

Transition on the land Utilization of Apartment Complex

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This study was to analyze land use tendency of the apartment complexes in Banpo in Seoul, Bundang, and Keureng in Chungju. The results of this study were followings. The patterns of Land use in the apartment complexes have been diversified and open spaces have been increased since 1990. In addition, land use relating facilities also has been increased. In the apartment complexes in large cities, park spaces also have been increased. The results of this study indicated that the tendency of apartment complexes is not just residential areas but places for quality of life.

Key words: Apartment complex district, Community commercial district, Neighbourhood commercial unit, Branch unit of neighbourhood commercial, New town

1. Introduction

High-rised apartment complex is a common residential type in Korea because of high rates of urbanization and population density. In the aspect of land supply, high-rised apartment complex has been considered effectively¹⁾.

Since 1960s, Korea has experienced rapid industrialization and urbanization. However, supply of housing has not been complied with. To combat this problem, large high-rised apartment complexes have been developed²⁾.

In the late 1980s, new residential towns including large apartment complexes were introduced. The residential towns have solved shortage of housing. However, the town also introduced lots of problems such as road networks, schools, parks and green spaces, and so on. These problems were mainly due to lacks of basic facilities³⁾.

Since 1990s, the tendency of land use in the apartment complexes has been turned to fulfill quality of life from supplying quantity of housing.

The overall purpose of study was to investigate the tendency of land use patterns in several large apartment complexes in Seoul and other local provincial areas.

2. Methods

To investigate the tendency of land use patterns in the apartment complexes in Seoul, data related to Banpo Apartment complex were collected from several sources. Land use classification was consulted with Basic Development Plan of Banpo Area⁴⁾.

To investigate the tendency of land use patterns in the apartment complexes in the other areas except Seoul, Bundang, Keumrung, Chungju were selected as study areas. Specifically, land use based on land use plan developed in 1990 was analyzed. Banpo land use classification was applied to compare⁵⁻⁸⁾.

3. Results and Discussion

3.1 Land Use Tendency in Banpo

To investigate land use patterns in the apartment complex, one of the representative apartment complexes in Korea, Banpo was selected as a study area. Related data were collected and analyzed from 1980 to 1997. The results were shown in Table 1 and Fig. 1.

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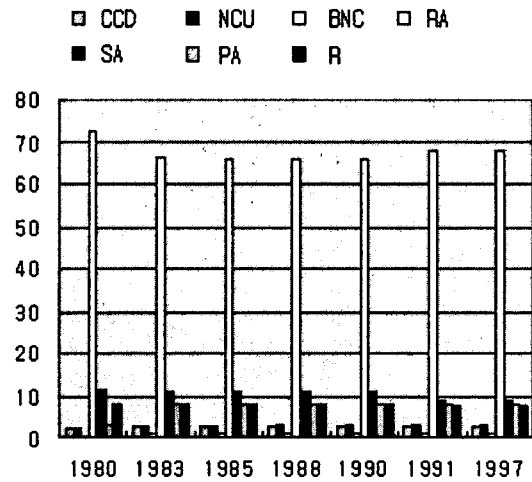
Table 1. land use change of Banpo apartment complex district

	1980	1983	1985	1988	1990	1991	1997
CCD	2.2	2.7	2.7	2.7	2.7	2.8	2.8
NCU	2.5	2.9	2.9	3.1	3.1	3.0	3.0
BNC	0	1.2	1.2	1.2	1.2	1.2	1.2
Residential area	72.7	66.3	66.1	66.1	66.1	68.1	68.1
School area	11.4	11.0	11.0	11.0	11.0	9.2	9.2
Park area	3.0	8.1	8.2	8.0	8.0	8.0	8.0
Road	8.2	7.9	7.9	7.9	7.9	7.7	7.7
Total	100	100	100	100	100	100	100

NCU; neighborhood commercial unit,
 BNC; branch unit of neighborhood commercial,
 CCD; community commercial district

The land use pattern in Banpo indicated that neighbourhood commercial unit, branch unit of neighbourhood commercial, community commercial district, park area have been increased. However areas including residences, schools and roads have been decreased. Among these, park areas showed dramatic increase from 3.0% out of total area in 1980 to 8.0% in 1997. Land use in branch unit of neighborhood commercial also increased from 0% in 1991 to 1.2% in 1997. Land uses in neighborhood commercial unit and community commercial district showed 0.5% ~ 0.6% of increase rates.

Residential areas has been decreased dramatically by -4.6%, followed by school (-3.2%), and road (-0.5%). Generally, land use of park, residential and school areas have been significantly changed. These tendencies were mainly considered due to legal change and expanding development areas. However, the



NCU; neighborhood commercial unit,
 BNC; branch unit of neighborhood commercial,
 CCD; community commercial district,
 RA; Residential Area,
 SA; School Area,
 PA; Park Area,
 R; Road

Fig. 1, land use change of Banpo apartment complex district

Change of land use also indicated that the pattern of land use has been changed to fulfill quality of life.

3.2 Land Use by Regions

Table 2 and Fig. 2 showed the results of land use analyses by apartment complexes in difference regions. For this analysis data collected from Seoul, Bundnag (New town), and Keumrung (Local province).

The results of this analysis revealed that residential area was highest (45.9%) out of total areas, followed by open spaces such as parks and roads, neighbourhood commercial unit and community commercial district (28%~29%), and school area (7.1%).

Data were compared by apartment complexes and new town. The results indicated that the rates park and facility areas in Bundang were higher than other regions. The analysis of use pattern in the apartment complexes indicated that Banpo has

Table 2. Land use rate in Banpo, Bundang, and Keumrung

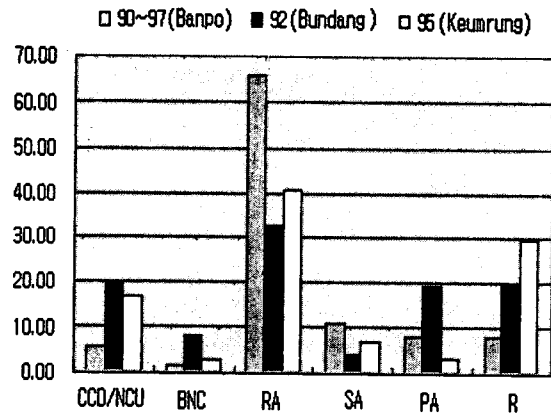
Land Use	Banpo (1990~1997)	Bundang (1992)	Keumrung (1995)	Total
CCD/NCU	5.7	20.3	16.8	14.1
BNC	1.2	8.3	2.8	4.1
Residential	66.2	32.4	40.7	45.9
School	11.0	3.7	6.8	7.1
Park	8.0	19.4	3.2	10.1
Road	7.9	19.6	29.7	18.8
Total	100.00	100	100	100

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higher rates of residential, school and park areas than Keumrung developing lately. In the other hand, neighborhood commercial unit and community commercial district, and road areas has lower rates than Keumrung. The results indicated that newly developed apartment complex has increasing area of facility and decreasing area of residential areas. In additions, Keumrung has higher stories of apartment buildings than Banpo. It is expected that Keumrung has land use rate change when designated park would be developed.

4. Conclusions

Since 1990s, land use in the large apartment complexes has been diversified. Basic facilities such as parks and roads have been increased. The increasing rate of these areas were shown in Seoul. The tendency indicated that land use pattern changed to fulfill people's quality of life.



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Fig. 2. Land use rate in Banpo, Bundang, and Keumrung

In new town, land use rate of park and facility areas was higher than apartment complexes in downtown. In the old apartment complexes, open space area should be increased. Redevelopment plan focused on diverse land use patterns should be considered. These kinds of apartment complexes showed decreased residential area and increased green and facility areas. The overall conclusion of this study indicated that apartment complexes turned to fulfilling people's quality of life rather than just supplying quality of housing.

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