

Tokyo Agriculture Promotion Plan

New Steps for the Next Stage



菜譜



May 2017

Foreword

Agriculture in Tokyo, which takes place in one of the world's largest metropolises, not only provides citizens with fresh, safe, and reliable agricultural and livestock products, but also serves a variety of functions in areas such as preserving the environment and disaster preparedness. The greenery of agricultural land, which gives the city an attractive atmosphere and a sense of calm, is an especially valuable asset of Tokyo citizens.

The situation surrounding agriculture in Japan as a whole, however, remains severe. Contributing issues include a shortage in the number of people engaged in agriculture due to factors such as the rising age of farmers, loss of agricultural land when land is inherited or transferred, and an increase in inexpensive imported farm products. Agriculture in Tokyo is no exception.

In such an environment, the Basic Act on the Promotion of Urban Agriculture, which outlines the responsibilities of the national and local governments for the promotion of urban agriculture, was enacted in April 2015. The Cabinet Decision on the Basic Plan for the Promotion of Urban Agriculture, issued in May 2016, also prepared the foundation for the promotion of urban agriculture, including specifying that farmland is “a type of land that cities should have.” The plan will also serve as a favorable boost for agriculture in Tokyo.

Taking into consideration such changes, and looking ahead to the Olympic and Paralympic Games Tokyo 2020 and beyond, we have formulated the Tokyo Agriculture Promotion Plan as a new strategy to further bring out agriculture's potential in this major metropolis and to steadily develop agriculture in Tokyo for the future.

By obtaining the understanding and support of the people of Tokyo, including that of farmers and agricultural organizations, and steadily implementing this plan, we will develop agriculture in Tokyo into an industry closely interlinked with the lives of citizens, and realize a sustainable “Smart City” brimming with vitality.

May 2017

Yuriko Koike
Governor of Tokyo



小池百合子

Contents

Introduction: Formulation of a New Tokyo Agriculture Promotion Plan.....	1
1. Purpose of Formulating a New Tokyo Agriculture Promotion Plan	1
2. Positioning the Plan	1
Chapter 1 Tokyo Agriculture Reaches a Turning Point	3
1. Changes in Society Related to Agriculture in Tokyo	3
(1) Situation surrounding agriculture in Tokyo	3
(2) Actions related to urban agriculture	4
2. Current Status of Agriculture in Tokyo and Challenges	5
(1) Current status and features of Tokyo agriculture	5
(2) Challenges faced by Tokyo agriculture	12
Chapter 2 Direction for the Promotion of Agriculture in Tokyo and Development of Measures	14
Section 1 Direction for Promotion of Agriculture	14
1. Vision that Tokyo agriculture should pursue	14
2. Direction and System for Agricultural Promotion	15
Section 2 Development of Agriculture Promotion Measures	16
1. Secure and train human resources and develop robust farm management practices	16
(1) Secure and train diverse human resources	16
(2) Strengthen the management skills of motivated farmers and others	17
(3) Enhance productivity by establishing required facilities, building infrastructure, etc. ...	18
2. Preserve farmland and leverage the various functions it can serve	20
(1) New approaches to preserving farmland	20
(2) Contribution to cities by the functions of disaster prevention and environmental conservation provided by farmland	21
(3) Expand opportunities to experience a variety of farm work	22
(4) Promote urban greening using flowers and trees raised in Tokyo	22
3. Promote sustainable agriculture and local consumption	23
(1) Provide agricultural products through sustainable agriculture	23
(2) Strengthen measures to prevent the spread of plant and animal diseases	24
(3) Promote local consumption of Tokyo agricultural and livestock products	25
4. Promote agriculture that takes advantage of the characteristics of the local area	26
(1) Promoting agriculture in Tokyo's Islands	26
(2) Promoting agriculture in Tokyo's hilly and mountainous areas	26

(3) Promoting agriculture in Tokyo's suburban areas	27
(4) Promoting agriculture in Tokyo's urban areas.....	27
Chapter 3 Improve Systems Pertaining to Urban Agriculture and Farmland	28
1. Attitude of National Government regarding urban agriculture and farmlands	28
2. Requests to National Government regarding system reform	28
(1) Inheritance tax deferral system that would apply to designated productive green areas which have been leased	28
(2) System for inheritance tax deferral to apply to land used for agricultural equipment and facilities required for the farming business	29
(3) Support for purchasing land designated productive green areas.....	29
(4) Establish a new system for payment of inheritance tax in kind.....	29
Chapter 4 Working Together to Promote Tokyo Agriculture	30
Chapter 5 Business Models for Tokyo Agriculture	31
1. Setting business models	31
2. Exemplification of Business Models	32
(1) Business model for leading agriculture in Tokyo (target income : 10 million yen)	32
(2) Business model for bearing agriculture in the area (target income : 6 million yen)	34
(3) Business model for supporting an expanse of agriculture (target income : 3 million yen)	37
(4) Business model for corporations (sales target: 50 million yen and above)	39
【Data】 Advanced and characteristic case studies of agriculture in Tokyo	41

[Artwork on front cover]

“Saichufu” (Compendium of Vegetables and Insects) by Ito Jakuchu

(Important Cultural Property from the collection of the Yoshizawa Memorial Museum of Art, Sano)

{	Location: 1-14-30 Kuzuu-higashi, Sano City, Tochigi Prefecture Phone: 0283-86-2008 Website: http://www.city.sano.lg.jp/museum/	}
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1

Purpose of Formulating a New Tokyo Agriculture Promotion Plan

In line with the Tokyo Agriculture Promotion Plan “A New Step for Agriculture in Tokyo as an Industry Closely Associated with Citizens’ Daily Life” formulated in March 2012, the Tokyo Metropolitan Government has implemented various measures to promote agriculture in Tokyo as an industry attractive to both the citizens and farmers.

The environment surrounding agriculture in Tokyo has remained severe due to factors such as the shortage of farmers resulting from the aging of existing farmers, reduced farmland from inheritance, the increased importance of agricultural products, and surges in the prices of agricultural production materials, etc. However, there are also positive factors for agriculture in Tokyo such as efforts to improve the competitiveness of domestic agriculture in response to advanced internationalization, the Tokyo 2020 Olympics and Paralympics (hereafter “Tokyo 2020”), and the enactment of the Basic Act on the Promotion of Urban Agriculture in April 2015.

The previous plan was formulated five years ago, and, given the changes in social circumstances, we decided to formulate a new Tokyo Agriculture Promotion Plan (hereafter “the Plan”) in response to the need for future-oriented agricultural promotion measures and improving the national system for preserving farmland.

2

Positioning the Plan

- The Plan outlines the direction of Tokyo agricultural promotion and the future development and implementation of measures based on the report submitted by the Council on Promotion of Agriculture, Forestry and Fishery in Tokyo in August 2016: A New Step for Agriculture that Coexists with the Urban Society and Contributes to Citizens’ Lifestyle.
- The Plan serves as a guideline for farmers, agrarian organizations, and local governments that can be utilized for agricultural promotion and community revitalization, and encourages citizens to actively take part in and cooperate with agriculture in Tokyo.
- The Plan doubles as a regional plan^(Note) of Tokyo in the Basic Act on the Promotion of Urban Agriculture.

(Note) Regional plan: Article 10 of the Basic Act stipulates that local governments must endeavor to implement a plan for promoting urban agriculture in their municipalities in line with a basic plan. The Tokyo Metropolitan Government positions the Plan as a regional plan.

- The Plan covers about ten years from 2017, and will be revised as necessary depending on changes in the socio-economic situation and extent of implementation of the measures.

1

Changes in Society Related to Agriculture in Tokyo

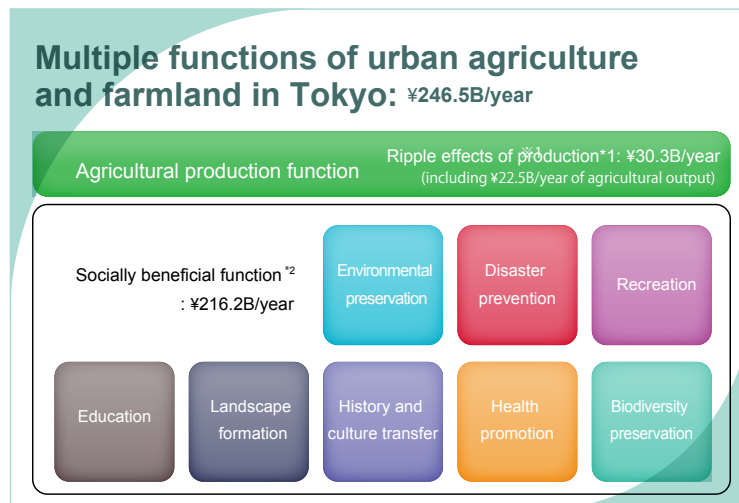
(1) Situation surrounding agriculture in Tokyo

Consumer attitude towards food is changing, and they are increasingly interested in buying fresh, safe and secure locally produced agricultural and livestock products that can be identified by their growers. In addition, since agriculture and farmland, besides producing food, can also function as disaster prevention and evacuation sites, environmental controls to mitigate the heat island phenomena and educational tools for students, they are becoming increasingly appreciated in densely populated areas.

However, many difficulties face the farming profession including the price slump due to mass imports of low-cost agricultural products, worsening profitability due to rising production costs, real estate taxes imposed on farmland in areas designated for urbanization, and heavy taxes on inherited land. These problems, as well as the difficulty in securing successors, the high average age of existing farmers, and a decrease in the number of farmers and available farmland all combine to make the future of agriculture in Tokyo extremely uncertain.

Multi-functionality and estimated value of urban agriculture and farmland in Tokyo

Survey Concerning Economic Appraisal of Multiple Functions of Urban Agriculture and Farmland: 2016 policy research by the Tokyo Metropolitan Government Bureau of Industrial and Labor Affairs



*1: The value of the ripple effects of agricultural production was calculated based on estimated agricultural output from farmland in areas designated for urbanization and inter-industry analysis.

**2: The estimated value of the socially beneficial function was obtained by multiplying the number of households by the average per-household cost for maintaining farmland (¥131,466/year) which was obtained via a CVM survey.

(2) Actions related to urban agriculture

The Tokyo Metropolitan Government, in order to maintain urban agriculture in the future, has requested the national government to revise the laws, regulations, and taxation system involving urban agriculture and farmland. In March 2015, we submitted Proposals Concerning National Strategic Special Zones to the national government on revising the laws and regulations to promote urban agriculture and preserve urban farmland.

Also, the Ministry of Agriculture, Forestry and Fisheries organized a Study Group for Promoting Urban Agriculture. The Ministry of Land, Infrastructure, Transport and Tourism established a City Planning System Subcommittee, the City Planning Committee, the Subcommittee on City Planning and Historic Features in the Panel on Infrastructure Development. These groups have been discussing the goals for urban agriculture and the positioning of farmland in areas designated for urbanization.

The Basic Act on the Promotion of Urban Agriculture (hereafter “the Basic Act”), which defines the guiding principle of the promotion of urban agriculture, was enacted in April 2015. The Cabinet endorsed the Basic Plan for the Promotion of Urban Agriculture (hereafter “the Basic Plan”) in May 2016, which is based on Article 9 of the Basic Act and explains the national government’s basic policy for the promotion of urban culture and preservation of farmland. Agriculture in Tokyo has reached a major turning point with an improving environment for stable and sustainable urban agriculture.

Enactment of the Basic Act on the Promotion of Urban Agriculture

The Basic Act on the Promotion of Urban Agriculture (Act No. 14 of 2015) aims to stably sustain urban agriculture and create a favorable urban environment through the various functions of urban agriculture. (Enforced on April 22, 2015)

Basic Act on the Promotion of Urban Agriculture

(Purpose)

Article 1 The purpose of this Act is to stably sustain urban agriculture through comprehensive and systematic implementation of the policies on the promotion of urban agriculture by; establishing basic principles and basic matters for its realization; clarifying the responsibilities of the national and local governments; and contributing to the creation of a favorable urban environment through appropriate and full utilization of the function of urban agriculture...

(Basic Plan for the Promotion of Urban Agriculture)

Article 9 The national government shall establish a Basic Plan for the Promotion of Urban Agriculture (hereafter “Basic Plan”) for the comprehensive and systematic implementation of the policies on the promotion of urban agriculture.

Basic Plan for the Promotion of Urban Agriculture

The Basic Plan for the Promotion of Urban Agriculture (endorsed by the Cabinet on May 13, 2016) outlines the new direction of urban agricultural promotion. Specifically, the measures presented in the plan are “securing human resources,” “securing land,” and “advancing the measures for agriculture in earnest.”

The Basic Plan for the Promotion of Urban Agriculture

Number 2 The comprehensive and systematic measures that the government should take to promote urban agriculture

- 1 Improving the function of supplying agricultural products and training and securing human resources
- 2 Fully utilizing the features of disaster prevention, natural beauty, nature conservation and the environment, etc.
- 3 Formulation of a plan for appropriate land use etc.
- 4 Taxation measures
- 5 Promoting the local consumption of agricultural products
- 6 Developing an environment where people can experience farm work, etc.
- 7 Expanding the opportunity of experiencing farm work in school education, etc..
- 8 Enhancing citizen's understanding and interest
- 9 Encouraging urban residents to acquire knowledge and skills concerning agriculture, etc.
- 10 Enhancing research and study

2

Current Status of Agriculture in Tokyo and Challenges

(1) Current status and features of Tokyo agriculture

Agriculture in Tokyo contributes to the citizens of Tokyo through hard-working farmers who develop and manage the characteristics of a region despite the harsh environment where agricultural land has been urbanized, profits have been deteriorating, and insufficient workers, etc.

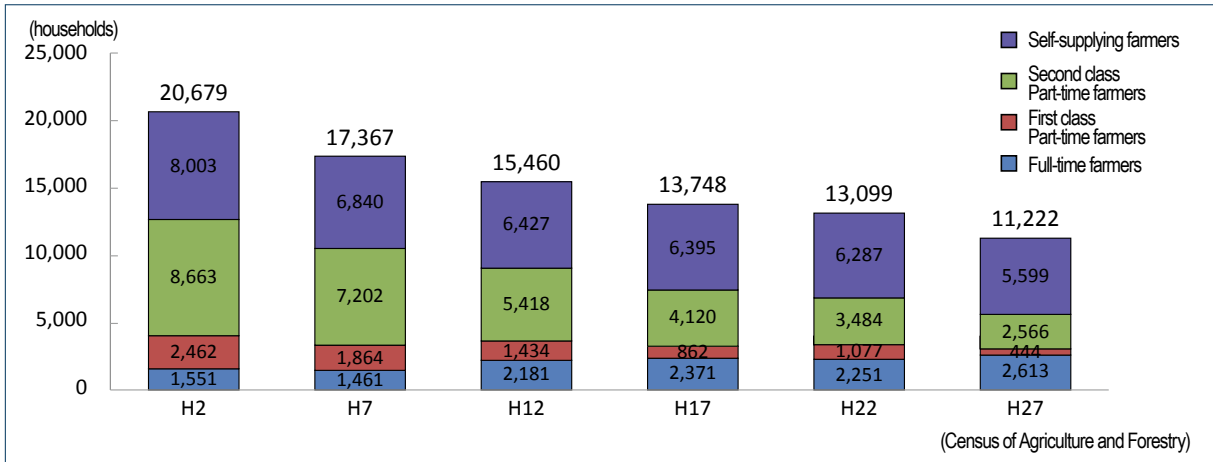
① Increase in hard-working farmers

The average age of farmers in Tokyo is 63.9 years old (2015), and this figure is 3.3 years higher than that of 2005. Despite this aging population, the number of farmers who try to improve management by introducing new plant varieties and new technologies, and finding new markets, etc. through innovation is increasing. Management bodies that are certified by municipalities and aim to improve management are called “certified farmers.” Currently there are 1,506 of them (as of March, 2016), which is a figure that has increased by 2.1 times in the last decade. The certified farmers are expected to support the agriculture in the area.

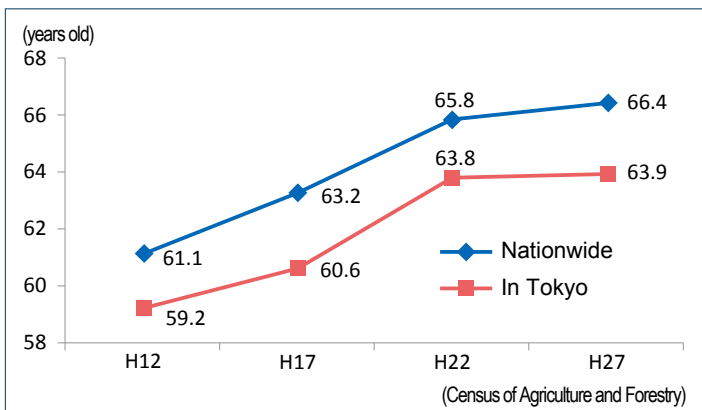
The difficulty of securing agricultural land and housing in Tokyo precludes prospective farmers from entering agriculture in Tokyo. However, recently some people who are not from farming families are

renting agricultural land in Tokyo and have begun farming. The number of such new agriculture workers is anticipated to increase from now on.

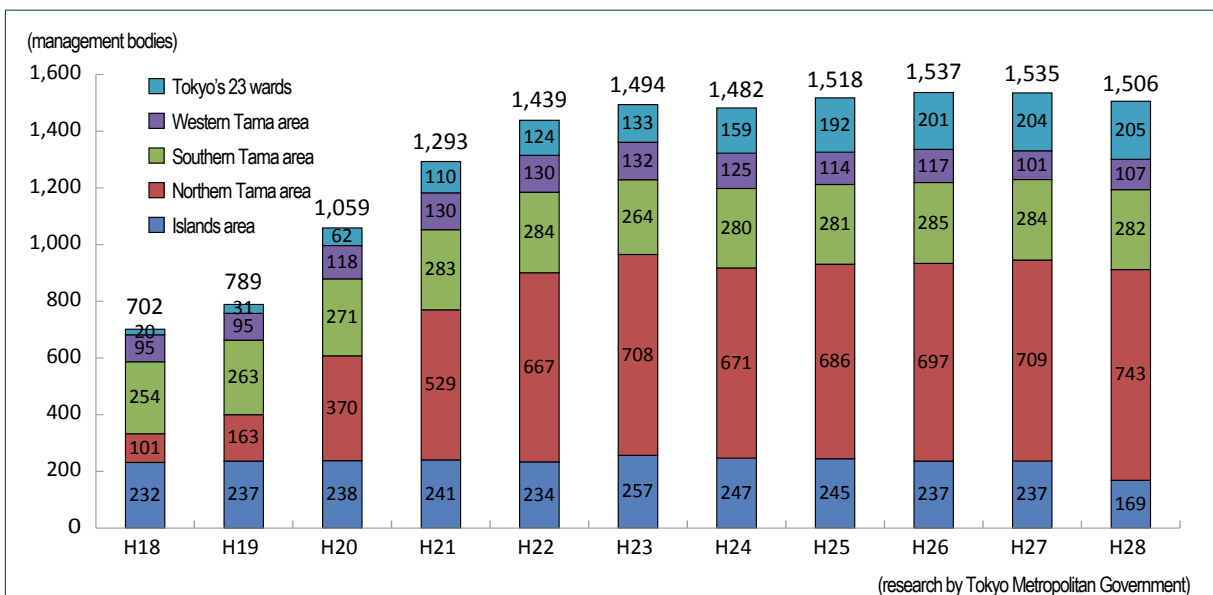
Trends in the number of farming households



Trends in the average age of farmers (agricultural work force)



Trends in the number of certified farmers

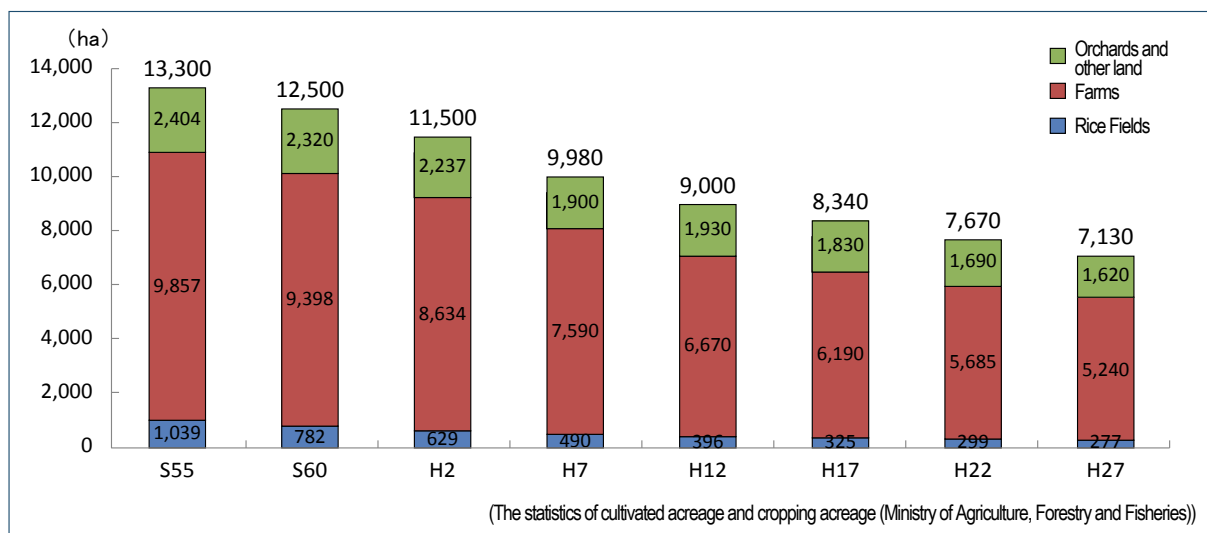


② Decreasing agricultural land

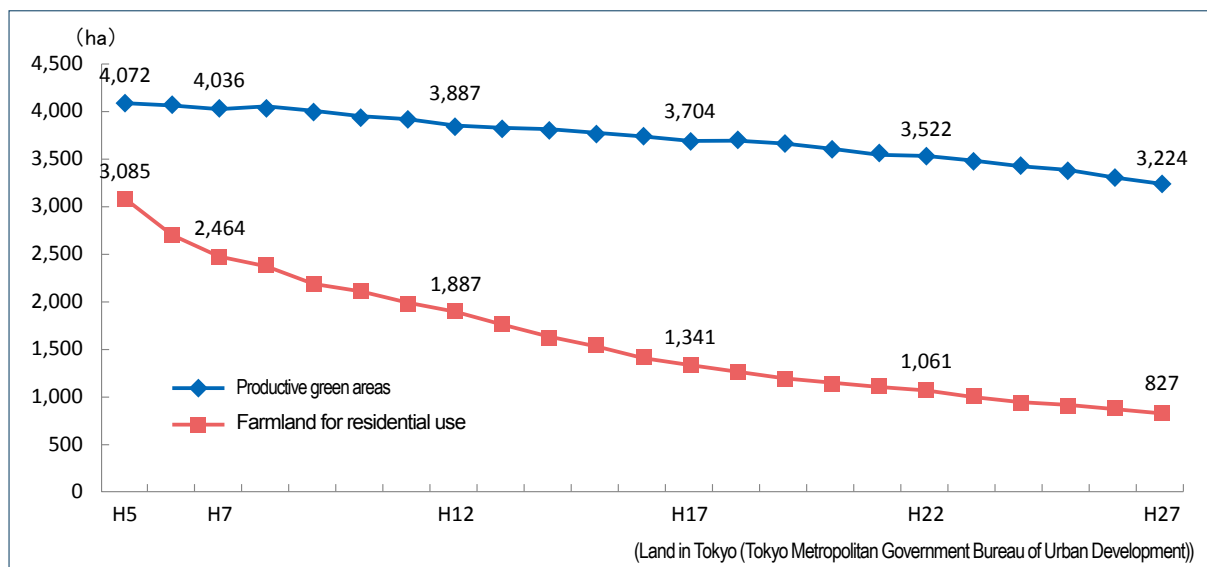
Agricultural land abounds in greenery and various plants, and brings warmth and comfort to the citizens' living environment. It also serves as space for disaster prevention, which is indispensable to a big city. It plays many important roles in citizens' lives. However, the amount of available agricultural land in Tokyo continues to decrease yearly due to urbanization and inheritance. There are concerns that these trends will impair the various functions of agricultural land.

Agricultural land in Tokyo has decreased by 1,210 ha in the decade starting from 2005 and the area of agricultural land in 2015 is 7,130 ha (decrease of 14.5 %). Of this, 993.6 ha of agricultural land has been lost within urbanization promotion areas in the decade, and the area of agricultural land within this region is 4,051.5 ha (decrease of 19.7 %). Especially, 38.3 % of farmland has been repurposed for residential use. Some wards and cities have reassigned farmland for residential use into productive green areas, but under the present circumstances, agricultural land will continue to decline.

Trends in farmland area



Transition of areas of productive green zones and farmland for residential use



③ Environmental conservation agriculture and the trend of local produce for local consumption

The Tokyo Metropolitan Government started the “Tokyo Metropolitan Ecological Agriculture Product Certification System” through environmental conservation agriculture techniques such as making healthy soil and reducing chemical pesticide and chemical fertilizer in 2013, and has certified 480 producers and 2,593 agricultural products (total) by 2016.

Also, agricultural products which are produced in Tokyo are supplied to citizens of Tokyo through various channels such as marketplace circulation, contracted shipping to mass retailers, and direct sales, etc. The increase in customer requirements for fresh agricultural products promotes an increase in cooperative direct sales stores opening in each area. In 1995, there were 19 cooperative direct sales stores in Tokyo, and as of 2015, this number has trebled to 57. Now, direct sales accounts for more than 70 % of the distribution methods.

Moreover, 90 % of the elementary and junior high schools in Tokyo use food ingredients produced in Tokyo for school lunch at least once in 2014, and the tendency of locally produced products for local consumption is increasing. In addition, dietary education activities in association with regional agriculture such as teaching agriculture to children through experience are also revitalized.

Elementary and junior high schools in Tokyo using locally produced food ingredients for school lunch (2014 results)

	Elementary schools			Junior high schools		
	The number of schools implementing complete school meals (schools)	The number of schools using locally produced food ingredients (schools)	Proportion (%)	The number of schools implementing complete school meals (schools)	The number of schools using locally produced food ingredients (schools)	Proportion (%)
Tokyo's 23 wards	839	699	83.3	382	346	90.6
Urban areas	428	427	99.8	205	201	98.0
Rural areas	24	24	100.0	20	20	100.0
Total in the whole Tokyo	1,291	1,150	89.1	607	567	93.4

(“The Actual Situation of School Lunches in Tokyo, 2015” (Tokyo Board of Education))

※ “Using locally produced food ingredients” means using food ingredients produced in Tokyo for school lunch at least once in a year.

④ Various styles of agricultural management

Distinctive styles of agriculture are implemented by taking advantage of the characteristics of the area such as islands, hilly and mountainous regions, suburban and urban areas in Tokyo.

The warm climate of islands areas produce special products, such as cut leaves and tropical fruits, etc.

Hilly and mountainous areas produce special vegetables, such as Japanese horseradish and potato.

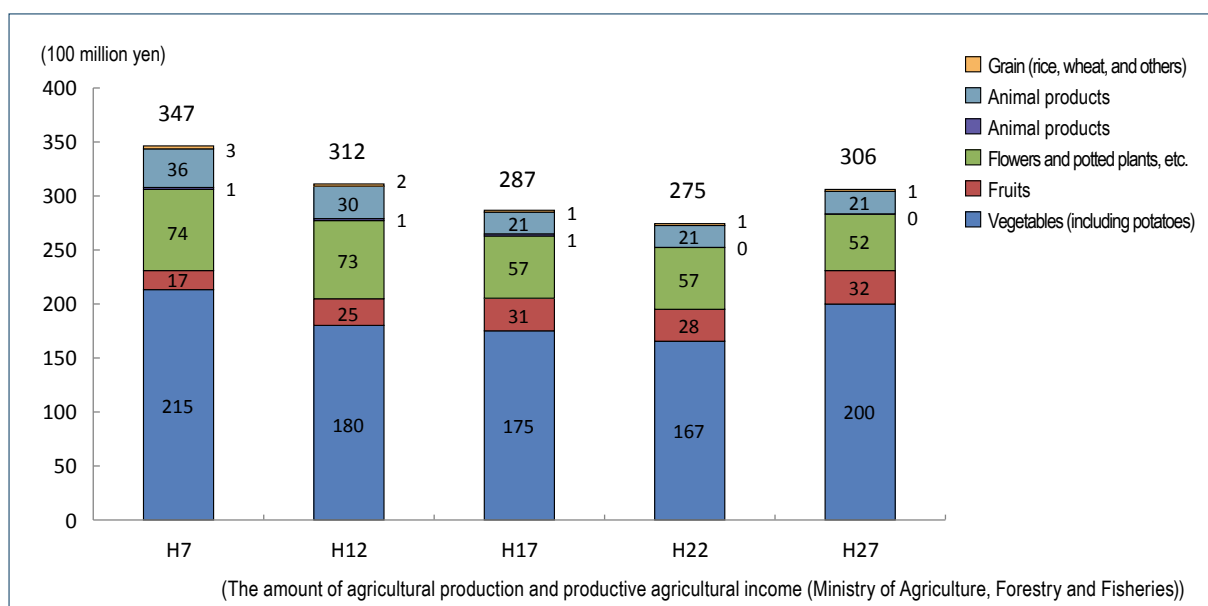
Suburban areas produce vegetables grown outdoors, such as sweet corn and cabbage, as well as various agricultural and livestock products, such as tealeaves, fruit and animal products on comparatively large agricultural areas including agricultural promotion areas.

The highly profitable urban areas cultivate Japanese mustard spinach and tomato, etc. in facilities that make the most of the limited amount of agricultural land.

Of production items, vegetables account for approximately 65 % of the 30.6 billion yen total agricultural production in Tokyo (2015). Other than vegetables, a wide range of products, such as fruit, flowers, potted plants, and animal products are produced, distinguishing the rich variety of agriculture in Tokyo. Also, various styles of agricultural management that take advantage of Tokyo's position as a major consumer base are implemented, such as diversified management covering processing, direct sales, and tourism.

Moreover, a hand-on farm work experience garden is gaining traction as a new management style because it can satisfy the citizens' desire to try farm work. At the end of FY 2015, the number of such gardens was 107, and many of them are in urban areas. This figure has increased by 1.4 times in the last five years, and is still steadily increasing.

Trends in the amount of agricultural production



Gardens for experiencing farm work

	Total number of gardens	The number of plots (plots)*	Total area (ha)
Tokyo's 23 wards	28	2,258	9.1
Western Tama area	61	3,066	12.8
Southern Tama area	15	481	2.9
Northern Tama area	3	85	0.4
Islands area	0	0	0
Total	107	5,890	25.2

(At the end of March, 2016 (research by Tokyo Metropolitan Government))

Gardens for experiencing farm work are established by the farmers themselves (agricultural landowner) as part of agricultural management. Here people can experience a variety of farm work under the guidance of a farmer throughout the year.

Allotment gardens

	Total number of gardens	The number of plots (plots)	Total area (ha)
Tokyo's 23 wards	201	11,572	27.5
Western Tama area	128	8,302	16.5
Southern Tama area	69	3,241	12.8
Northern Tama area	47	2,541	7.4
Islands area	2	13	1.9
Total	447	25,669	66.0

(At the end of March, 2016 (research by Tokyo Metropolitan Government))

Allotment gardens were established by a municipality or an agricultural cooperative association. They rent agricultural land from a farmer (agricultural landowner) and divide the land into small plots (10 to 15 m² each) for use as recreational places for urban citizens. Users can decide what to grow, and are relatively free to cultivate their own produce.

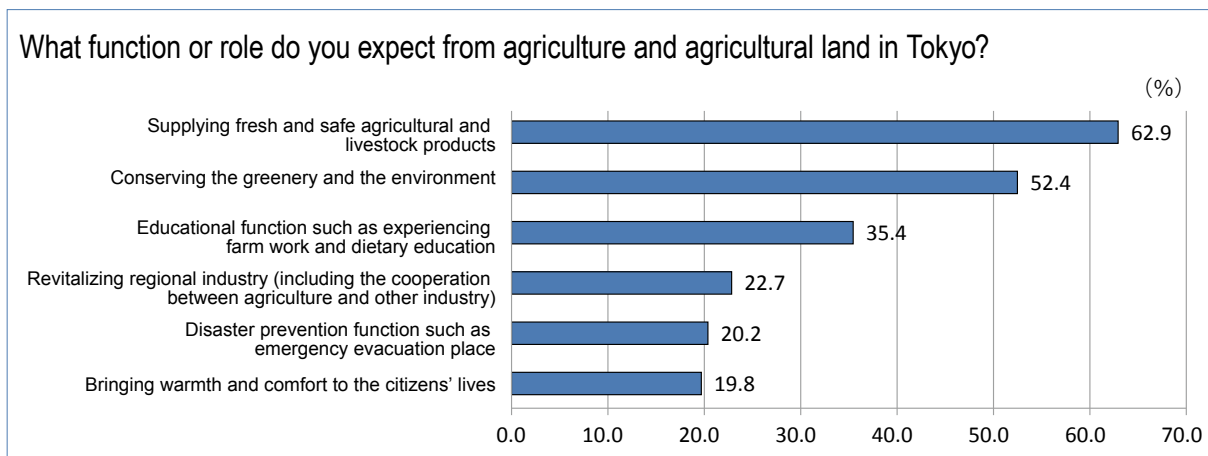
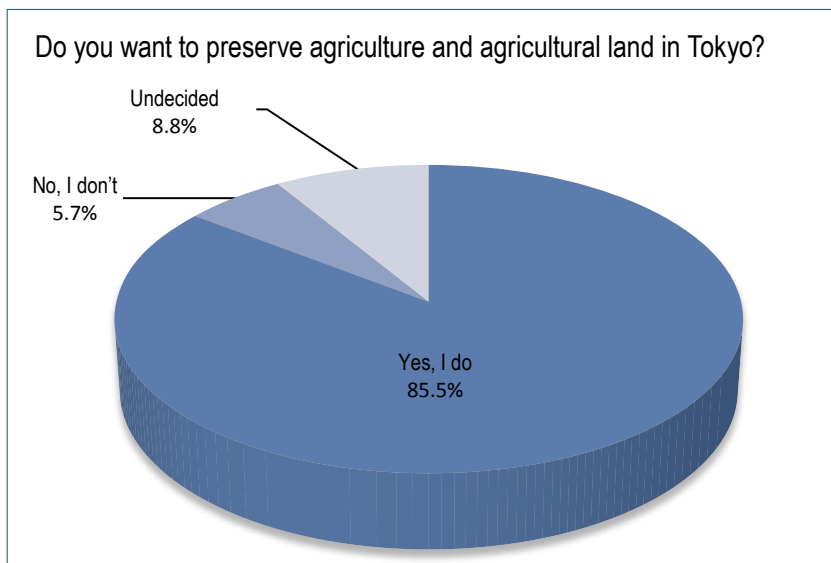
⑤ Awareness of the citizens of Tokyo

According to the Internet monitoring questionnaire regarding the administration of Tokyo 2015, 85.5 % of the respondents answered that they “want to preserve agriculture and agricultural land in Tokyo,” which is an increase from 84.6 % in 2009. Furthermore, “supplying fresh and safe agricultural and livestock products (62.9 %),” “conserving the greenery and the environment (52.4 %),” and “educational function such as experiencing farm work and dietary education (35.4 %)” are higher scoring answers to the question “What function or role do you expect from agriculture and agricultural land in Tokyo?” Moreover, 20.2 % answered “disaster prevention, such as emergency evacuation points” to the same question, which is an increase from 13.0 % in 2009. Expectations for agriculture in Tokyo have been increasing in recent years.

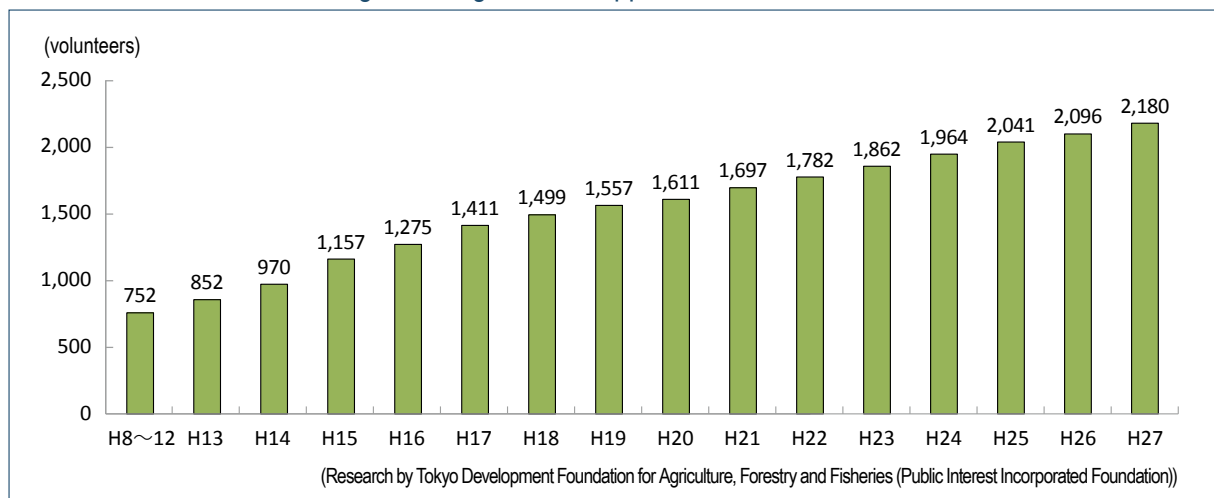
As a show of the awareness of the citizenry, enthusiastic agriculture volunteers in each region of Tokyo actively help with farm work and support agriculture in Tokyo. At present, Tokyo Development Foundation for Agriculture, Forestry and Fisheries (Public Interest Incorporated Foundation) work on training agriculture support volunteers in association with municipalities. There were 2,180 registered supporters of agriculture in Tokyo at the end of fiscal 2015.

Necessity of agriculture and agricultural land in Tokyo, Expected roles of agriculture and agricultural land in Tokyo

(From the Internet monitoring questionnaire about administration of Tokyo 2015, "Agriculture in Tokyo" (Tokyo Metropolitan Government Bureau of Citizens and Cultural Affairs))



Trends in the number of the registered agriculture support volunteers



(2) Challenges faced by Tokyo agriculture

Approximately 60 % of agricultural land in Tokyo is located in urbanization promotion areas. The challenges are peculiar to the metropolis, such as limitations concerning the land tenure system and tax structure, and considerations to the environment.

① Utilizing agricultural land in urbanization promotion areas and securing and training human resources

The system for leasing agricultural land based on the “Strengthening of the Agricultural Management Base Promotion Law” ^(Note) is not applicable to agricultural land in urbanization promotion areas. Therefore it is difficult to lease such land in the present circumstances. For that reason, some farmers who want to expand the scale of their operation have no choice but to rent suburban agricultural land in urbanization control areas located comparatively far from their houses to produce farm products.

Also, small-scale farmers have special difficulty in gaining sufficient profits, which in turn makes securing their successors difficult.

(Note) Leasing agricultural land based on the “Strengthening of the Agricultural Management Base Promotion Law,” a guide for utilizing and integrating farm land to enthusiastic farmers. Agricultural land rented under the farmland utilizing and integrating plan (established by municipalities according to the law) is automatically restituted to its owner after a defined period. This allows owners to lend agricultural land safely, which leads to greatly increased leasing of agricultural land.

② Conservation of urban farmland and implementation of multifaceted functions

Agriculture in Tokyo faces the same national challenges such as deteriorating profitability, aging farmers and a shortage of new workers. Additional challenges peculiar to the metropolis include the worsening of the production environment following urbanization, heavy taxation on inheritance tax. Therefore, it is difficult to conserve urban farmland through efforts by individual farmers under present circumstances, and more than 100 ha of farmland is disappearing every year.

Further, even when multifaceted functions are implemented, some farmers expend a great deal of energy and money on a garden for schoolchildren to help with their dietary education, yet struggle to keep it running.

③ Practicing environmental conservation agriculture and promoting local produce for local consumption

In urban agriculture, farm products are cultivated on farmland located near consumers. This requires a reduction in usage of chemical pesticides and fertilizers as well as fossil fuel for transportation, etc. necessary to implement environmental conservation agriculture.

Also, the distribution of agricultural and livestock products produced in Tokyo to areas without agricultural land is a challenge when promoting local produce for local consumption in Tokyo.

④ Promoting agriculture in each area

On islands, agricultural products are produced as allowed by the natural environment and agriculture is a key industry. However, the advanced age of farmers and a shortage of successors make the future of the industry uncertain. Also, an improved steady distribution method for agricultural products is necessary because current methods (air and sea) are easily affected by weather conditions.

In hilly and mountainous areas, agriculture is implemented on small-scale farmland, which is mostly on sloping land. While the farmers are getting older, damage caused by birds and animals reduces the farmers' motivation for agriculture, and the amount of neglected farmland increases. Therefore, finding a way to curb damage from wildlife is a problem in need of urgent attention.

In suburban areas, comparatively large-scale farming and animal husbandry are implemented on "large areas of land suitable for farming," often in areas for comprehensively promoting agriculture. Continuous promotion of improving agricultural bases and facilities is required to enhance productivity.

In urban areas, efficient and profitable farming is implemented even on small agricultural areas. Various requisite revisions to the urban farmland system should be implemented promptly in order to conserve the decreasing agricultural land.

Section 1 Direction for Promotion of Agriculture

1

Vision that Tokyo agriculture should pursue

The city of Tokyo has a population of over 13 million and holds a gigantic market, where various needs can be grasped in a quick and precise manner. As an advantage, the city has businesses, universities, and research institutes of all types showing various potential.

The social and urban environments surrounding agriculture in the Tokyo metropolis have been undergoing great changes, and now is an excellent opportunity to invest in the future of agriculture in Tokyo.

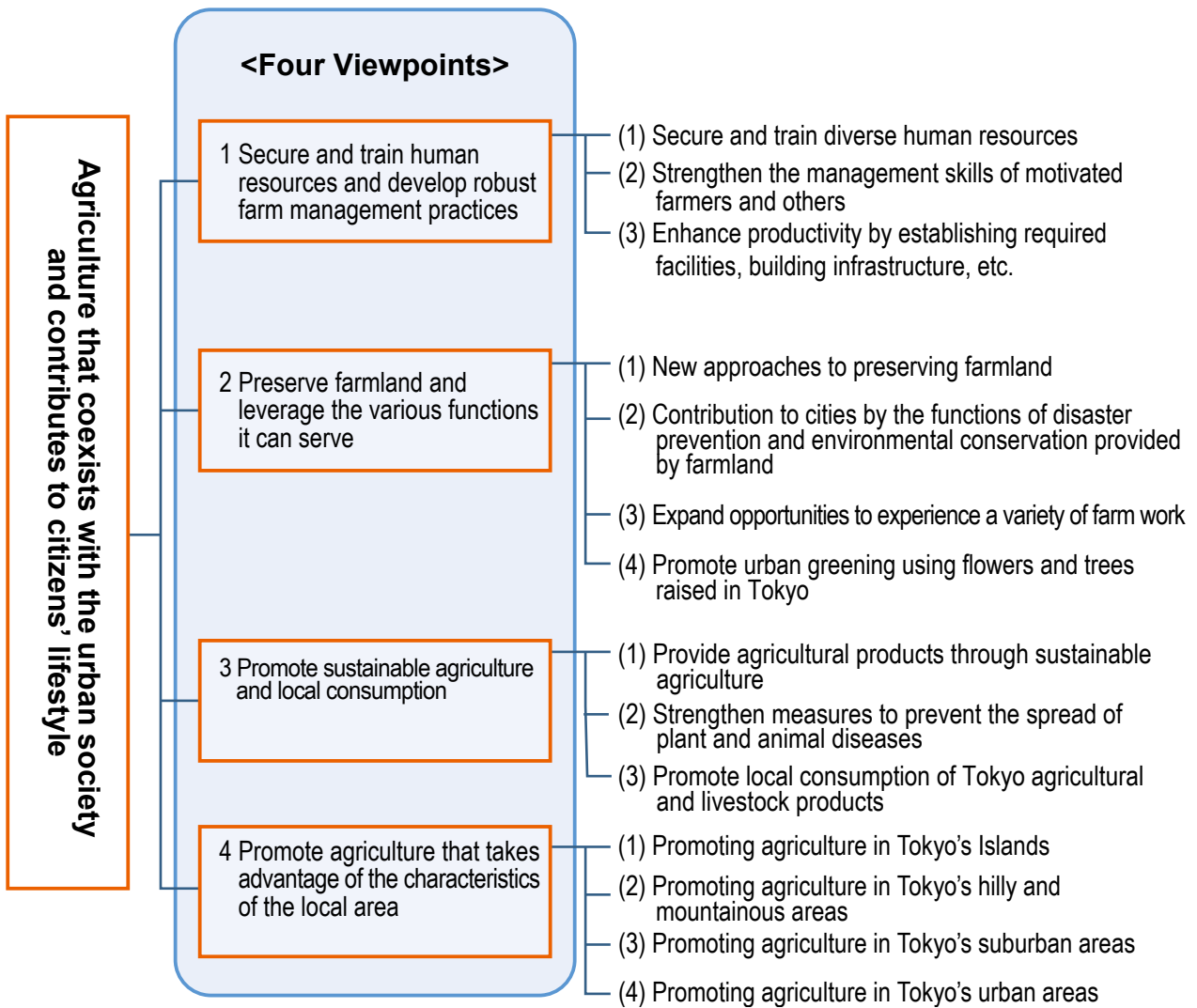
In order to develop agriculture in Tokyo as a fascinating industry, the Tokyo Metropolitan Government will advance the future measures to implement “agriculture that coexists with urban society and contributes to citizens’ lifestyle” while utilizing the potential of the Tokyo metropolis.



2

Direction and System for Agricultural Promotion

In order to address the challenges encountered by agriculture in Tokyo, we will advance measures for new agricultural promotion while focusing on four viewpoints.



Section 2 Development of Agriculture Promotion Measures

1

Secure and train human resources and develop robust farm management practices

In order for the next-generation farmers to inherit agriculture in Tokyo, it is essential to encourage and train new farmers and improve the profitability of the industry. To this end, the combined efforts of Tokyo Metropolitan Government, the wards and other municipal governments, and the agrarian organizations are essential.

(1) Secure and train diverse human resources

Agriculture in Tokyo mainly depends on family-run farms, the successors have come from within the families. However, in order to tackle the problems of aging of existing farmers and match the shortage of next-generation farmers, we will train new farmers from the female workforce and farming businesses instead of from farming families.

① Support successors and new farmers

- We will provide integrated training courses by farming instructors^(Note), from cultivation techniques to farm management, in order to train farmers who will work in agriculture in Tokyo in the future.
- We will enrich and enhance our comprehensive support system including: provision of various types of information on how to enter the farming profession, consultations, training courses, support for establishing farming facilities, introduction of financial arrangements, and instruction on cultivation techniques to farmers new to the farming profession.
- In cooperation with the Agricultural Committee, we will support new farmers through introduction of farmlands and establishment in local communities.



Training of shipping adjustments
by farming instructors

(Note) Farming instructors are those who have excellent credentials in the industry and can train other farmers. In December 2016, the Tokyo Metropolitan Government certificated 43 “Tokyo Metropolitan farming instructors” for 20 ward and municipal governments.

② Arrange an environment in which female farmers can actively work

- Targeting women, including new graduates and those who desire to start farming, from other industries, we will promote building a better working environment for female farmers through measures such as providing detailed training courses regarding agricultural techniques and handling of agricultural machinery.
- To help female farmers become active management partners, we promote the signing of family operation agreements that clarify roles within the family and applications for certified farmers under the joint signatures of married couples. In addition, we will actively support female farmers in creating networks and developing their abilities.

③ Encourage and train various types of farmers

- We will provide seminars aiming to develop farming volunteers and agrarian organizations entrusted with farming work.
- We will consider supporting farmers who employ aged workers and provide measures for safety and health.

(2) Strengthen the management skills of motivated farmers and others

By integrating various industries and research institutes, which is one of the advantages of Tokyo, we will help farmers improve productivity and produce value-added products through their own initiative and inquisitive spirit while also supporting their efforts in strengthening management skills based on the characteristics of diversified small-quantity production mainly focusing on direct sales.

By including efforts for active response to consumer demands such as dairy education farms^(Note), we will support livestock farmers who use their contiguity with large markets through processing and sales of dairy products and direct sales of chicken eggs.

(Note) Dairy education farms are Stock and other farms where people can learn about stock and other farming, the natural environment, and coexisting with nature. Here the aim is to support learning about eating and life through the stock farming experience.

① Establish high-productivity agricultural industry utilizing advanced technologies

- In order to maximize profits from limited farmland, we will proceed with developing advanced technologies including stable and highly productive environmental control cultivation systems, root area limiting cultivation^(Note) and ICT^(Note) for fruit trees to improve the quality of crops, and will quickly introduce these technologies to farmers.

(Note) ICT stands for Information and Communication Technology. Efforts are being made to introduce ICT for controlling cultivation environments and managing production in the agricultural industry.

(Note) Root area limiting cultivation: A cultivation method in which seedlings are set out in the cultivating soil of a banking structure isolated from the ground with the water supply adjusted to match the tree growth. The banking structure of the cultivating soil prevents water damage from standing water. The tree growth can be controlled by adjusting the amount of cultivating soil, water, and fertilizer. In addition, isolating the cultivating soil from the ground prevents damages due to soil borne diseases.

② Promote added-value to agricultural and livestock products made in Tokyo

- We will endeavor to establish high-quality brands by such means as developing new varieties based on consumer demand and characteristics of local areas and providing technical training courses to farming groups trying to apply new cultivation techniques.
- We will formalize the techniques for cultivating Edo-Tokyo vegetables^(Note), popularize them among farmers and consider solutions such as contract farming for stable production.



Magome Sanzun carrot (Edo-Tokyo Vegetable)

- We will endeavor to differentiate between, and add value to, these agricultural products through consideration of unique advertisement and sales methods, development of new products including processed foods, and region branding by utilizing regional collective trademarks^(Note) and the geographical indication protection system^(Note).

(Note) Edo-Tokyo vegetables are derived from the so-called local varieties, most of the seedlings of which were self-supplied or secured by the neighboring seedling businesses during the Edo period to the middle of the Showa Era (late 1960's), or vegetables derived from regional cultivating methods.

(Note) Regional collective trademarks: Regarding trademarks consisting of names of regions, products, and the like that are known in a certain scope, such as organizations and cooperative business associations may be granted registered trademarks as regional collective trademarks.

(Note) Geographical indication protection system: A system to protect the names of those products that have qualities, social evaluations, and other established characteristics tied to the producing districts as intellectual properties. More than 100 countries across the world hold protection systems.

③ Supporting the implementation of farm management using original and inventive ideas

- We will strengthen the support systems using expert knowledge and advice for farmers, who have no knowledge on how to implement their vision of spreading the future of farms, with problems regarding management of farms.
- When developing desirable farm management utilizing the advantages of Tokyo, we will support projects using inventive ideas such as development of processed foods by establishing a sixth industry, participating in markets, and founding farmer-run restaurants^(Note).

(Note) Farmer-run restaurants: Businesses in which farm management personnel, who are certified by the prefectural governors under the Food Sanitation Law (Law No. 233, 1947), provide unspecified persons with cuisine consisting of food materials produced by themselves and procured within the region, regardless of the ratio thereof, and obtain payment.

④ Strengthening farm management capabilities

- By providing diagnosis and instruction on techniques and farm management, we will comprehensively help farmers create and implement their management improvement plans in an attempt to train certified farmers^(Note) with an excellent sense of farm management.
- We will support efforts by the certified farmers toward strengthening farm management from the viewpoint of both hardware and software, while enhancing measures to improve farm management by other farmers.
- Along with advanced business-oriented management and incorporation, business bodies with workers from outside their immediate families have increased. We will therefore popularize and spread measures for labor management and accident protection in farming work.

(Note) Certified farmers are those with certification from municipal governments that satisfies criteria pursuant to the Act on Promotion of Improvement of Agricultural Management Foundation. Their management improvement plans are ① appropriate when compared with the basic strategy of the municipality, ② thought to be achievable, and ③ appropriate for efficient and comprehensive use of farmland.

⑤ Support management for livestock farmers

- In addition to improving working conditions by the enhancement of dairy farm helpers, measures for improved environment around livestock barns, cost reduction by improved production of self-supplied feedstuff, and support of value-added products, we will strengthen support for advancing the understanding of dairy farming through interaction with Tokyo citizens including experiential learning from neighboring schools.

(3) Enhance productivity by establishing required facilities, building infrastructure, etc.

In order to develop efficient and highly productive agriculture by utilizing a small labor force and limited farmland, we will proceed with the transfer of farmlands and support building facilities and upgrading

infrastructure.

① Improve productivity through building facilities

- The Tokyo Olympic and Paralympic Games in 2020 is an opportunity for supporting enthusiastic farmers to build the necessary agricultural facilities so that they can develop highly productive management in the future.



Production of tomatoes
by "barrel cultivation system"

② Promote utilization of farmlands by upgrading agricultural infrastructure

- On islands and in hilly and mountainous areas, we will upgrade farm roads and watering facilities to allow for flexible response to the scope or environment of agriculture, promote utilization of farmlands, and promote efforts to elongate the lifecycles of facilities through repairing existing agricultural facilities.
- For farmlands within residential areas, we will support construction of facilities including chemical prevention shutters and soil dust prevention nets in consideration of the residential environment, improve landscapes by making parks along water channels, and preparation of water wells for both disaster relief and agricultural purposes that can supply water to domestic areas in case of a disaster.

③ Establish management base through active transfer of farmland

- Outside the areas designated for urbanization, we will ensure more active transfer of farmlands pursuant to the Act on Promotion of Improvement of Agricultural Management Foundation to increase the scope of farmers and encourage and train of new farmers.
- Regarding the areas designated for urbanization, the National Government is currently considering a framework of leasing productive green areas and therefore, we will consider effective use of farmland and new farm management models toward active transfer of farmland in cooperation with individual agricultural committees and agrarian organizations.

2

Preserve farmland and leverage the various functions it can serve

The farmlands in Tokyo not only supply agricultural products to the Tokyo citizenry, but also give the citizens peace of mind and assurance and help form good residential environments. In order to maintain farmlands with this multi-functionality, measures for farmland conservation that can be adjusted to individual circumstances must be considered.

(1) New approaches to preserving farmland

In order to contribute to lives of Tokyo citizenry by further developing the multi-functionality offered by farmland including those for disaster relief, environment, and education, we will develop new measures for farmland conservation from new points of view.

① Maintain farmland within areas designated for urbanization

- Considering future system reform to promote leasing of farmland within areas designated for urbanization, we will conserve urban farmland by enhancing programs for preparation of facilities that help further develop multi-functionality including those for recreation, welfare, and education in cooperation with the ward and municipal governments.
- We will arrange a model farm to show how to utilize productive green areas after purchase, communicate the knowledge to the ward and municipal governments, and promote conservation of urban farmlands through purchase and agricultural use of productive green areas by the municipal governments.
- Expecting future system reform regarding urban farmlands, we will consider effective programs to restrict the reduction of productive green areas and promote the designation of new productive green areas.



Children experiencing harvesting
(Hino City)

② Conservation of urbanization control areas and agricultural developing areas

- Within the urbanization control areas, we will encourage and train new farmers as well as promote active transfer of farmland through intermediation by the municipal governments and the agricultural committees in an effort to respond to the shortage of farmers and unused farmland. In addition, we will prepare a flexible infrastructure for revitalizing an area.
- In developing agricultural areas, developing mountain village areas, and on islands, we will promote construction of agricultural facilities aiming to conserve high-quality farmland, improve production of high value-added agricultural products while also implementing programs to maintain and manage farm roads and watering facilities that respond to local conditions.
- Considering depopulation and further aging of farmers, we will help make local communities and conserve agricultural water so that the multi-functionality of farmlands can be maintained including conservation of biological diversity and formation of landscapes.

③ Support small-scale farmers

- In order to preserve the small-scale productive green areas additionally specified due to the partial amendment of

the Production Green Land Law, we will provide both hardware and software to support farmers that sell agricultural products on a small-scale to improve their management and further utilize their multi-functionality.

- We will try to make small-scale farmers understand and utilize the system of farmland lease for the purpose of farmland preservation.

④ Restore and upgrade unutilized farmland, etc.

- We will support certified farmers and new farmers to restore farmland by such means as reclamation, stumping, removal of gravel, and mixing soil when they use unutilized and hardly utilized farmland.

(2) Contribution to cities by the functions of disaster prevention and environmental conservation provided by farmland

Farmland is valuable multi-function open space in a city that provides temporary evacuation sites in case of a disaster and alleviates the heat island effect. We will help further promote such functions as disaster prevention and environmental conservation.

① Strengthen disaster prevention functions through utilization of agriculture and farmland

- We will actively support ward and municipal governments and farmers to implement disaster preventive measures by preparing water wells for both disaster relief and agricultural purposes that can supply domestic water in a disaster and upgrade U-turn farmlands^(Note).
- By providing emergency drills at agricultural facilities and promoting specified disaster-prevention support farmland, we will support programs that provide disaster relief in case of a disaster.



Cooking drills in agricultural greenhouses (Nerima Ward)

(Note) U-turn farmlands: Lands that were once farmland but were changed to parking lots, apartment housing and the like, and were then returned to farmland by removing gravel, mixing soils, etc. We recommend that returned farmland is specified as disaster-prevention support farmland.

② Promote efforts for further development of environmental conservation

- We will consider support for programs that feature environmental conservation of farmland in plans for preservation of urban green zones and further develop those features.

③ Form agricultural landscapes through preservation of farmland and homestead woodlands

- In cooperation with the urban plan-related sections, we will promote utilization of the “agricultural landscape development zone system”^(Note), which specifies areas where farmlands and homestead woodlands coexist where agricultural scenery is conserved, and will support programs for landscape preservation in which local residents participate.

(Note) Agricultural landscape development zone system was established by the Tokyo Metropolitan Government to conserve the decreasing amount of farmland and give the agricultural landscapes to future citizens. In cooperation with the ward and municipal government, the Tokyo Metropolitan Government specifies areas where farmland and homestead woodland usage is maintained to a certain degree, and actively utilizes urban planning systems for conservation of farmland and the like, in order to conserve and develop agricultural landscapes while complying with regional community development plans.

(3) Expand opportunities to experience a variety of farm work

We anticipate an increased need for allotment gardens, experience gardens, schoolchildren's gardens, welfare gardens, and the like as places of farm work experience. Therefore, we will upgrade and develop farmland in order to respond to these diverse purposes.

① Upgrade allotment gardens, etc.

- By providing both hardware and software, we will support ward and municipal governments and farmers who plan to open allotment gardens that include facility arrangements, dispatch experts for program creation, public relation activities, and seminars on user safety.

② Cooperate with school education

- For the smooth operation of schoolchildren's gardens as places of agricultural experience for children, we will develop teaching aids and manuals necessary for farm work experience in cooperation with school officials, farmers, and agrarian organizations, and at the same time consider framework to reduce the burden on farmers including garden management.

③ Cooperate with the welfare sector

- By providing both hardware and software, we will support those farmers planning to open their facilities by including preparation of barrier-free farmland facilities and dispatching experts such as garden landscapers.

(4) Promote urban greening using flowers and trees raised in Tokyo

Since the Edo Era, the citizenry of Tokyo have developed a culture of enjoying flower gardens and garden plants decorating their homes, which forms the basis of modern greening plants. From the viewpoints of farmland conservation and formation of a good living environment for the citizens of Tokyo, we will endeavor to maintain and improve beautiful scenes of flowers and garden plants while promoting effective use of the Tokyo-produced greening plants.

① Expand the use of Tokyo-produced greening plants

- When procuring greening plants, including street trees, in public works by the Tokyo Metropolitan Government, we will promote Tokyo-produced greening plants and endeavor to create rich green areas through production and utilization.

② Develop and popularize new greening techniques

- The Tokyo Olympic and Paralympic Games in 2020 is a great opportunity to promote the development of techniques for greening various urban spaces and for alleviating summer heat. We will endeavor to stimulate demand for, and expand consumption of Tokyo-produced greening plants by introducing and demonstrating new methods to utilize diverse greening plants including Tokyo-produced flowers, garden plants, cut leaves, and foliage plants.



Demonstration of experiments for a portable greening system

③ Promote community greening activities

- In order to expand understanding and use of community-produced flowers and garden plants, we will support community greening activities to decorate areas around railway stations and local shopping streets.

3

Promote sustainable agriculture and local consumption

Under the global demand for food safety, environmental conservation, and labor safety in agriculture, we will support the acquisition of GAP^(Note) certification. We will also popularize sustainable agricultural production in order to secure safe and reliable agricultural products and promote environment-conscious agriculture.

Since farmers are close to consumers, agriculture in Tokyo has an advantage that farmers can offer fresh, safe and reliable agricultural and livestock products that meet consumers' needs. In addition, CO₂ emissions and transportation costs are reduced. We will fully utilize these advantages to promote consumption of local agricultural and livestock products.

(Note) GAP (Good Agricultural Practice) is a series of production process management procedures in which, based on agricultural products and regional and other conditions, farmers ① plan farmwork and determine inspection items, ② execute and record farmwork in accordance with the inspection items, ③ inspect and evaluate the records and make improvements, and ④ utilize them in the next cropping. This allows various objectives to be met, including ensuring safe agricultural products and environmental conservation.

(1) Provide agricultural products through sustainable agriculture

By promoting sustainable agriculture that considers food safety and the environment, we will further promote safe and reliable agricultural products to the citizenry of Tokyo.

① Popularize and promote GAP and environment-conservation agriculture

- We will actively encourage farmers to introduce GAP while promoting it to consumers and distribution companies.
- In order to enhance safety and reliability of Tokyo-produced agricultural products, we will establish the Tokyo Metropolitan GAP^(Note) system that will enable sustainable agricultural production by utilizing the features and advantages of the city of Tokyo as well as supporting certification applications including JGAP^(Note).
- We will develop and popularize techniques for environment-conservation agriculture including comprehensive pest control independent of chemical pesticides and reducing chemical fertilizers. In addition, we will actively promote the Tokyo Metropolitan Ecological Agricultural Product Certification System^(Note) to markets and distribution companies for more active transactions.

(Note) JGAP (Japan Good Agricultural Practice) is Japan's unique, international-level GAP certification to be given to farms implementing food safety and environmental conservation.

(Note) Tokyo Metropolitan GAP is Tokyo's own GAP that indicates production control content and control methods related to "food safety," "environmental conservation," and "labor safety" based on the agriculture-related laws and regulations, and conforms to the "Guideline Regarding Common Foundation for Agricultural Production Process Control (GAP)" by the Ministry of Agriculture, Forestry and Fisheries.

(Note) Tokyo Metropolitan Ecological Agricultural Product Certification System certifies Tokyo-produced agricultural products made with less chemically synthesized pesticides and fertilizers than specified in industry standards. The agricultural products are certified by the Tokyo Metropolitan Government and classified based on the percentage reduction: 25% or more (Tokyo Eco 25), 50% or more (Tokyo Eco 50), and none used (Tokyo Eco 100).

② Investigate the safety of agricultural and livestock products and disclose that information

- We will implement monitoring systems such as residual chemical investigations and radioactive material inspections on the Tokyo-produced agricultural and livestock products, and disclose the information on safety in an easy-to-understand manner through the Tokyo Metropolitan Government website and the like, in order to relieve anxiety among consumers.

(2) Strengthen measures to prevent the spread of plant and animal diseases

We will upgrade the risk management system against plant diseases pests and animal diseases caused by factors such as global warming and unrestricted international movement of persons and goods, the risk of disease is increasing. We will prepare a stress-free environment where farmers can produce excellent agricultural and livestock products.

① Prepare a stress-free environment where farmers can produce agricultural products

- In an effort to respond to intrusion and diffusion of new pests such as kiwifruit canker and plum pox viruses, we will strengthen cooperation with pest control organizations and provide farmers with information in order to prevent intrusion and take appropriate and effective control measures.

② Upgrade system for animal epidemic prevention

- Due to an increased risk of serious livestock epidemics, including highly pathogenic avian influenza and foot-and-mouth disease, being introduced to Japan, we will constantly provide farmers with information and raise awareness, while improving support and instructions to retain good feeding sanitation control conditions within farms and promoting preventative measures.



Epidemic prevention drills based on possible outbreaks

- We will strengthen systems related to animal epidemic prevention by deepening cooperation with the organizations concerned, including the National Government, the ward and municipal governments, and JA.

③ Strengthen measures for prevention of damage by animals

- In order to mitigate damage caused by wild animals in a community, which is a factor in reducing a farmer's motivation and increasing unutilized farmland, we will organize farmers, and hold seminars on habits of harmful birds and animals. In addition, we will prepare facilities for prevention including wild animal deterrents, intrusion prevention fences and supporting the capture of harmful birds and animals, in order to take comprehensive and effective measures.
- On islands, we will continue to take measures for extermination of non-native wild animals, and consider measures for damage prevention including intrusion prevention fences.

(3) Promote local consumption of Tokyo agricultural and livestock products

We will further promote the production and consumption of agricultural and livestock products in Tokyo. This will aid both the citizens of Tokyo and the farmers: The former can obtain fresh, safe, and reliable agricultural and livestock products and the latter can efficiently produce products that meet the needs of the citizens.

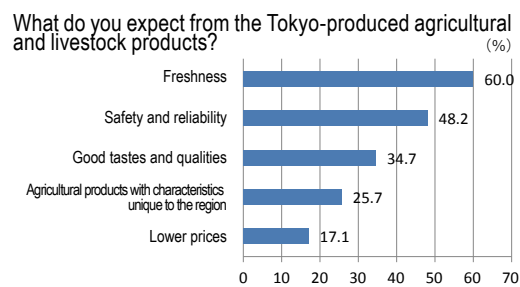
① Promote diverse efforts for the production and consumption in Tokyo

- By using the antenna shop founded in cooperation with agrarian organizations in order to expand the production and consumption of Tokyo-produced agricultural and livestock products to the citizens living in the civic center section, we will display and sell Tokyo-produced agricultural and livestock products, communicate information, through PR and other events.
- By matching the producers of the Edo- Tokyo vegetables with restaurants and other businesses, and strengthening cooperation with agrarian organizations, we will support promotional activities for the citizens of Tokyo.
- We will consider supporting programs to open farmer-run restaurants and other facilities that utilize local agricultural and livestock products.

What do you expect from the Tokyo-produced agricultural and livestock products?

In an “Internet Metropolitan Government Monitors Questionnaire” held in FY 2015, the Tokyo Metropolitan Government asked a question: “What do you expect from the Tokyo-produced agricultural and livestock products?” The top-ranked answers included quality-related items: “Freshness” (60%), “Safety and reliability” (48%), and “Good tastes and qualities” (35%).

These answers seem to indicate that the agricultural products from neighboring areas more important than “lower prices.”



② Increase supply for use in school lunches

- By strengthening cooperation between the local farmers and officials responsible for school lunches, we will increase supply of Tokyo-produced agricultural products for use in school lunches. In particular, in order to increase supplies for use in school lunches in areas with little farmland, we will establish a new system for supplying school lunches that involve agrarian organizations, officials responsible for school lunches, distribution companies, and the like.

③ Strengthen communication of information

- By effectively utilizing various methods including communication of information through the web, SNS, and IoT, and holding PR events, we will further increase information available on the Tokyo-produced agricultural and livestock products and the multi-functionality of agriculture in Tokyo.

4

Promote agriculture that takes advantage of the characteristics of the local area

In Tokyo, farms are operated in diverse environments including islands, hilly and mountainous areas, and suburban and urban areas, making it is necessary to promote farm operation by utilizing the individual characteristics and resources of the region.

(1) Promoting agriculture in Tokyo's Islands

On islands, production of cut leaves, cut flowers and tropical fruits utilizing the warm climate is popular. The severe environment of remote islands, however, have problems such as many youths leaving their islands higher education and employment and shipping being affected by the weather. Therefore, we will endeavor to introduce and train farmers and to stabilize shipping lanes.

- In order to reduce the shortage in farmers, we will train new farmers, such as U-, J-, and I-turns^(Note), through recruitment drives and provide them with technical training and farmland, while supporting efforts by local municipalities in securing a basic livelihood, including housing.
- We will support the introduction of cooling containers for stable shipment of agricultural products to outside islands and promote research into techniques to keep cut leaves and cut flowers fresh.
- We will support the establishment of a sixth industry to utilize unique agricultural products, including development of processed products in cooperation with traders and manufacturers on the islands.
- On islands, we will continue to implement measures for exterminating non-native wild animals, and consider measures for damage prevention including intrusion prevention fences. (Described again)



Training in techniques to adjust shipment of cut leaves (Hachijo-machi)

(Note) U-, J- and I-turns are collective terms referring to movement by residents from metropolitan areas to the provinces. U-turn stands for moving back to the person's hometown; J-turn, moving to a provincial city near the person's hometown; and I-turn, moving to a province other than the person's hometown.

(2) Promoting agriculture in Tokyo's hilly and mountainous areas

In hilly and mountainous areas, mainly the eastern Tama region, some agricultural products including wasabi (Japanese horseradish) and yuzu (citron) are produced as local specialties by utilizing the natural environment. We will promote initiatives like this that utilize regional resources for agriculture and fertile areas.

- We will support gardens with lodging facilities where urban citizens can stay and experience farming and Nature.
- In order to mitigate damage caused by wild animals in a community, which is a factor in reducing a farmer's motivation and increasing unutilized farmland, we will organize farmers, and hold seminars on habits of harmful birds and animals. In addition, we will prepare facilities for prevention including wild animal deterrents, intrusion prevention fences and supporting the capture of harmful birds and animals, in order to take comprehensive and effective measures. (Described again)

(3) Promoting agriculture in Tokyo's suburban areas

Suburban areas, mainly the southern and western Tama region, are urbanization control areas including agricultural promotion areas considered as leading areas for agricultural production in Tokyo.

- We will support improving cultivation structures etc. and help upgrade agricultural and livestock production facilities, while supplying the products to urban areas without farmland for use in school lunches to develop new sales channels.
- In the agricultural promotion areas, we will expand businesses by consolidating farmland leases and other methods, and upgrade the infrastructure including farm roads and watering facilities.

(4) Promoting agriculture in Tokyo's urban areas

In the 23-ward area and urban areas in the Tama region, the productive green areas in the urbanized areas are mainly used for farming. We will supply agricultural products to the citizens of Tokyo and implement initiatives to feature the multi-functionality of agriculture and farmland.

- We will support initiatives by municipalities that feature multi-functionality such as disaster prevention, education, recreation, and community forming.
- In order to secure urban farmland, we will support farmland preparation by removing gravel and mixing soils. This will hasten the restoration of farmland from residential land.
- To prepare for future reform of urban farmland systems by the National Government, we will implement programs to respond to the new systems including introducing new techniques to secure profitability from small-scale productive green areas and conservation of farmland through leasing.

1

Attitude of National Government regarding urban agriculture and farmlands

When urban residents were expecting more from urban agriculture and farmland, and after receiving requests from farmers, agrarian organizations, and municipalities, the National Government changed the policy to actively utilize the multi-functionality of the urban farmlands, considering that the urban agriculture and farmland “should exist.”

In February 2017, the bill to reform the Production Green Land Law was approved by the Cabinet and thereby, changed the minimal area for specification of a productive green area from 500 m² in every case to an area appropriate to the local conditions.

2

Requests to National Government regarding system reform

The Tokyo Metropolitan Government has so far submitted requests to the National Government every year regarding the reform of systems related to urban agriculture and farmland. In March 2017, we submitted a proposal for system reform of promoting urban agriculture and conservation of urban farmlands to the authority responsible for the National Strategic Special Zones.

We will continue to petition the National Government so that the urban farmland playing multiple roles in the lives of the citizens of Tokyo can be preserved and the urban farmers can run farms in the future without anxiety.

(1) Inheritance tax deferral system that would apply to designated productive green areas which have been leased

At present, farmland within urbanized areas cannot be leased pursuant to the Act on Reinforcement of the Agricultural Management Framework and therefore, we will make the following three requests:

- ① In order that the owners of the productive green areas, or the farmland set for conservation, can lease their lands as farmland to enthusiastic farmers without anxiety, a system should be established that is equivalent to leasing pursuant to said Act, which clearly defines the lease periods.
- ② The leased productive green areas should also be covered by inheritance tax deferral system.
- ③ Inheritance tax deferral system should also be applied to the productive green areas leased to municipalities, etc. pursuant to the Act on Special Measures for the Cropland Act Regarding Lease of Specific Farmlands and the Act on Promotion of Development of Community Farms.

Currently, in certain cities in the three metropolitan areas, the productive green areas to which inheritance tax deferral system has been applied has been obstructed by the obligatory use of those areas as farmland for the owners' lifetime. If leased, the leaseholder becomes the “main person engaged in work on the land (cultivating person)” and thus if the landowner should die, the heir cannot apply to purchase the land.

Therefore, we will request to amend the system so that, with regard to the productive green areas to which inheritance tax deferral system is applied, in case of death of the owner during the lease period, the heir can make application for purchase.

(2) System for inheritance tax deferral to apply to land used for agricultural equipment and facilities required for the farming business

The productive green areas are covered by inheritance tax deferral system. However, the system does not cover the lands for product collecting and shipping facilities, farming equipment warehouses and livestock barns essential for farm management, and homestead woodlands and flatland woods. Therefore, we will request measures to reduce burden of inheritance tax by such means as expanded application of the system under land use restriction of a certain level.

(3) Support for purchasing land designated productive green areas

In Tokyo, the area of land to which applications of purchase based on the Production Green Land Law are made is around 50 ha every year. Because these applications are made, for example, after the death of persons engaged in farming, it is difficult to purchase land in a well-planned manner. In addition, it is difficult for the municipal governments accept purchase requests due to high land prices, or heavy financial burdens. Furthermore, since other farmers hardly purchase land through introduction, farmland is increasingly developed into residential areas.

Of the farmlands in productive green areas that are desired to be purchased, those that can be expected to fully perform multi-functionality such as disaster prevention, environmental conservation, and education should be preserved by public ownership. To this end, we will petition municipalities for financial support for well-planned purchasing of productive green areas.

(4) Establish a new system for payment of inheritance tax in kind

Currently, farmland that has been assigned to the National Government as in-kind tax payment at the time of inheritance is never preserved as farmland and is sold off to developers.

Therefore, we will request the establishment of a new system by which farmland that is owned by the National Government through in-kind payment of inheritance tax may continuously be used for agricultural purposes by such means as leasing to municipalities at low prices as allotments.

To implement robust agriculture infrastructure in Tokyo that coexists with the urban society and contributes to the citizens, the Tokyo Metropolitan Government is promoting agriculture in Tokyo in cooperation with farmers, local governments, and the citizens of Tokyo.

1

Cooperation with farmers and agrarian organizations

In cooperation with farmers and agrarian organizations, the Tokyo Metropolitan Government will implement measures to improve the regional agricultural productivity and farm management capability in order to continue to produce and supply fresh, safe and reliable agricultural products for a long time to come.

In addition, by making individual sections play their roles, we will actively promote initiatives for contribution to local society through featuring the multilateral functions of agriculture and farmland.

2

Cooperation with local governments

In cooperation with the municipal governments, the Tokyo Metropolitan Government will develop detailed measures to promote agriculture based on the characteristics of individual areas.

In addition, for initiatives to preserve farmland by positioning agriculture and farmland in community development plans, we will support the sections related to urban planning and agriculture so that the two sides can cooperate in taking comprehensive measures.

3

Cooperation with National Government

In cooperation with the National Government, the Tokyo Metropolitan Government will endeavor to develop promotion measures to maintain agriculture in Tokyo, which is operated under various geographical conditions and in diverse management types.

We will request system improvements so that the multi-functionality can play a more important role in communities and the environment.

4

Cooperation by citizens

Agriculture in Tokyo can be greatly supported by the citizens of Tokyo when they understand the challenges encountered by farmers and take action such as purchasing Tokyo-produced agricultural and livestock products and participating in the farming experience.

So that many more citizens understand, support and become more interested in, agriculture in Tokyo, the Tokyo Metropolitan Government will develop programs for the citizenry to actively participate in.

There is a diverse range of business sizes and management styles for agriculture in Tokyo due to the different natural and social conditions such as islands, hilly and mountainous areas, and urban areas, etc.

Therefore, to promote agriculture, it is desirable to promote the regional characteristics and to design and develop stable and attractive management appropriate to the differences.

Accordingly, based on actual agricultural business examples in each area in Tokyo, business models categorized by targeted agricultural income are exemplified for utilization as indices in preparing agricultural promotion plans in each municipality and in setting management improvement targets of farmers.

1

Setting business models

Business models categorized by agricultural income are set by the management foundation, social conditions of the area, and the age of the human resource, etc.

- ① Target income 10 million yen : Full-time farmer business model for leading agriculture in Tokyo
- ② Target income 6 million yen : Business model for bearing agriculture in the area
- ③ Target income 3 million yen : Business model for supporting an expanse of agriculture

Also, the next model is set for large-scale agricultural management bodies and business management bodies such as corporations, etc. that introduce an employed work force.

- ④ Sales target 50 million yen and above: Business model for corporations.

- ※ 1) The management style is based on the family run business.
- ※ 2) The target annual work hours for each main worker is set to approximately 1,800 hours by actively facilitating agricultural labor saving efforts from the point of view of health and leisure time.

2

Exemplification of Business Models

(1) Business model for leading agriculture in Tokyo (target income : 10 million yen)

This model adopts a predetermined employed work force and aims to use agricultural management as driving force of agriculture in Tokyo as a central hub.

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
1	Vegetables	I	Management featuring direct sales of vegetables grown in both a greenhouse and outdoors	120 (Facility 40) 180	3 + employee 1	Tomato, cucumber, sweet corn, broccoli, carrot, cabbage, etc.	Agriculture Greenhouses, heating unit, and precooling chamber
2	Vegetables	II	Management mainly composed of marketing and contracted shipping of vegetables grown outdoors and in a greenhouse	180 (Facility 20) 360	3 + employee 1	Daikon radish, cabbage, spinach, Japanese mustard spinach, tomato, broccoli, etc.	Agriculture Greenhouses, precooling chamber, seed mulcher, transplanting machine, and vegetable washer
3	Vegetables	II	Management mainly for marketing and shipping of school lunches, specializing in Japanese mustard spinach	50 (Facility 40) 300	3 + employee 1	Japanese mustard spinach	Agriculture Greenhouses, precooling chamber, and vegetable washer
4	Vegetables	II	Management by combining marketing and contracted shipping of mainly vegetables grown in a greenhouse	150 (Facility 30) 375	3 + employee 1	Spinach, Japanese mustard spinach, potherb mustard, carrot, etc.	Agriculture Greenhouses, precooling chamber, and vegetable washer
5	Flowers	I II	Management featuring direct sales and marketing of potted flowers	45 (Facility 45) 90	3 + employee 2	Potted flowers such as cyclamen and poinsettia, etc.	Agriculture Greenhouses, heating unit, clod crusher, and potting machine
6	Flowers	II	Management mainly composed of marketing and contracted shipping of flower bed seedlings and potted flowers	70 (Facility 30) 120	3 + employee 2	Flower bed seedlings, potted flowers, and vegetable seedlings	Agriculture Greenhouses, heating unit, automatic irrigation systems, seeding machine, wheel loader, soil mixer for pots, and storage space for soil for horticulture
7	Flowers	II	Management by marketing of <i>Eurya japonica</i>	250 (Facility 0) 250	3 + employee 1	<i>Eurya japonica</i>	Speed sprayer, back hoe, and carrier
8	Fruits	I	Management featuring fruits, introducing restricted root zone cultivation system for Japanese pears and grapes	80 (Facility 20) 80	2 + employee 3	Grapes, Japanese pear	Agriculture Greenhouses, speed sprayer, chemical proof shutter, fruit trellis, and restricted root zone cultivation system
9	Potted plants	II	Management of producing trees for urban tree plantation	240 (Facility 2) 240	3	Tall deciduous trees, general shrubs, and general shorter trees	Raising seedling house, truck with crane, and back hoe
10	Potted plants	II	Management by producing ground cover plants and container potted shrubs, etc.	300 (Facility 100) 300	4 + employee 3	Ground cover plants and shrubs in general	Steel frame greenhouse, automatic irrigation systems, wheel loader, and fork lift
11	Animal husbandry	II	Management of breeding high performance dairy herds utilizing self-supplying feed, and producing and selling manure	400 40 cows (delivered cows)	2 + employee 0.5	Raw milk and manure	Cattle barn, automatic feeding machine, milker, bulk cooler, manure handling and disposing shed, wheel loader, and coarse feed cultivation machinery

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
12	Animal husbandry	II	Management by combining the production of egg-laying hens and Tokyo Shamo chickens	30 3,000 hens (egg-laying hens) 1,000 chickens (Tokyo Shamo chickens)	2 + employee 1	Chicken eggs, Tokyo Shamo chickens, and fermented chicken manure	Poultry house, brooding house, manure handling and disposing shed, wheel loader, and direct sales facility
13	Animal husbandry	III	Management by combining dairy farming and direct sales of home-made dairy products	50 20 cows (delivered cows)	2 + employee 0.5	Raw milk, dairy products, and barnyard manure	Cattle barn, milker, bulk cooler, automatic feeding machine, manure handling and disposing shed, wheel loader, and facility for processing and selling milk
14	Combined	I	Management featuring protected horticulture mainly taking care of passion fruits	40 (Facility 30) 40	2 + employee 1	Passion fruit, mango, lemon, tomato, etc.	Agriculture Greenhouses and fruit trellis

<<Types of business models>>

- I Management of agriculture working on locally produced products for local consumption by mainly direct sales, etc.
- II Management of agriculture mainly composed of marketing and contracted shipping to mass retailers, etc.
- III Management of agriculture working on not only production but also processing and sales
- IV Management of agriculture making a contribution to fulfilling lives of the citizens of Tokyo

(2) Business model for bearing agriculture in the area (target income : 6 million yen)

This model enhances agricultural management by introducing family labor power and employed work force as required, and planning to improve market channel, etc. effectively utilizing agricultural land and facilities, etc.

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
1	Vegetables	I	Management mainly composed of direct sales and contracted shipping of vegetables grown in a greenhouse	50 (Facility 40) 250	3	Tomato, cucumber, spinach, Japanese mustard spinach, Edo-Tokyo vegetables, etc.	Agriculture Greenhouses, heating unit, and precooling chamber
2	Vegetables	I	Management featuring vegetables, by shipping to a variety of partners, such as cooperative direct sales stores, direct spot sale stores, mass retailers, and schools for school lunches, etc.	60 (Facility 20) 120	3	Tomato, cucumber, kidney beans, leaf and stem vegetables, sweet corn, daikon radish, etc.	Agriculture Greenhouses, heating unit, precooling chamber, and direct sales facility
3	Vegetables	I II	Management featuring contract and direct sales of mainly tomatoes produced by hydroponic culture	50 (Facility 30) 60	3 + employee 1	Tomato, cucumber	Agriculture Greenhouses, hydroponic culture facility, heating unit, and heat pump
4	Vegetables	II	Management featuring marketing of mainly leaf vegetables such as Japanese mustard spinach and spinach, etc.	50 (Facility 40) 250	2	Japanese mustard spinach, spinach, edamame soybeans	Agriculture Greenhouses, precooling chamber, and vegetable washer
5	Vegetables	II	Management mainly composed of marketing and shipping for school lunches, specializing in Japanese mustard spinach	40 (Facility 30) 180	2	Japanese mustard spinach	Agriculture Greenhouses, precooling chamber, and vegetable washer
6	Vegetables	II	Management mainly composed of marketing Japanese mustard spinach and edamame soybeans	60 (Facility 30) 240	2	Japanese mustard spinach, edamame soybeans	Agriculture Greenhouses, precooling chamber, and vegetable washer
7	Vegetables	II	Management featuring marketing of mainly leaves and flowers for decorating Japanese dishes	30 (Facility 20) 80	3	Decorative leaves and flowers for culinary use	Agriculture Greenhouses, precooling chamber, and packing control facility
8	Vegetables	II	Management mainly composed of marketing vegetables grown outdoors	12 (Facility 0) 240	3	Cabbage, broccoli, daikon radish, spinach, carrot, etc.	Transplanting machine, precooling chamber, and washer
9	Vegetables	II	Management featuring direct sales and marketing of vegetables	80 (Facility 20) 160	3 + employee 0.5	Tomato, cucumber, Japanese mustard spinach, spinach, daikon radish, etc.	Agriculture Greenhouses, heating unit, precooling chamber, and vegetable washer
10	Vegetables	II	Management featuring ashitaba mainly for processing	200 (Facility 0) 200	2	Ashitaba	Back hoe
11	Vegetables	III	Management mainly composed of producing, processing and selling wasabi horseradish	50 (Facility 2) 50	2	Wasabi horseradish and processed products	Raising seedling house, processing facility and selling facility
12	Vegetables	III	Management by combining direct sales of vegetables and processing and sales of farm products	80 (Facility 20) 120	2 + employee 1	Tomato, eggplant, cucumber, daikon radish, taro and processed products (confectionery and daily dishes)	Agriculture Greenhouses, heating unit, precooling chamber, processing facility and selling facility
13	Vegetables	IV	Management mainly composed of operating a garden for experiencing farm work and direct sales of vegetables	65 (Facility 10) 900	3	Tomato, cucumber, cabbage, spinach, etc.	Agriculture Greenhouses and farm work experiencing facility
14	Flowers	I	Management by combining direct sales and marketing of flowers	50 (Facility 30) 120	2 + employee 1	Pot flowers (cyclamens, etc.), flower bed seedlings and vegetable seedlings	Agriculture Greenhouses, heating unit, automatic irrigation systems, culture soil disinfecting machine, wheel loader, potting machine, and seeding machine

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
15	Flowers	I	Management mainly composed of shipping chiefly cut flowers to cooperative direct sales stores and mass retailers	60 (Facility 40) 120	4 + employee 1	Lily, malcolm stock, aster, Russell prairie gentian, and other cut flowers	Agriculture Greenhouses, precooling chamber, and automatic liquid fertilizer mixing machine
16	Flowers	II	Management mainly composed of marketing pot flowers and flower bed seedlings	80 (Facility 20) 160	2 + employee 0.5	Pot flowers and flower bed seedlings	Agriculture Greenhouses, heating unit, automatic irrigation systems, culture soil disinfecting machine, wheel loader, potting machine, and seeding machine
17	Flowers	II	Management by marketing cut flowers	60 (Facility 60) 60	2	Rose	Agriculture Greenhouses, heating unit, nutritious liquid supplying apparatus, and precooling chamber
18	Flowers	II	Management mainly composed of marketing bouvardia	100 (Facility 50) 100	2	Bouvardia, Fleesia, Aspidistra elatior, etc.	Agriculture Greenhouses, precooling chamber, and wheel loader
19	Flowers	II	Management by marketing Phoenix spp. (cut leaves) (both grown outdoors and in a greenhouse)	140 (Facility 40) 140	2	Phoenix spp.	Net greenhouse
20	Flowers	II	Management by marketing cut leaves	30 (Facility 30) 30	2	Leather fern, ruscus, dianella, etc.	Agriculture Greenhouses
21	Flowers	II	Management by marketing Eurya japonica	100 (Facility 0) 100	2	Eurya japonica	Carrier
22	Flowers	II	Management by marketing ornamental pot flowers	100 (Facility 50) 100	2	Phoenix spp., kinds of Dwarf schefflera, Ficus, and palm coconut	Agriculture Greenhouses and net greenhouse
23	Fruits	I	Management featuring fruits, by mainly producing grapes grown in a greenhouse	50 (Facility 20) 50	2	Grape, pear	Agriculture Greenhouses, speed sprayer, chemical proof shutter, fruits trellis, and restricted root zone cultivation system
24	Fruits	I	Management featuring fruits, by mainly producing Japanese pears and grapes	80 (Facility 0) 80	2 + employee 0.5	Pear, grape, kiwi fruit, etc.	Speed sprayer, swing sprinkler, fruits trellis, chemical proof shutter, and rooting zone control cultivation system
25	Fruits	I	Management featuring fruits, by mainly producing kiwi fruits	80 (Facility 10) 80	3	kiwi fruit, grape, persimmons, etc.	Speed sprayer, fruits trellis, chemical proof shutter, cold storage warehouse, direct sales facility, and chipper
26	Fruits	IV	Management mainly by operating a tourist farm where tourists can pick fruits	80 (Facility 0) 80	2 + employee 0.5	Pear, grape, blueberry	Speed sprayer, sprinkling equipment, fruits trellis, bird net, and direct sales facility
27	Potted plants	II	Management by producing ground cover plants and container potted shrubs, etc.	220 (Facility 20) 220	2 + employee 2	Ground cover plants and shrubs in general	Agriculture Greenhouses and automatic irrigation systems
28	Potted plants	II	Management featuring potted plants, by producing mainly trees for tree planting	300 (Facility 6) 300	2.5	Deciduous tall trees, shrubs in general, and lower trees in general	Agriculture Greenhouses and truck with crane
29	Animal husbandry	I	Management featuring pig farming, trying to recycle regional resources	30 500 pigs (growing-finishing pigs)	2	Growing-finishing pigs and manure	Pigpen, manure handling and disposing shed, livestock feed adjusting facility, and wheel loader

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
30	Animal husbandry	I	Management by breeding of egg-laying hens and direct sales of hen's eggs	30 5,000 hens (egg-laying hens) 1,000 fowls (Tokyo Silky Fowls)	2 + employee 1	Chicken eggs and fermented chicken manure	Poultry house, manure handling and disposing shed, and direct sales facility
31	Animal husbandry	II	Management mainly composed of breeding Japanese Black Cattle	150 30 cows (breeding cows)	1 + employee 0.5	Calves and barnyard manure	Cattle barn, manure handling and disposing shed, and wheel loader
32	Animal husbandry	II	Integrated management by raising Tokyo X pigs	30 30 pigs (mother pigs)	2	Tokyo X pigs and barnyard manure	Pigpen, manure handling and disposing shed, automatic feeding machine, and wheel loader
33	Animal husbandry	II	Management mainly composed of fattening Japanese Black Cattle	100 50 cows (fattening cows and breeding cows)	2	Beef cattle and barnyard manure	Cattle barn, manure handling and disposing shed, and wheel loader
34	Animal husbandry	II	Integrated management by raising Tokyo X pigs and ordinary pigs	30 15 pigs (Tokyo X mother pigs) 25 pigs (ordinary mother pigs)	2	Tokyo X pigs, ordinary growing-finishing pigs, and barnyard manure	Pigpen, manure handling and disposing shed, automatic feeding machine, and wheel loader
35	Animal husbandry	III	Management by direct sales of egg-laying hens and egg processed food	50 3,000 hens (egg-laying hens)	2 + employee 0.5	Chicken eggs, egg processed food	Poultry house, manure handling and disposing shed, processing facility, and direct sales facility
36	Tea	III	Integrated management mainly composed of retailing raw tea leaves and manufactured tea	150 (Facility 0) 150	2	Tea	Riding tea plucking machine, frost protection fan, tea manufacturing machine, and selling facility
37	Combined	I	Management featuring protected horticulture mainly for passion fruit	30 (Facility 20) 30	1 + employee 1	Passion fruit, mango, lemon, tomato, etc.	Agriculture Greenhouses and fruit trellis
38	Combined	I II	Management mainly composed of contracted shipping to mass retailers and schools for school lunches, and direct sales of vegetables, cut flowers and fruit	80 (Facility 20) 160	3 + employee 1	Tomato, cucumber, edamame soybeans, sweet corn, cut flowers, and blueberry	Agriculture Greenhouses, precooling chamber, and heating units
39	Combined	IV	Multiple management by combining tourist farm and direct sales	80 (Facility 0) 80	2 + employee 0.5	Blueberry, kiwi fruits, vegetables, etc.	Bird net, processing facility, direct sales facility, and eating experience facility

<<Types of business models>>

- I Management of agriculture working on locally produced products for local consumption by mainly direct sales, etc.
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- IV Management of agriculture making a contribution to fulfilling lives of the citizens of Tokyo

(3) Business model for supporting an expanse of agriculture (target income : 3 million yen)

This model establishes agricultural management that promotes each area's characteristics by utilizing agricultural land, facilities, machinery and equipment under family operation.

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
1	Vegetables	I II	Management featuring vegetables, by shipping to a variety of partners, such as cooperative direct sales stores, direct spot sale stores, mass retailers, and schools for school lunches, etc.	60 (Facility 5) 100	2	Tomato, cucumber, Japanese mustard spinach, turnip, broccoli, Edo-Tokyo vegetables, etc.	Agriculture Greenhouses and precooling chamber
2	Vegetables	I IV	Management by combining direct sales of many varieties of vegetables and running tourist farms	50 (Facility 10) 70	2.5	Tomato, cucumber, Japanese mustard spinach, spinach, etc. and blueberry	Agriculture Greenhouses and direct sales facility
3	Vegetables	II	Management featuring marketing of mainly fruits and vegetables	50 (Facility 20) 80	2	Tomato, cucumber, and vegetable seedlings	Agriculture Greenhouses and precooling chamber
4	Vegetables	II	Management mainly composed of marketing and shipping for school lunch, specializing in Japanese mustard spinach	25 (Facility 20) 120	2	Japanese mustard spinach	Agriculture Greenhouses and precooling chamber
5	Vegetables	II	Management mainly composed of marketing wasabi horseradish	50 (Facility 2) 50	2	Wasabi, horseradish	Raising seedling house
6	Vegetables	II	Management mainly composed of marketing ashitaba	80 (Facility 0) 80	2	Ashitaba	Bagging machine
7	Vegetables	III	Management by combining direct sales of vegetables and processing and sales of farm products	50 (Facility 10) 80	2.5	Sweet corn, daikon radish, taro and processed products (confectionery and daily dishes)	Agriculture Greenhouses, processing facility and precooling chamber
8	Vegetables	IV	Management mainly composed of operating a garden for experiencing farm work and direct sales of vegetables	50 (Facility 0) 60	2	Tomato, eggplant, spinach	Agriculture Greenhouses and farm work experience facilities
9	Flowers	II	Management by marketing mainly flower bed seedlings and pot flowers	40 (Facility 10) 80	2	Flower bed seedlings and pot flowers	Agriculture Greenhouses, automatic irrigation systems, wheel loader, and seeding machine
10	Flowers	II	Management by marketing cut leaves	40 (Facility 20) 40	2	Dianella, ruscus, leather fern, etc.	Agriculture Greenhouses
11	Flowers	II	Management by marketing Eurya japonica	50 (Facility 0) 50	1	Eurya Japonica	Carrier
12	Fruits	I	Management featuring fruits, by mainly producing Japanese pears and grapes	30 (Facility 0) 30	2 + employee 0.5	Pear, Grape, kiwi fruit, persimmons	Speed sprayer, fruits trellis, sprinkling facility, direct sales facility, and chemical proof shutter
13	Fruits	III	Management mainly composed of production, processing, and sales of Japanese apricot, yuzu citrus, persimmons, etc.	60 (Facility 0) 60	2	Japanese apricot, pickled dried plum, citrus fruits, persimmon	Processing facility and direct sales facility
14	Fruits	IV	Management featuring fruits, mainly by picking and direct sales of blueberries	40 (Facility 0) 40	2	Blueberry	Bird nets and direct sales facility

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
15	Potted plants	II	Management featuring potted plants, by producing mainly trees for planting	100 (Facility 5) 100	1.5	Tall deciduous trees, general shrubs, and general short trees	Agriculture Greenhouses and truck with crane
16	Farm products	III	Management by production, processing and sales of buck wheat, wheat, soybeans, etc.	60 (Facility 0) 90	2	Buck wheat, wheat, and soybeans	Combine harvester, processing facility, and tasting facility
17	Combined	I	Management featuring direct sales of cut flowers and various vegetables	40 (Facility 5) 60	2	Cut flowers and vegetables	Agriculture Greenhouses, heating unit, and direct sales facility
18	Combined	I	Multiple management mainly composed of spot sales of Tokyo Silky Fowls and vegetables	50 (facility 5) 100 fowls 60 a	2	Tokyo Silky Fowls, tomato, cucumber, cabbage, broccoli, Japanese mustard spinach, etc.	Poultry house, compost depot, and direct sales facility
19	Combined	I II	Multiple management mainly composed of marketing podded peas and cut leaves	30 (Facility 20) 40	1	Podded peas, cut leaves, decorative branches, etc.	Agriculture Greenhouses
20	Combined	IV	Combined management of producing passion fruits, lemons, and tomatoes	30 (Facility 10) 40	2	Passion fruit, lemon, tomato	Agriculture Greenhouses and fruits trellis

<<Types of business models>>

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(4) Business model for corporations (sales target: 50 million yen and above)

This model aims at large-scale agricultural management bodies that actively incorporate employment and a stable work force for high profitability.

No.	Classification	Business model type	Agricultural business model	Managing cultivated land (a) (facility area (a)) Cropping acreage (a)	Work force (employees)	Main item	Main facility and machine
1	Vegetables	II	Highly intensive management by producing hydroponic leaf vegetables such as Japanese mustard spinach, etc.	40 (Facility 40) 480	3 + employee 4	Japanese mustard spinach, salad, mini-celery, etc.	Agriculture Greenhouses, hydroponic cultivation facility, adjusting and packing facility, and precooling chamber
2	Vegetables	III	Management by marketing vegetables grown in greenhouses and outdoors	250 (Facility 60) 650	6 + employee 7	Small turnip, spinach, potheb mustard, taro, carrot	Agriculture Greenhouses, precooling chamber, vegetable washer, and water well for sprinkling
3	Flowers	II	Corporate management by producing special flowers and ornamental pot flowers	500 (Facility 80) 500	3 + employee 5	Phoenix spp. and ornamental potted flowers	Agriculture Greenhouses and storage space for horticulture soil
4	Potted plants	II	Management by production and distribution of trees for planting	500 (Facility 50) 500	2 + employee 1	Tall deciduous trees, general shrubs, and general short trees	Raising seedling house, truck with crane and back hoe
5	Animal husbandry	II	Dairy farm management introducing milking robots	300 100 cows (delivered cows)	3 + employee 2	Raw milk and barnyard manure	Cattle barn, milking robot, bulk cooler, TMR feeding machine, and manure handling and disposing shed
6	Animal husbandry	III	Corporate management by processing dairy products	-	2 + employee 4	Dairy products	Pasteurizer, filling machine, ice creamer, refrigerating and freezing chamber, and show case
7	Processing	III	Corporate management by processing and sales of local agricultural and livestock products	-	3 + employee 3	Processed products (daily dishes and box lunch)	Show case, gas type automatic fryer, cold table, and refrigerating chamber

<<Types of business models>>

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Advanced and characteristic case studies related to this plan will be introduced in each measure below.



Secure and train human resources and develop robust farm management practices

(i) Secure and train diverse human resources

◇ Support for successors of farmers and new human resources

Training course for human resources in islands areas

In islands areas, because many young people leave to go to school and find a job on the mainland, the shortage of farmers is serious. Therefore, training farmers is encouraged in such areas.

Hachijo Town established “The Center for Growing and Training Human Resources of Agriculture” in April, 2008, Kozushima Village established “Tanosawa Agricultural Training Facility” in April, 2013, and Oshima Town established “The Center for Supporting and Training New Agriculture Workers” in April, 2015. Local senior farmers provide technical training as the instructors in such centers. Vigorous efforts for securing and training new agriculture workers are spreading in each island.



The Center for Supporting and Training New Agriculture Workers (Oshima Town)

“Experiencing Life on Islands with Agriculture”

Tokyo Metropolitan Island Promotion Public Corporation holds a four day guided tour for promoting settlements on island areas in association with their town and village offices. People who are interested in agriculture can experience working and living on an island.

This is a worthwhile program where local veteran farmers can offer guidance for farm work and directly convey his feelings on agriculture to the participants. Also, providing many opportunities to communicate with islanders and information for living on the island, this program can give the participants a chance to consider life on the island. As a result, the number of participants who actual choose to live on the island has increased.



Experiencing life on an island with agriculture on Izu Oshima Island (November, 2016)
“Experiencing planting work of passion fruit”
(Picture provided by Oshima Town Office)

◇ Establishing an environment where women can play an active role

Towards active female participation

Adachi Ward is actively working on a joint application for certified farmers. 29 management bodies are certified as certified farmers in the ward, and 26 of them were certified by joint applications. (At the end of FY2015)

Also, the promotion center holds technical training for cultivating vegetables and flowers and agricultural products processing, etc., and lectures on management and inspection training, etc. for enhancing women's management ability five times in a year.

As a result, information interchange between female farmers became active and that led to an increase in income by newly expanding direct sales items in some cases.



Authorization certificate award ceremony by joint application (Adachi Ward)

Urban agriculture is in such high spirits!

"Nigoriya farm" run by a family of five in Kodaira city is working on direct sales of vegetables produced in the farm, and various activities using seasonal fruit and vegetables, such as harvesting experience of Japanese udo salad utilizing an underground hot house, and cooking lessons for kashiwamochi (rice cake wrapped in an oak leaf) starting with picking oak leaves, etc.

Also, farms play an extensive role in processing fruit and vegetables produced on the farm by establishing agricultural products processing facility and by producing agricultural processed products entrusted by neighboring farmers, etc.

Moreover, farms are gathering attention as a new business model of urban agriculture in terms of defining shared roles among the family members by concluding a family run business agreement and in terms of a business launched by a female farmer.



Harvesting experience in a hot house for Japanese udo salad

◇ Securing and training diverse human resources

We will support you in every place in Tokyo!

In spite of the expansion of the efforts utilizing a system for agriculture support volunteers in each municipality in Tokyo, there are still insufficient human resources of agriculture. Therefore, Tokyo Development Foundation for Agriculture, Forestry and Fisheries (Public Interest Incorporated Foundation) has been registering and dispatching "wide area agriculture support volunteers" who help farm work beyond the boundaries of municipalities since 2013.

Volunteers of wide generations help farm work, such as seeding, planting, thinning out, weed control, and harvesting, etc. on agricultural land in each area in Tokyo.

Some participants are from areas without agricultural land, and these volunteer activities are good opportunities to develop their understanding of agriculture in Tokyo.



Support for harvesting work by agriculture support volunteers

(ii) Strengthen the management skills of motivated farmers and others

◇ Establishing highly profitable agriculture using advanced technologies

Agriculture in Tokyo Innovation Project

Tokyo Metropolitan Agriculture and Forestry Research Center (TMAFRC) established “Agriculture in Tokyo Innovation Project” in association with private enterprises and Tokyo Metropolitan Industrial Technology Research Institute, etc. and is working on developing “Tokyo Type Integral Environment Control Production System” materializing highly profitable agricultural management even in restricted area of agricultural land. This system is a new production technology harmonizing agriculture and engineering science, enabling high yield and high quality by comprehensively controlling growing environment factors (temperature, humidity, light, carbon dioxide, water, and fertilizer, etc.) of farm products on the computer. Besides, TMAFRC also originally developed a hydroponic culture system without emitting waste fluid and with small environmental burden which is ideal for urban agriculture.



Tokyo Type Integral Environment Control Production System

TMAFRC plans to open its system to the public for producers, etc. in fiscal 2017, and promote and spread its popularity.

◇ Promotion of adding higher values to agricultural and livestock products produced in Tokyo

Tokyo Brand agricultural and livestock products

Efforts for branding are made in each area in Tokyo.

In Hachioji city, a group of producers and process manufacturers in the city produce and sell processed products in cooperation for branding “Hachioji ginger” which has been traditionally cultivated in the city.

In Akishima city, for the purpose of making “Hajjima welsh onion,” which is a local special product said to have been cultivated since the 1920, the city, JA and the promotion center started working in cooperation to unify quality and standards and to increase the production of “Hajjima welsh onion.”

Tokyo Metropolitan Agriculture and Forestry Research Center has produced new plant varieties, such as “Tokyo Gold” kiwi fruit with high sugar content and mild acidity, “Tokyo Komachi” wakenegi scallions enabling year-round cultivation, and “Tokyo Ohisama berry (currently applying for the registration),” a strawberry suitable for outdoor cultivation, etc. And the center has begun to generalize them in the areas.



Kiwi fruit
“Tokyo Gold”



Strawberry
“Tokyo Ohisama berry”



Wakenegi scallions
“Tokyo Komachi”

◇ Support for materializing creative and original agricultural management

We will support your efforts to begin new agricultural management!

Tokyo Metropolitan Government has established "Support Center for Agriculture endeavors" and has been dispatching specialists in management consulting, distribution, and food processing, etc. to support farmers who try to develop new agricultural management.

"Kato Farm (Nerima Ward)", who produces high quality strawberries by hydroponic cultivation, develops various sales strategies utilizing its farm business, such as making a logo, establishing an Internet website, and opening a branch of marché in the city center.

Also, "Yanagisawa Farm (West-Tokyo)" produces high quality tomatoes utilizing environment controlled greenhouses, and has made banners, leaflets, and bags for sale after receiving advice from professionals. The farm has also reviewed its sales strategy, and has expanded its sales channel by changing its conventional sales method of direct sales to mass shipping to retailers and schools for school lunches, and selling through mail order, etc.



A branch of marché was opened



Leaflets promoting sales

New product development in each area (major efforts in recent years)**【America sweet potato (Niijima Village)】**

"America sweet potato" has been a staple food for islanders for a long time. Farmers in Niijima Village have started to cultivate the potatoes for producing and selling the shochu white liquor in association with the breweries on the island.

**【Ti leaf (Hachijo Town)】**

"Ti leaf" is a kind of Keulenlilie and has been cultivated as an ornamental foliage plant for many years. Now the farmers in Hachijo Town ship Ti leaves as ornamental material, such as a lei garland for hula dancing, etc., in association with flower suppliers.

**【Hachijo lemon (Hachijo Town)】**

Stable production techniques for lemons were introduced in the island before the war. Then, Tokyo Research Center for Agriculture, Forestry and Fisheries on Islands has established techniques and the "Hachijo lemon" brand, and the female group in Hachijo Island belonging to JA Tokyo Islands has started production and sales of lemon jam.

**【Passion Fruit (Tokyo Metropolitan Food Technology Research Center)】**

Tokyo Metropolitan Food Technology Research Center has developed technology for manufacturing fruit vinegar from passion fruit produced mainly in island areas in association with a private enterprise in Tokyo. Utilizing this technology, passion fruit dressing is now available for sale.

**Collaboration between direct sales store of agricultural products and hot-spring resorts**

Local agricultural products and agricultural processed products are sold at the store "Asa Tsuyu" established together with the hot-spring resort facility "Seoto No Yu" in Akigawa Valley, Akiruno city.

This is a very popular direct sales store because people can buy fresh local agricultural products on a hot-spring resort in Tokyo. This is located in a mountainous area, and self-sufficient agriculture is traditional here. However, after the establishment of this direct sales store, farmers can sell farm products in their local area and has revitalized agriculture in this area.



The products sales store "Asa Tsuyu"

◇ Efforts for strengthening agricultural management ability

Agricultural corporation management in Tokyo

“Suzaki Farm” in Tachikawa city was established in 1974 as a limited company for producing and selling potted plants. Since then, they have been providing employees with proper working conditions, such as worker’s accident compensation and employment insurance, etc.

Attracted by the representative’s skills and personality, potted plant producers have gathered at this company from all over Japan to improve themselves. A trainee who aims to become a farmer while working and acquiring skills in this company can be employed as a regular employee and can work in the same working conditions as the other employees. Therefore, they can acquire skills peacefully in the stable labor environment.



A trainee who works to acquire skills

◇ Management support for livestock farmers

Advanced dairy farming in Tokyo

There are so many daily essential operations for dairy farming, such as feeding and milking, etc., and therefore efforts for labor saving are necessary for managing dairy farms.

“Shimizu livestock Farm” in Mizuho Town has introduced milking robots and suckling robots that took advantage of the opportunity to upgrade the barn. That has shortened the time needed for operation, and has established time and labor power for producing self-supplying feed. This is the largest dairy farm managed in Tokyo.

Also, Tokyo Dairy Farming Cooperative Association has introduced mobile sales vehicles for selling milk with tasting, and selling confectionery and gelato using milk produced in Tokyo at events in each area in Tokyo for promoting dairy farming in Tokyo to more citizens of Tokyo.



The introduced mobile sales vehicle

(iii) Enhance productivity by establishing required facilities, building infrastructure, etc.

◇ Enhancing productivity by using facilities more actively

Making Hino city a production center of barrel tomatoes (the efforts by Hino City Research Society for Protected Horticulture)

All the members of Hino City Research Society for Protected Horticulture have introduced a “Barrel Cultivation System,” which is for hydroponic cultivation of tomatoes by putting coconut shell culture in a barrel container, to produce high quality tomatoes.

In the “Barrel Cultivation System,” soil disinfection is not needed because coconut shells are used instead of soil. Besides, the adjustment of sprinkling and fertilizing is easy due to the hydroponic cultivation method. Therefore, it is possible to enable both labor saving and high quality products at the same time.

Each member of the Research Society cultivates tomatoes at different times, and makes efforts to supply consumers with high quality barrel tomatoes throughout the year. The members also endeavor to enhance the cultivation techniques by exchanging information with each other.



Producing tomatoes by using “Barrel Cultivation System”

◇ Use and promotion of agricultural land by improving agricultural infrastructure

Infrastructure for bringing regional resources back to life

Tokyo Metropolitan Government has supported maintenance and conservation of irrigation facilities for securing agricultural water and improving safety. The government has also been supporting the integrated improvement of infrastructure considering regional conditions such as the natural environment, etc.

It is important to secure agricultural water in Hachijo Town because of the increasing number of agricultural cultivation facilities, etc. in the town. Then, the town has been trying to stabilize the supply of agricultural water by prolonging the life of irrigation facilities, such as water tanks that have deteriorated due to the ocean winds peculiar to island areas.

Hinode Town has been encouraging interaction between people and agriculture, along with creating places for coming into contact with agriculture and nature by developing a garden for farm work experience and allotment gardens from unused agricultural land.



Water tanks for agriculture (Hachijo Town)
(Top: before improvement, Bottom: after improvement)

The improvement of infrastructure for supporting sustainable agriculture

Tokyo Metropolitan Government has been supporting improvements to agricultural water channels and conduits, etc., developing agricultural land for improving agricultural management conditions, and improving farm roads for carrying agricultural products, etc.

Kozushima Village has been endeavoring to create an ideal environment for farmers by improving agricultural management conditions, such as widening narrow unpaved farm roads, and repairing and improving deteriorated pavement, etc.

Farm roads play an important role in the area, such as enhancing convenience by improving transportation and making communication between communities smooth, etc., as well as travel between other farming areas and carrying farm products, etc.



A farm road (Kozushima Village)
(Top: before improvement, Bottom: after improvement)

◇ Establishment of the management foundation by fluidization of agricultural land

Agricultural land patrol (For preventing farm land from becoming unused and preventing illegal conversion of farm land)

Musashino City Agricultural Affairs Committee has named September "a month for agricultural land patrol", and investigates the state of use of all the agricultural land in the city at once in association with its member, JA, and its secretariat. The committee also offers guidance for utilizing agricultural land properly.

Every year, the committee takes pictures of all the agricultural land and records the locations on the map in the investigation. The committee manages them along with parcel numbers, land owners, and the state of use, etc., and reports the results to all the farmers. Using the results, the committee encourages farmers to utilize the land more effectively.

These steady efforts by the Agricultural Affairs Committee are the basis for supporting agriculture in the area.



Agricultural land patrol



Preserve farmland and leverage the various functions it can serve

(i) New approaches to preserving farmland

◇ Conservation of farm land in urbanization promotion areas

Fulfilling multifunctional roles of agricultural land (Project for supporting the conservation of urban agricultural land)

Tokyo Metropolitan Government has been trying to conserve valuable urban agricultural land by improving infrastructure for effectively fulfilling multifunctional roles of agricultural land.

Inagi City has been gradually installing chemical proof shutters, etc. for preventing agricultural chemicals from scattering into fruit farms in the city, since more consideration for the residents is necessary under expanding urbanization.

These measures for conserving farmland have made it possible to manage stable agricultural businesses and conserve urban agricultural land. The measures also lead to the enhancement enthusiasm for producing Inagi city's brand fruits, the "Inagi" Japanese pear, and "Takao" grapes.



A chemical-proof shutter for preventing agricultural chemicals from scattering into the surrounding areas (Inagi City)

◇ Conservation of urbanization control areas and agricultural promotion areas, etc.

Agricultural promotion in mountainous areas

Tokyo Metropolitan Government has been supporting for developing facilities needed to produce and distribute agricultural products suitable for the area in order to promote agriculture in mountainous areas and islands areas.

In Okutama Town, "Okutama wasabi" brand of Japanese horseradish has been cultivated as a special product of the area since the Edo era. It is very hard work for farmers to cultivate Okutama wasabi because steeply sloping fields located along the banks of mountain streams. Therefore, the government has been gradually installing monorails for carrying cultivation and harvest materials in to cope with the aging farmers and to maintain and increase the amount of production, and prevent the agricultural land becoming unused.



A transport monorail (Okutama Town)

Tokyo NEO-FARMERS! (Try new agriculture in Tokyo)

Until now, starting agriculture in Tokyo, which has the smallest acreage of agricultural land in Japan has been difficult. However, cooperation among the municipalities, the Agricultural Affairs Committee, and the Tokyo Agriculture Council, etc. has found new agriculture workers who are not from farming families, and the number of such workers has been increasing steadily.

These new agriculture workers and the supporters from various backgrounds gathered to form a voluntary group with common goals, "Tokyo NEO-FARMERS!" in September of 2012. They have been taking on the challenges of agriculture in Tokyo from a new point of view, by opening a permanent store in a supermarket in Tokyo, and making inroads into marché, etc.



A permanent store of "Tokyo NEO-FARMERS!"

◇ Restore and upgrade unutilized farmlands, etc.

We will restore farmlands to vitalize regional agriculture.

In order to encourage enthusiastic farmers to enlarge their scales and new farmers to effectively utilize farmlands, the Tokyo Metropolitan Government is conducting the “Unutilized Farmland Restoration Program” to support restoration of unutilized and hardly utilized farmlands.

In Hachijo Town, the farmlands restored through this program are used by young farmers to actively increase production of leaves of ashitaba (*Angelica keiskei*) for processing, leading to preventing farmlands from becoming unutilized and hardly utilized, clearing unutilized and hardly utilized farmlands, and vitalizing regional agriculture.



Farmland being restored
(Hachijo Town)

(ii) Contribution to cities by the functions of disaster prevention and environmental conservation provided by farmland

◇ Enhance disaster prevention function by utilizing agriculture and farmlands

Cooking drill on urban farmland – Verifying disaster prevention functions of farmlands

The municipality of Nerima Ward uses a garden for experiencing farm work for cooking drills in a greenhouse for agriculture aiming to have citizens understand the disaster prevention functions of farmlands. In this drill, with support from participants, they cooked and distributed tonjiru (miso soup with pork in), etc. for 400 people by using vegetables produced on this garden and reserved pregelatinized rice provided by the Nerima Ward government.

Agriculture and farmlands in cities provide various functions including such disaster prevention functions as preventing fire from spreading and providing sufferers with evacuation spaces and foods when a disaster occurs. The Tokyo Metropolitan Government will actively support programs to strengthen the disaster prevention functions of farmlands in cities.



Cooking drill in green house for agriculture
(Nerima Ward)

◇ Promote efforts for further development of functions of environmental conservation

Efforts for preservation of valuable regional resources left in cities

The Negaramimae paddy field on the left side of Tama River in the western area of Hamura City is the only one paddy zone in the city and gives pastoral scenery regardless of its closeness to the center of Tokyo. The irrigation water association once managed and maintained the farm roads and irrigation channels in this region but was struggling with maintenance due to aging of farmers, lack of successors, and aging of facilities.

To keep the paddy scenery, a valuable regional resource, the Hamura City government is supporting establishment of systems for constant preservation activities including inspection of irrigation channels and farm roads, mowing, and dredging. Like this, people are holding programs to vitalize the community including offer of farming experience in paddy and the Tulip Festival in addition to keeping paddy farming.



Negaramimae Paddy Field Tulip Festival
(Hamura City)

- ◇ Form agricultural landscapes through preservation of farmlands and homestead woodlands

Community development by utilizing agriculture and farmlands in cities

The Tokyo Metropolitan Government is supporting initiatives to utilize agriculture and farmlands for lives of the citizens of Tokyo and their community development in cooperation among citizens, farmers, and municipalities so that the valuable urban farmlands in Tokyo can be conserved.

In Setagaya Ward, where comparatively many farmlands are left, the citizens are interested in conservation of farmlands. Because the ward had the Jidaibubori Koen Park, where typical rural scenery in Setagaya and an old stream were restored, the ward municipality had a program to conserve the local scenery with farmlands and encourage farmers by such means as preparation of walk guide signs for enjoying the town with agriculture and farmlands, direct spot sale stores, a water well for both disaster prevention and farming purposes, and soil dust preventing nets in the park.



Walk guide sign to enjoy town with agriculture and farmlands

- (iii) Expand opportunities to experience a variety of farm work

- ◇ Upgrade allotment gardens, etc.

A garden for experiencing farmwork in a city

A garden for experiencing farmwork is a garden opened and managed by a farmer where the users can experience farmwork constantly all through the year. This system was initiated by the Nerima Ward government. Recently, the gardens of this type have been evolving by such means as being used as places for communication.

The Tomi Club, a garden for experiencing farmwork in Nishitokyo City, is providing farmwork experience, seminars for users in the reformed storehouse owned by the garden owner, and seminars on local agriculture and planter cultivation of vegetables to nearby school children and residents in elderly nursing homes. In addition, the garden is used for various activities including disaster prevention drills such as cooking in cooperation among the municipal government, the garden users, the fire station, and the Self-Defense Forces.



Facility prepared by reforming storehouse owned by garden owner

Facility for experiencing local agriculture, nature, history, and culture

The Akiruno City government reformed the previous Tokura Elementary School, which had been closed due to decrease in students, to found the Tokura Shiroyama Terrace, an experiencing facility with a lodging facility.

The facility is providing opportunities of experience by utilizing nature, history, culture, and so forth and is used as a place for seminars held by businesses and schools. It is a base for lodging-type sightseeing aiming to vitalize the Tokura area.

By using locally produced vegetables for meals offered mainly to lodgers, the facility contributes to promotion of local production and consumption of agricultural products and to raising enthusiasts of local farmers.



Tokura Shiroyama Terrace (Akiruno City)

◇ Cooperation with school education

Farming experience by schoolchildren

To make children understand agricultural products used for school lunches, the elementary schools in Hino City have schoolchildren's farms, where local farmers become teachers and have children experience all the rice cropping processes from seeding to harvesting, and the children cook rice harvested by themselves.

In cooperation with the Inagi Pear Producers' Association, the elementary schools in Inagi City are providing children with experience of paper-bagging and harvesting pear fruits.

Through these programs, it is expected that children be interested in local agriculture and support next-generation agriculture.



Experience of paper-bagging pear fruits
(Inagi City)

◇ Cooperation with welfare sector

Cooperation between welfare sector and agriculture

In Machida City, a special subsidiary^(Note) of a large company restored an unutilized farmland of about 6 a and is using it for production of vegetables grown outdoors.

Administrators who completed agriculture seminars for new farmers held by the Machida City government are instructing handicapped persons and shipping vegetables harvested in the morning to local mass retailers, etc. This work is expected to expand methods of working suitable to the characteristics of the individuals.



Restored and upgraded farmland
(Machida City)

(Note) Special subsidiary: A subsidiary company that gives special care to handicapped persons, is approved by the Minister of Health, Labor and Welfare after satisfying specific requirements pursuant to Article 44 of the Act on Employment Promotion etc. of Persons with Disabilities, and is considered as one organization with its parent company for the purpose of calculation of the employment rate of persons with disabilities.

(iv) Promote urban greening using flowers and trees raised in Tokyo

Show hospitality of Tokyo in summer by using Tokyo-produced flowers and trees!

The Tokyo Metropolitan Agriculture and Forestry Research Center is conducting researches to expand production of Tokyo-produced flowers and trees in this season and solve problems regarding use thereof.

In cooperation with the Tokyo Metropolitan Park Association, the Flowering Plant Research Team is conducting demonstration experiment in the Hibiya Park regarding flower bed seedlings that can survive the hot summer of central Tokyo to select species likely to stably and constantly produce flowers.

In cooperation with Gunma University, the Garden Plant Team developed the portable container greening system, which can immediately produce leafy shades where room for planting is unavailable.

By installing large tree pots with benches using Tokyo-produced plant trees, it is expected that people can be provided with comfortable spaces.

We will popularize these research results among farmers in Tokyo, not only for hospitality during the Tokyo 2020 Games but for establishment of techniques usable even after the games.



Demonstration experiment of flower bed seedlings in Hibiya Park

Garden tree field as a greenery art museum!

Kobayashi Yojuen in Tachikawa City is one of the Japanese largest garden tree producers producing deciduous tall trees such as keyaki (zokova tree) and producing and distributing topiary trees. Topiary trees are living modeled objects sterically created by pruning trees into geometrical patterns, animal body shapes, and so forth. Creation of a topiary tree requires a few years before completion. This garden has been opened to the public as Midori no bijutsukan, or the Greenery Art Museum, considering topiary trees in various shapes as pieces of work of art.

In the museum, the visitors can enjoy the various topiary trees and purchase what they like. Because the museum makes people feel more familiar with locally produced garden trees, it attracts attention as an example of new manners of utilization of urban farmlands.



Diverse topiary trees in Midori no bijutsukan (Tachikawa City)

Toward the effective utilization of pruned branches from garden tree fields

The area of garden tree fields in Tokyo is approximately 390 ha, where more than two million garden trees are produced. Production of garden trees needs pruning operation to arrange the tree shapes, discharging pruned branches every day. The amount of pruned, damaged, and dead branches to discharge is thought to be approximately 56,000 m³ per year. These branches are processed into chips to use as raw material of barnyard manure. However, since the chipping process produces large noise, etc. from the machines, it is difficult to treat pruned and other branches in fields in cities, which are adjacent to dwelling houses.

For continuous production of garden trees in cities in the future, it is a challenge to effectively use pruned and other branches discharged from garden tree fields in Tokyo.



Pruning in garden tree field



Promote sustainable agriculture and local consumption

(i) Provide agricultural products through sustainable agriculture

Acquisition of GAP Certificate toward provision of foodstuff for Tokyo 2020 Games.

Tokyo Metropolitan Government has started “Support Project for Agricultural, Forest and Fishery Product Certification” to help farmers obtain GLOBAL G.A.P and JGAP Advance.

Agricultural, forest and fishery products supplied to the Olympic Village of Tokyo 2020 Games must satisfy procurement standards specified by the Tokyo Organizing Committee.

To acquire GAP certificate, one of the means to check compliance with the standards, farmers must pass the examination provided by the examining authority through improvement instructions by the consultant based on the detailed management standards concerning food security related to production processes of agriculture products, environmental conservation and work safety.



Confirmation of management records

We are engaged in “eco-friendly agriculture”!

Tokyo Metropolitan Government certifies agricultural products cultivated with 25% or more reduced chemical pesticides and chemical fertilizers compared with general ones in Tokyo as “Tokyo Eco-Agricultural Products” and has approved 481 farmers as of January 1, 2017.

As recent notable technology, fluorescent lights with a wavelength (green) that keeps away owl moths which damage agricultural products are installed in fields to reduce the number of chemical sprayings. Fields with the green fluorescent lights have less damage to the agricultural products by owl moths and are sprayed with chemicals a fewer number, achieving eco-friendly agriculture considering the surrounding environment.



Green fluorescent lights keeping away owl moths

Holding “Consumer Assembly” for Tokyo Eco-Agricultural Products

Tokyo Metropolitan Government supports farmers who work on acquisition of Tokyo Eco-Agricultural Products Certificate as well as holding “Consumer Assembly” to make environmental conservative agriculture known to citizen of Tokyo.

At the “Consumer Assembly” in 2016, consumers visited a farmer with Eco-Agricultural Certificate in Kokubunji, looked preparation of soil using barnyard manure, pest control using light and cultivation techniques using natural enemies, and had a meeting. One of the participants said, “This changed my image of agriculture. I understand how hard farmers are working”. Also, it was suggested to the government that it should work on disseminating information actively to let consumers recognize this system”.



Explanation of pest control and cultivation techniques to the participants.

(ii) Strengthen measures to prevent the spread of plant and animal diseases

Toward restart of plum cultivation

Ome City, which is designated as an emergency control zone for plum pox viruses, works on a project to strengthen virus control toward replanting of plum trees aiming for “Revival of Ume-no-Sato (Plum Town).

Since 2015, the city has worked hard on survey of plum tree illness, thorough elimination of plant lice that transmit the viruses and immediate felling of infected trees, and managed to replant plum trees in “Plum Park” in November 23, 2016.

In February 2017, approx. 2,000 nursery trees were planted in cultivated land owned by commercial farmers. In addition, in the autumn 2017, exhibition is planned to demonstrate joint cultivation which joints seedlings for growth in a short period within the district.



Replanting of plum trees in the fields of commercial farmers

Anti-epidemic measures against highly pathogenic avian influenza

Tokyo Metropolitan government is organizing a system to prevent epidemic of influenza quickly and surely including preparing a diagnostic system, storing materials for epidemic prevention, securing work personnel, implementing exercise for epidemic prevention, in case that highly pathogenic avian influenza is found.

Especially, the government has assigned the work personnel for epidemic prevention in advance to respond to an occurrence of influenza immediately because the epidemic prevention requires quickness and safety.



Training for epidemic prevention assuming an occurrence of influenza

Preventive measures against damage by animals to agricultural products...the habitat of masked palm civets and racoons is expanding.

Harmful birds and animals that damage agricultural products in the field such as wild boars, masked palm civets and racoons have been caught more and more, but the farm area damaged by those birds and animals remains the same or is increasing.

Especially, the habitat of racoons is expanding to a city area, and there are reports of damage to agricultural products from areas which previously did not get damaged.

Tokyo Metropolitan Government makes efforts to reduce damage to agricultural products such as helping farmers have local lectures to prevent damage by birds and animals, catch those animals, install electric fence and animal prevention nets.



Caught racoon

(iii) Promote local consumption of Tokyo agricultural and livestock products

Gather, schoolboys and girls in Wards lacking farmland!

The Tokyo Metropolitan Government has opened farming areas, out of its proprietary land, to supply fresh and safe agricultural and livestock products as lunch provisions for elementary and middle schools in central Wards of Tokyo which are devoid of farmlands. Agricultural products grown there have been provided for lunches at schools in 16 Wards in central region of Tokyo.

In addition to the supply of agricultural products, tours to the farming areas are offered (to 3 schools per year; on any date) to provide their pupils opportunities to see, touch and experience actual agricultural products how they are produced on site before provided for school lunch.



Tour of elementary school pupils to observe agricultural machines

Support to endeavoring agriculture in Tokyo

In tie-up with Consumers' Monthly Executive Committee in Metropolitan Tokyo which aims at enlightening consumers, "Agriculture Management Club in Metropolitan Tokyo" and "Chamber of Agriculture in Metropolitan Tokyo" annually hold "food and agriculture seminars" and "agriculture supporting bus tours" as projects for supporting "endeavoring agriculture in Metropolitan Tokyo."

In each of the projected events, consumers and agriculturists enjoy free talks with each other, and consumers get better understanding of agriculture in Tokyo. The projects certainly provide good opportunities to foster powerful support of agriculture in Tokyo.



Observation at Farming Fields

Foodstuffs produced in Tokyo!

The Tokyo Metropolitan Government holds "Tokyo Special Foodstuff Business Meets and Talks" with a view to matching agricultural producers with restaurant enterprisers in Tokyo, to appeal and propagate agricultural products in Tokyo to eventually expand their sales outlets.

Increase in the number of restaurants and menu items there to use more agricultural products in Tokyo will increase their fans in the metropolitan citizens, which also will lead to expand the local production and consumption in Tokyo.



Tokyo Special Products Business Meets and Talks

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