



Agricultural Support for New Farmers in H City, Tokyo, Japan

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Abstract In Japan, engaging in agriculture as a new farmer comes with various challenges and uncertainties. To sustain and secure the agriculture sector's future, national and local governments, farmers, private entities, and other stakeholders provide a wide range of support. Seeking best practices is a sound basis for increasing the number of new farmers and improving their resilience. Through a case study approach, this study aimed to clarify the current condition and issues of agricultural support for new farmers in H City, Tokyo, and determine the initiatives and agricultural support that assisted a young female farmer in establishing an urban farm. This study conducted interviews with a young female farmer and city officers. The in-depth key informant interviews revealed that training, subsidies, securing land services, and referral to farmer's organizations are some of the available forms of support. The interviewed farmer considered the recent revision of the Law on Productive Green Areas a significant opportunity for her to rent farmland, which is a challenge for most new farmers. Despite the fact that a 5-year rental period is commonly practiced, she could avail of a 30-year lease, conveying the importance for new farmers to also develop trust, confidence, and a good relationship with the farmland owner. Although the interviewed farmer has successfully established a farm, there is a need for further investigation to clarify consumer preferences, buying behavior, and their degree of familiarity with her farm and products to improve her farm business and resilience.

Keywords new farmers, law on productive green areas, farm resilience, female farmer

INTRODUCTION

According to the Ministry of Agriculture, Forestry and Fisheries Japan (MAFF Japan, 2020), the country's self-sufficiency level was 73% in 1965 and decreased severely to 38% based on calorie-based calculation in 2021. Therefore, the primary source of food for human consumption and feed for livestock mainly depends on imports from abroad. Although the country must increase its self-sufficiency level, decreasing trends in farmland area and population are apparent challenges in the agricultural sector of Japan. According to MAFF Japan (2021a), the total cultivated area was 6.0 million ha at a peak in 1961 and gradually decreased to 4.3 million ha in 2021. For the past four

decades, the number of individuals employed in the agricultural sector declined by more than 60% from 5.77 million in 1980 to 2.13 million in 2020 (Statistics Bureau Japan, 2022).

Under such circumstances, urban agriculture supplies agricultural products and provides a multi-functional environment in the cities. According to MAFF Japan (2022), 13.0% of the total agricultural management entities are in urbanization-designated area (*shigaika-kuiki* in Japanese), commonly defined by the urban municipalities. These 140,000 agricultural management entities contribute about 7.0% of gross domestic agricultural production, only cover 62,000 ha of farmland limitedly 1.4% of the total domestic farmland. Looking at those farmers who work mainly in agriculture, 70% of them are over 65 years old and only 11% of them are younger than 49 years old (MAFF Japan, 2022). In this apparent situation of aging farmers, identifying ways to increase the number of new farmers is crucially important. What kind of support new farmers need remains a question. In this study, we organize policies of the government and attempt to elucidate how new farmers are supported by introducing a case of a new tomato farmer in H city.

METHODOLOGY

We described policies and trends of agriculture in the H city based on key informant interview of H City Agricultural Affairs Division on 20 June 2022 at the H city hall. Through a case study approach, we collected reference materials related to the sequence of events when starting farming and establishing agricultural cooperation, and conducted an interview and observation survey regarding the current business of Ms. K.

RESULTS AND DISCUSSION

Policy for New Farmers in Japan

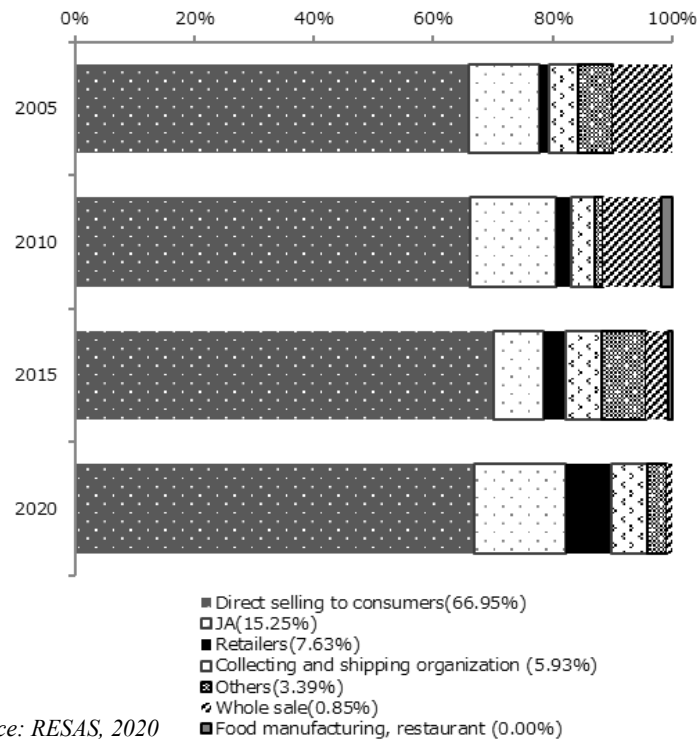
According to Bureau of Urban Development (2022), the promotion of productive green areas was proceeded as the *Productive Green Area Act* among large cities for city planning development, to avoid farmland conversion to housing land area and maintain the agricultural environment in cities. If landowners keep the land as the green area which are not only farmland but also related business including farm restaurant and direct selling shop for agricultural products; benefits include payment of fixed asset tax of the green area under farmland category, and eligibility for inheritance tax payment grace system. It is expected that this kind of promotion of agriculture leads to land retention.

The *Productive Green Area Act* and at same time *Urban Farmland Leasing Facilitation Act* assist new farmers in accessing farmland for the long-term. The latter act secures the landowner's right over the farmland for a long-term lease contract. It protects them not to lose the land rights after leasing out the land to non-family members. Historically, Japan had a landlord system between landowners and tenants before land reforms were implemented twice in the 1940s. With this act, tenants were entitled to hold landownership of the land as actual cultivators. This may be a reason why the landowner avoids long-term leases to others, especially non-families. When new farmers' parents are not from a farming family without succession, they experience difficulties in starting farming. Hashimoto and Mitsuhashi (2017) studied the case of Utsunomiya City's new farmers. When they start farming, they need access to land, financial support, and training opportunities. Osawa (2014) also pointed out that access to farmland become a barrier for new farmers from non-farming families. His research illustrates a way to create places for new farmers to sell vegetables at direct selling markets and let them gain more profit even though they produce small volumes at a time. In addition to the land access, a new farmer needs support. Tokyo Metropolitan Government (Bureau of Industrial and Labor Affairs, n.d.) designs supporting systems for new farmers: A farming preparation fund (supports financially new farmers during the training period before they start farming on their own within 2 years) and Business start-up capital (supports new farmers immediately after they start farming when management is unstable within 3 years). In the new farmer settlement support project as a farming preparation fund, the Tokyo Chamber of Agriculture supports newly certified farmers. Municipalities subsidize 3/4 of the operating costs for cultivation-related

facilities and agricultural machinery (Tokyo Chamber of Agriculture, 2021). The new farmers gained experience and reached an annual income of 3 million yen.

Background of H City, Tokyo

With regards to agriculture, blueberry, pear, apple, persimmon strawberry, radish, and tomato are well-known agricultural products of H City. There are many picking farms of blueberries and/or apples as popular agritourism destinations. The high season of picking farms is in summer, between July and August. Radish is Tokoiji (Toko temple) in a line of Nerima radish as one of the Edo vegetables.



Source: RESAS, 2020

Fig. 1 Management entities by marketing channels for agricultural products (%)

According to the H City based on an interview, agriculture in the H City was once used to be active in rice farming, but from the mid-1950s onwards there was a shift to upland farming. The conversion was to produce crops with a higher selling price than rice. Tomatoes were one of them. Cultivation in greenhouses was introduced in the 1960s, and it became important. Since 2009, tomatoes have been produced using a barrel cultivation system. Tomatoes have become a specialty product. Currently, there are 8 tomato farmers in the H City. Based on the key informant interview of H City agricultural affairs division staff, the total number of farm households decreased from 371 in 2005 to 273 in 2020. Moreover, there are only 57 farmers who are younger than 50 years old, 238 farmers are older than 50 years old including 76 farmers above 75 years old. In H City, more than 100 cases convert farmland of paddy fields and fields into housing areas every year. There is a total of 57 ha of farmland under cultivation of H City, comprising of paddy field 4 ha, a vegetable field 37 ha, and a fruit orchard 16 ha. The ratio of farmland compared to the whole land of H city decreases from 4.1% in 2005 and 2.1%. Out of 129 farm households in 2020, 123 households averagely cultivate less than 1 ha, 5 households cultivate in the range from 1.0 to 1.5 ha and only one household cultivate larger than 1.5 ha in 2020. Notedly, as shown in Fig. 1, 67% of the agricultural products harvested in H city are sold directly to the citizens in H city through farmer’s market or roadside stand locally, indicating that producers and consumers seems to have close distance in H City. It may

be predictable that people in H City are used to purchasing local products and being familiar with the local brands or producers of fruits and vegetables.

A Case of the New Farmer as a Tomato Producer

There are three main attempts by the municipal administration based on the Tokyo metropolitan government's policy: (1) implementing the New Farmer Settlement Support Project with the additional subsidy by H City, (2) increasing the motivation of citizens to support farm work for local farmers, and (3) producing and consuming locally through the direct farm shop and school lunch catering. As of 20 June 2022, funds of new farmers come from the Tokyo metropolitan government subsidy (equivalent to 75% of the total expense) and the remaining 25% is equally sourced from H city subsidy and new farmer's own capital.

There are three types of new farmer support in the H City: (1) new farmer as the successor of an existing farmer, (2) newly employed farmer at agricultural cooperation, and (3) new entrants from non-farm households. Among these new farmer types, there is the "authorized new farmer (*nintei shinki shunousha*)" who submits own management plan to the municipal office. New entrants of farming in this system are limited to youth in the age range from 18 to 44 years old. H City prepares not only subsidies but also support to rent in farmland and introduces agricultural organization under the municipal administration.

In the H City for the past 22 years from the year 2000 to 2021, there have been 29 new farmers as heirs of the existing farmers who start working at home. On the other hand, there are only 2 new farmers as authorized new farmers, and Ms. K is the first case of new farmer under the new farmer settlement support project in 2020 to develop one tomato cultivation facility. According to Ministry of Land, Infrastructure, Transport and Tourism (n.d.), the *Law on Productive Green Area* was enacted first in 1974. In 1992, it was revised to add tax reductions on inheritance tax and property tax with the condition of area larger than 500 sq. m. In 2017, it was again partially revised to allow the following: (1) municipalities can reduce the area from 500 sq. m. to 300 sq. m. or more by ordinance, (2) to set up restaurants, processing facilities, and farmer's markets in the area, and (3) If 30 years have passed after the municipality register the land as a productive green area, the purchase offer period can be extended to 10 years. Landowners can receive tax break for property tax as farmland tax not as housing and deferring inheritance tax payment. In September 2018, after the Urban Farmland Leasing Facilitation Act was enacted, tenants could rent the land directly from the owner of the land, and those owners still could maintain the grace period for paying inheritance tax after they rent out in the urban area (MAFF, 2021b). This act is limited to the land that is designated as a Productive Green Area. Advantages of the act area; for tenant it is easier to rent-in directory, and for owner after the contract period usually long term, the farmland will be returned, therefore the landowner can rent it with confidence.

After graduating from university, Ms. K started working for a large-scale tomato greenhouse company. In 2017, she became a farm trainee in Tokyo and established the Farm in H City in 2018. When she was looking for farmland to start farming, there was a revision of the law on productive green areas in 2018. It triggered for Ms. K to rent farmland from a local landowner. The law allows landowners to receive tax breaks even if they rent own farmland out to others. Ms. K became the very first new farmer who could have access to the land lease in Japan after the law on productive green area was revised. She also gained support from Tokyo Chamber of Agriculture member (Tokyo Chamber of Agriculture, 2021) and the municipal officer as third parties. When someone is new to farming, it is quite hard to gain trust from landowners. With the support of the Tokyo Chamber of Agriculture and the H City, she was assisted in having a 30-year rental contract for the land and installed facilities to produce tomatoes and other crops. For the land rental, she seemed to have benefitted from *Urban Farmland Leasing Facilitation Act* and the revision of Productive Green Act. Moreover, she purchased three greenhouses with the subsidies under new farmer settlement support project. Since seven-eighth was paid by subsidies, her expense became only one-eighth of the total expense. As Ms. K explains, the landlord understands her desire to make a large investment and build greenhouses, and in anticipation of the payback period of the investment, she was able to rent the land for an extended period.

She produces vegetables in the cultivating facilities of the plastic greenhouse as shown in Fig. 2a. Her products are certified as Tokyo GAP (Good Agriculture Practice) and eco-farm products of Tokyo (Fig. 2b). In addition to medium-sized, large-sized, and mini-sized tomatoes, the farm also produces turnips, blueberries, and other vegetables. Most vegetables are sold fresh, except for some tomatoes that are processed tomato puree with yellow, green, and red colored tomatoes and bottled separately. These colorful puree products are sold online. She sells fresh tomatoes and others through her online shop in a box. The marketing channels of the fresh tomatoes include the unmanned store (*mujin hanbai*) in front of the farm (Fig. 2c), the farmer's market of Japan Agricultural Cooperative (JA), a shop supported by the municipality, local fruits and vegetable shops, and chain supermarkets in Tokyo. Moreover, she proactively participates in a local young farmer's club since 2020 to revitalize the agriculture of H City. She also sells her own products at those coordinated events. She also opens events at her farm for local kids with parents to and feel the importance of food through various farming activities such as harvesting fruits and vegetables.

To promote sustainable agriculture in Tokyo, issuance of Tokyo GAP started in April 2018. As of 2 March 2022, 130 farmers were certified (Bureau of Industrial and Labor Affairs, n.d. on Promotion of GAP in Tokyo). Farmers who apply for Tokyo GAP are required to fill out the checklist and comply with water quality, recordings of management, soil cultivation, IPM (Integrated Pest Management) to reduce chemical input, and other recommended farming practices. On the other hand, the certification of eco-farm products started in 2021. It intends to reduce the usage of synthetic pesticides and chemical fertilizers. There are three categories of certification: 25% or more reduction, 50% or more reduction, and no usage at all. When farmers do not apply any of the inputs, their products are considered "Tokyo Eco-100" (Tokyo Metropolitan Government, 2017). In the case of tomatoes, these are commonly certified as "Tokyo Eco-25" with a 25% reduction of synthetic pesticides and chemical fertilizers through agriculture. These two certifications ensure her concerns on human health and the environment load reduction by applying sustainable farming practices.



Source: Farm visit, 2022

Fig. 2 Pictures taken at Ms. K's farm

CONCLUSION

This paper presents the national and municipal policies to support new farmers. After the overview of agriculture in the H City was introduced, the case of new farmers was described. In the H City, the number of farmers has been on the decline, and increasing the number of farmers is an important mission. For this reason, the city actively implements support for new farmers. When new farmers start farming, they need access to land, financial support, and training opportunities. Thus, the city supports not only those who become farmers as successors but also non-farmers who are new to farming as one of the important policies of the city. This article took up the case of Ms. K, a tomato producer who also produces blueberries and vegetables. To start production in the H city in 2019, access to land was a challenge. But after the revision of the *Productive Green Area Act*, as the first

new farmer (non-farmer who is from a non-farming household), she has been producing tomatoes. Now, she is one of the popular local farmers featured in various media, so people often recognize her face and name. A specific element of the successful case in the H City is still not commonly seen in Japan. Municipal officers and the Tokyo Chamber of Agriculture supported Ms. K in gaining access to a 30-year land lease, which is a very rare case. However, this implies that without third party support, including with regard to land access, new farmers from non-farming families find it very difficult to start farming.

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REFERENCES

- Bureau of Industrial and Labor Affairs. n.d. Comprehensive measures for training new farmers. Tokyo Metropolitan Government, Tokyo, Japan, Retrieved from URL <https://www.sangyo-rodo.metro.tokyo.lg.jp/nourin/nougyou/shuunou/jisedai/> (in Japanese)
- Bureau of Industrial and Labor Affairs. n.d. Promotion of GAP in Tokyo. Tokyo Metropolitan Government, Tokyo, Japan, Retrieved from URL <https://www.sangyo-rodo.metro.tokyo.lg.jp/nourin/shoku/anken/gap/> (in Japanese)
- Bureau of Urban Development. 2022. Productive green area. Tokyo Metropolitan Government, Tokyo, Japan, Retrieved from URL https://www.toshiseibi.metro.tokyo.lg.jp/seisaku/midori_kakuho/seisanryokuchi.html (in Japanese)
- Hashimoto, M. and Mitsuhashi, N. 2017. Efforts towards farming issues of new farmers and heirs in the suburbs of the metropolitan area, Case study of Utsunomiya City. *Journal of Rural Planning*, 36, 264-270, Retrieved from URL https://www.jstage.jst.go.jp/article/arp/36/Special_Issue/36_264/_pdf (in Japanese)
- Ministry of Agriculture, Fisheries and Forestry (MAFF Japan). 2020. Self-sufficiency level in Japan. Tokyo, Japan, Retrieved from URL https://www.maff.go.jp/j/zyukyu/zikyu_ritu/012.html (in Japanese)
- Ministry of Agriculture, Fisheries and Forestry (MAFF Japan). 2021a. Statistical information 2021 on arable land area. Tokyo, Japan, Retrieved from URL https://www.maff.go.jp/j/tokei/kekka_gaiyou/sakumotu/menseki/r3/kouti/index.html (in Japanese)
- Ministry of Agriculture, Fisheries and Forestry (MAFF Japan). 2021b. Summary of the annual report on food, agriculture and rural areas in Japan. Retrieved from URL <https://www.maff.go.jp/e/data/publish/attach/pdf/index-69.pdf>
- Ministry of Agriculture, Fisheries and Forestry (MAFF Japan). 2022. The annual report on food, agriculture, and rural areas in Japan. Tokyo, Japan, Retrieved from URL https://www.maff.go.jp/j/wpaper/w_maff/r3/pdf/zentaiban.pdf (in Japanese)
- Ministry of Land, Infrastructure, Transport and Tourism (MLIT Japan). n.d. Productive green areas. Retrieved from URL https://www.mlit.go.jp/toshi/park/toshi_city_plan_tk_000041.html (in Japanese)
- Osawa, M. 2014. New farmers from non-farming families, Five reasons to become a farmer. *Japan Studies: The Frontier*, 9, 73-86, Retrieved from URL https://researchmap.jp/makotootokam/published_papers/32461859/attachment_file.pdf
- Regional Economy Society Analyzing System (RESAS) on Industrial Characteristics in Hino City. Retrieved from URL <https://summary.resas.go.jp/summary.html> (in Japanese)
- Statistics Bureau Japan. 2022a. Statistical Handbook of Japan 2022. Retrieved from URL <https://www.stat.go.jp/data/handbook/index.html>
- Statistics Bureau Japan. 2022b. Census of Agriculture and Forestry. Retrieved from URL <https://www.e-stat.go.jp/en/stat-search/files?page=1&toukei=00500209&tstat=000001032920>
- Tokyo Chamber of Agriculture. 2021. New farmer settlement support project. Retrieved from URL <https://www.tokaigishinki.com/syunoshien/gyoseishien/teichakushien/> (in Japanese)
- Tokyo Metropolitan Government 2017. Tokyo Agriculture Promotion Plan. Retrieved from URL <https://www.sangyo-rodo.metro.tokyo.lg.jp/plan/nourin/295/>