Design for Inclusion, Vol. 75, 2023, 198–202
https://doi.org/10.54941/ahfe1003340

Housing in Japan Toward a Super-Ageing Society: How Far Have We Accomplished and What Remains to Be Done?

Satoshi Kose

Professor Emeritus, Shizuoka University of Art and Culture; Guest Researcher, Building Research Institute, Higashi-shinbashi, Minato, Tokyo 1050021, Japan

ABSTRACT

Japan started policy preparation to cope with its ageing in mid-1980s when alarming forecast told that a quarter of population would be sixty-five and over in 2030. Housing policy was no exception, and the author engaged in the development of dwelling design guidelines for an ageing society (not for aged persons) at a research institute. A proposal of design guidelines was drafted in 1991/92, which included three essential requirements: elimination of unnecessary step differences; installation of hand/grab rails for securing stability; and widening of corridors/doors for temporary use of an indoor wheelchair. The application of guidelines started in the early 1990s, and the government introduced a policy to make the design recommendation to work – extra subsidies for housing mortgages in 1996 if the dwelling design was prepared for the ageing. Although the scheme was terminated in about ten years, major housing providers were persuaded to abide by the requirements since they were easy to follow for new construction compared to other requirements. Afterwards, similar policy measures were introduced intermittently to give incentives for new housing construction (but difficult to modify after the dwellings were once completed). An optimistic forecast was that existing housing will be demolished and replaced at a speed of one million dwelling units per year. The reality was that roughly only half a million were demolished every year, the other half survived with poorer quality in many aspects, and they tended to accommodate greying frail seniors – newly constructed ones were mostly occupied by younger generations. As of 2022, people aged 65 and over is nearly 30% of total population, but housing survey conducted in 2018 suggests that about 42.4 %% of seniors live in dwellings complying at least one of three key requirements. However, only about 8.8 % of seniors live in dwellings that meet all three requirements, suggesting that the situation is less than satisfactory. Will Japan need another 25 years to eliminate the mismatch between the ageing/aged residents and design?

Keywords: Ageing society, Dwelling design, Housing policy, Universal/inclusive design

INTRODUCTION

It was in 1986 when Japan was told of a prediction of rapid ageing, with expected ratio of people aged sixty-five and over will become around a

quarter of the whole Japanese population in the year 2030 (*1). Almost all government ministries and agencies responded with their budget proposal to prepare for the future, and the Ministry of Construction, which was responsible for housing policy, was no exception. The proposal was accepted, and funds were allocated to the Building Research Institute, to which the author was affiliated as a researcher.

Before the forecast was issued, the Ministry was already starting to implement a new housing scheme to respond to the ageing of population with the introduction of senior specific public housing, similar to the sheltered housing in the UK (Kose, Nakaohji, 1991a, 1991b). However, the prediction that a quarter of whole population will be aged 65 and over in 2030 was far more pessimistic than previous assumptions, and I was determined to redefine the future – to make every dwelling to be ready to accommodate the residents from cradle to grave – without being forced to move out due to capability deterioration. The design of dwellings must be universal design or transgenerational design.

THE DEVELOPMENT PROCESS

It was no easy to develop the dwelling design guidelines for the future, though: Almost all people involved in the research and development project, who were designers/researchers in their training, still assumed that senior-specific housing would be enough as the mainstream solution. Private sector housing manufacturers knew the reality. And they were more cooperative to find out better solutions – satisfying both present and future needs of the clients/residents. With experiments on the functional capability of majority of seniors (not the current frail ones) and the experience on the clients' wishes, we were able to reach proposals on dwelling design guidelines for the ageing society – not as senior-specific but for the society of the future (Kose, 1992).

The draft guidelines were issued in March 1991 and March 1992, for multifamily housing and detached houses, respectively. The former was applicable to housing provided by the local governments with central government subsidies (social housing), while the latter was more tuned to made-to-order dwellings for individual clients (details of guidelines issued by the Ministry are described in Kose, 2001). Many design aspects were covered, but three essential requirements were crucial to enable residents to continue to live as their functional capabilities slowly deteriorate with their age: Elimination of unnecessary step differences; installation of grab/handrails for securing stability; and widening of corridors/doors for use of an indoor wheelchair. The first requirement was more on the prevention of accidental falls, the second was preparation to extend the period of independent living without reliance to others, and the third was to enable continued living in the dwelling even with temporary deterioration of one's capabilities due to diseases, particularly after discharge from the hospital in-patient (Kose, Kumano, Matsuzaki, 1999). Therefore, it was

expected to be reasonable enough to become an impact on housing policy (Kose, 1997).

APPLICATION OF DEVELOPED GUIDELINES: PERSUASION IN EARLY 1990s AND BEYOND

After submission of draft of the design guidelines, I was active in persuading housing providers. I visited their associations, one on prefabricated housing manufacturers, another 2x4, i.e., balloon-frame construction housing providers, and timber housing providers, all in private sector. Regarding the public housing, the central government revised the scheme to assist the local governments to adopt the concepts by increasing the subsidies in favor of design for ageing society (for example, allowing installation of elevators for three-story multifamily housing, which was previously uncovered).

Major impact was the revision of the scheme of Housing Loan Corporation mortgages in 1996: HLC, as a semi-government body, has been under pressure to be eliminated since the private banking systems in Japan are ready to provide with necessary housing mortgages - HLC now lost its rationale to exist. HLC declared that it will abide by the housing policy toward better quality – only such dwellings will be eligible for lower interest rates or larger sum of mortgages since government subsidies from tax money are the source of preferential rates. Regarding better quality, either requirement on structural stability, energy efficiency, or design for ageing had to be satisfied, and the last one was the easiest to satisfy.

The results were that around half of those mortgages complied with design for ageing toward the end of 1990s (Kose, 2006). The Housing Loan Corporation was terminated in 2006, but housing providers adopted the concept of design for ageing by the time – for new construction, the idea was so easy to follow without extra cost. Similar incentives were adopted intermittently, when the economic downturn necessitated boost – housing construction has been assumed to be the booster of economic recovery. Therefore, new housing construction were basically made accessible and usable by seniors.

OVERALL PROGRESS?

However, existing dwellings were more difficult to modify. There is a tendency that Japanese people will acquire their new dwellings around the age of 40, and even as they grow older, they are reluctant to make modification after 25 to 30 years: When they reach the age of around seventy, they assume they will pass away not long after, and therefore are not willing to make modification and upgrading for the usability of their dwelling, which in reality could be critical for their QOL.

Optimistic forecast by the professionals was that existing housing stock would be demolished and replaced at a speed of one million dwelling units per year, and in 20 years, most dwellings will meet the level of standards. Actually, among the one million, only half were replaced, and the other half were built on completely new sites, leaving dwellings below standard untouched,

i.e., the half survived as poorer quality dwelling units, where many seniors continued to live without modification.

As of 2022, people aged sixty-five and over occupy roughly 30% of Japanese population. Housing survey conducted in 2018 suggests that 42.4% of seniors live in dwellings that comply with at least one of three requirements (i.e., either step-free living area or grab/handrails at essential points); only about 8.8% of seniors live in dwellings where all three essential requirements are satisfied (Statistics Bureau, 2020). Both percentage points increased only slightly from the previous survey done five years ago in 2013. As we examine the statistics in detail, we find that the percentage point increases with dwellings built in 1996 and after, reflecting the impact of change in Housing Loan Corporation scheme along with the emphasis on housing policy toward ageing. Regarding dwellings built in 2001 and after, the requirements of step-free living area and grab/handrails are satisfied by around 70% for dwellings seniors live. If we include requirement on wider doors and circulation routes, only a quarter of the dwellings resided by seniors satisfy the requirements. It means that majority of seniors still live in dwellings where they will experience difficulties during their daily living in one way or another (Kose, 2010, 2018).

CONCLUSION

Even with repeated government incentives, we have failed to provide seniors with reasonable quality of dwellings to enable them to live "from cradle to grave." Will Japan need another 25 years to eliminate the mismatch between ageing/aged residents and liveable/usable design? In 25 years, almost all Japanese baby-boomer generation born between 1947 and 1950 will have passed away (*2), and many of the dwellings built before 2001 will be demolished or modified.

We are not sure what will come out. Many poorer quality dwellings might be demolished, or they might be just left vacant. At least for the moment, we are witnessing the latter case happening since it does not cost much for the owners (Most inherited them from their parents but have no intention to live there by themselves, and there are no high demands for such poor-quality dwellings to let). These vacant houses are becoming the cause of troubles (*3), and a radical policy change might be introduced.

ACKNOWLEDGMENT

The author would like to acknowledge research colleagues who cooperated during the development of the draft of the Dwelling guidelines for the ageing society.

NOTES

1. The population forecast in 1986 by the National Institute for Population Problems was too optimistic. It turned out that 25% level was reached in 2013 instead of 2030.
2. Population forecast tells that roughly 40% will be sixty-five and over, but total number of population will decrease.

3. An unusual cold spell in January 2023 broke many water pipes in such vacant houses in northern localities facing Japan Sea, resulting water supply disruption. Staff had to visit every vacant house to close the valve to stop water leakage before resuming supply. This scale of troubles was never expected before.

REFERENCES

Kose, S. Nakaohji, M. (1991a) Design guidelines for dwellings for an ageing society — A Japanese perspective, Building Research & Information, 19:1 24–30.

Kose, S., Nakaohji, M. (1991b) Housing the Aged: Past, present, and future; Policy development by the Ministry of Construction of Japan. The Journal of Architectural and Planning Research, 8:4 296–306.

Kose, S. (1992) Capability of daily living of the elderly and their accident experiences: Implication to design of safer, easier-to-use dwellings, EDRA 23, 158–166.

Kose, S. (1997) Housing elderly people in Japan, Ageing International 23:3/4, 148–164.

Kose, S., Kumano, I., Matsuzaki, A. (1999) How far has the design of dwellings improved in these ten years? Comparison of two groups of houses from the viewpoint of design for the aging society, EDRA30, 127–132.

Kose, S. (2001) Design Guidelines of dwellings for the ageing society: Japanese approach toward universal design. Proceedings of the CIB World Building Congress, Wellington, NZ. 10 pages.

Kose, S. (2006) Universal design of dwellings in Japan: Who are the assumed residents? Gerontechnology 5:3 170–173.

Kose, S. (2010) How can the exploding senior population be accommodated? Japanese struggle towards inclusive design, Journal of Engineering Design, 21:2/3, 165–171.

Kose, S. (2018) Housing design for the ageing: Struggle toward supporting age-in-place instead of special housing for seniors, in Transforming our World Through Design, Diversity and Education, G. Craddock et al. Eds, 307–314.

Statistics Bureau, Ministry of Internal Affairs and Communications (2020) Summary of Housing and Land Survey 2018. (in Japanese). https://www.stat.go.jp/data/jyutaku/2018/pdf/kouzou_gaiyou.pdf