[Definitions]

1. Basic statistical terminology

(1) Classification of agriculture management entities (definitions used since the 2005 Census of Agriculture and Forestry)

Terminology	Definition
Agriculture management entities*	An establishment that either performs agricultural production directly or on contract and fulfills one of the following conditions: (1) manages 30 ares or more cultivated land, (2) possesses a planted area or cultivated area or a number of livestock being raised or delivered that is equal to or greater than a predetermined standard (e.g. 15 ares for outdoor grown vegetables, 350 square meters for vegetables grown in facilities, one cow), (3) accepts farm work on contract. (Censuses from 1990 to 2000 regard agriculture management entities as the combination of commercial farm households, agricultural holdings other than a farm household, and agricultural service enterprises.)
Family management entities	Individual management entities (farm household) or a single-household corporation (a farm household that is incorporated).
Organized management entities	Agriculture management entities that do not fall under family management entities.
Single farming entities	Entities whose main agricultural product sales account for more than 80% of income from all agriculture product sales.
Semi-multiple farming entities	Entities whose main agricultural product sales account for 60% to less than 80% of income from all agriculture product sales.
Multiple farming entities	Entities whose main agricultural product sales account for less than 60% of income from all agriculture product sales (excluding the management entities without any sales).

*"Agriculture management entities" is described as "Farms" in this annual report.

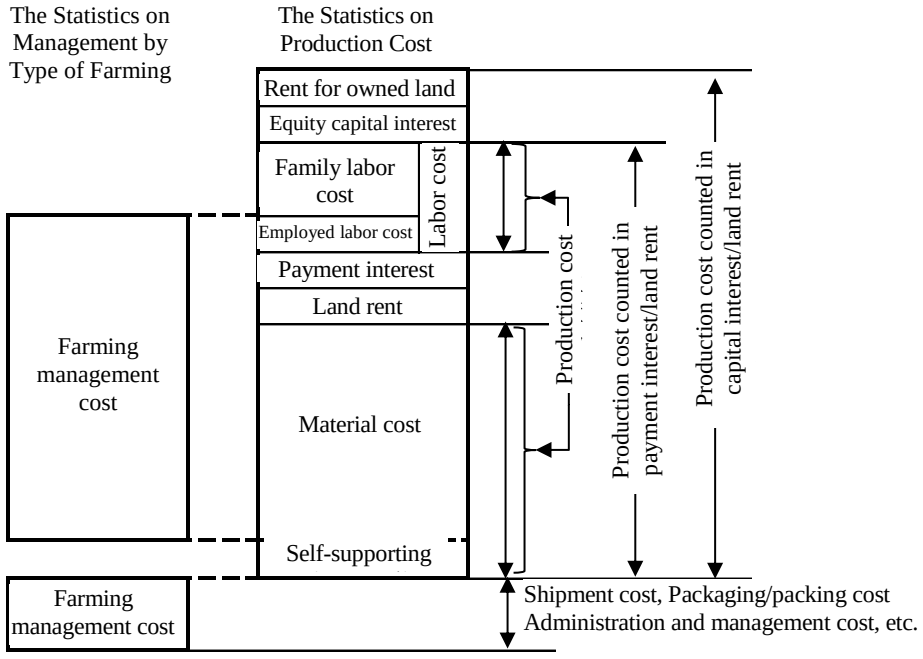
(2) Classification of farm households (definitions used since the 1990 World Census of Agriculture and Forestry)

Terminology	Definition
Farm household	Household engaged in farming and managing cultivated land of 10 ares or more, or earning more than 150,000 yen per year from sales of agricultural products.
Commercial farm household	Farm household managing cultivated land of 30 ares or more, or earning more than 500,000 yen per year from sales of agricultural products.
Business farm household	Farm household whose main source of income (50% or more) is farming, and which possess at least one family member under the age of 65 who is engaged in self-employed farming for more than 60 days a year.
Semi-business farm household	Farm household whose main income (50% or more) is from sources other than agriculture and which possess at least one family member under the age of 65 who is engaged in self-employed farming for more than 60 days a year.
Side-business farm household	Farm household without any members under the age of 65 engaged in self-employed farming for more than 60 days a year (farm households other than business and semi-business farm households).
Full-time farm household	A farm household without family members who are part-time farmers.
Part-time farm household	A farm household with one or more members who are part-time farmers.
Farm household earned main income from farming	A part-time farm household gaining more income from farming than other work.
Farm household earned main income from other jobs	A part-time farm household gaining more income from work other than farming.
Non-commercial farm household	A farm household managing cultivated land of less than 30 ares, and earning less than 500,000 yen per year from sales of agricultural products
Agricultural holding other than farm household	A holding other than farm household managing cultivated land of 10 ares or more, or earning 150,000 yen or more per year from sales of agricultural products.
Agricultural service enterprise	An enterprise conducting farm work on contract (including enterprise other than agricultural holding, specializing in production and sale of seedlings).
Land tenure non-farm households	A household other than a farm household possessing 5 ares or more in cultivated land and abandoned cultivated land

(3) Farm household economics

Terminology	Definition
Total income	Agricultural income + Income from agriculture-related production + Nonagricultural income + Income from pensions, etc.
Agriculture income	Gross agricultural income (total income from farming) – Agricultural expenditures (all expenses necessary for farming)
Income from agriculture-related production	Earnings from agriculture-related production (earnings from businesses such as agricultural processing, farm-inns, restaurants and tourist farms, which are related to agriculture and managed by individuals engaged in farming) - Expenditures from agriculture-related production (expenditures such as labor and material costs required for the aforementioned businesses)
Non-agriculture income	Non-agriculture earnings (e.g. earnings from independent part-time nonagricultural businesses, salaries and wages) - Non-agriculture expenses (e.g. expenses for independent part-time non-agricultural businesses, transportation expenses for commuting)
Production cost	The production cost is the total cost (combining property and labor costs) for production of farm products minus by-product values
Material cost	The material cost combines liquid goods costs (seeding, fertilizers, agricultural chemicals, heating, lighting, power and other materials costs) and depreciation costs for fixed goods (depreciable assets including buildings, automobiles, agricultural machines and production management equipment).
Land rent	The land rent for a crop subject to the survey is calculated by multiplying the actually paid farm rent by the contribution rate for the relevant crop.
Interest payment	Interest payments are classified by use of underlying loans and multiplied by a contribution rate for a crop subject to the survey to calculate the borrowed capital interest to be shouldered by the crop.
Family labor cost	The family labor cost is calculated by multiplying family working hours by an average hourly wage as computed based on wage data for business establishments with five to 29 workers in the construction, manufacturing and transportation/postal industries in the Monthly Labor Survey Report (by the Ministry of Health, Labor and Welfare).
Employed labor cost	The employed labor cost represents wages paid to workers employed on an annual, seasonal or daily basis for producing farm products. Boarding and material compensations are assessed based on market prices. The cost includes rewards paid separately from wages.
Equity capital interest	The equity capital interest is calculated by multiplying equity capital – gross capital minus debt capital – by an annual interest rate of 4%.
Rent for owned land	The rent for owned land is based on a rent for similar farmlands (having capabilities similar to the farmland for a crop subject to the survey) within the same region.

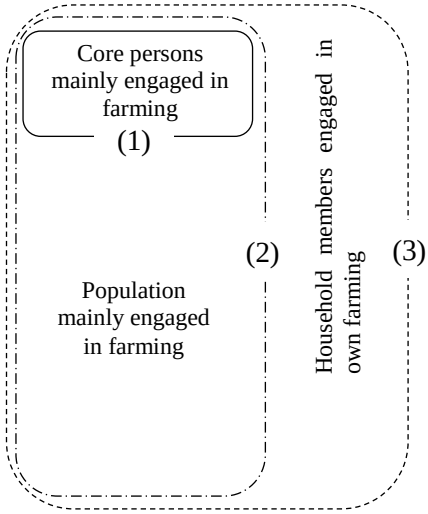
Relationship between agricultural expenditures and production cost



Note: Actually, by-product values are deducted from "production cost," "production cost counted in payment interest /land rent" and "production cost counted in capital interest/land rent."

(4) Agricultural labor by farm household members

<table>
<tr><td colspan="2" rowspan="2"></td><td colspan="4">Involvement in farming</td><td>Household member</td></tr>
<tr><td>Engaged only in farming</td><td colspan="2">Engaged in both farming and other</td><td>Not engaged in farming</td><td rowspan="3">As a rule, people who live and earn a living together
(1) Core persons mainly engaged in farming
Among household members involved in self-employed farming (population engaged mainly in farming), those who are working mainly in agriculture during regular hours.
(2) Population mainly engaged in farming
Persons engaged only in self-employed farming, or persons who are also engaged in work other than farming but spend more time engaged in farming on a yearly basis.
(3) Household members engaged in own farming
Household members 15 years old and over who are engaged in self-employed farming for more than one day per year.

- Full-time farmers
Among persons engaged in mainly farming, those who are engaged in self-employed farming for more than 150 days per year</td></tr>
<tr><td></td><td>Mainly farming</td><td>Mainly other</td><td></td></tr>
<tr><td rowspan="2">Status during regular hours</td><td>Engaged mainly in work</td><td colspan="4" rowspan="2"> 
</td></tr>
<tr><td>Other (housework and school, etc.)</td></tr>
<tr><td colspan="2">Permanently hired worker on farm</td><td colspan="5">Refers to workers hired mainly for farm management with an employment agreement (including verbal agreement) covering a period of seven months or more (including the workers hired regardless of an employment period).</td></tr>
<tr><td colspan="2">Temporary hired worker on farm</td><td colspan="5">Refers to Day and/or seasonal workers hired on a temporary basis for farm management (including mutual help among farm households (labor exchange) and assistants (labor accepted for free)), but not including the laborers employed under a partial farm work contract.
It includes cases in which workers are hired mainly for non-farm management work but engaged in farm management during the busy season, as well as those who had an employment agreement for longer than seven months but quit before reaching seven months.</td></tr>
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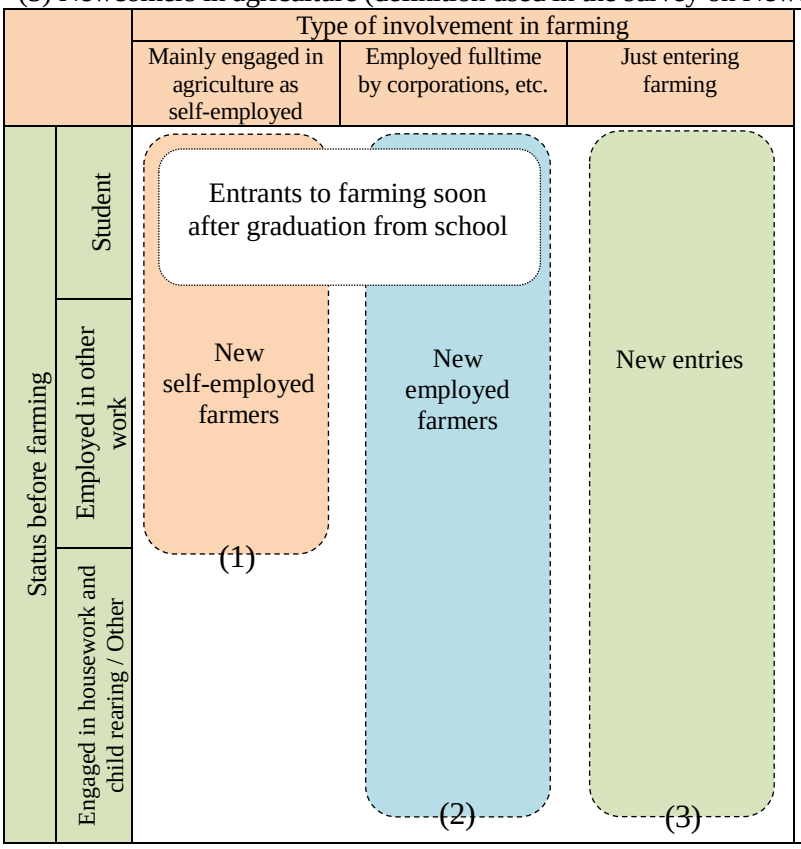
(5) Newcomers in agriculture (definition used in the survey on Newcomers in Agriculture)



Newcomers in agriculture

Defined as individuals who fulfill one of the following conditions:

(1) New self-employed farmers

Members of family management entities whose living status has changed anytime within a year of the survey date from "student" or "employed in other work" to "new graduate who has become a farmer" or "a new farmer who changed occupations".

(2) New employed farmers

Persons engaged in farming who have been hired by corporations anytime within a year of the survey date and work for their employers for 7 months a year or more.

(3) New entries

Persons responsible for farming started anytime within a year of the survey date by securing land and funds on their own, and their partners

- Entrants to farming soon after graduation from school

New self-employed farmers who have changed their status from "student" to "engaged mainly in farming", as well as new employed farmers who were recently students.

(6) Classification of agriculture area

Terminology		Definition
Classification of agriculture area		Classification of former cities, wards, towns, and villages (hereinafter referred to as "municipalities") based on fundamental conditions (e.g. the rate of cultivated land or forest land and grazing land area, gradient of farmland) that define the structure of agriculture area.
	Category	Standard index (fulfills one of the following conditions)
	Urban area	- Former municipalities where the rate of DID is 5% or more of habitable land, and which have either a population density of 500 or more or have a DID population of 20,000 or more. - Former municipalities where the rate of residential area is 60% or more of habitable land, and which have a population density of 500 or more. Regions where the rate of forest land and grazing land are 80% or more of the total area are excluded.
	Flat farming area	- Former municipalities where the rate of cultivated land accounts for 20% or more of the total area and the rate of forest land and grazing land account for less than 50% of the total area. However, areas where the total area of all paddy fields with gradients of 1/20 or more and upland fields with gradients of 8° or more account for 90% or more of the total area are excluded. - Former municipalities where the rate of cultivated land accounts for 20% or more of the total area and the rate of forest land and grazing land account for 50% or more of the total area, and where the total area of all paddy fields with gradients of 1/20 or more and upland fields with gradients of 8° or more account for less than 10% of the total area.
	Hilly farming area	- Former municipalities other than urban and flat farming area where the rate of cultivated land is less than 20% of the total area. - Former municipalities other than urban and flat farming area where the rate of cultivated land is 20% or more of the total area
	Mountainous farming area	- Former municipalities where the rate of forest land and grazing land is 80% or more and the rate of cultivated land is less than 10% of the total area.

Notes: 1) Order of priority: Urban area → Mountainous farming area →Flat and hilly farming area
2) As a rule, DID (Densely Inhabited Districts) are defined as areas where basic district units, as defined by the national census, with populations densities of 4,000 per km^2 or more are adjacent to each other and the total population of these conjoined districts is 5,000 or more.
3) Gradient refers not to the gradient of cultivated land per parcel, but to the main topographical gradient as grouped land.
4) The combination of the hilly and mountainous farming area categories is referred to as hilly and mountainous area.
5) Former municipalities are those that were classified as of February 1, 1950.

(7) Designated areas under rural promotion acts

Terminology	Definition
"Designated rural areas" under the Act for the Promotion of Infrastructure Development for Vitalization of Agriculture and Forestry in Designated Rural Areas	(Designated rural areas meet any of the first, second and third conditions, and the fourth one below) 1 Paddies on slopes with a gradient of one-20th or more account for 50% or more of the total paddy area that captures 33% or more of the total cultivated land. 2 Upland fields on slopes with a gradient of 15 degrees or more account for 50% or more of the total upland field area that captures 33% or more of the total cultivated land. 3 The ratio of forest and grazing land is 75% or more. 4 Agricultural and forested areas account for 81% or more of the total land area, or persons engaged in agriculture or forestry account for 10% or more of the population aged 15 or more, etc.
"Developing mountain villages" under the Mountain Villages Development Act	○ The ratio of forest and grazing land is 75% or more (1960 forestry census). ○ Population density is 1.16 persons per hectare or less (1960 forestry census), etc.
"Underpopulated areas" under the Act on Special Measures for Promotion for Independence for Underpopulated Areas	Underpopulated areas meet any of the first to three conditions below: 1 Meeting (1) and (2) (1) Population requirement: Any of the following is met 1) Population decline from 1960 to 1995 was 30% or more. 2) Population decline from 1960 to 1995 was 25% or more and the ratio of elderly people (aged 65 or more) in 1995 was 24% or more. 3) Population decline from 1960 to 1995 was 25% or more and the ratio of young people (aged between 15 and 29) in 1995 was 15% or less. 4) Population decline from 1970 to 1995 was 19% or more. In cases 1), 2) and 3), however, communities with a population decline of 10% or more over 25 years from 1970 to 1995 are excluded. (2) Financial capability requirement: The three-year average financial capability index between FY1996 and FY1998 was 0.42 or less, and income from public racing was 1.3 billion yen or less. 2 Meeting (1) and (2) (1) Population requirement: Meeting any of the conditions below: 1) Population decline from 1960 to 2005 was 33% or more. 2) Population decline from 1960 to 2005 was 28% or more and the ratio of elderly people (aged 65 or more) in 2005 was 29% or more. 3) Population decline from 1960 to 2005 was 28% or more and the ratio of young people (aged between 15 and 29) in 2005 was 14% or less. 4) Population decline from 1980 to 2005 was 17% or more. In cases 1), 2) and 3), however, communities with a population decline of 10% or more over 25 years from 1980 to 2005 are excluded. (2) Financial capability requirement: The three-year average financial capability index between FY2006 and FY2008 was 0.56 or less, and income from public racing was 2.0 billion yen or less. 3 Meeting (1) and (2) (1) Population requirement: Meeting any of the conditions below: 1) Population decline from 1965 to 2010 was 33% or more. 2) Population decline from 1965 to 2010 was 28% or more and the ratio of elderly people (aged 65 or more) in 2010 was 32% or more. 3) Population decline from 1965 to 2010 was 28% or more and the ratio of young people (aged between 15 and 29) in 2010 was 12% or less. 4) Population decline from 1985 to 2010 was 19% or more. In cases 1), 2) and 3), however, communities with a population decline of 10% or more over 25 years from 1985 to 2010 are excluded. (2) Financial capability requirement: The three-year average financial capability index between FY2010 and FY2012 was 0.49 or less, and income from public racing was 4.0 billion yen or less.
"Peninsula promotion measures implementation area" under the Peninsula Promotion Act	○ An area that is surrounded by sea in three directions, has lagged behind other areas in developing industrial infrastructure and a living environment due to less flatland, poor water resources and other constraints on national land resources use, covers two or more municipalities and has certain social and economic sizes.
"Remote island development measures implementation area" under the Remote Islands Development Act	○ A remote island area where measures are recognized as required to promote the independent development of a remote island playing key roles in maintaining Japan's territory and exclusive economic zone, using marine resources and conserving natural environments and to stabilize livelihoods for island residents and improve their welfare.

(8) Agricultural regions nationwide

Agricultural region	Prefecture	Agricultural region	Prefecture
Hokkaido	Hokkaido	Kinki	Shiga, Kyoto, Osaka, Hyogo, Nara, Wakayama
Tohoku	Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima	Chugoku Sanin Sanyo	 Tottori, Shimane Okayama, Hiroshima, Yamaguchi
Hokuriku	Niigata, Toyama, Ishikawa, Fukui	Shikoku	Tokushima, Kagawa, Ehime, Kochi
Kanto/Tosan Northern Kanto Southern Kanto Tosan	 Ibaraki, Tochigi, Gunma Saitama, Chiba, Tokyo, Kanagawa Yamanashi, Nagano	Kyushu Northern Kyushu Southern Kyushu	 Fukuoka, Saga, Nagasaki, Kumamoto, Oita Miyazaki, Kagoshima
Tokai	Gifu, Shizuoka, Aichi, Mie	Okinawa	Okinawa

2. Basic Terminology

AFFrinnovation	AFFrinnovation which means initiatives for agriculture, forestry and fisheries operators to voluntarily cooperate with others to comprehensively and integrally promote agriculture, forestry and fisheries as the primary industry, manufacturing as the secondary industry and retailing as the tertiary industry to utilize regional resources for producing new added value.
Agricultural irrigation facilities	These facilities are roughly divided into two types -- irrigation facilities for providing irrigation water for farmlands and sewerage facilities for discharging surplus surface and soil water at farmlands. Irrigation facilities include dams and other water storage facilities, water intake facilities such as weirs, drains, pumping facilities, circular tank diversion works, farm ponds and other water supply and distribution facilities. Sewerage facilities include drainage canals and drainage pump stations. In addition, there are water control facilities to monitor, control and operate irrigation and sewerage facilities.
Agricultural producers' cooperative corporation	According to the Agricultural Cooperative Act, more than three farmers are necessary to establish such as corporation. These corporations are meant to facilitate cooperation in agricultural production between cooperative members and increase common profit. There are two types of these corporations. One aims to establish communal facilities for equipment and resources or promote communalization of agricultural operations, and the other aims to manage a corporation agricultural business such as farming. Both are called agricultural producers' cooperative corporations.
Biomass	Biomass means organic resources of flora and fauna origin, excluding fossil resources. Biomass is made by organisms that create organic matter from inorganic water and CO2 through photosynthesis using solar energy falling on the earth. This type of resources is renewable throughout its life cycle as long as there are organisms and solar energy.
Calorie supply (Calorie intake)	Calorie supply refers to the total amount of calories from food that is supplied to the public, and calorie intake refers to the total amount of calories actually consumed by the public. As a rule, the value for calorie supply is taken from the Food Balance Sheet issued by the Ministry of Agriculture, Forestry and Fisheries, while the value for calorie intake is taken from the National Health and Nutrition Examination Survey issued by the Ministry of Health, Labor and Welfare. Although it is necessary to keep in mind that calculations for both values are entirely different, since the calorie supply value includes leftovers and food destroyed in the distribution stage, the difference between this value and calorie intake can be used as an approximate measure of food wastes including food residue emerging inevitably in food industry processes, home food leftovers, etc.

Certified farmer (system)	The certified farmer system certifies plans for improving agricultural management drafted by farmers to attain targets for efficient and stable farm management in basic plans prepared by municipal governments to meet their respective conditions under the Agricultural Management Framework Reinforcement Act. For certified farmers, or those whose plans have been certified, various measures are primarily implemented, including low interest financing from the Super L loan system and other programs, measures to facilitate farmland consolidation and infrastructure improvement efforts to support business farmers.
Community based farm cooperatives	These farm cooperatives consist of farming households in certain regions that have developed a relationship through the local community or other geographical bases. In these cooperatives, farming households conduct agricultural production as a collaborative enterprise. Adopting the three basic tenets of (1) aggregation of diverted paddy fields, (2) communal use of communally purchased equipment and (3) communalization of the entire farming process from production to marketing with farming leaders playing a central role. These cooperatives take different forms and approaches depending on their geographical location.
Dilapidated farmland	A dilapidated farmland is a farmland that has been left uncultivated and dilapidated due to the abandonment of cultivation and is viewed objectively as unable to be used for growing crops with conventional farming methods.
Direct seeding (rice)	Direct seeding, where rice seeds are directly scattered into paddies, can skip seedling-raising and transplanting steps required for the conventional practices including transplanting. There are various direct seeding methods, which are roughly divided into two groups – flooded direct seeding where seeds are scattered into flooded paddies after plowing and soil pudding, and dry direct seeding where seeds are scattered into non-flooded paddies.
Farmland concentration and intensification	Farmland "concentration" means owning or leasing farmland to expand farmland for utilization. Farmland "intensification" means exchanging farmland use rights to allow farming to be conducted continuously without difficulty.
Food security	As for food security in Japan, the Food, Agriculture and Rural Areas Basic Act states, "Even in the case that domestic supply is insufficient to meet demand or is likely to be for a certain period, due to unexpected situations such as a bad harvest or interrupted imports, the minimum food supply required for the people shall be secured in order not to be a hindrance to the stability of peoples' lives and smooth operation of the national economy." As for global food security, meanwhile, the Food and Agriculture Organization (FAO) states, "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." This widely accepted definition points to the following dimensions of food security: the availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (food availability), the legal, political, economic and social entitlements of individuals to access foods for a nutritious diet (food access), utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met (utilization), and stable access to adequate food at all times for a population household or individual (stability).
Food self-sufficiency potential	This concept expresses the potential capacity of food production in the Japanese agriculture, forestry and fisheries sectors. The components of the food self-sufficiency potential for agricultural production are agricultural resources such as farmland and irrigation systems, agricultural technology, and people engaged in farming. The components of the food self-sufficiency potential for fishery production are potential production volume and people engaged in fishery. ○ "Food self-sufficiency potential indicator" Based on the premise that farmlands are fully utilized and calorie efficiency is maximized, this indicator shows the amount of calories which could be supplied per person per day in

	the Japanese agriculture, forestry and fisheries sector. The indicator is comprised of the following four patterns. (Pattern A) When major grains such as rice, wheat and soybeans are mainly cultivated by maximizing the calorie efficiency with certain consideration to nutritional balance (Patten B) When major grains such as rice, wheat and soybeans are mainly cultivated by maximizing the calorie efficiency (Pattern C) When potatoes are mainly cultivated by maximizing the calorie efficiency with certain consideration to nutritional balance (Pattern D) When potatoes are mainly cultivated by maximizing the calorie efficiency
Food self-sufficiency ratio	This index indicates how much food for domestic consumption is being supplied by domestic sources. - Self-sufficiency ratio for individual items: The following equation is used to calculate the self-sufficiency ratio on a weight basis for individual items. Food self-sufficiency ratio calculation equation $\text{Self-sufficiency ratio} = \frac{\text{Domestic production volume}}{\text{Supply for domestic consumption}}$ $= \frac{\text{Domestic production volume}}{\text{Domestic production volume} + \text{Import volume} - \text{Export volume} \pm \text{Fluctuations in inventory}}$ - Total food self-sufficiency ratio: This ratio is an index for the total volume of food, and is expressed in both calorie basis and production value basis. Products made from domestic livestock raised with imported feed are not included in calculations. - Total food self-sufficiency ratio on calorie supply basis: Weight values for each item are converted to calories using the *Standard Tables of Food Composition in Japan* (2010), after which the calories of all items are totaled. This is equivalent to the ratio calculated by dividing the value for the sum of the domestic calorie supply per person per day by the value for the calorie supply per person per day. - Total food self-sufficiency ratio on production value basis: Weight values are converted to production values using farm gate prices and import prices from domestic agricultural price and trade statistics, after which all production values are totaled. This is equivalent to the ratio calculated by dividing the sum of the domestic production value of food by the total food supply value for domestic consumption. - Feed self-sufficiency ratio: This index indicates how much feed is being supplied by domestic sources, calculated in terms of total digestible nutrients (TDN) using the *Standard Tables of Feed Composition.*
Food traceability	The international definition of "food traceability" is "the ability to follow the movement of a food through specified stage(s) of production, processing and distribution" (CODEX, 2004). Specifically, to establish and maintain records regarding arrival and shipment of a food at each stage throughout the process of production, processing and distribution in other to enable identification of the movement of the food.
Foot-and-mouth disease	An animal disease caused by Foot-and-mouth disease virus which affects cloven-hoofed animals including cattle and pigs. FMD causes clinical signs such as vesicles/blisters on and within the mouth and feet which results in loss of productivity of infected animals. The mortality rate is several percent for adult animals but can exceed 50% for young animals. Due to the rapid spread, high infectivity and the lack of effective treatments, the World Organization for Animal Health (OIE) regards it as one of the most important infectious diseases. Meat of infected animals will not be placed on the market. The meat and milk derived from infected animals are safe for human consumption.
GDP	GDP stands for gross domestic product. GDP refers to the total of value added for all goods and services produced in a country within a designated time frame, which is usually one year. It is used as an index to measure domestic economic activity levels.
Good Agricultural Practice (GAP)	Good Agricultural Practices are continuous activities of improving agricultural production operations through the accurate implementation, recording, inspection and assessment of each process in agricultural production in line with checklists worked out according to relevant laws and regulations.

Greenhouse gas (GHG)	Greenhouse gases heat the earth's surface by absorbing and radiating a portion of infrared radiation reflected from the ground. The Kyoto Protocol designates carbon dioxide (CO_2), methane (CH_4, generated by rice paddies and final waste disposal sites), dinitrogen monoxide (N_2O, generated during the process of manufacturing some raw ingredients for chemical products and from livestock waste), hydrofluorocarbons (HFCs, used as coolants for air conditioning devices), perfluorocarbons (PFCs, used in the production of semiconductors), sulfur hexafluoride (SF_6, used in the production of semiconductors) and nitrogen trifluoride (NF_3, used in the production of semiconductors; added in the second commitment period) as greenhouse gases that should be reduced.
HACCP	HACCP (Hazard Analysis and Critical Control Point) is a management system in which food safety is addressed through the analysis and control of biological, chemical and physical hazards from raw material production, procurement and handling, to manufacturing, distribution and consumption of the finished product.
Highly Pathogenic Avian Influenza(HPAI)	Highly Pathogenic Avian Influenza (HPAI) is kind of Avian Influenza with highly fatality to poultry. When poultry are infected by HPAI, they show general symptoms such as neurological, respiratory and digestive ones, and many of them die. In Japan, there hasn't been a case where HPAI spread from poultry to humans by eating chicken meat or eggs.
Idle farmland	An idled farmland meets either of two provisions in Item 1 Article 32 Agricultural Land Act. The first provision cites a farmland that is unused for cultivation and is expected to remain unused for the purpose. The second cites a farmland that is used far less than other farmlands in the vicinity.
Japanese dietary pattern	A nutritionally well-balanced dietary pattern, mainly eating rice, combined with various types of side dishes using fish, meat, milk/dairy foods, vegetables, seaweed, pulse, fruits and tea.
Legal person eligible to own farmland	This is a legal person that can acquire rights to farmland and satisfy all of the following requirements: (1) Requirements for incorporation (a stock corporation [not a publicly traded company], a membership company or an agricultural producer's cooperative corporation), (2) Requirements for business operations (main business is farming), (3) Requirements for members of the corporation (the majority of the voting rights are held by farmers), (4) Requirements for executives (the majority of executives engage in farming full time).
Regulatory science	Regulatory science is a science to bridge scientific knowledge and regulatory and other administrative policies and measures. It includes both research to acquire scientific knowledge available for considering administrative policies and measures and administration to decide policies and measures based on scientific knowledge.
Total agricultural output	In agricultural production, the total agricultural output is the total output of all finally completed agricultural goods. It is the amount of the item-based production volume of agricultural products minus intermediate products such as seeds and fodder to prevent overlapping calculations, multiplied by the price of each item when delivered from the farms.
Value chain	A value chain is a process of adding value at each step of production, processing, distribution and sales that are organically connected to each other.
"WASHOKU; traditional dietary cultures of the Japanese"	In December 2013, the United Nations Education, Scientific and Cultural Organization registered "WASHOKU; traditional dietary cultures of the Japanese" as a UNESCO Intangible Cultural Heritage. "WASHOKU" is a social practice associated with food, embodying the Japanese people's spirit of "respect for nature" with characteristics such as (1) various fresh ingredients and respect for their natural flavors, (2) nutritional balance that supports healthy diets, (3) emphasis on the beauty of nature and changing of seasons in the presentation and (4) deep ties to New Year's and other regular annual events. It is considered that Japanese people as a whole promote its protection and succession.
WTO	The World Trade Organization (WTO) is an international organization established in January 1995 as a result of the Uruguay Round negotiations, which has set a wide variety of

	multilateral trade rules. The WTO not only addresses new trade agenda but also implements and operates these current trade rules through a dispute settlement mechanism. The headquarters is located in Geneva, Switzerland.

3. Multifunctional roles of agriculture, forestry and the fisheries

(1) Agriculture

Flood prevention by retention and storage of rainwater	Function to prevent/alleviate flood by temporarily collecting rainwater in paddy fields surrounded by ridges and cultivated field soil.
Landslide prevention	Function to prevent slope failure by detecting and repairing the failure of farmlands at an early stage through agricultural production activities in sloping farmlands, or to prevent landslides by holding down sudden rises in the groundwater level by allowing rainwater to permeate slowly underground through the cultivation of fields.
Soil erosion prevention	Function to prevent the erosion of soil caused by rainwater and wind, with the surface of water covering paddy fields or with the foliage and stems of crops in fields.
Water recharge	Rainwater and agricultural water for paddy fields seep underground and over time returns to the river, and water that seeps further below cultivates underground watersheds.
Water purification	Water purification is achieved the decomposition of organic material in paddy and dry fields, the absorption of nitrogen by crops, and the removal of nitrogen by microorganisms.
Decomposition of organic waste	Microorganisms within paddy and dry fields such as bacteria decompose livestock waste and compost made from household waste. The decomposed material is eventually reabsorbed by crops.
Climate mitigation	Crops growing on farmland absorb heat through transpiration and paddy fields absorb heat through water evaporation, resulting in lower climate temperatures.
Conservation of biodiversity	Rice paddies and upland fields are properly and sustainably managed to form and maintain a secondary natural environment with ecosystems rich in plants, insects and animals, etc. to secure biodiversity.
Formation of a good landscape	Agricultural activities combined with farmland, old farmhouses, surrounding water sources and mountains create attractive natural landscapes.
Maintenance of cultural tradition	Japan features many annual events and festivals which trace their origins to prayers for rich harvests. Agriculture plays a role in passing on these traditions to future generations.

(2) Forestry

Conservation of biodiversity	Forests inhabited by a wide variety of plants and animals contribute to conserving the diversity of genes, species and ecosystems.
Conservation of the global environment	Forests can adjust the natural environment on a global scale through transpiration and absorption of CO2 which causes global warming.
Prevention of landslide disasters and conservation of soil	Brush, fallen leaves and branches suppress soil erosion, and the network of roots from forest trees prevents landslides.
Watershed capabilities	Forest soil mitigates floods and stabilizes river flow by storing rainwater and moderating the volume of water running into rivers.
Formation of comfortable environments	Forests help form comfortable environments by moderating climate through transpiration, reducing wind shear and noise, adsorbing dust through tree crowns and alleviating the heat island phenomenon.
Benefits for health and recreation	Trees release volatile substances such as phytoncides that are known to directly improve health, and forests provide areas for sports and leisure.
Culture	As a foundation for the succession of culture and traditions, forest scenery plays a vital role in the shaping of the traditional Japanese outlook on nature, and they also provide a place for forest environment education and practical learning.
Material production	The ability of forests to produce a wide variety of materials including wood, extracts and various types of fungi

(3) Fisheries

Supplementary contributions of fishery to the nitrogen and phosphorus cycle	An appropriate level of fishery can help recycle nitrogen and phosphorus absorbed by marine wildlife through the food chain to land.
Conservation of coastal environments	Bivalve shellfish such as oysters and clams filter and purify seawater by feeding on organic suspension such as plankton.
Water purification	Mudflats and seaweed beds, and plants and animals that inhabit them purify seawater by decomposing organic matters, absorbing nutrient salts and carbon dioxide gas, and supplying oxygen.
Preservation of ecosystems	Appropriate fishery operations can contribute to preserving mudflats, seaweed beds and other ecosystems that provide inhabitation environments for a wide variety of water creatures.
Transfer of cultural assets such as traditional fishing practices	Cultural assets such as traditional fishing practices are passed down to future generations through the activities of people living in fishing villages.
Rescue operations in the event of marine emergencies	Fishery workers help emergency rescue operations when ships sink, capsize, become stranded, go adrift, collide or catch fire.
Rescue operations in the event of disasters	Fishery workers conduct emergency operations such as supply transportation and oil recovery during natural catastrophes, oil tanker accidents and other disasters.
Monitoring of coastal environments	The fisheries monitors abnormalities in coastal environments. For example, fishery workers assist in early detection of red tides, blue tides and jellyfish outbreaks.
Border monitoring	Activities to monitor illegal poaching of precious marine resources also protects the national interest by preventing smuggling and illegal immigration.
Functions related to providing places for exchange	The mariner industry can provide places for leisure such as marine recreation facilities and places to learn the importance of nature.