

Analysis of urban and peri-urban agriculture

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The reality of urban and peri-urban agriculture

The number of farms within urban areas, within the classification of agricultural areas, has fallen by 22.4%, from 298,965 farms in 2015 to 231,930 in 2020. Nonetheless, in 2020, the (estimated) sales value of agricultural products from these areas amounted to roughly 1.3 trillion yen (or approximately 17% of the total value), which gives some idea as to the importance of urban and peri-urban agriculture.

The following analysis breaks down in detail urban areas by geographic conditions, including their distance from Densely Inhabited Districts (DID) and population densities, to reveal the multifaceted reality of urban and peri-urban agriculture.

First, 92.4% of farms in urban areas are located within 5 kilometers of a DID. Moreover, within DIDs, there are 46,469 farms (20.0%) with 67,120ha of cultivated land under management, while 50,040 farms within 500m of a DID hold 82,461ha of cultivated land under management (Table 1). Simply put, the production volume of urban and peri-urban agriculture is by no means small.

However, the same table indicates that the average area of cultivated land under management among farms between 2 and 5 kilometers from a DID is 224ha, while the figure is 144ha within DIDs, and when narrowed down to areas with population densities of above 10,000 people/km², the average area of cultivated land under management is 84ha. In short, the size of farms in urban and peri-urban areas decreases closer to city centers and with increasing levels of urbanization. The small size of these operations is reflected in their share of the total sales value of agricultural products for farms achieving a sales value of agricultural products above 30 million yen. For instance, this share is 42.2% for farms at a 2–5km distance from a DID, an average of 32.2% for farms within DIDs, and just 22.2% for farms in areas with population densities of above 10,000 people/km².

Table 1. Characteristics of agricultural structures within urban areas, by location

		Number of farms	Total area of cultivated land under management (ha)	Average area of cultivated land under management (a)	Total amount and share of the sales value of agricultural products for farms with sales above 30 million yen (Trillion yen)	
2–5km from a DID		(42,802)	95,944	244	963	42.2%
1–2km from a DID		(42,613)	86,343	203	781	37.9%
500m–1km from a DID		(32,504)	60,722	187	522	35.9%
Less than 500m from a DID		(50,040)	82,461	165	652	33.1%
Inside a DID		(46,469)	67,120	144	533	32.2%
Population density	1,000–2,500 people/km ²	(6,526)	11,411	174	87	33.8%
	2,500–5,000 people/km ²	(19,371)	32,602	168	251	35.3%
	5,000–10,000 people/km ²	(15,726)	18,320	116	155	29.4%
	Above 10,000 people/km ²	(4,307)	4,075	84	30	22.2%

Source: Compiled by the author from the Census of Agriculture and Forestry survey data.

Note: (1) Total sales values of agricultural products have been estimated using the class value for each scale of sales amounts.

(2) Percentages (%) show shares within the relevant location.

(3) The top two for each item are displayed in orange, and the bottom two are displayed in blue. (The same applies to Table 2).

Toward a focus on organic and sustainable agriculture

Agriculture undertaken within urban and peri-urban areas often takes advantage of its location. Table 2 presents the proportion of different types of agriculture undertaken in these areas. Within DIDs with high population densities, a high proportion of business related to agricultural production involves farms engaged in retail operations (involving direct sales to consumers of agricultural products produced by farm management), rented farms, farms for field studies, and farms for experiencing farming and tourist farms. Moreover, the proportion of farms for which the top sales destination of agricultural products is agricultural cooperatives decreases the closer they are to a DID, and within DIDs, the proportion decreases as population density increases, while the proportion of direct sales to consumers and wholesale markets increases.

Additionally, the percentage of farms engaged in organic agriculture is approximately 6% outside of DIDs and as much as 8.1% within them. Among the latter, organic farms account for 9.2% of farms in areas with population densities of 5,000–10,000 people/ km² and 13.3% within areas of more than 10,000 people/ km².

The figures above confirm the significant role played by urban areas in total agricultural production, as well as the many farms and agricultural properties within cities and their peripheries. However, it must be noted that urban and peri-urban agriculture is supported by comparatively small-scale farms.

In addition to the scale of agricultural production, the strengths of urban and peri-urban agriculture also lie in various adjacent activities, such as direct sales of agricultural products that accurately reflect consumer needs, as well as in the provision of farming experiences and opportunities for agricultural field studies. Agriculture in urban areas is particularly promising as a focal point for organic agriculture, and further development along these lines is likely.

(Analysis by YOSHIDA, Shingo)

Table 2. Proportions of various initiatives undertaken in urban areas, by location

(Unit: %)

		Related business of agricultural production			Top sales destination for agricultural products			Organic agriculture
		Retail	Farm for experiencing farming/field study on farming	Tourist farm	Direct sales to consumers	Agricultural cooperatives	Wholesale markets	
2–5km from a DID		6.5	0.1	0.6	9.8	54.1	6.8	6.4
1–2km from a DID		7.0	0.2	0.7	10.9	53.1	7.3	6.7
500m–1km from a DID		7.0	0.3	0.6	11.2	51.6	7.8	6.2
Less than 500m from a DID		8.4	0.3	0.5	13.1	48.5	8.5	6.8
Inside a DID		11.0	0.8	0.9	18.9	40.1	10.1	8.1
Population density	1,000–2,500 people/km ²	9.3	0.2	0.4	12.4	51.4	7.6	6.1
	2,500–5,000 people/km ²	8.7	0.4	0.5	14.2	46.4	8.5	6.9
	5,000–10,000 people/km ²	13.1	1.0	1.1	22.7	33.0	11.8	9.2
	Above 10,000 people/km ²	17.1	2.4	2.2	36.8	18.4	15.1	13.3

Source: Compiled by the author from the Census of Agriculture and Forestry survey data.