THE SEARCH FOR QUALITY OF LIFE IN JAPANESE PLANNED COMMUNITIES*

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Japanese cities have gained a reputation for having a low quality of life in the midst of rising affluence. But Japan has also undertaken since the 1960s an ambitious national effort to develop large-scale planned communities in existing metropolitan areas. How successful have planners been in carrying out plans for these new towns? Furthermore, have residents of the new towns judged them to be successful thus far in providing a reasonable quality of life? This study will address these questions by focusing on Tama and Chiba New Towns, two of the earliest planned communities in the Tokyo metropolitan area.

A study of the degree of success of these two Tokyo-area new towns can provide useful comparative information for new town planning in other countries and add to the knowledge about new town developments throughout the world. Comparisons might be made, for example, between Japan and developed countries in Europe and North America as well as between Japan and the densely populated but less developed countries of East and Southeast Asia.

This study of Tama and Chiba New Towns was conducted in 1987 through field investigation, interviews, and use of published and unpublished planning documents provided by planners and government officials. Both English-language and Japanese-language sources were used.

Tama and Chiba are located on opposite sides of the metropolitan area and are both 25-40 kilometers from central Tokyo (Figure 1). Tama's site, in the more popular western sector of metropolitan Tokyo, consists of hills interspersed with stream valleys, whereas Chiba in the less popular eastern sector has relatively flat topography.

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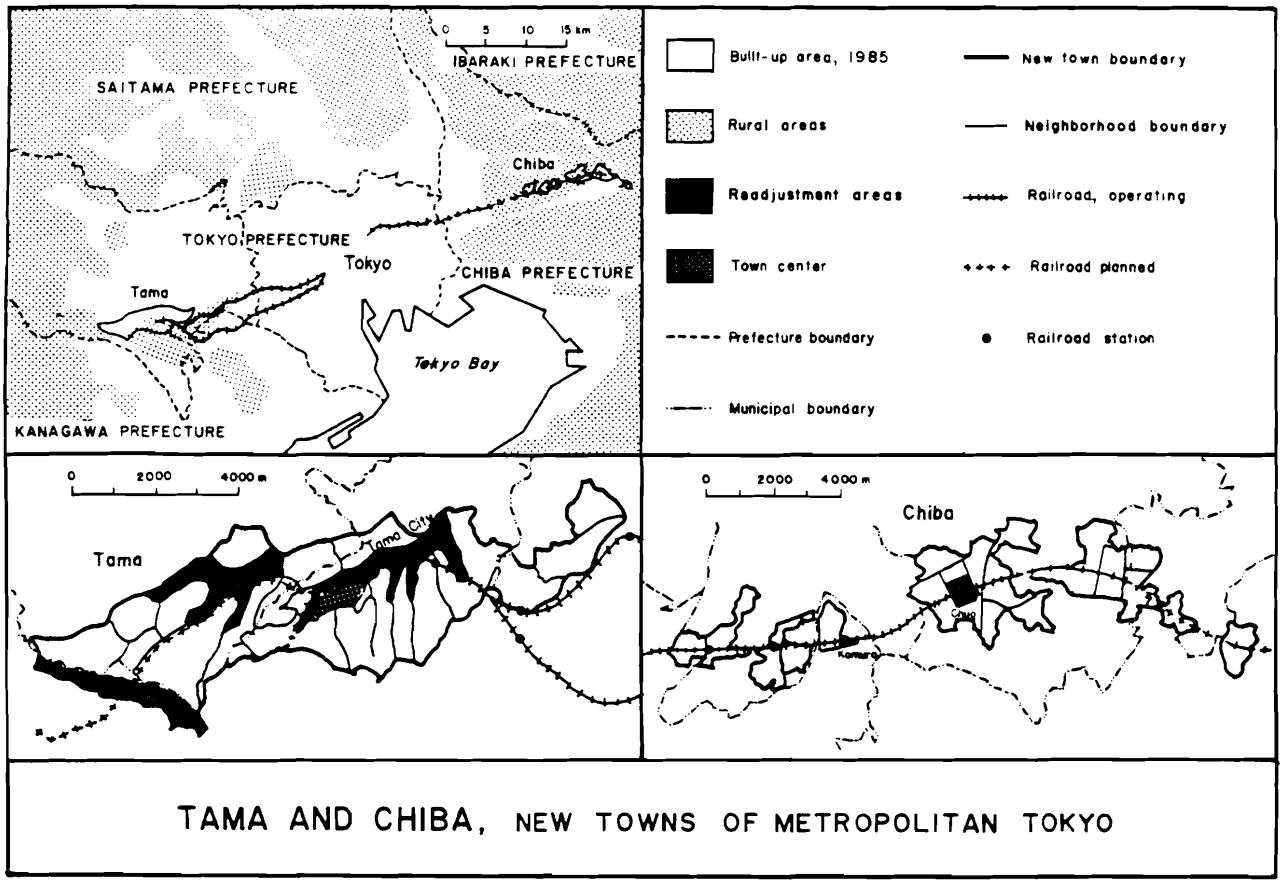

Figure 1

Tama and Chiba are both government-sponsored projects whose planning began in the mid-1960s, and each originally encompassed an area of just under 3,000 hectares. Original population targets in each case were 300,000 or greater (Table 1). Tokyo Metropolitan government conceived the idea for Tama in 1964 and has been assisted in development by Japan's Housing and Urban Development Corporation (HUDC) and the Tokyo Metropolitan Housing Supply Corporation (TMHSC). Chiba's prefectural government is the sponsor of Chiba New Town and has been assisted by HUDC, a national government agency that has been involved in new town projects throughout Japan.

Both new town projects are based on similar original planning goals and on similar planning concepts. The two original goals were to provide a planned alternative to high density urban sprawl and to help alleviate housing shortages in Greater Tokyo during the postwar period. Tama and Chiba were

Table 1: Comparison of Tama and Chiba New Towns

	Tama NT	Chiba NT
Planning commenced	1965	1966
Planned completion	1990	1994
Original planned size	2,962 hectares	2,912 hectares
Current planned Size	3,016 hectares	1,933 hectares
Original target population	300,000	340,000
Current target population	309,000	176,000
Current population (1987)	120,000	29,000
Current population/ original target	40%	8.5%
Current population/ current target	3.8%	16.5%
Original planned neighborhood untis	23, averaging 12,000 people and 100 hectares each	41, averaging 8,000 poeple and 60 hectares each
Current planned neighborhood units	21	22

Sources: TMG, *Report of Projects* (in Japanese), Tokyo, 1986; TMG et. al., *Tama New Town* (in Japanese), Tokyo, 1987; HUDC, *Chiba New Town Plan* (in Japanese), Chiba, 1987; Chiba Prefecture and HUDC, *Chiba New Town* (in Japanese), Chiba, 1986.

initially conceived as planned residential communities, without a local employment base, and with commuter rail links to central Tokyo. Both new towns were based on the neighborhood planning concept, although the average territorial and population size of the neighborhood units was larger in Tama (Table 1). Above the locally based neighborhood units with their service centers providing daily necessities, plans for both new towns called for district units comprised of several neighborhood units centered around a railroad station. At the top of the service hierarchy was the new town center with the most specialized service facilities for all residents.

ACHIEVEMENT OF ORIGINAL GOALS

Visits to the two project sites corroborate that Tama and Chiba are meeting the goal of providing a planned alternative to the high-density sprawl that dominates outlying parts of Greater Tokyo. The use of neighborhood planning concepts and a hierarchy of service centers has resulted in a coordinated and efficient land use pattern in the two new towns. At the same time, planned open space is relatively plentiful. Tama will average 16.8 square meters of park and green space per inhabitant,[1] compared with an average of just 3 square meters of park and green space per inhabitant for Tokyo Prefecture as a whole.[2] Chiba New Town will have 10.7 square meters of planned open space based on a 1986 revised plan.[3]

Neither new town has succeeded in achieving the second goal of providing housing according to very ambitious original schedules. Government authority over the private land market is more limited in Japan than in Europe or Hong Kong, where new towns have also been undertaken. Japanese government authorities have also been unwilling in some cases to exercise existing eminent domain authority to acquire land for new town projects. Thus, ambitious early housing and population targets could not be met, and serious delays have resulted. Although planned completion dates are drawing near, Tama has not yet achieved half its planned population target, and the record for Chiba is even more dismal (Table 1).

The chief obstacle to the successful completion of the Chiba project has been the difficulty of acquiring land from the numerous private landowners in the area. Private landownership rights are strong, and farmers have often been reluctant to part with their land. The Chiba prefectural government was responsible for negotiating with landowners and, when many farmers refused to sell in the early stages of the project, decided neither to raise the offering price for the land nor to use the

[1]Interview, Mr. Ueno, HUDC, 12 June 1987.

[2]*Tama New Town: Yesterday, Today, Tomorrow* (Tokyo [in Japanese], 1981), p. 18.

[3]Chiba Prefecture and HUDC, *Chiba New Town* (Chiba [in Japanese], 1986).

power of eminent domain because of fear of a political backlash.[4] Eventually, in 1986 the prefectural government had to reduce the size of the project by one half since strategic parcels of land simply could not be acquired. Many neighborhood units were eliminated entirely (Table 1). Furthermore, the ambitious and unrealistic original target that called for the completion of the project in just eight years from its conception was revised.[5]

A second land acquisition difficulty that endangered Chiba's success involved the construction by HUDC of a rail segment within the new town from Komuro Station to Chuo Station (Figure 1). Construction of the rail line on schedule depended on Chiba Prefecture's acquisition of necessary land. Failure to acquire all of this land seriously delayed the project. Meanwhile HUDC had started 4000 housing units in the Chuo district based on the belief that the rail line could be completed to Chuo Station on schedule. These partly started units were not completed for more than ten years because of lack of necessary rail connections. Upon the opening of the rail line to Chuo Station in 1984, some of the units were completed while others were still undergoing modification in 1987.[6]

Still another land acquisition problem for the Chiba project involves the planned railroad link to central Tokyo. In contrast to the direct rail lines from Tama New Town to central Tokyo completed in 1974 and 1975, a direct rail line from Chiba to Tokyo begun in 1972 remains uncompleted. Residents of the easternmost ward of Tokyo want the proposed surface line to be built underground to reduce noise and prevent loss of their properties, and thus have been refusing to sell the necessary land. Until the new direct line is completed, residents of Chiba must use an inconvenient, time-consuming, and expensive indirect route to Tokyo instead.[7]

Although acquisition of land for Tama New Town involved long and difficult negotiations, public authorities had obtained 99.1% of necessary land by March 1986. Hilly sites were easiest to obtain, as

[4]Interview, Messrs. Ishida and Horio, HUDC, 5 October 1987.

[5]HUDC, *Chiba New Town Plan* (Chiba [in Japanese], 1987), p.1.

[6]Interview, Messrs. Ishida and Horio, HUDC, 5 October 1987.

[7]Interview, Mr. Kuriyagawa, HUDC, 5 October 1987.

these were not used for agriculture. In lower-lying agricultural areas, where about 2,000 part-time farmers owned land, the public developer (TMG) eventually used eminent domain to force some of the farmers to sell.[8]

In contrast to the unsuccessful total acquisition approach for Chiba, TMG used a land readjustment approach for 15% of Tama New Town's project area. This method involves the landowner retaining part of his land while being supplied with infrastructure; the value of the land is thereby increased. In return, the owner transfers the other portion of his land to government authorities, who use part to supply common facilities such as parks, and also sell part to help finance infrastructure costs. The landowner can develop his now smaller holding or sell it to someone else for development. Land readjustment has helped gain the cooperation of many private landowners who can profit from development. In Tama, land readjustment areas are located mainly in valleys (Figure 1) and already had some development prior to the project's start. Readjustment has therefore included redrawing plot boundaries, adding improved infrastructure, new development of mixed housing types, and even some redevelopment of housing.

QUALITY OF LIFE: ECONOMIC ENVIRONMENT

In 1986 national government legislation endorsed a new multifunctional concept for Japanese new towns so that they could achieve some degree of self-containment. As a result, Chiba Prefecture now provides incentives, including low-interest loans, in an attempt to attract private companies to Chiba. In Tama, a new TMG policy in 1982 began to promote local employment and higher level educational functions. By 1987, 60 private companies had located in Tama, and ultimate future job targets are 20,000.[9] There are plans to move Tokyo Metropolitan University to a new site in Tama New Town. In addition, a new land readjustment area at the western edge of the new town is recommended as a future location for nonpolluting high technology activities.

[8]Interview, Mr. Ueno, HUDC, 12 June 1987.

[9]Interview, Mr. Ueno, HUDC, 22 June 1987.

QUALITY OF LIFE: SOCIAL ENVIRONMENT

Improving the quality of the social environment in the two new towns is another matter of concern to public authorities. A recent survey in Tama showed that housewives are much more likely to interact socially with neighbors than are male household heads, who generally spend much less time in the new town.[10] Public authorities in both Tama and Chiba have sponsored festivals to increase community awareness and resident satisfaction. The spring festival for Tama in 1987 had a total attendance of more than 200,000, or about double the new town's population at the time.[11] Physical design in one of Tama's newer neighborhoods is also intended to encourage social interaction. Innovative "plus-one" housing units include a separate room, fronting on the pedestrian way, which can be used for hobbies, education, or shops; planners hope this highly visible room will promote social interaction as people pass along the pedestrian way in the evening.

QUALITY OF LIFE: PHYSICAL ENVIRONMENT

Plans for Tama and Chiba show a well-defined hierarchy of public open spaces, with one large central park near the town center, district parks, and more locally based neighborhood parks and children's playgrounds. But in Tama, which will have significantly more park and green space per inhabitant than Chiba, planners are also undertaking changes in park and green space design. In the first developed neighborhoods, parks were planned as unconnected units. Later neighborhoods had pedestrian ways that connected park units. The newest neighborhoods have broader park belts to encourage a closer relationship between housing and open areas. More recent town house developments are also designed to incorporate larger common green areas than existed in earlier developments.

QUALITY OF LIFE: HOUSING

In response to changing life-styles and the needs and demands of a generally more affluent population, public developers of Tama and Chiba have sought in recent years to provide a greater variety of housing types and to upgrade standards in newly constructed units. This contrasts with an

[10]Interview, Mr. Ueno, HUDC, 22 June 1987.

[11]Interview, Mr. Kihara, TMG, 13 July 1987.

earlier emphasis on building mass-produced units of lower quality in order to alleviate housing shortages. In Tama, the average floor space in sales units increased from 50 square meters initially to 90 square meters in 1984. A new "menu system" for owned housing allowed dwellers to choose among alternative interior design arrangements for their units, whereas a new "free plan" enabled dwellers to design their owned units completely, except for plumbing equipment.[12] In Chiba during the late 1980s HUDC developers were enlarging apartment units in the Chuo district that had been started a decade earlier, in order to make them more marketable. In addition, the revised plan of 1986 proposed increasing the proportion of lower apartment buildings and single-family units while reducing high-rise apartments. Under the original plan the first two types comprised just 25% of the total, whereas the revised plan made them 67%.[13]

QUALITY OF LIFE: RESIDENT PERCEPTIONS

How then do residents perceive quality of life in the two new towns? In Chiba, significant delays in development and the decision to reduce project size by half have helped to create a negative image among residents. Residents have expressed frustrations about past promises concerning transportation services and variety in the new town's service base that have not been fulfilled. One of the most serious complaints is about the one-hour-and-twenty-minute commute to central Tokyo, including transfers, via an indirect rail route. Not only is the journey uncomfortable but is also expensive, as one rail segment has the highest cost per kilometer of any commuter line in Japan. Furthermore, services during nonrush hours for shopping and other purposes are infrequent, entailing a special disadvantage for residents, since construction of Chiba's town center has been delayed.[14]

By contrast, resident surveys in Tama New Town indicate a generally much greater degree of satisfaction. One of the most recent and detailed surveys is for the Tama City portion of the new town (Table 2). Tama City is one of four local governments serving the new town and currently includes the

[12]HUDC, *Housing of the Housing and Urban Development Corporation in Tama New Town* (Tokyo, [n.d.]).

[13]HUDC, *Chiba New Town Revised Plan* (Chiba [in Japanese]: 1987), p. 2.

[14]Interview, Messrs. Ishida, Horio, and Kuriyagawa, HUDC, 5 October 1987.

Table 2: Resident Evaluation of Quality of Life in Tama City Section of Tama New Town

Abundant green space	1.32
Clean air	1.39
Sunny and breezy	1.40
Drainage and sewer system	1.50
Parks	1.52
Garbage disposal	1.53
Assembly facilities	1.71
Appearance of buildings	1.76
Friendliness	1.86
Safety of transportation	1.89
Community activities	1.97
Crime prevention, public morals	2.04
Housing	2.08
Noise, vibration	2.08
Convenience of shopping areas	2.22
Convenience of transportation	2.35
Medical facilities	2.37
Retail prices	2.81

Note: Average scores among residents; 1.00 = Good, 2.00 = Rather good, 3.00 = Rather bad; 4.00 = Bad.

Source: Tama City, *Tama City Popular Opinion Survey* (Tama City [in Japanese], 1987), p. 60.

Town as having a good or very good living environment; in only one neighborhood of the eight included did the results fall below 90%.[15] When residents were asked to evaluate the aspects of their living environment, they rated most favorably such physical environmental features as amount of green space, parks and playgrounds, air quality, and sun/ventilation conditions. Also rated favorably were public utility services such as drainage, sewage disposal, and solid waste disposal. Residents rated somewhat negatively a variety of public and private service functions or facilities, including retail price levels, convenience of shopping areas and of transportation, and medical facilities. Also rated somewhat negatively were housing conditions and a noisy environment. Survey results suggest that Tama New Town residents suffered from a common problem of new town projects around the world, that the pace of service development in earlier stages of the project does not correspond with resident expectations.

CONCLUSION

Tama has clearly been more successful than Chiba in achievement of original planning goals as well as in establishing a reasonable quality of life for its inhabitants. Judged by standards of some countries with a strong tradition of public involvement in the land market, Tama and Chiba may appear unsuccessful. Implementation of plans has been slow and difficult, and major changes in plans have been necessary. But in light of the realities of Tokyo's land market, including currently the highest land prices in the world, and the limits to public authority in Japan, the relative success of Tama New Town in providing a higher quality of life is still apparent.

[15]Tama City, *Tama City Popular Opinion Survey* (Tama City [in Japanese]: 1987), p. 53, 55.