

Design Guidance for 'Urban-Housing'

Kim, Jin Wook
Kim, Young Hyun
Lee, Min Woo

The main objectives of this study are suggesting an exemplary model of urban housing to stimulate supply of Urban-Housing⁴⁴⁾ and providing a direction and a design guidance of Urban-Housing. Examples of urban housing of foreign countries were examined and the current conditions were simulated to improve the current law. Furthermore, this study suggests providing Urban-Housing as alternatives to improve living condition of small unit housing in the high density residential area and to encourage companies to provide small-scale housing.

Urban-Housing, provided in the Housing Act revised on 3 February 2009, refers to one of National Housing between 20 and 150 households. Ministry of Land, Transport and Maritime Affairs(MLTM) has loosened regulations on planning Urban-Housing. It will offer increasing one- or two-member households dormitory-style units and one-room units⁴⁵⁾ provided in Enforcement Decree of the Housing Act. Also, it will expand private-sector built housing of Multi-in small-scale housing housing complex. Finally, Urban-Housing will be an institutional device to stimulate small-scale housing provision, which has excluded from public housing provision had focused on large-scale apartments, and improvement of living environment in the high density residential area.

44) Urban housing은 본래 '도시주거'를 의미하나 본 연구에서는 '도시형 생활주택'이 도시주거의 법적 유형을 의미한다고 판단하여 도시형생활주택을 'Urban-Housing'으로 표기한다. 다만, 일반적인 의미의 도시주거(urban housing)과 구분하기 위하여 도시형 생활주택은 고유명사(Urban-Housing)로 표기하였다.

45) 도시형 생활주택 중 '기숙사형'과 '원룸형'을 각각 'dormitory-style units', 'one-room units'로 표기하였다.

Current regulation on Urban-Housing is focused on the building itself rather than comprehensive environment of Multi-family housing complex. Although the regulation has been relaxed, Multi-family housing complexes are not being developed vigorously now. This results from failure of positive relaxation of regulation to improve urban environment along with economic feasibility. Also, it is because only incentive program has been offered to stimulate construction of Multi-housing Complex without an exemplary model of new urban housing. It is feared that the same urban problems in the large apartment complex would be repeated. Therefore, this study suggests the policy that lead Multi-family housing complex site to be planned considering environmental conditions.

To suggest an exemplary model of urban housing, the significance of Urban-Housing was reviewed and several cases of urban housing of overseas countries were analyzed. In addition, the whole changes that took place in Korean housing policy were surveyed to trace the changes of housing paradigm.

With the advent of the Industrial Revolution, housing as a problem worsened as urban populations expanded. Houses were built rapidly in huge numbers without considering context. To overcome urban disamenity from urban housing development, relationship between street and building began to be considered. This effort clarified relationship between city and housing complex and differentiated private space from public space to improve livability in the city.

Urban housing should take care of population concentration in the residential area of the city because a 'city' means 'large settlement' basically. In developed countries, major urban housing type had been changed to low-rise apartment complex. Also, housing complexes in Japan and some European countries meet the needs of amenity and density and are well connected to urban context.

As an alternative of present urban housing, 'Compact Urban Housing Cluster' was suggested in this study. In the Compact Urban Housing Cluster system, urban housing is regarded as a part of urban structure rather than a compound of buildings and land. It can be connection between living environment and urban structure and stimulate to improve urban environment.

Housing provision policy of Korea has been changed as needs of consumers. Until the 1980s, the government was focused on increasing of housing supply. Multi-family housing was introduced in 1985 and apartment buildings were constructed rapidly in newly-developed residential areas. Housing supply focused on quantitative expansion was bound to relaxation of regulation especially on the part of building coverage ratio and parking lot. This deregulation made living conditions worsen and regulation policy came to the fore again.

Urban-Housing can be understood as an institutional solution to provide small scale housing which was shrunk by regulation and housing supply focused on apartments. It is expected to encourage investment of private sector and to increase quality of life. Urban-Housing, defined by Housing Act and Regulation on Housing Construction is classified based on number of building and mix of use. However, a guidance for environment of compact urban housing cluster is insufficient and regulation is concentrated in controlling only each building.

Some housing complexes in the European countries and Japan were surveyed to set the characteristics of Urban-Housing as compact urban housing cluster. Street hierarchy system was noticeable in some examples such as Kop van Zuid in Netherlands and Hammarby in Sweden. Neighborhood facilities were located according to the characteristic of each street and they made characteristics of the block and effected to decide proper housing types of the block. On the other hands, in Ypenbrug in Netherlands, an independent complex was planned apart from the city and each building was also independent like a townhouse. In Makuhari in Japan, various types of building were planned based on characteristics of blocks and street and various types of atrium were suggested to make a buffer zone between private space and public space or to plan parking lot.

Planning of Urban-Housing was simulated under the actual conditions. 36 cases were examined according to number of household, type of the site, unit type, relationship to the streets based on the regulations on Multi-family housing complex. 3 housing complex plans were demonstrated in Seoul based on those results.

It was found that Urban-Housing could cause some living problems in the housing complex. Commercial facilities on the lower floor should be various and arranged along the street. Sufficient outdoor space and public facilities also be required by the official regulations. Especially, limit of 660 m² in housing unit seems not to be economically practical. Also, the government has to take counter measures to make up for relaxation of regulation. Urban-type Housing provided in the newly-developed area should be combined with Residential Site Development Planning and District Unit Planning.

Usually, when a new housing policy is introduced, companies begin to seek a new business model based on analysis of feasibility. Therefore, without institutional support to make a profit, expectations of the government do not coincide the needs of companies. For effective policy practice, the government has to examine all types of business models and offer a proper one.

Urban-Housing also have to set a direction and suggest an attractive model of housing type. Not only unity type of housing but also building type and developing procedure should be examined and suggested under the Housing Act.

Policies related to Urban-Housing refer to only short-term enticement by improving each regulations without considering land owners. Most urban plots in Korean major cities are not capable of 20 to 150 households. It is necessary to merge plots to solve that problem. Development by merging land is more disadvantageous in a price of land. Also, additional expenses to improve living environment would be involved in the project. Positive consent of land owners could be acquired by reducing those expenses. It is a key to success in this development.

Urban-Housing would create mid-scale land plots and change urban structure. It will be a chance of harmonious development between a large-scale plot with apartment complex and a small-scale plot with single-family house. Therefore, urban plot system and street system should be maintained.

In the developing process of Urban-Housing, cooperation among residents, developer and government is very important. It would be a virtuous circle of housing development with voluntary participation of area residents. Institutional devices to

solve the problems due to housing development should be suggested.

In this study, as a compact urban housing cluster, a model plan was suggested. In that plan, the buildings are arranged along the street to maintain context of old plots. Outdoor atrium space was planned to expand living spaces. To increase small scale housing supply and to improve living conditions in the cities by Urban-Housing, improvement of the system and establishment of administrative process are necessary.

Improvement of the System to Plan Compact Urban Housing Cluster

Regulation on Multi-family housing complex limits area of a building to 660 m² should be removed to plan street type Urban-Housing and insert out door atrium space. Because of this limit, it is very difficult to plan sufficient public space in the building. By standard of Exclusive Using Area of National Housing, 85m², five-story building with 10 households should be recommended. Therefore, at least limit of building area provided in Enforcement Decree of Building Code should be revised from 660m² to 950m². If area limitation is difficult to raise, attached house type would be permitted or Urban-Housing standards could be applied to row house.

In the 2nd class general residential area, the number of floors of Multi-family housing complex is restricted under 5. Therefore, incentive on floor area ratio would be ineffective. To enhance feasibility of the development, total number of floors should be raised to 7 and it should be applied to building complex not to each single building. However, a design guideline should be provided prior to this deregulation.

Furthermore, along with observance of prohibition on removing streets, regulations on distance between buildings should be established.

At last, Residential Site Development Planning and District Unit Planning should be established to provide Urban-Housing in the 1st class general residential area of New Town Development. Some sites should be designated for a pilot project of Urban-Housing.

Establishment of Administrative Process to Stimulate Urban-type Housing Provision

Official notification would be an effective way to stimulate supply of Urban-Housing. Design guidance and guideline suggested by central government should provide an exemplary model of urban housing and indicators of improved living condition. This design guidance and guideline should include incentive system and deregulation criteria. A variety of incentive programs include floor area ratio incentive system or total numbers of floor deregulation.

For wide spread of Urban-Housing, there should be further discussion and examination on the design guidance and guideline. This study is expected to be a foundation of the wider discussion of this issue.

Keywords : Urban-Housing, Multi-family Housing Complex, Compact Urban Housing Cluster