of the protection of this right, because unlike a patent or such other rights, a breeder's right covers a plant (new variety) itself, which is a living matter, and this may make it difficult to prove any infringement. The amended provisions of the Plant Variety Protection and Seed Act which will come into force in April 2022 will provide a system that is easier to use in terms of legal practice, such as by allowing the confirmed characteristics of a variety to be used to determine the identity of the variety.

Investigation of the characteristics of a variety is an essential part of the examination of an application for variety registration. This investigation is conducted mainly at the Center for Seeds and Seedlings of the National Agriculture and Food Research Organization. Efforts will be made to improve this investigation so that the results can be utilized for such purposes as determining the identity of varieties, and also to strengthen Japan's overall national expertise about the protection of plant varieties through continuous personnel exchanges with examiners from the MAFF.

The variety protection system under the UPOV Convention does not use gene sequence information in proving the distinction between different varieties, because it is the characteristics (phenotypes) of a variety that is important when producers use the variety. However, based on the recent development of gene analysis technology and utilization of genetic information in breeding, technology development is internationally underway in order to effectively operate the system by utilizing gene sequence information. As a country with an advantage in the development of excellent varieties, Japan will also proceed with necessary technology development and other activities in light of this international situation and will ensure the appropriate protection of rights by sharing resulting technology with breeder's right holders and others involved.

(2) Wagyu beef genetic resources

Since wagyu beef is Japan's unique precious property that has been improved by

persons involved over the ages, concerned organizations in Japan established “the Council for Domestic Utilization of Wagyu Beef Genetic Resources” (*Wagyu Iden Shigen Kokunai Katsuyo Kyogikai*), through which efforts have been made such as voluntary restraints on the export of wagyu beef genetic resources. However, in June 2018 a case of attempted unauthorized export of wagyu beef genetic resources was identified, where wagyu beef genetic resources were carried out to China without export inspection and were disapproved for import by the Chinese authorities. This heightened calls for the protection of the value of wagyu beef genetic resources as intellectual property in Japan.

In light of this situation, the MAFF established the Committee for Distribution Management of Wagyu Beef Genetic Resources (*Wagyu Iden Shigen no Ryutsu Kanri ni kansuru Kentokai*) consisting of academic experts and concerned organizations, among others. The Group had five discussion meetings on such topics as appropriate ways of distribution management and the potential for protecting the value of wagyu beef genetic resources as intellectual property, before publishing an interim report in July 2019. Under this committee, the MAFF then established the Specialized Subcommittee for Strengthening the Protection of the Intellectual Property Value of Wagyu Beef Genetic Resources (*Wagyu Iden Shigen no Chiteki Zaisan-teki Kachi no Hogo Kyoka ni kansuru Senmon Bukai*) in October the same year. The subcommittee had an extended membership that included law practitioners, intellectual property experts, and concerned government agencies, in addition to the membership of its superior committee. The subcommittee had four discussion meetings on such topics as challenges in strengthening the protection of wagyu beef genetic resources, measures against these challenges, and the positioning of these resources in the intellectual property system, before publishing an interim report in January 2020. These interim reports stated that livestock improvement is a creative activity by persons involved in the livestock industry in that it allows differentiation in quality of improved animals from other animals through the process of improvement in which considerable efforts are invested, and that livestock genetic resources produced through this process have intellectual property values. These reports expressed a concern that if we neglect a situation where livestock genetic resources as products of this activity are illicitly distributed and used to breed and reproduce livestock by getting a free ride on the efforts for improvement by persons involved, these persons involved will not be able to recover their investment incurred in the energy-consuming process of improvement, resulting in a loss of incentives for further improvement and breeding, which may, in turn, seriously affect the promotion of livestock raising across the country. Based on these interim reports, the two wagyu beef bills, namely, the “Bill Partially Amending the Act on Improvement and Increased Production of Livestock” and the “Bill on Prevention of Unfair Competition Involving Livestock Genetic Resources,” were approved by the Cabinet in March 2020 and were submitted to the Diet. The two bills were approved and enacted in April 2020, followed

by enforcement in October 2020.

The Act on Prevention of Unfair Competition Involving Livestock Genetic Resources has made it possible to seek injunction of, or damages for, use, transfer or other acts breaching a contract in order to protect the value of wagyu beef genetic resources as intellectual property. The act has also created a system for protecting the value of wagyu beef genetic resources as intellectual property by imposing criminal punishment on malicious illicit acts. Specifically, the act categorizes unauthorized product use violating livestock genetic resources into types of unfair competition, and allows injunction or damages to be sought from or against any of the following, for the purpose of protecting the intellectual property value of sperm and fertilized eggs: (i) any person who obtains sperm or fertilized eggs by fraud or theft or embezzles sperm or fertilized eggs entrusted with the person by another person; (ii) any person who attempts to export sperm or fertilized eggs in breach of a contract limiting their use to domestic uses; or (iii) any person who produces calves (or their calves), sperm, fertilized eggs, etc. using any of the items set forth in (i) or (ii) above. The act also allows injunction or damages to be sought from or against any person to whom the sperm, etc. mentioned in any of (i) through (iii) above is subsequently resold. Furthermore, the Act Partially Amending the Act on Improvement and Increased Production of Livestock enhances the distribution management of sperm and fertilized eggs by such means as expressly prohibiting transfer to other persons of sperm, etc. stored anywhere other than livestock artificial insemination clinics or the like and by, particularly for wagyu beef's sperm, etc., requiring labeling on containers and recording, and retaining records of, transfers and certain other activities.

In order to ensure that these systems will fully work, the MAFF will promote efforts to prevent unfair competition involving livestock genetic resources by such means as: promoting the execution of contracts to be executed when transferring wagyu beef genetic resources, by disseminating templates of these contracts; and disseminating information on how to post on a website the restrictions contained in the terms and conditions of standard-form contracts (i.e., uniform contractual terms and conditions for transactions with many unspecified persons). In addition, the MAFF will promote awareness by such means as: holding training seminars for livestock artificial inseminators and other persons doing practical work of livestock artificial insemination, in order for them to develop a deeper understanding of relevant laws and regulations; and distributing stickers for disseminating and raising awareness of the efforts for appropriate distribution management to persons handling wagyu beef genetic resources, including producers. Furthermore, in order to ensure the appropriate distribution management of wagyu beef genetic resources, the MAFF will reduce the paperwork of prefectural governments involved in reports and other inputs from livestock artificial insemination clinics under the amended Act on Improvement and Increased Production of Livestock, and will, at the same time, promote the development

and operation of a nationwide system for bringing information together. Moreover, the MAFF will regularly conduct on-site inspections, in cooperation with prefectural governments and the National Livestock Breeding Center, in order to directly check and provide guidance, etc. as to whether appropriate distribution management is in place at livestock artificial insemination clinics across the country.

In addition to the above, the MAFF will disseminate accurate information on wagyu beef to overseas parties in order to expand the export of wagyu beef. The MAFF will also promote the dissemination and awareness of the Universal Wagyu Mark in cooperation with the Japan Livestock Products Export Promotion Council, as well as the active dissemination of information on wagyu beef production, such as production areas, by utilizing QR codes, in order to differentiate wagyu beef from foreign beef and to increase the awareness and brand value of wagyu beef.

(3) Geographical indication (GI)

The Act on Protection of Names of Specific Agricultural, Forestry and Fishery Products and Foodstuffs (Act No. 84 of 2014; hereinafter referred to as the “GI Act”) intends to promote the interests of producers and to protect consumer trust by protecting the names of agricultural, forestry, fishery, food, and other products that are associated with specific production areas in terms of quality and other aspects (hereinafter referred to as “GI Products”).

Products whose GI has been registered have benefited not only from the elimination of counterfeit goods but also from emerging secondary effects such as an increase in the number of persons handling these products and an expansion of transactions. GI registration is expected to: promote efforts for the appropriate branding of agricultural, forestry, fishery, food, and other products; secure consumer trust; and secure benefits that are supposed to be obtained by agriculture, forestry, fisheries, and food businesses. In particular, branding should be developed by carefully preparing a strategy or story for each brand to prevent obsolescence. The GI protection system is an effective tool for carrying this out.

A GI protection system is originally fit for protecting the traditional values of processed foods, because local traditional manufacturing processes and other practices are often considered to constitute characteristics. In EU, many processed foods, such as cheese, wine, olive oil, and processed meat products, are on GI registry. In Japan, however, while food businesses which are manufacturers of processed products have deep connections with prefectural commerce and industry departments or other administrative departments and commerce and industry associations, the GI protection system has not been sufficiently made known to food businesses and these departments, which has resulted in poor progress in putting processed foods on GI registry, despite the existence of various attractive traditional foods in Japan.

In order to promote the utilization of the GI protection system, the MAFF will work on disseminating, and raising and increasing awareness of, the GI system, with a particular focus on putting processed foods on GI registry, by such means as continuing to improve the consultation system for applications for GI registration, promoting the utilization of the GI protection system through outreach to intellectual property experts, and working harder to disseminate information on GI Products. The MAFF aims to register two hundred GIs by fiscal 2029. In addition, the MAFF will promote efforts towards the continuous development of the GI system by such means as promoting efforts to improve the quality and brand value of GI Products and to expand their sales and overseas export, through grouping registered producer organizations and sharing good practices, among others. The MAFF will also take additional measures including, among others, conducting prompt and fair registration examination and providing appropriate control against unauthorized use after registration.

More than one hundred countries now have a system for protecting GIs, including countries whose system is equivalent to that of Japan. It is important to promote increasing the brand values of Japan's GI Products and to use the increased values to promote export, through mutual protection of GIs with these countries by making international agreements with them. In response to the mutual protection of GIs with EU resulting from the Japan-EU Economic Partnership Agreement taking effect in February 2019, the GI Act was amended accordingly, such as by limiting the prior use period to seven years in principle, relaxing the obligation to label products with GI marks, and regulating misleading labeling. This is expected to strengthen the GI Act's effect of eliminating counterfeit goods and to protect GI Products at higher level. The MAFF will continue to promote efforts to expand the list of countries and regions with which Japan mutually protects GIs.

Furthermore, in order to promote the export of Japanese agricultural, forestry and fishery products and food, it is important to utilize GI marks to have these products identified as genuine Japanese specialty goods, and to eliminate overseas counterfeit products of Japanese goods. In light of the actual situation where foreign products bearing Japanese geographical names are widely distributed, the MAFF will inform all concerned parties that utilizing the GI system or the regional collective trademark system provides protection to names containing a geographical name. In addition, in order to promptly and appropriately deal with counterfeit products that are becoming sophisticated, such as by printing marks, etc. registered as trademarks in Japan on product packaging in a country where the marks, etc. are not registered as trademarks, before exportation to a third country, it is necessary to cooperate with JETRO, diplomatic establishments abroad, the Ministry of Economy, Trade and Industry, and other relevant agencies. The MAFF is going to continue to work harder on, among other things, investigating overseas markets through the "Agriculture, Forestry, and Fisheries Intellectual Property Protection Consortium", which

is a private-public partnership program, and supporting countermeasures against infringement taken by businesses, as well as publishing and disseminating activity reports about the consortium. On top of these, the MAFF will investigate intellectual property systems and other schemes in major exporting countries and will work on the elimination of counterfeit products from many directions in cooperation with local country governments.

Along with the efforts described above, Japanese GI marks have been registered as trademarks or have otherwise been protected in fourteen different countries and regions at present in order to prevent unauthorized use of these GI marks in overseas market. The MAFF will promote further trademark registration and other protection of Japanese GI marks in additional foreign countries and regions. The MAFF will also work on improving the environment to promote export by working on increasing awareness of GI marks and getting products carrying GI marks identified as genuine Japanese specialty goods.

(4) Trademark system

In the agriculture, forestry, fisheries, and food industries, various types of intellectual property have been created. These include, in addition to breeder's rights, GIs, and regional collective trademarks described above, statutory types of intellectual property, which include, among others, "patent rights", which entitle the holder to use its invention, such as a cultivation method or a unique material, to use in an exclusive manner, and "trademark rights" which entitle the holder to use its product mark in an exclusive manner. In order to promote the active use of the patent and trademark systems, the MAFF will further spread their use by, and increase the awareness of them among, agriculture, forestry and fisheries businesses, agricultural technology leaders and so on in cooperation with the Japan Patent Office, the National Center for Industrial Property Information and Training (hereinafter referred to as the "INPIT"), and producer organizations, among others.

While the export of Japanese agricultural, forestry and fishery products and food is expanding, the reality exists that applications have been filed in several foreign countries for trademarks related to names of brand products containing Japanese geographical names by foreign third parties that are unrelated to the parties involved in the products, and that counterfeit products of these brand products have been widely sold. In addition, there have been cases where seedlings of orchard trees with promising export potential were carried out to China and were sold there as if they were Japanese products by being labeled in Japanese, or where applications were filed for trademarks containing Chinese phonetic equivalents whose pronunciations are the same as the corresponding Japanese letters. Furthermore, there have been identified cases where Chinese-made counterfeit products of Japanese brand products are sold in certain Southeast Asian countries. As seen in these cases, we are facing a major issue of abusive trademark applications for Japanese geographical

names or Japanese brand product names or for logos and other marks combining Japanese geographical names and graphics, as well as of counterfeit products. In order to prevent the brand values of Japanese products from being compromised particularly in major export destination countries, the MAFF will promote trademark applications for Japanese brand product names and other intellectual property and the protection of rights in these property, in cooperation with the Japan Patent Office, JETRO, and other relevant agencies.

If the overseas expansion of food processing businesses and manufacturing businesses increases, it is likely that the protection of Japanese technologies and know-how in foreign countries will become another major issue. The MAFF will work to cooperate with relevant agencies to ensure that patent applications are filed appropriately in the food and other relevant industries.

It is important to increase brand power by actively using combinations of intellectual property systems, such as patent rights, trademark rights, breeder's rights, and GIs. While technology and brand management are two different things, the MAFF will, by combining the two, promote efforts that would further demonstrate the advantages of the Japanese agriculture, forestry, fisheries, and food industries.

(5) International standards

It has become a general practice to trade agricultural, forestry, fisheries, food and other products globally across borders. Under these circumstances, international standards contribute to smooth global transactions and consumers' rational choices, since uniform agreements on (or yardsticks for) product quality, production methods, production technologies, etc. secure smooth transactions, and since certification based on uniform yardsticks leads to further *visualization* ("Mieru-ka" in Japanese) of values, among other reasons. Recent year have seen more active wheeling and dealing by national governments to establish international standards that would give an advantage to their respective home countries' agriculture, forestry and fishery products and food in distribution and transactions, such as by forming a new market by establishing international standards that place the respective home countries in a superior position. Strategic standardization is essential for Japanese excellent technologies and quality to be properly appreciated. This has made it more important to enhance efforts for standardization in the agriculture, forestry, fisheries, and food sector.

(i) JAS and other Japan-originated standards and international standardization

It is important to develop the JAS (Japan Agricultural Standards) and other Japan-originated standards into international standards by utilizing the ISO standards, the approval standards of the Global Food Safety Initiative (hereinafter referred to as "GFSI"), and various other frameworks, in order to create an environment where intellectual property created in Japan and agricultural, forestry, fishery, food, and other products utilizing this

intellectual property will be distributed and traded internationally in ways favorable to Japan. To this end, the MAFF and the Ministry of Economy, Trade and Industry will, in collaboration and cooperation with each other and together with relevant incorporated administrative agencies and other entities, strongly promote strategic activities for standardization in the agriculture, forestry, fisheries, and food sector. In doing so, making efforts tailored to the characteristics of the relevant region is important. Therefore, the MAFF will develop systems for communication, information sharing, and consultation across the horizontal connections between relevant agencies at regional level and across the vertical connections within the headquarters, branches, and other organizations, so that the regional needs for standardization will appropriately lead to actual standardization. The MAFF will also promote: the dissemination of the JAS, the ASIAGAP, and other Japan-originated standards in Japan and abroad; the proposal and establishment of international standards that are in harmony with the JAS, including standards for scientific freshness evaluation methods for fresh fish and seafood; and procedures of the Food and Agricultural Materials Inspection Center (FAMIC) for mutual recognition with various foreign certification organizations. Furthermore, the MAFF will further the improvement of the environment towards international standardization, such as by setting up endowed courses and other programs at universities in Japan and abroad or by developing human resources for, or increasing awareness among human resources of, standardization and certification, such as training and developing experts. In doing so, the MAFF will also take such actions as conducting hands-on practical analysis practice and promoting participation by local private companies, as preparatory efforts to develop Japan-originated food standards into international standards.

There is a movement to make a freshness evaluation method for fresh fish and seafood based on appearance (such as color, shape, and sliminess), which has been employed in Europe, into an international standard. However, there has been a concern that if this method becomes an international standard, highly fresh products that are prepared by the Japanese *ike jime* method or a similar technique and are edible raw will be undervalued in international markets, because of wounds caused by the *ike jime* method. In order to avoid this situation and to increase the international awareness of, and to differentiate, Japanese highly fresh products, the MAFF will promote efforts to make the evaluation method using the “K value,” which is a scientific indicator to measure freshness, an international standard under Japan’s initiative.

It is also effective to make good use of the JAS to call attention to Japan’s advantages welcomed by overseas markets. In the case of gluten-free foods that are popular mainly overseas, the MAFF will promote the stimulation of overseas demand by such means as disseminating the JAS certification of gluten-free rice flour, through which manufacturers will be able to call attention to their high management capability for manufacturing rice

flour whose gluten content is, for instance, 1 ppm or less.

(ii) Active use of standards as a tool for social implementation of technologies

The digital innovation has reduced the time required for social implementation of a new technology, increasing the speed at which new standards are required. At the same time, ISO committee meetings and such other forums have seen intensified leadership struggles among countries. Under these circumstances, it is necessary to promptly spot important technologies that can demonstrate Japan's advantages, such as smart agriculture technology or methods of analysis of high-quality or highly functional foods, and to strategically utilize standards as a tool for social implementation of new technologies from the planning or designing stage of research and development, in cooperation with public research institutes, relevant government agencies, etc. so that markets can be captured in the future. To this end, the MAFF will provide seminars for consultation on, dissemination of, and building awareness of, international standardization and will work on the development of manuals for international standardization, among other measures, all targeting research institutes in order to sophisticate efforts for intellectual property management.

2. Promotion of data utilization in the era of Smart Agriculture, Forestry and Fisheries

In promoting Smart Agriculture, Forestry and Fisheries, the MAFF will maximize the effect of Smart Agriculture, Forestry and Fisheries by minimizing the risk of leakage of technologies or know-how owned by agriculture, forestry and fisheries businesses or by local entities, in full coordination with industrial data-related measures taken across the national government, such as the creation of the "shared data with limited access" system under the 2018 amended Unfair Competition Prevention Act.

(1) Promotion of data utilization and protection of know-how and other intellectual property

In the agriculture, forestry and fisheries, it is necessary to ensure that the parties to a contract provide for appropriate ownership of rights and other terms and conditions from two aspects: the promotion of data utilization towards the dissemination of Smart Agriculture, Forestry and Fisheries that will realize labor-saving production and high-quality production utilizing data, AI, and other technologies, in response to aging, labor shortage, and other issues in these industries; and the protection of data embodying know-how of agriculture, forestry and fisheries businesses. In order to provide reference information on contract practices, in March 2020 the MAFF developed and published the "Contract Guidelines for AI and Data in the Agriculture Sector. In order to ensure that contract practices required by these guidelines will take root in the front lines of these industries, the MAFF will further the dissemination of these guidelines through, among other measures: making them rules for the MAFF's subsidized programs and other activities; and cooperation with WAGRI and other relevant agencies. The MAFF will also distribute leaflets to producers and producer organization,

agricultural machinery manufacturers, and IT vendors in order to disseminate the guidelines to the front lines of the industries, and will provide training and other programs for persons involved in order to create an environment that allows agriculture, forestry and fisheries businesses to receive consultation services. At the same time, in light of the possibility of utilizing data as intellectual property, the MAFF will foster an awareness of intellectual property among agriculture, forestry and fisheries businesses and will promote the dissemination and awareness of notions about agricultural data utilization and the protection of know-how.

In addition to the above, the MAFF aims to develop and publish data contract guidelines in the fishery field, based on the Contract Guidelines for AI and Data in the Agriculture Sector.

Furthermore, towards the overseas expansion of Smart Agriculture, the MAFF will aim to capture overseas markets in cooperation with JICA, JETRO, and other relevant agencies, while giving consideration to: the prevention of leakage of know-how; appropriate income of persons involved in agriculture according to their levels of contribution; and intellectual property.

(2) Development of an environment toward the promotion of data utilization

In the agricultural sector, the MAFF will promote the development of new services for the smooth transfer of skilled farmers' know-how (master craftsmanship) and the like to new farmers and others by integrating and analyzing such know-how and the like using ICT, in order to ensure the further promotion of the use and utilization of agricultural data through WAGRI and other organizations. In doing so, the MAFF must prevent leakage of know-how unwanted by agriculture, forestry and fisheries businesses. Furthermore, the MAFF will ensure improvement of content by implementing various agriculture-related data in WAGRI, and will develop a Smart Food Chain that ensures the linkage of data from production to processing, distribution, and to consumption, based on the needs of distributors, retailers, and other business partners involved in the food chain. Calling attention to the appeal of GI Products and other Japanese agricultural, forestry and fishery products and food by tracing back to their production stage is expected to contribute to the promotion of export. For this reason, in food distribution the MAFF will promote the development of data linkage systems to ensure traceability necessary to accommodate export conditions or for other purposes. In addition, different systems do not use the same data form, terminology, etc. which could hinder data linkage. Therefore, in order to ensure the interoperability and portability of agricultural data between systems, the MAFF will proceed with the development of guidelines for the standardization of data items, various names, and other details, as well as promoting the dissemination and awareness of those guidelines. Furthermore, the MAFF will proceed with the promotion of the development of an open API to make agriculture-related

information publicly available in formats that allow secondary use (i.e., conversion to open data) and to realize data linkage across borders between different agricultural machinery manufactures or different systems.

In the livestock industry, the MAFF will develop a system which provides support to allow many management units to perform advanced livestock management and to make business decisions by utilizing data, through: integrating production-related information from across the country, including data obtained from ICT and other equipment, and making the integrated information available for direct utilization by motivated livestock management units; and providing guidance from producer organizations, private companies, etc. on methods of data analysis and utilization.

Furthermore, in the forestry sector, the MAFF will promote data utilization in managing forest resources and taking countermeasures against disasters or bird and animal damage, among other things. In the fisheries sector, the MAFF will promote the use and utilization of environmental data, such as seawater temperature and tidal current data, and market data.

3. Creation of intellectual property

- (1) Development of an environment for promoting the creation of intellectual property in the agriculture, forestry and fisheries sector

To expand export and strengthen the competitiveness of agriculture, it is important to develop agricultural products with new quality characteristics, including new plant varieties, and to develop new technologies to improve productivity, such as Smart Agriculture.

As for new plant varieties, it is important for the vitalization of local agriculture to firmly support the formation of production areas by protecting intellectual property in new varieties in which Japan has an advantage. Doing so is likely to eventually contribute to the creation of needs for Japanese agricultural, forestry and fishery products and food in overseas markets. Japanese excellent varieties are popular overseas and are a source of international competitiveness. A new plant variety is actually cropped following its development and, after a certain period of time during which production areas are formed and the variety is branded, the variety will be accepted in the market. Thus, it takes a long time from a new plant variety's development until its penetration into consumers.

The number of variety registration applications in Japan has recently dropped significantly, from the peak of 1,533 applications in 2007 to 784 applications in 2019. If this continues, we will not be able to exclude the possibility that reduced capabilities to develop varieties will affect the competitiveness of Japanese agriculture. For this reason, the MAFF will promote efforts to improve the development capabilities of the National Agriculture and Food Research Organization (NARO), local governments, and private companies. In addition, based on the needs of private companies and others, the MAFF will collect, conserve, provide, and otherwise handle plant genetic resources in Japan and abroad, and will develop a network

that allows the integrated management of genetic resource information. Furthermore, the MAFF will promote the development of an environment that allows Japan to smoothly obtain and use overseas plant genetic resources.

In addition, the promotion of Smart Agriculture requires the innovative development of technologies, such as agricultural machinery or data analysis systems utilizing robots, AI or IoT, or the creation of innovation. These technologies are essential in strengthening the competitiveness of agriculture. Research and development must be promoted based on the needs of the front line of the agriculture industry and by integrated efforts of government, industry, academia, and the front line of the agricultural industry, through cooperation among NARO, public research institutes, universities, and private companies.

(2) Intellectual property management at public research institutes

In research and development, it is important to promote the research and development activities after sharing among the persons involved an ultimate vision that the research results will be implemented in the front lines and will bring benefits to society. Back casting from the ultimate vision would make it clearer to whom and how the research results should be disseminated, among other things. The development of excellent new varieties leads to increase in the income and productivity of producers who are users of the new varieties. It is thus important to create an environment that allows continuous research and development activities by public research institutes. The promotion of future research and development focused on new technologies will be based on the basic notion that “research results are worthwhile only if utilized in such places as the front lines of the agriculture, forestry and fisheries.” Based on this notation, the social implementation of research results will be promoted effectively and efficiently by developing, from the planning or designing stage of research and development, intellectual property strategies that are effective in commodification and commercialization, from such perspectives as who are the appropriate persons to utilize the research results under what appropriate conditions, and by what appropriate method the research results should be protected and utilized, such as by acquiring rights in them, or keeping them secret, or putting them in the public domain.

As to intellectual property rights in research results, it is important to promote strategic licensing in Japan and abroad. With respect to the utilization of research results, the MAFF will provide advice and guidance to enhance the intellectual property management at research institutes, including prefectural public research institutes, in order to ensure that the most appropriate method will be employed from the viewpoint of accelerating the giving back to society through success in business, with a view to a wide range of choices such as: acquiring rights in, or keeping secret, or putting in the public domain, the research results upon their invention; or releasing patents or other intellectual property in, or granting an exclusive license to, the research results after acquiring rights in them. The MAFF will also promote strategic

licensing not only in Japan but also abroad, with an eye on the promotion of export. Furthermore, the MAFF will strive to enhance the awareness among such persons as researchers at public research institutes by improving manuals and other materials for appropriate intellectual property management.

4. Traditional intellectual property

The agriculture, forestry and fisheries and rural areas contain various types of intellectual property, including cultivation techniques, plant varieties, products rooted in the area, and cultures traditionally passed on. However, most of the relevant intellectual property systems appear to have not been made full use of, with those items of intellectual property seeming to be underappreciated. Efforts should be promoted that contribute to improved efficiency and reduced cost of agriculture, through the improvement of farm fields, the introduction of large agricultural machinery and latest equipment, and the accumulation and intensification of agricultural land. On the other hand, it is important to obtain economically proper evaluation of distinctive local cultivation methods that have been continuously handed down from old times, or agricultural, forestry and fishery products rooted in native varieties, or local resources such as sceneries and cultures of rural areas, and to connect this evaluation to the improvement of the income of agriculture, forestry and fisheries businesses and rural areas at large.

- (i) Distinctive local agriculture, forestry and fishery products and food, (including cultivation, manufacturing, and storage techniques and native varieties)

In the past in Japan, unique vegetables and other products were produced in many parts of the country. Then, out of the necessity to steadily produce standardized vegetables and other products, F1 varieties and other improved varieties have spread. Under these circumstances, some voice a concern that varieties may become uniform and traditional varieties may disappear. On the other hand, a trend has arisen that rediscovers the existence and appeal of traditional vegetables, backed by, among other things, the registration of “Washoku, traditional dietary cultures of the Japanese” as a UNESCO intangible cultural heritage in December 2013, and consumers’ needs for diversity. With their high added value, traditional vegetables can contribute to the local economy despite the small production volume of each vegetable. For this reason, it is effective to vitalize local agriculture through promoting traditional vegetables and other local products by constructing a cycle in which persons involved work together to inherit tradition and pass it on to consumers.

There is also a risk that due to aging or labor shortage in the local area, producers of local traditional foods or food ingredients decrease in number, resulting in gradual losses of local traditional foods. These appealing foods may be accepted in overseas markets, and it is important to pass down products of small businesses.

In order to deal with this situation, it is necessary to promote branding by utilizing GIs and other types of intellectual property and to disseminate information on the characteristics of products to reach agriculture, forestry and fisheries businesses, processors, distributors, and consumers. To this end, the MAFF will continue to improve the contact points for consultation services for registration applications filed under the GI system and to disseminate, and raise and increase awareness of, the GI protection system, in order to promote the utilization of the GI protection system for agricultural, forestry, fisheries, food, and other products. The MAFF will also promote the development and dissemination of excellent varieties and advanced production technologies that meet the needs of consumers and users, by using excellent varieties and advanced production technologies in which Japan has an advantage. At the same time, the MAFF will promote the collection, storage, and provision of useful genetic resources at Japanese gene banks, by improving or setting up databases for traditional varieties in Japan managed by public research institutes.

In addition to the above, the MAFF will continue to promote the “Cooking Masters” program, which grants awards to excellent chefs who have contributed to the spread and development of Japanese “food” and “dietary culture” and have made efforts to cooperate with agriculture, forestry and fisheries businesses, food companies, etc. in producing distinctive local agricultural, forestry, fisheries, food, and other products.

(ii) Local intellectual property such as sceneries and cultures of rural areas

Inviting inbound demand to rural areas, which are best places for Japanese food and dietary culture, contributes not only to increasing the number of foreign tourists to Japan but also to a virtuous cycle that further increases the amount spent during their trips and expands the export of agricultural, forestry, fisheries, and other products. For this reason, the MAFF will improve the content of attractive foods and eating experiences by continuing to promote the SAVOR JAPAN program, which certifies key areas attracting foreign tourists to Japan by their diverse foods and the underlying agricultural, forestry and fisheries, and by their traditional cultures, among other things, and the “Eat! Meet! Japan Project” which creates an environment that allows foreign tourists to Japan to re-experience Japanese food after their return to home countries. At the same time, the MAFF will increase the utilization of intellectual property by enhancing its cooperation in the multilingual portal site “Taste of Japan,” which is designed to disseminate information on Japanese food and dietary culture. As for the dissemination overseas of information on the attractiveness of Japanese food and dietary culture, effective measures will be taken from three viewpoints: developing and securing human resources to work on the dissemination of Japanese food and dietary culture; expanding and utilizing points through which information is disseminated, such as Japanese food ingredient supporter shops; and taking advantage of global events and other opportunities that are effective in disseminating information. These measures will be

connected to an expansion of inbound demand and demand for Japanese food ingredients, coupled with the dissemination of Japanese food and dietary culture. Furthermore, the MAFF will work together with relevant government agencies to promote the evaluation, visualization, and dissemination of the value of *washoku* as a cultural asset and to promote such efforts as the research of, and the compilation of a database of, regional traditional foods.

With respect to foreign tourists to Japan, the MAFF will increase their interest in Japanese food by such means as disseminating information on Japanese food not only as meals but also by combining Japanese food with the underlying agriculture, forestry and fisheries, or the underlying culture, history or other factors, or with various stories or experiences, such as cultures, arts, sports, and so on that the locals take pride in, or by providing farm stay experiences. These measures will also be connected to an expansion of the consumption of Japanese food ingredients by these tourists after their return to home countries.

The MAFF will comprehensively promote the vitalization of the local economy and promote the agriculture, forestry and fisheries and the underlying rural areas, by supporting local efforts that utilize, and the branding of, local intellectual property such as sceneries of rich nature, rice terraces, etc., traditional culture, and local cuisine, from the viewpoint of protecting and passing down local resources such as sceneries and traditional cultures. The MAFF will also promote such efforts as adding high added value to local resources, including Rural Innovation (i.e., an initiative to discover and refine a local resource with utilization potential from a rural area and to make an unprecedented combination of the local resource and something from other sector). Furthermore, the MAFF will promote the improvement of the environment towards the achievement of the SDGs in rural areas, so that rural areas are able to work on the creation of a “regional circular and ecological sphere,” where each area forms an independent decentralized society and where different areas support each other by complementing the local resources of each other, by such means as constructing local economic circulations utilizing local resources. In doing so, in light of the fact that the value and appeal of rural areas have been reappreciated in Japan and abroad, the MAFF will promote measures with the participation of a wide range of parties, including not only the residents of the local area but also its related population. Regarding the Globally Important Agricultural Heritage Systems and the Japanese Nationally Important Agricultural Heritage Systems, both of which are intended to certify sites that practice traditional agriculture, forestry and fisheries, the MAFF will continue to promote certification by these systems and will also work on increasing public awareness of these systems, because they are able to effectively disseminate the appeal of rural areas to people in Japan and abroad.

III. Directions of Intellectual Property Policy Necessary for Agriculture, Forestry and Fisheries in the Global Era

(1) Necessity of open and close strategy

With the expansion of the export of agricultural, forestry and fishery products and food and with the expansion of overseas business development, businesses in overseas markets diversify. For this reason, we should not only protect intellectual property that serves as a source of profit to Japan but should also consider measures to expand businesses by effectively utilizing intellectual property.

In order to maximize profit by utilizing intellectual property, it is necessary to classify intellectual property into intellectual property to be opened by individual businesses and that to be protected as secrets, and to introduce an intellectual property strategy for businesses that effectively utilize intellectual property. The MAFF must support the development of human resources for these businesses. For instance, in the open and close strategy, you decide whether you open certain intellectual property to others or keep it closed, depending on how you will receive income within the production area or at your company. This strategy allows you to construct a business model in which you: keep certain intellectual property in the core area, which serves as a source of income, confidential (closed) as a trade secret; license the other intellectual property under trademark, patent, breeder's or other rights; and standardize these intellectual property rights to form a platform, on which you ensure your advantage over businesses following you by keeping them subordinated to you.

At private companies, setting up a department responsible for giving directions on this open and close strategy (e.g., an initiative underway by the Ministry of Economy, Trade and Industry to have companies appoint "Chief Standardization Officers" [CSO] who are responsible for giving directions on standardization) should be considered in the agriculture, forestry, fisheries, and food sector as well.

In this regard, one should note that intellectual property once opened cannot be closed.

(2) Supporting businesses making money by utilizing intellectual property

As part of the export promotion policy implemented by the MAFF, support should be provided to businesses making money by utilizing intellectual property.

To do this, ways to utilize intellectual property overseas must be considered in detail for different situations, while exercising caution not to negatively affect domestic agriculture, forestry and fisheries businesses.

(i) Using intellectual property as a means to control overseas business activities

One effective way to secure profit is to utilize a local subsidiary or other business unit in the export destination country to provide raw material production, processing, sales, and other services as an extension of export. Zespri of New Zealand has obtained breeder's rights in Japan to prevent unauthorized cultivation. Zespri has also granted licenses to

Japanese farmers and has them produce kiwifruit under the Zespri brand during New Zealand's second crop season. This allows Zespri-brand kiwifruit to be shipped in Japan all year round. Thus, controlling partners' overseas business activities by utilizing intellectual property is one effective way to make money by utilizing intellectual property.

Since Japan's territory is long in a north-south direction, a similar business model is possible that allows year-round shipping of the product through corporation between different production areas in Japan, by utilizing breeder's rights or other intellectual property.

(ii) Securing income from licensing

Another way is to grant nonexclusive licenses to overseas businesses and receive license fees. When granting non-exclusive licenses, the licensor may limit the overseas use of the intellectual property to a business, in which case the licensor can expect that the business will monitor unauthorized disclosure of the intellectual property on behalf of the Japanese licensor. On the other hand, cases have been seen where the licensor has granted to overseas producers licenses to cultivate but has not eventually secured sufficient income. It is important to secure income from licensing, in regard to which approaches taken overseas should also be looked at, including, for instance, collecting license fees from proceeds from harvests instead of at the seed or seedling stage. In addition, to prevent licensees' business activities from competing against the licensor's business, caution should be exercised by, for instance, refraining from executing a license agreement with any business in a country from which the product may potentially be exported to the export destination country to which the product is exported from Japan.

One should note that once intellectual property rights have been obtained to protect the intellectual property, license fees will usually be received. Since this is presumed to be a totally new point of view for users of intellectual property in the agriculture, forestry and fisheries sector, these users' awareness must be raised by providing specific viewpoints in order to facilitate their efforts.

Another thing, which shares an aspect with the topic discussed in (i) above, is that in some cases overseas licensing may be difficult to handle for a small- or medium-sized seed and plant supplier or an individual breeder, as it involves such tasks as overseas intellectual property management. Overseas, a business model has been established in which the business collectively manages, and grants overseas licenses to, breeder's rights and other intellectual property of small- and medium-sized seed and plant suppliers or other relevant entities. For instance, Royalty Administration International (RAI) of the Netherlands is an organization that monitors and takes legal actions against infringements on behalf of breeder's right holders who have difficulty handling infringements. If an infringement is found as a result RAI's monitoring (on-site visit) of a licensee, RAI collects information that can be used in litigation. For this reason, most infringements are resolved before litigation is filed. However, RAI is available for representation in litigation cases in cooperation with

attorneys and other professionals.

In Japan, an IP fund management company IP Bridge, Inc. acquires unused patents from Japanese or U.S. private companies, universities, etc. and provides support for licensing and commercialization. However, in the case of breeder's rights, it is difficult to say that any similar mechanism is in place in Japan. On behalf of the national government, the MAFF will consider supporting the introduction of this kind of business model to Japan.

(3) Protection of trade secrets as sources of values

Utilizing intellectual property rights in Japan and abroad is a means for Japanese businesses to make money. In doing so, truly essential information must be managed as trade secrets to prevent leakage.

Part of the important intellectual property that belongs to the Japanese agriculture, forestry, fisheries, and food industries consists of agricultural techniques and know-how. These techniques are patentable, and allow their owners to obtain patent rights overseas and to make profits by utilizing the patents. On the other hand, the patent system publishes technical information, making the owners no longer able to keep their techniques and know-how secret.

In the agriculture, forestry and fisheries sector, many types of information are kept secret from outside parties, such as production techniques and know-how, and parental varieties of an F1 progeny. On the other hand, agricultural cultivation frequently takes place outdoors, which makes it difficult to objectively judge if something is managed as a secret. Similarly, at the production committee of an agricultural cooperative, several members share trade secrets but have little awareness of their nature as such. For these reasons, it is difficult to say that the frameworks for the protection of trade secrets have been made full use of.

In order to protect production know-how and other intellectual property, which may be likened to a national treasure, by promoting the utilization of the frameworks for protecting trade secrets in the agriculture sector, standards for secrecy management necessary for trade secrets in the agriculture sector should be considered.

(i) Considering measures to protect know-how and other intellectual property in the agriculture sector using trade secret protection or other protection

In order to appropriately protect and utilize such intellectual property as parental varieties of an F1 progeny, excellent know-how of skilled farmers and other workers, and orchard tree forms embodying pruning techniques, the MAFF will consider measures to protect techniques, know-how, and other intellectual property in the agriculture sector, including utilizing trade secret protection under the Unfair Competition Prevention Act. The results will be compiled in a format that allows easy reference by people at production sites, such as by demonstrating management methods based on trade practice and characteristics specific to the industry. Through these actions, the MAFF intends to foster awareness of

people at, and to strengthen measures for, production sites.

In addition, with respect to agriculture, forestry and fisheries businesses, agricultural technology leaders and the like, the MAFF intends to put in place a support system for managing and utilizing techniques, know-how, etc. in cooperation with the INPIT and other supporting organizations and agencies.

(ii) Prevention of leakage of know-how in overseas expansion

With an eye toward export expansion, the Japanese agriculture, forestry, fisheries, and food industries have, as with other industries, shown movements of overseas expansion of related businesses, such as production, processing, and sales, in addition to export of goods. In order to prevent this export expansion from resulting in leakage of know-how or other intellectual property as a source of the international competitiveness of Japanese agricultural, forestry and fishery products and food, it is important to take firm measures to prevent such leakage. To this end, the MAFF will take the following specific measures to prevent the risks involved in overseas expansion, in cooperation with relevant government agencies and JETRO and other relevant organizations: breaking down overseas expansion into patterns; summarizing points to note from the viewpoint of securing national interests; based on these points, summarizing what appropriate contracts for protecting intellectual property or know-how are like; and, after taking these measures to prevent leakage of know-how, considering support measures to promote overseas expansion.

In addition, when agriculture, forestry and fisheries businesses or entities aim for overseas expansion, the MAFF will, in cooperation with the INPIT and other support organizations and agencies, promote support as to the acquisition of rights in intellectual property and as to methods of managing and utilizing know-how, according to the relevant overseas business developments. Care should be exercised to ensure that reverse import to Japan of agricultural, forestry and fishery products produced overseas will not negatively impact the production activities of agriculture, forestry and fisheries businesses in Japan.

(4) Promotion of domestic standardization for export

The national government has promoted market-oriented production to expand the export of agricultural, forestry and fishery products and food. To achieve this, the MAFF needs to promote production accommodating overseas regulations and needs, and needs also to revise domestic standards.

For instance, some say that since sales overseas do not require the setting of detailed production standards as are required by Japanese consumers, standards for sales overseas should be those that would contribute to reduction of the burden on producers or to the overseas promotion of Japanese products.

Others say that since export expansion requires measures from the aspect of logistics, such as for reducing transport cost by preventing packing materials from collapsing or by

preventing loss or quality deterioration of the content, standards should be set for packing materials consistent with the standards for containers and pallets or for skills to operate and manage transport, such as temperature management during transport.

From these viewpoints, setting standards that will contribute to the rationalization of production, distribution, and sales for export purposes by utilizing JAS and JIS standards will lead to market oriented export, in which products of a quality required by export destination countries will be sold in large lots. This setting of standards for export will also contribute to the rationalization of the standards for production, distribution, and sales for domestic purposes.

(5) Creation of intellectual property with a view to export and overseas markets

To develop overseas markets, it is also important to develop intellectual property or content targeted at overseas markets. For instance, in Korea, strawberry varieties with a firm core were developed specifically for export purposes, to prevent damage to the shape of the fruit during transportation, allowing an extended sales period.

Then, to allow an extended sales period, new technologies such as storage and transport technologies are required.

As a prong of the technology development in agriculture, forestry and fisheries policies, efforts should be made to develop technologies and varieties designed for use in the development of overseas market.

(6) Creation of values matching new agriculture, forestry and fisheries (foodtech)

In response to the increase in global demand for food and to the diversification of dietary demand, it is necessary to provide a stable food supply by effectively utilizing the limited resources on Earth. Under these circumstances, the development of foodtech, which combines food and advanced technology, has been hoped for in addition to improving productivity by technological innovation. Examples of foodtech include research and development of meat alternatives containing soy or other plant proteins, and genome edited crops. Foodtech not only helps to solve such social issues as hunger but also has a potential to change future agriculture, forestry and fisheries.

Foodtech is a key technology in developing a next-generation food system which will realize, in ten to twenty years' time, a complete recycling-based food supply or high dietary QOL and will allow people to continue palatable, cultural, and healthy diet.

With the innovation of digital technology, biotechnology, and other technologies which used to have only tenuous relationships with food, recent years have seen the emergence of ventures working on the development of new food businesses by using these emerging technologies, which have a potential to develop into technologies that form the core of the agriculture, forestry, fisheries, and food industries in the future.

Based on this situation, it is important to create new markets by promoting research and development and social implementation in the foodtech sector, which has not been covered by agriculture, forestry and fisheries measures in the past, in order to work on the creation of values related to foodtech from the viewpoint of long-term industrial development. In particular, support for technology development at seed stage and assistance with working funds for subsequent commercialization must be considered in cooperation with relevant agencies involved in the support for start-up, in terms of, among other things, a new industry-academia-government collaborative scheme for vitalizing private investment, the supply of risk money to ventures, and support for commercialization of technologies owned by research institutes and universities.

Towards the establishment of a technology base that will form the core of the foodtech sector, an industry-government-academia initiative will be promoted to facilitate the solution of the issues in the cooperative area of the foodtech sector and to support the development of new markets, through such means as identifying overseas trends in such matters as the formation of rules on safety or on new production or processing technologies, and fostering consumer understanding of new technologies. This sector has not yet undergone international standardization to a large extent. It is important that Japan strategically promote standardization and will also promote international standardization in the future and become a rule maker.

(7) Creation and standardization of intellectual property that deals with SDGs and other global challenges

The Sustainable Development Goals (SDGs) adopted at the 2015 UN summit are a major challenge common to mankind. The agriculture, forestry, fisheries, and food sector do face major challenges too, such as zero hunger, securing a healthy life, sustainable production and consumption, ecosystem protection, and conservation of natural resources, among others.

In light of the decreasing number and aging of producers, global warming and other climate changes, the COVID-19 pandemic and so on, the MAFF has been considering the “Green Food System Strategy” as a new strategy to realize, through innovation, a balance between improvement in productivity and sustainability of the food, agriculture, forestry and fisheries. This strategy aims to realize CO₂ zero emission in agriculture, forestry and fisheries, reduce the usage of chemical pesticides and chemical fertilizers, expand the area of organic farming, and procure sustainable imported raw materials, among others. Globally, these challenges have been considered unexplored because of their lack of economic rationality. While their solution by innovation is hoped for, they are likely to offer new business opportunities, whose realization will involve, as key factors, the creation of new intellectual property and standardization towards its use.

Efforts are needed to create values towards the achievement of the SDGs, such as, for

instance, developing earth-friendly pesticides and fertilizers, and other goods and technologies and developing varieties and production techniques towards the solution of hunger issues.

To promote these efforts for the SDGs in the front lines, standardization can serve as a powerful tool, such as the Organic JAS and the JAS for “Chicken eggs and meat by sustainable system” which utilizes domestic self-supplied feed (rice for animal consumption) and a wide range of breeding resources (domestic chicken breeds), among others. We should promote the introduction of JAS and JIS standards for promoting the introduction of techniques to the front lines, such as environment-friendly production methods and techniques for reducing food loss.

Furthermore, private businesses are expected by stakeholders to accommodate social needs like the SDGs through technological innovation, in addition to seeking sales and profits as before. In fact, ESG investments have been made in programs and initiatives to develop technologies for sustainable industrialization that gives consideration to the environment (i.e., climate change, biodiversity, etc.), society (i.e., local community, health, etc.), and so on.

Developing technologies that allow sustainable business activities giving consideration to the environment and other factors, is also useful in increasing the competitiveness of the Japanese agriculture, forestry, fisheries, and food industries. Technology development programs of a highly public nature, such as actions against invasive alien species and the maintenance of ecosystem services, are led by public research institutes. On the other hand, programs aiming at the development and subsequent social implementation of environment-friendly production systems should be carried out by promoting support to ventures or other entities with innovative technology.

IV. Development of Human Resources

There is concern that even though technologies and other resources involved in agricultural production can be intellectual property, producers may be poorly interested in the protection and utilization of intellectual property. It is important to first expand the interest among businesses of agriculture, forestry and fisheries and agricultural technology leaders in intellectual property.

The MAFF will promote the dissemination to, and awareness among businesses in agriculture, forestry and fisheries and agricultural technology leaders of: a business model in which intellectual property is protected and utilized as a source of the competitiveness of Japanese agriculture, forestry and fisheries; and strategic intellectual property management supporting the business model. The MAFF will do this mainly through the consultation and support systems, including the INPIT’s IP Comprehensive Support Counters, which have been set up at all prefectural governments through the cooperation between the MAFF and the Japan Patent Office which started in 2016, as well as such specialist consultation counters as the Trade Secrets and Intellectual Property Strategies Consultation Counter and the Overseas Operation

Intellectual Property Support Counter, while cooperating with producer organizations as well.

In addition, the consultation systems for matters related to intellectual property will be improved and training programs on intellectual property will be provided to young extension instructors, both through cooperation between agricultural management consultation centers or other local agricultural guidance organizations and the IP Comprehensive Support Counters. The training programs for extension instructors intended to enhance intellectual property management will also be improved, by such means as creating learning content about intellectual property in the agriculture, forestry and fisheries sector. Regarding the Plant Variety Protection and Seed Act, the dissemination and awareness programs for extension instructors, university students, etc. will continue to be provided. As for the Act on Improvement and Increased Production of Livestock, the national government and the prefectural governments will continue to provide training and dissemination and awareness programs for livestock artificial inseminators and others who play an important role in the management of wagyu beef genetic resources, in order to ensure that they will be able to obtain techniques and knowledge necessary to appropriately manage wagyu beef genetic resources as intellectual property. Furthermore, in order to reinforce the support systems for intellectual property in the agriculture, forestry and fisheries sector, the MAFF will deepen the cooperation with attorneys, patent attorneys, administrative scriveners, and other related professionals, starting with the expansion of efforts such as the joint holding of various seminars. Together with these efforts, the MAFF will improve the IP educational programs for agricultural, forestry and fisheries high schools, university students, etc. in order to develop next-generation human resources who are familiar with intellectual property in the agriculture, forestry and fisheries sector. As it stands, even though university agriculture departments are forums of creation of intellectual property in the agriculture, forestry and fisheries sector, many faculty members, researchers, and other persons involved still consider it good to disseminate intellectual property of their creation to the front lines unconditionally without charge, and are negative about applying the open and close strategy to intellectual property in the agriculture, forestry and fisheries sector. For this reason, it is necessary to instill, in the front lines of education, the significance of appropriately protecting and utilizing intellectual property in the agriculture, forestry and fisheries sector, including the fact: that in these sector, as in other sector, this appropriate protection and utilization of intellectual property helps to disseminate the intellectual property in ways that allow it to work most effectively on the front lines of these sector; that the interests of Japanese agriculture, forestry and fisheries businesses which produce genuine products are protected by protecting these products from counterfeit goods and other infringing products arising overseas or elsewhere after the intellectual property has been highly appreciated; and that in the global era, this protection will be a source of the international competitiveness of Japanese high quality, high-value added agriculture, forestry and fishery products.

Furthermore, since it is essential for the MAFF personnel to have knowledge of business

models and knowledge of strategic intellectual property management underlying these business models, as well as flexible mindset, in implementing various measures and programs, the MAFF will continue to provide training programs for this purpose. In addition, in order to develop specialist human resources from a long-term perspective for the GI system and the plant variety registration system, which are intellectual property systems under the jurisdiction of the MAFF, the MAFF will promote continuous personnel exchange programs with the Japan Patent Office and the NARO's Center for Seeds and Seedlings. The MAFF will also continuously participate in international discussions at the World Intellectual Property Organization (WIPO) and the UPOV, in order to develop international human resources from a long-term perspective, so that measures necessary for Japan will be taken. In the field of standardization, the MAFF will actively develop human resources in this field in cooperation with the Ministry of Economy, Trade and Industry, which has already actively promoted measures for standardization through personnel exchanges with the ISO and by providing training to human resources for the FAMIC.

On the other hand, situations have been seen where the national government, universities, research institutes, organizations or other parties concerned have defenselessly published actual data on farming in manners that would allow specific corporations to be identified. It is important to reconsider this culture itself in which it is considered natural to totally open this kind of agricultural data, and to foster an awareness that information with economic value should be fairly paid for, with an eye on the open and close strategy. The MAFF will promote awareness programs in corporation with relevant agencies in order to ensure that this is understood by those parties concerned.

V. Promotion of Consumers' Understanding

Agricultural, forestry and fishery products and food are sold not at the cost incurred in their production but at a price including the cost incurred in creating breeder's rights and other intellectual property rights. However, it is said that consumers have poor awareness of this fact. With the expansion of e-commerce markets at an accelerating pace, new distribution channels between individuals through flea market apps or other means are expanding, in addition to the provision of goods and services to consumers by companies. In cases where an individual sells goods and services to consumers, the individual could sell them under arbitrary brand names. It has been pointed out that this makes it difficult for brand owners to control pricing, brand image, and quality management that need to be controlled in brand management, and that this may lead to rights infringements.

As for copyrights including those in comic books and music, people are becoming aware these days that continuous creative activities are made possible by consumers' payment of appropriate costs incurred in creating the intellectual property rights. Creating the same awareness of intellectual property in agricultural, forestry and fishery products and food among consumers is expected to lead to the proper valuation of intellectual property in the agriculture,

forestry, fisheries, and food sector, such as new plant varieties and GIs, and to lead to the prevention of rights infringements as well. For this reason, the MAFF will work on PR and awareness programs so that consumers in Japan and abroad understand the intellectual property systems and properly appreciate intellectual property in the agriculture, forestry, fisheries, and food sector, such as the new plant variety protection system and the GI protection system.

With respect to overseas consumers, increasing awareness of Japanese GI Products and other products through PR activities is expected to be effective in preventing rights infringements through export expansion or by counterfeit goods and other infringing products.

Protecting intellectual property owned by agriculture, forestry, fisheries, food, and other businesses by raising consumer awareness of intellectual property in the agriculture, forestry, fisheries, and food sector will not only facilitate the formation of production areas or the branding of products and protect the interests of agriculture, forestry, fisheries, food, and other businesses, but will also lead to continuous production and supply of Japanese excellent agricultural, forestry and fishery products and food. This is beneficial to domestic consumers as well, since they will have a wider choice of agricultural, forestry and fishery products and food.

Accordingly, the MAFF will conduct awareness programs not only for agriculture, forestry, fisheries, food, and other businesses but also for consumers, in order to make consumers fully understand the importance of protecting intellectual property.

<Related Information>

Information on II

- The Strategy for Agriculture, Forestry and Fishery products and Food Export Expansion:
https://www.maff.go.jp/j/shokusan/export/e_action/attach/pdf/index-5.pdf
- Amendment of the Plant Variety Protection and Seed Act:
<https://www.maff.go.jp/j/shokusan/shubyoho.html>
- Management and protection of livestock genetic resources:
https://www.maff.go.jp/j/chikusan/kikaku/kachiku_iden.html
- GI protection system:
https://www.maff.go.jp/j/shokusan/gi_act/index.html
- Contract Guidelines for AI and Data in the Agriculture Sector:
<https://www.maff.go.jp/j/kanbo/tizai/brand/keiyaku.html>
- Intellectual Property in Agriculture, Forestry and Fisheries Research:
<https://www.affrc.maff.go.jp/docs/intellect.htm>
- Smart Agriculture:
<https://www.maff.go.jp/j/kanbo/smart/attach/pdf/index-158.pdf>
- Smart Agriculture Promotion Comprehensive Package:
<http://www.maff.go.jp/j/kanbo/smart/package.html>
- WAGRI and Smart Food Chain:
https://www.maff.go.jp/j/kanbo/smart/pdf/wagri_gaiyou.pdf
- Provision of open API in the agriculture sector:
<https://www.maff.go.jp/j/kanbo/smart/openapi.html>
- JAS (Japanese Agricultural Standards):
<https://www.maff.go.jp/j/jas/index.html>
- JAS for Management of Gluten-Free Rice Flour Manufacturing Process
<https://www.maff.go.jp/j/seisan/keikaku/komeko/nongurujas.html>

Information on III

- Green Food System Strategy
<https://www.maff.go.jp/j/kanbo/kankyo/seisaku/midori/team1.html>

List of the Members of the “Ministry of Agriculture, Forestry and Fisheries
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Toshiya Watanabe: Professor, Institute for Future Initiatives, University of Tokyo (Chairperson)

(Japanese syllabary order; titles omitted)