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Report Name: Urban Farming Trends in Japan Present Limited Opportunities and Challenges for US Agriculture

Country: Japan

Post: Tokyo

Report Category: Agricultural Situation

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Report Highlights:

Given the small scale of urban farming in Japan, urban agricultural production is unlikely to impact U.S. agricultural priorities in Japan but may offer limited opportunities for exports of specific U.S. commodities.

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Background

Over the past several decades, Japan's declining population, high urbanization and lack of farm successors have underpinned steady reductions in farm area and total number of farmers. According to Japan's Ministry of Agriculture, Forestry and Fisheries (MAFF), between 1960 and 2019, the total agricultural land area shrank by 27 percent from 6 million hectares (ha) to 4.4 million ha. As the average age of Japanese farmers continues to climb and the agricultural sector faces substantial labor shortages¹ and high property taxes, farmland across Japan becomes abandoned or converted to non-agricultural (e.g., residential, industrial, or commercial) use. Although most of Japan's farmland is in rural areas, there has been a growing movement within the country to protect and promote agriculture in urban areas. This report focuses on the status and outlook for agricultural land in urban areas.

Legal Framework

The <u>Basic Land Use Master Plan</u> based on the National Land Use Planning Law classifies land in Japan into one of five categories: urban, agricultural, forest, natural park or nature conservation area. During Japan's economic boom in the 1960s, as urbanization intensified, the Government of Japan enacted the City Planning Act in 1968, and the Act on the Development of Agricultural Promotion Areas (DAPA) in 1969. The DAPA Act classified urban areas into (i) Urbanization Promotion Areas (UPA), (ii) Urbanization Control Areas (UCA), and (iii) Agriculture Promotion Areas (APA) (Figure 1). While the Act does not allow for the conversion of agricultural land within the APA to non-agricultural status, it is possible to take UPA land out of agricultural use, provided a prior notification is submitted to the municipal agricultural committees.

Figure 1. Relationship between Agricultural Promotion Area, Urbanization Control Area and Urbanization Promotion Area



Sources: MAFF (2020 based on 2018 data), Ministry of Land, Infrastructure and Transport (MLIT) (2018) with translation by FAS/Tokyo

¹ For details on how Japan's demographic shifts are affecting the agricultural landscape of Japan, please see <u>JA2020-0081</u>, which explores the increasing reliance on foreign workers, <u>JA2020-0104</u>, which focuses on the role of women in Japanese agriculture, and <u>JA2020-0129</u>, which examines the expansion of Japanese food manufacturers overseas.

Note: For more on the country's Urban Land Use Planning System, please refer to <u>MLIT – Introduction of Urban Land Use</u> <u>Planning System in Japan</u>.

The move to protect and promote urban farmland gained momentum when Japan amended the Productive Green Land Act in 1991 (originally established in 1974). Prior to 1991, high property tax rates on urban farming land were almost equivalent to the rates for residential land and discouraged urban farming. Since 1991, Japan designated roughly 13,000 hectares of urban land nationwide, and around 3,200 hectares in Tokyo as a Productive Green Space (PGR), offering 30 years of tax incentives to those who would use the land for agricultural purposes. As opposed to the agricultural land within the UPA, both short-term and long-term agricultural measures can be implemented on farmland designated as Productive Green Spaces. Moreover, on Apr 22, 2015, Japan promulgated the Urban Farming Promotion Basic Act, which obligated national and local governments to promote urban farming.

With most of Japan's Productive Green Spaces facing the expiration of the 30-year tax incentives in 2022, in 2018, MAFF revised regulations to extend tax incentives by 10 years to encourage landowners of Productive Green Spaces to utilize the land or rent out unused farmland. Typical farmland leases are renewed automatically with heavy protections for tenants' rights, and discourage landowners from leasing their farmland to avoid potentially endless lease cycles (Sources: <u>MAFF</u>, <u>OECD</u>). The 2018 Act on Urban Farmland Lease Facilitation exempted urban farmland within the PGRs from this standard lease arrangement. According to an <u>April 2021</u> survey conducted by Nikkei, one of Japan's major newspaper publications, landowners of nearly 80 percent of Productive Green Spaces in Tokyo and three neighboring prefectures (Kanagawa, Saitama, Chiba) applied and/or were approved for a 10-year extension of their tax incentives expiring in 2022.

Government of Japan's Urban Farming Policy

The Basic Law on the Promotion of Urban Agriculture defines urban farmland in Japan as agricultural area situated within the country's UPAs. As of 2019, the latest data available, less than two percent (63,925 ha) of Japan's total farmland is categorized by MAFF as "urban farmland". Agricultural land within a UPA can fall within a protected farmland, referred to as Productive Green Space (PGS), or outside of PGS. National government incentivizes long-term farmland preservation in the PGS through tax breaks for landowners and farmers. There are no similar measures in place to encourage farmland preservation in UPAs outside of the designated PGS. To maintain a PGS designation, the land has to be maintained as farmland for at least 30 years after the initial designation, and the landowners have the option to sell the land every 10 years, after satisfying the 30-year requirement.

Goals for Urban Farming

MAFF's 2021 report titled "<u>The situation regarding urban agriculture</u>" (available only in Japanese) identifies six key functions for urban farming: (1) supply fresh produce (farm-to-fork), (2) disaster buffer zone, including evacuation site, (3) agricultural experiences and exchanges through community/rental farms, etc., (4) preservation of land and environment, (5) restful green space, and (6) fostering the understanding of agriculture among urban residents. Recent surveys suggest that urban residents who live in neighborhoods with farmland nearby, are more likely to think that farmland should be preserved. According to a <u>May 2020 survey conducted by MAFF</u>,

approximately 50 percent of urban residents in Japan believe that the COVID-19 pandemic contributed to the rise of urban agriculture and direct farm sales.

MAFF's 2021 Green Food System Strategy ("Ministry's Measures for achievement of Decarbonization and Resilience with Innovation" (*MeaDRI*, see JA2021-0068, JA2021-0048), developed under Prime Minister Suga's 2050 carbon neutrality target, identifies among its goals the promotion of urban agriculture and the consumption of local produce.

MAFF's Recent Budgets Related to Urban Farming

In the last three Japanese fiscal years (JFY; April-March), MAFF allocated over 98 million yen (\$890,909²) to support urban farming efforts (JFY 2019: 98.09 million yen (\$891,727), JFY 2020: 98.05 million yen (\$891,364), JFY 2021: 98.05 million yen (\$891,364)). These funds have been used by private organizations, regional councils, municipalities, the Japan Agricultural Cooperatives (JA), and non-profit organizations to (i) disseminate information to improve urban residents' understanding of urban agriculture and arouse interest in agriculture, (ii) organize seminars on tax systems and inheritance related to urban agricultural land, (iii) develop facilities for community/rental farms, and (iv) support for efforts to maintain and strengthen disaster prevention functions.

Trends in Japanese Urban Farming

Since 1993, when MLIT and the Ministry of Internal Affairs and Communications (MIC) began to collect data, the total area of agricultural land within the Urbanization Promotion Areas (UPA) has shrunk by more than half to 63,925 hectares in 2019. In 1993, agricultural land within the UPAs represented 2.8 percent of the country's total farmland, but by 2019 agricultural land within UPAs accounted for only 1.5 percent of total farmland (Figure 1). The steep decline in farmland within the UPAs likely stems from a lack of successors, particular for farmland outside of the Productive Green Space designation, and tax treatment of the UPA farmland as equivalent to residential land (e.g., ineligible for inheritance tax deferment). According to <u>MLIT statistics</u>, as of JFY 2015, approximately 60 percent of lost farmland within the UPA has been converted into residential land.

PGS areas have also decreased in line with the overall decline in farmland area in Japan, though at a slower pace than farmland in the UPAs. Between 1993 and 2019, the total farmland shrunk by 14 percent, while the PGS dwindled by approximately 18 percent (Figure 2).

² The currency conversion rate used in this report it \$1=110 Japanese yen.



Figure 2. Comparison of Japan's total farmland area to UPA farmland areas, including PGSs, between 1993 and 2019

According to MAFF, in 2019, Productive Green Spaces comprised approximately 19.5 percent of the land within the UPA. While the majority of farmland within UPAs, aside from PGS, is located <u>outside</u> of cities in the three major metropolitan areas (Tokyo, Kinki and Chubu), the majority of PGS areas are <u>within</u> the three major metropolitan areas (Table 1, Figure 3).

Table 1 Area	of farmland	in urhan	areas by	category in 2019
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	Three major metropolitan areas	Other areas	Total
Productive Green Space	12,387 ha (19.4%)	110 ha (0.2%)	12,497 ha (19.5%)
Other farmland within UPA	10,461 ha (16.4%)	40,967 ha (64.1%)	51,428 ha (80.5%)
Total farmland within UPA	22,848 ha (35.7%)	41,077 ha (64.3%)	63,925 ha (100.0%)

Sources: MIC (2019), MLIT (2019)

Note: Total and breakdown do not necessarily match due to rounding error.

Source: MAFF

Figure 3. Distribution of Productive Green Spaces in Specific Cities within Japan's Three Major Metropolitan Areas



Note: Area figures as of December 31, 2020. Source: MIC (2020)

Characteristics and Scale of Urban Farming Operations

Despite urban farmland comprising approximately 1.5 percent of total farmland in Japan, it houses 13 percent of urban farming operations and 7 percent of national agricultural output (Table 2). While the agricultural output of average farms across Japan consists mainly of livestock, vegetables, and rice, urban farms largely produce vegetables (Figure 4).

Table 2. Scale of Agricultural farming operations within Urbanization Promotion Areas

	Number of Agricultural Management Entities	Size of Agricultural Land (ha)	Agricultural Output
Nationwide	1,076,000 (2020)	4.372 million (2020)	8,894 billion yen (2020)
Urbanization Promotion Areas % of nationwide total	140,000 (2019)	Total: 64,000 (2019) (of which PGS is 12,000)	622.9 billion yen (2019)
	13%	1.5% (Productive Green Space: 0.3%)	7%

Sources: MAFF's <u>"Census of Agriculture and Forestry (2020)</u>", MAFF's <u>"Agricultural Land Area Survey (2020)</u>", MAFF's <u>"Agricultural Output Survey (2019)</u>". Figures for Urban Promotion Areas are estimates based on MIC's <u>"Summary Report</u> on Prices of Fixed Assets (2019)", MLIT's <u>"Urban Planning Status Survey (2019)</u>", and surveys by the Tokyo Metropolitan Government and National Chamber of Agriculture (2019)



Figure 4. Agricultural output in major cities by commodity

Sources: MAFF's "Statistics of Agricultural Income Produced (2018)", MAFF's "Agricultural Output by Municipality (2018, Estimate)"

According to MAFF, as of 2019, the average size of individual farms within the Urbanization Promotion Areas (6,600 meters squared (m²)) is substantially smaller than the nationwide farm size (29,900 m²). Urban farmers tend to offset production implication of smaller land plots through utilization of greenhouses and multiple vegetable harvests a year. In 2019, according to the 2020 Census of Agriculture and Forestry, 20 percent of all Japanese farmers and 17 percent of urban farmers had sales revenue in excess of 5 million yen (\$45,455). Government of Japan's analysis indicates that urban farmers benefit from greater proximity to major consumption areas and increased opportunities for direct sales, where farmers can set prices more freely. MAFF's 2020 Census of Agriculture and Forestry (link to Overview in Japanese only) reports that overall 9.0 percent of nationwide respondents cited "direct sales to consumers (including self or jointly operated produce stands, e-commerce and others) " as the destination with the highest sales compared to 44.5 respondents residing in Tokyo.

Compared to average Japanese farmers, urban farmers tend to work more part time in farming and receive more income from their non-farming activities. According to MAFF's 2019 Survey of Movements in Agricultural Structure, while 33 percent of commercial farmers (i.e., cultivate land area of at least 30 ares, or earn more than 500,000 yen (\$4,545) per year from sales of agricultural products) nationwide were full-time farmers, among farmers in the Tokyo metropolitan area, only 15 percent were full-time farmers. Moreover, there is a higher proportion of non-commercial farmers among urban farmers, compared to average Japanese farmers. According to the 2020 Agricultural Census, 59 percent of Japanese farmers were commercial and 41 percent were non-commercial. In the Tokyo metropolitan area, 49 percent of urban farmers were commercial, and 51 percent were non-commercial. The number of community gardens, of which approximately 30 percent are located within the UPA, is also growing. From JFY 2018 to JFY 2019, nationwide the number of community gardens increased by 23 percent, from 3,382 to 4,169 (for details, see

https://www.maff.go.jp/j/nousin/kouryu/tosi_nougyo/s_joukyou.html available in Japanese only).

Implications for U.S. Agriculture

As of 2020, Japan's calorie-based food self-sufficiency rate was 37 percent so FAS/Tokyo expects Japan's reliance on agricultural imports to continue. Still, Japan's efforts to preserve and promote agriculture in urban areas, coupled with COVID-19-driven increase in emphasis on the consumption of local products, may further exacerbate Japanese consumers' preference for locally produced foods. As of December 2020, 73.5% of respondents to a MAFF survey indicated that they paid attention to the production area when selecting agricultural, forestry and fishery products, as well as food. In the same survey, approximately 10 percent of respondents answered that their preference for local produce increased during the COVID-19 pandemic.

The interest in urban farming in Japan may offer opportunities for seed and nursery exports from the United States. Japan currently relies on the United States for nearly 11 percent (1.74 billion yen or \$15.84 million as of 2020) of its imports of vegetable seeds. Japanese Government's efforts to increase food self-sufficiency and reduce farmland loss through tax incentives may draw more new-entry farmers and part-time farmers, especially in urban areas, to farming. By exposing Japanese urban farmers to the range of seed and nursery products available in the United States, Japanese consumers may also increase their familiarity with U.S. vegetable varieties.

Attachments:

No Attachments.