

The Preservation and Use of Scarce Agricultural Land in Suburban Areas

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1. Introduction

There are approximately one million *kleingartens* (small gardens) in Germany which provide public green spaces in urban areas. Most of the land is owned by local governments, who rent plots for approximately ¥20,000 per year to people without gardens. In Japan, on the other hand, most agricultural land in urban areas is privately owned, and unless preservation and utilization efforts are quickly implemented, these valuable green spaces will be lost to urbanization.

In the past, suburban farms supplied fresh vegetables to cities, and at the same time served as a scarce resource for urban dwellers to experience the changing of seasons and peace of mind. However, with the aging of farmers and shortage of successors, a severe labor shortage has beset farms, causing farmland to be abandoned or idled. Meanwhile, more urban dwellers interested in farming as a fulfilling and healthy pastime are seeking volunteer opportunities as farm workers. Thus by dovetailing the needs of farmers and urban dwellers, farmland can be preserved and utilized, while urban dwellers can enjoy a “life with agriculture.”

This paper examines efforts to preserve and utilize suburban farmland, and notes the issues confronting these efforts in the future.

2. Preservation of Green Space and the Revised Urban Planning Law

A revision of the 1968 Urban Planning Law was passed into law by the Upper House on May 12, 2000. At the time the original law was implemented in 1968, Japan was in the midst of miracle growth, and the population and key functions of society were concentrating in cities. During this hectic period, the construction of public facilities was unable to keep pace with the rapid urbanization, and chaotic urban sprawl was wiping out green spaces. The law introduced zoning and planned urbanization to control development and construction.

However, the population structure has changed drastically since then — with less population concen-

tration in cities, aging, and the decline in children — while more people are participating directly in community development.

Compared to the present law, which establishes uniform urban plan areas nationwide, the revised law empowers local governments to designate “semi-urban plan areas” in areas bordering the urban plan areas, and to regulate land use therein.

Thus the revision aims to provide high quality urban space in harmony with surroundings by distinguishing development goals for urban areas from preservation goals for scarce suburban farmland. At the same time, it notes the need to develop in the future a comprehensive approach that extends to funding and tax measures related to land purchases by local governments.

3. Kanto Farmland Decreases for 13 Straight Years

During the bubble period when land prices surged, suburban farmland was considered to be underutilized land, and converted to housing and commercial uses to accommodate the sprawling population.

According to a 1999 survey by the Kanto Regional Agricultural Administration Office, the land area under cultivation in its ten-prefecture jurisdiction is 827,200 hectares.¹ This represents a 1.2% decrease of 10,400 hectares from the previous year, and the 13th straight year of decline since 1987. By type of field, rice paddies decreased only 1,300 hectares (0.3%) from the previous year to 440,500 hectares, while non-paddy fields decreased more sharply by 9,000 hectares (2.3%) to 386,700 hectares.

The steady decline in cultivated land reflects the difficulties facing farms, including pressures to sell off or convert farmland to residential use to pay hefty inheritance taxes, the need to scale down operations as farmers age, and lack of successors to carry on the farm. For more details, we present the results of a 1998 survey by the Tokyo Metropolitan Government.

Survey sample: 13,508 farm households who live in the Tokyo Metropolis and own at least 10 hectares of farmland in designated urban plan areas.

Date of survey: July 20, 1998

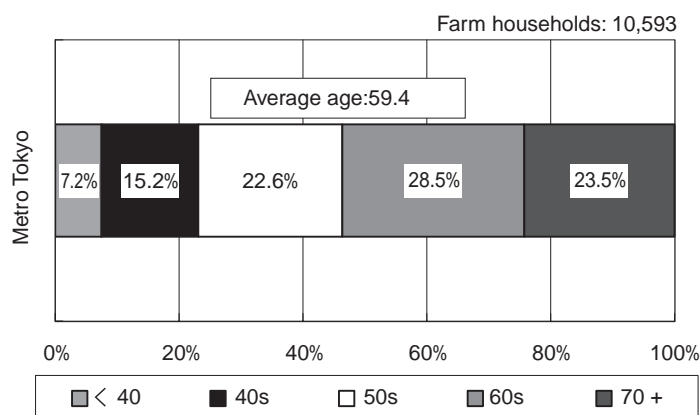
Valid responses: 11,333 (83.9% response rate)

According to the survey, 11,333 households own farmland in designated urban plan areas in Tokyo, a decline of 1,180 households (and 509 hectares) from the previous survey in 1992. Of these, 8,901 households (78.5%) own land designated as productive farmland.

The age composition of active farmers for Tokyo overall reveals the rapid pace of aging: the 60s age

group is the most prevalent (28.5%), followed by 70s (25.3%) and 50s (22.6%). Compared to the previous survey, the age composition has increased overall, including a 1.5 percentage point increase in the 40s age group.

Figure 1 Age Composition of Farmers

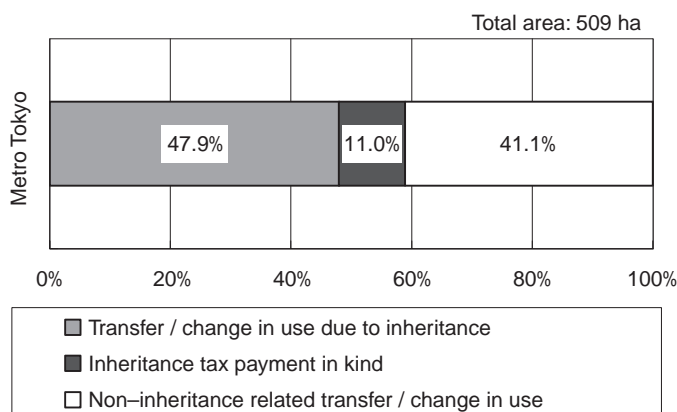


Source: Tokyo Metropolitan Government Labor Economics Bureau, Survey of Farming in Urban Areas (January 1999).

The survey also found that 50.8% of households have successors, while 49.2% do not. Compared to the 1992 survey, this represents an 11.2 percentage point decline in households with successors.

Moreover, since the previous survey, 509 hectares of farmland (2,720 households) has been converted to other uses. Of this, 58.9% of the land area (49.8% of households) was converted or transferred in connection with inheritance or the payment of inheritance tax (Figure 2).

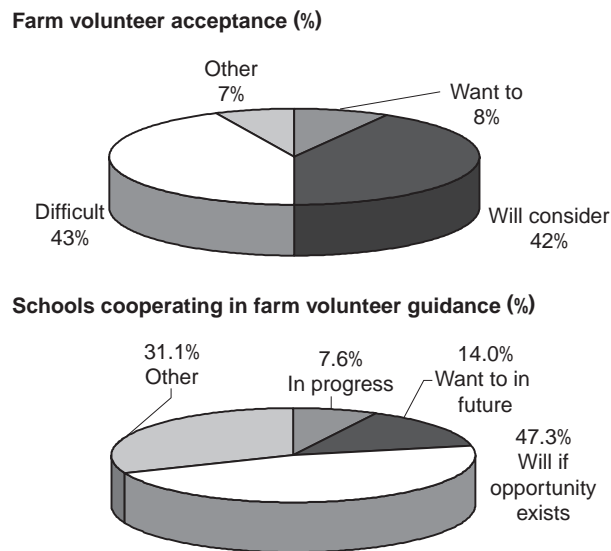
Figure 2 Reason for Disposal of Farmland



Source: See Figure 1.

With regard to interactions with urban residents through the acceptance of farm volunteers, over half of respondents said they either want to accept farm volunteers or would consider the idea. In fact, almost 70% show a cooperative stance — they already do, want to do so in the future, or would if given the opportunity — to offer farming experience in school curriculums. The successful development of farm volunteer programs could not only enrich school curriculums, but help stabilize farm management by alleviating farm labor shortages, improving farmland productivity, and providing a stable demand for farm produce from school lunch programs.

Figure 3 Farm Household Interaction with Urban Residents



Source: See Figure 1.

4. Examples of Farmland Preservation Initiatives²

Below we introduce three recent examples of initiatives in the Tokyo area to preserve farmland. In all three cases, the initiatives are implemented by local governments in collaboration with farmers and local residents.

(1) Recreational Farms in Nerima Ward³

Following on conventional community farms sponsored by ward or municipal governments for the benefit of local residents, in 1995 Nerima ward initiated a new type of farm using productive farmland. Under this system, farmers set up and manage “recreational farms” (*taiken noen*). But instead of leasing plots to users, the farmer maintains control of the farm, and supervises users on all activities from planting to harvesting. In return, users pay a fee for the experience and share in the harvest of twelve types of crops. These farms differentiate themselves from tourist farms and community farms by

imparting agricultural knowledge and techniques.

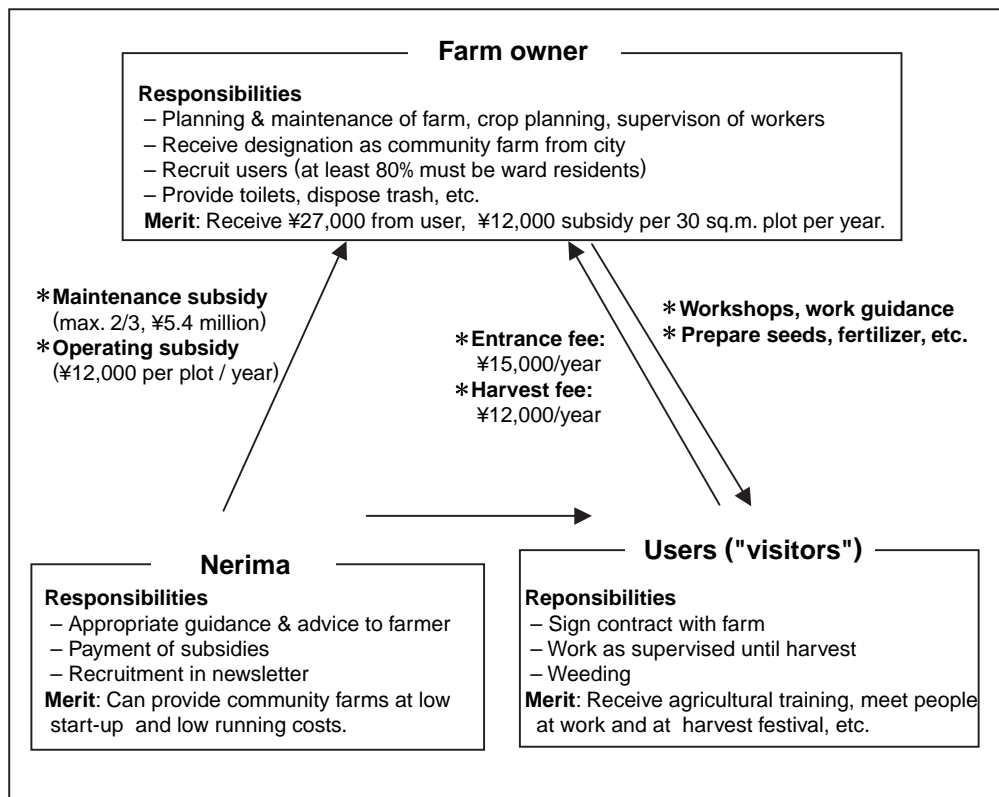
As of August 2000, with a population of 660,000 and land area of 48 square kilometers, Nerima has the largest agricultural land area of Tokyo's 23 wards.⁴ Once known for the Nerima *daikon* radish, Nerima today has less than 10% of its land area, or 353 hectares (of which 235 hectares is productive farmland), devoted to growing cabbages and other leaf vegetables. In the past, local residents have taken advantage of the ward's abundant farmland by engaging in a variety of farming projects.

Specifically, these include "club farms" for elderly persons, "school farms" for students, "community farms" for the general public, and "agricultural parks" that provide a year-long agricultural training program.

Under the Nerima recreational farm initiative, one farm has been added each year since 1996, bringing the total to four farms (448 plots of approximately 30 square meters each, for a total area of 17,027 square meters). The ward subsidizes two-thirds of maintenance costs and one-third of operating costs of each farm. As shown in Figure 4, the merits of the initiative are many: local residents get to experience nature close to home, farm households can stabilize farm management, and the Nerima ward government can run an effective program at low cost.

With conventional community farms that lease out plots, the biggest problem is that many farms are forced to close down when inheritance taxes are levied, because they cannot ask the local government to purchase the productive farmland, and are not allowed to defer the inheritance tax. In contrast, since recreational farms legally collect entrance fees rather than rents, even farms that exist on productive farmland can ask to be purchased when the inheritance tax is levied, and the inheritance tax is also likely to be deferred. Looking ahead, one pending issue is what to do when local subsidies (¥12,000 per plot annually) expire after seven years.

Figure 4 The Nerima Recreational Farm Initiative, and Merits to Participating Parties



Source: JA-Zenchu (Central Union of Agricultural Co-operatives of Japan)

(2) Farm Support System in Sagamihara City

Sagamihara City, located in central Kanagawa prefecture next to the Tokyo commuting towns of Machida and Tama, has a population of 600,000 (as of July 2000). Of the city's 90.4 square kilometer land area, 71.6% (6,469 hectares) has been designated as urban plan areas. Although there are only 750 hectares (8.3% of the city's land area) of farmland within city limits, farmland is disappearing at a rapid pace (42 hectares, or 5.6% of farmland area) due to the aging of farmers and lack of successors.

To alleviate farm labor shortages, the city collaborated with the local chapter of the Japan Agricultural Cooperative (JA) to introduce a program for training local residents and placing them in farm jobs. The local agricultural cooperative organized an agricultural training program for the public, and arranged for graduates to seek farm jobs through the Public Employment Security Office. Similar support systems offering opportunities to volunteers and part-time workers have been implemented in the "Agri-support" program in Hadano City, Kanagawa, and "Farm Volunteer Programs" in Tokyo's Sugunami ward and Yachiyo City, Chiba.

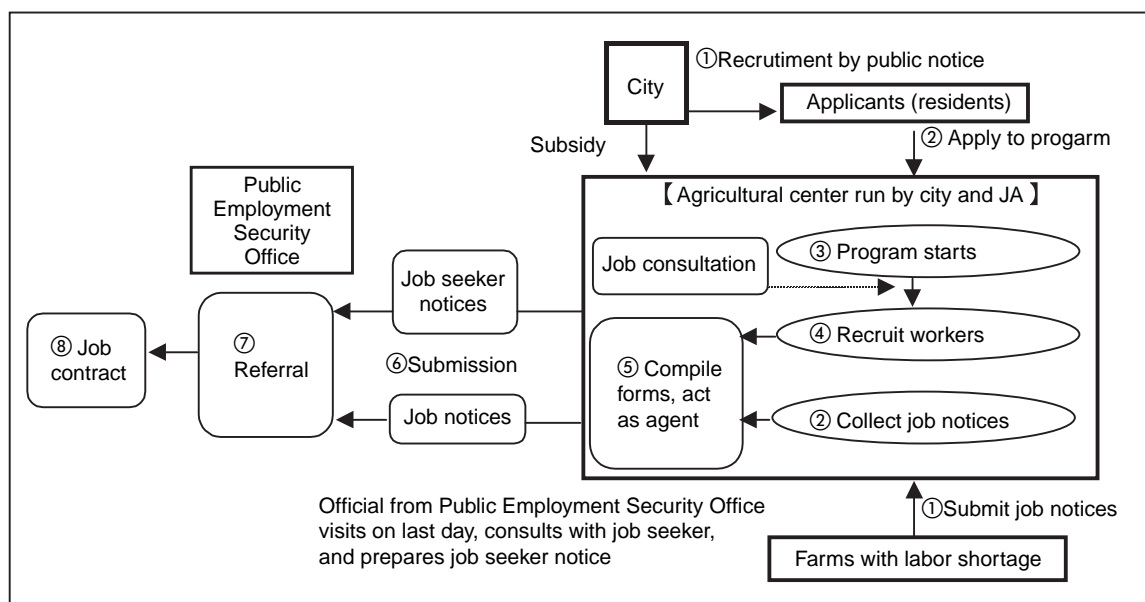
In preparing the system, the city and local JA chapter surveyed farmers and local residents to identify

the needs of both sides.⁵ According to the results, 15% of farmers (320 respondents) want to entrust farm work to someone because of labor shortages. Of these, 61 respondents want to entrust farm work to local residents. Meanwhile, 41% of local residents (981 persons) said they want to assist with farm work at farms experiencing labor shortages.

The city subsidizes up to 50% of operating costs for the JA chapter, which actually operates the program.⁶ Since the program began in fiscal 1995, the JA chapter has conducted the training, and the Public Employment Security Office has placed graduates in farm jobs after the employer and job seeker agree on terms (Figure 5).^{7, 8}

In fiscal 1999, there were 28 applicants (23 men and 5 women). The men were mostly in their 60s (average age 57.2), and the women in their 40s (average age 37.8). From 1995 to 1998, 149 participants enrolled in the program, and 128 graduated. However, few graduates have been placed in farm jobs, primarily since most graduates attended the program for personal edification rather than vocational need. Furthermore, there have been difficulties in reaching agreement between job applicants and employers, and in worker retention. The JA chapter is thus considering screening seminar applicants more carefully, and organizing graduates to perform farm work in groups.

Figure 5 The Farm Support Program in Sagamihara City



Source: JA-Zenchu

(3) Farming for the Elderly — The Aozora Day Service in Kunitachi City

Kunitachi City, located west of Tokyo, has a population of 71,500 (as of March 2000), of which elderly persons comprise 13.9%, and are increasingly living in single-person and two-person elderly house-

holds. In 1992, to prevent their isolation and withdrawal from society, and to promote their health, the Kunitachi City Social Welfare Council and JA Tokyo Midori Kunitachi office initiated a model project to augment at-home welfare called “Aozora Day Service.”

A 300 *tsubo* (990 square meters) plot of land bordering Koshu Kaido road was set aside for the project (the landowner happens to be a director of the local social welfare council and executive of the JA Kunitachi office). Approximately 30 elderly persons participate each year in planting, growing, and harvesting vegetables on the plot. The average participant is 79.2 years old, and the oldest is 92. Since volunteers from local elderly person’s clubs and farmers help prepare the land for cultivation and perform heavy labor, even elderly persons with no prior farm experience can participate readily. Each participant is supported by two staff members, and 15 types of vegetables are grown, including potatoes, eggplants, and cucumbers.

There are five to six work sessions each year, and harvest festivals are held using potatoes in the summer and *satsuma-imo* sweet potatoes in the fall. The work sessions are 90 minutes long, lasting from 10:00 a.m. to 11:30 a.m. Since participants decide what to do for themselves rather than being told, comments have generally been positive — participants enjoy being able to put previous farm experience to good use, make friends, save money by growing their own vegetables, and have more conversations with their family.

Figure 6 Photo of Elderly Persons Performing Farm Work



Source: Kunitachi City Social Welfare Council

6. Conclusion

In a stable, maturing urban society, the preservation of scarce suburban farmland is an important priority for preserving greenery and creating opportunities to commune with nature, as well as for practical considerations such as disaster readiness.

In the interest of protecting the environment and greenery, it is important to preserve and even create new agricultural land in urban areas. We first need to clarify the status of agriculture and agricultural land for community and urban planning purposes, and encourage creative and ambitious initiatives by communities and agricultural groups. Furthermore, guidelines and regulations need to be implemented, and agricultural land marked for preservation in order of priority. As discussed earlier, it is imperative to explore new methods based on partnerships between residents and farmers, and to implement financing measures to subsidize experimental programs. We should also consider how local governments and farmers can negotiate land purchases, although the present condition of local public finances poses difficulties. In the future, we must also consider ways to shield agricultural land from the effects of the inheritance tax, such as fixed-term leases by the local government for expropriated land, and special provisions for community farms that have the strong support of residents.

Notes

1. *Planted Area and Arable Land Use Ratio of Agricultural Produce FY1999*. The survey is dated July 1, 2000, and covers the prefectures of Nagano, Gunma, Tochigi, Ibaraki, Saitama, Kanagawa, Chiba, Tokyo, Yamanashi, and Shizuoka.
2. This research was conducted with the cooperation of JA-Zenchu (Central Union of Agricultural Co-operatives of Japan).
3. Nearby programs similar to Nerima's recreational farms exist in Yomohama City ("farm for experiencing growing and harvesting crops"), Sagami-hara City ("Fuchinobe district recreational farm"), and Chofu City ("community farm for experiencing farming").
4. Materials provided by the Nerima ward office.
5. The survey of farmers ("Survey of Intentions Regarding the Effective Use of Agricultural Land"), conducted in July 1994, had a sample of 4,180 regular JA members, 2,058 valid responses, and response rate of 49.2%. The survey of local residents ("Opinion Survey Regarding Municipal Administration"), conducted in August 1995, had a sample of 3,000 local residents, 2,380 valid responses, and response rate of 79.3%.
6. A subsidy program by the national treasury was introduced from 1997.
7. There are three courses: the beginner's course lets first-time applicants learn about growing vegetables in the field and classroom; the step-up course actually sends graduates out to farms to learn in the field; and the sup-

port course has all participants work together on a farm under supervision, doing everything from planting to harvesting and selling crops.

8. Under the Employment Security Law, regardless of whether wages are paid, job referral activities require approval of the minister of labor. Based on numerous discussions between the Sagamihara Public Employment Security Office and the prefectural government's job placement policy office, agreement was reached to use the services of the former.