



SOUTH KOREA



SEOUL

<i>Size of the country</i>	99 400 km² (70% covered by mountains)
<i>Population</i>	47,3 M
<i>Population density</i>	477 inhab/km²
<i>Population growth rate (1993 – 1999)</i>	1%
<i>Part of urban population</i>	81%
<i>Life expectancy at birth</i>	73
<i>Infant mortality (per 1000 live birth)</i>	9
<i>Access to improved water sources (% of population)</i>	83
<i>Life expectancy at birth</i>	74 years (male: 71, female: 78)
<i>Ethnic groups, their percentages in the population</i>	Han
<i>Official languages</i>	Korean
<i>Religions</i>	Buddhism: 45%, Christian: 50%
<i>Gross domestic product</i>	398 billion USD
<i>Gdp per capita</i>	8490 USD
<i>Inflation</i>	0,8% (1999)
<i>Gdp growth rate</i>	8%
<i>Gdp repartition in different sectors</i>	Agriculture: 5%, Industry : 43,5% (manufacturing : 31,8%), Services: 51,5%
<i>Unemployment rate</i>	4,6% (2000)
<i>Illiteracy (% of population age 15+)</i>	2
<i>Tourism</i>	4,5 M visitors (1998)
<i>Population of province of Kyonggi-do</i>	22 M
<i>Population of Seoul</i>	10,8 M

PUBLIC POLICIES FOR NEW TOWNS IN KOREA: AN APPRAISAL

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Introduction

In the post-war period, Korea has experienced severe housing problems, characterized by an absolute shortage of housing, an extremely skewed distribution of housing services, and real-estate price inflation. Housing problems were especially noticeable in the city of Seoul. Numerous efforts were made to solve them, including large-scale residential redevelopment and in-city new town projects, but with little success. The reason basically had to do with the massive influx of people into the city and with the extremely high rate of household formation¹.

In the late 1980s, the situation worsened to the point where the government decided to initiate a massive housing construction plan to meet the ever-increasing demand for housing and stabilize real estate prices, especially in the Seoul Metropolitan Area (SMA). The plan, prepared in 1987, was to provide as many as two million new housing units of various size and quality within a five-year period (1988 to 1992).

The city of Seoul needed as many as 100,000 to 120,000 units of housing annually, but it only had a small surface of land available for new

residential development under its jurisdiction. Land had to be secured elsewhere, outside the city limits, but the location had to be reasonably close to the city so that Seoulites could settle there with minimum adjustment. Yet, under the legislation then in force, it was also very difficult for the government to acquire residential land on such a scale within such a short period of time.

Actually, the government had enacted the " Residential Land Development Promotion Law " in 1979, which authorized public entities to engage in large-scale residential development. But the law was not effectively enforced until 1989 when the government decided to develop the new towns within the Seoul Metropolitan Area. The other important piece of legislation was the 1978 " National Land Use and Management Law, " which defined and regulated the uses of the nation's land at the regional level. The law authorized the government to designate a large amount of land throughout the country for residential development purposes in order to implement a massive construction plan. It was decided that the land parcels located just outside the city of

Seoul, but adjacent to the greenbelt area, would be used primarily as sites for the development of new towns.

As such, the new town development scheme was an integral part of the massive housing production plan known as the "Two-million-unit housing construction plan of 1988-1992." The plan envisaged that the five new towns in the SMA would provide a total of 293,000 housing units, mostly multi-family condominium units. The new town sites were to be strategically positioned within a 20-25-km radius from the city's Central Business District. The boundaries of the new towns were delimited according to the local planning codes. The five new towns were Bundang, Ilsan, Pyungchon, Joongdong and Sanbon by order of size (See Figure 1).

This paper will first briefly describe how the new town development took place. It will then discuss its achievements and drawbacks, as well as the criticisms that it received. The final section of this paper will attempt to draw lessons from the Korean experience for the benefit of those who conceive new towns as a means to solve inner-city problems.

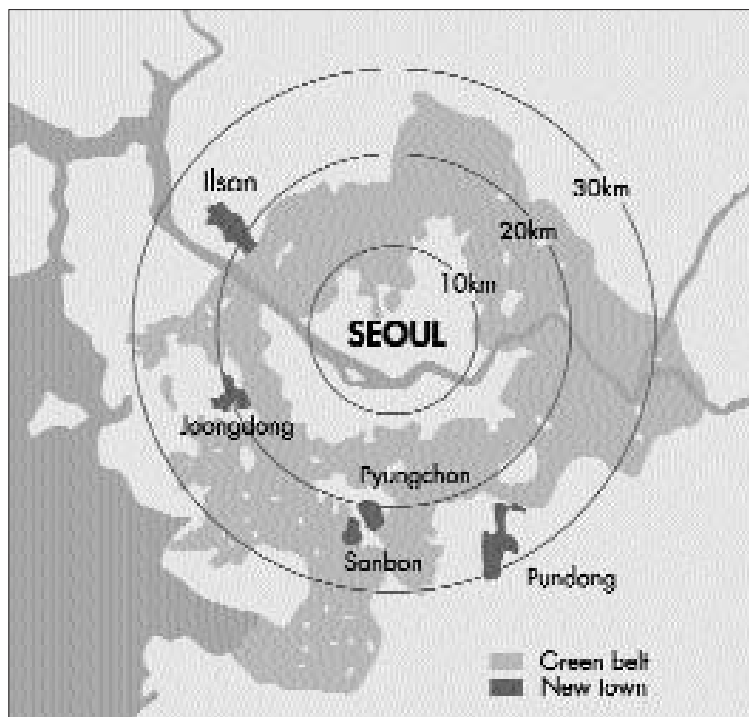


Figure 1. Seoul and the New Towns

The Rationale for New-Town Development

A Brief Overview

The new-town development effort of 1989 was not new in Korea. In the past, this method had been used either as a policy tool to alleviate problems in the inner cities or as a means to support the industrialization policy. The scheme for the development of five new towns was conceived to relieve congestion and the over-concentration of population and industries in Seoul. The city's population had increased to 10.4 million in 1989 from only 2.4 million in 1960. Over 20 percent of the nation's popula-

tion resided in a small area of 680 sq. km, approximately 0.06 percent of the country's total surface. The concentration of population in Seoul led to over-loaded public facilities and environmental degradation. In addition, an inadequate level of social infrastructure services aggravated the quality of urban life². Worse still, over-concentration and centralization in and around the primate city of Seoul further intensified housing shortage. Housing conditions went from bad to worse. Housing price inflation was rampant and homeowners

benefited most from this inflationary situation. As a result, income distribution between the rich and the poor became more unequal. Home prices doubled every three to four years. Inevitably, poor tenants were hard-pressed, as rents rose even faster than sale prices.

The government devised numerous measures to decentralize population and industries and push them away from the city and the SMA. But none of them worked effectively. On the contrary, the city grew even more rapidly as the economy boomed in the late 1980's. Policy-makers realized that the inter-regional decentralization programs would take more time and that they had to initiate a policy of intra-regional de-concentration. They opted for a policy of sub-urbanization that took shape in the form of five new towns. Even before the announcement was made, an increasing number of newly emerging middle-class and upper-middle class households had moved out of Seoul to live in the suburbs, beyond the green belt. This middle-class exodus to suburbia was largely due to the rise in income and changes in the value system, as well as to the deterioration of living conditions in the city³.

Rationale for the Five New Towns

Basically, the development of the five new towns can be rationalized from two perspectives, housing and the use of space.

The housing shortage surfaced in the early 1970s as a result of the massive migration of the rural population into the large cities, especially Seoul. As shown in Table 1, the number of housing units only doubled between 1960 and 1990 while households almost tripled throughout the country. The situation was even worse in Seoul where the supply ratio for housing was as low as 50 to 55 percent before the massive housing construction that started after 1989⁴. Housing density was extremely high. For example, the number of persons per room was 1.48. A World Bank study found that the average figure was 1.6 in its sample of world cities as a whole, but only 0.7 in advanced countries⁵.

The average price of a house was about 9 to 10 times the median annual household income in the late 1980s. With continuing expectations of higher prices, housing became the target of speculation. Home prices in Seoul increased by 75 percent during the five-year period from 1985 to 1990. A study conducted by the Korea Research Institute for Human Settlements (KRIHS) revealed that only the upper 30 percent of the nation's households could access the housing market and that over 72 percent of them were already homeowners. The same study found that most were motivated by the combined reasons of upward residential mobility and, even more importantly, the search for a productive investment. In fact, a subsequent survey showed that over 90 percent of home buyers had investment or speculative motives in mind. They anticipated an average 23.3 percent rate of return on their investment in housing⁶.

The better-off residents sparked the trend in speculative purchase, but it almost instantaneously spread among upper middle-class households that felt insecure about rises in home prices. The latter were eager to buy homes because soon they would not be able to afford it. In fact, the price of the large-size condominiums went up by 30 to 50 percent over only half a year in the late 1980s. The rate of return was almost five times the rate of regular savings accounts in banks. Besides, much of the income earned from speculation went untaxed. Other taxes, e.g. property tax and the income tax on real estate transfers, were not high enough to discourage speculators from investing in housing. Property taxes on condominiums were light because they were based on real-estate values under-assessed at as little as one-tenth of the current market value.

The other housing-related problem was the shortage of residential land. Land prices soared which, in turn, severely constrained the supply of housing. Residential land shortage was especially detrimental to the construction of low-income housing units. A KRIHS study of

the Korean housing market strongly suggested that the variables of housing demand combined with a low elasticity of supply explained the major part of the land price spiral. Nevertheless, government control on land use and land supply remained tight, which exacerbated the situation even further⁷.

Despite numerous anti-speculation measures, large chunks of land were held on to by individuals and corporations with speculative profits in mind. This was especially true in urban fringe areas. Yet official measures were counter-productive. They created a "locked-in effect," thus further reducing land supply. Land was purchased and hoarded until capital gains could be maximized. Given the risks and uncertainties involved in alternative investments like stocks and bonds, land investment seemed to be relatively secure and yielded an extremely high rate of profit. Consequently, a large portion of domestic investment funds, which would otherwise have been utilized for more productive purposes, poured into the land market. Such a speculative demand for land pushed up land prices, which in turn translated into the inability of developers to moderate the price of housing.

The situation in Seoul was particularly critical. The amount of land available for new residential development within the city planning area was only 8,232 acres, while the amount of land required every year was estimated at 2,137 acres. Therefore, new housing development would have to stop within a few years, even

with a careful and efficient management policy. The second perspective is that of land use. As pointed out earlier, planners had for years argued for the intra-regional dispersion of the population of Seoul city throughout the capital region. This was to be a substitute for the failed inter-regional decentralization policy. However, planners were divided on conceptualization: one group argued that the sites of the new towns should be located far away from Seoul city; the other group advocated just the opposite. The former group considered the new towns as independent and self-contained entities, spatially, functionally as well as economically. Their preference went to large-scale towns that could serve as counter-magnets to the primate city of Seoul. The latter group was strongly in favor of satellite dormitory towns that would provide a wide variety of new accommodation for the Seoulites. They conceived such new towns merely as extensions of the city's housing market. The government initially adopted the views of the former group, but eventually, when the plan materialized, it sided with the latter group⁸.

To sum up, housing issues were the primary reason for the development of new towns. It helped suburbanize the Seoul Metropolitan Area (SMA), but intensified the centralization problem. In retrospect, planners and government officials in particular were very shortsighted in that they failed to take sustainability criteria into consideration when they designed the new towns.

New-Town Development

The Methods for Residential Land Development

Once the decision to develop new towns was made, a whole range of issues had to be solved, such as acquiring land, financing infrastructures, pricing the serviced lands, and marketing the new towns to potential buyers. After a careful review of existing laws and regulations, government officials came to the conclusion that the most relevant and effective tool was the Residential Land Development Promotion Law. It provided the legal basis for a mechanism called "Public Purchase and Development" (PPD), which was used for new town development. There were two other frequently used methods — Land Readjustment Project (LRP) and Urban Redevelopment Method — but both were replaced by the Public Purchase and Development method (PPD) in the early 1980's. The PPD method did not allow land-owners to keep their ownership rights after the land had been purchased. Development plans were formulated by either local or central governments and executed by public entities such as local development corporations, Korea Land Development Corporation (KLDC), Korea National Housing Corporation (KNHC), etc. The purchased lots were subdivided, partitioned, and often serviced. Then they were sold or leased to private developers and other public builders. This was the method used for the new towns.

The New-Town Plan: An Overview

Location of the New Towns

The five new towns are located within a 20-25-km. radius from the center of Seoul city, as shown in Figure 1. Government planners initially conceived Bundang and Ilsan as self-contained, independent towns because of their size, and the other three as "in-city new-towns."

Bundang is quite close to Kangnam, the fast growing urban center south of the Han River. Almost 70 percent of the area were agricultural land and the other 30 percent remained undeveloped green space. Because of its proximity to the primate city, the town was intended to accommodate the middle and upper-middle income households living in Kangnam as well as function as a business and commercial sub-center of the city of Seoul.

Ilsan used to be an agricultural area — with mostly paddy fields — close to the demilitarized zone (DMZ). It is located about 25 km to the north-west of Seoul. Despite its environmental quality, the new town failed to attract as many home buyers as Bundang. The reason has to do with both the proximity to the demilitarized zone and the lack of adequate direct transportation routes to Seoul's downtown area.

The other three new towns were located within the city planning areas of the existing cities of Buchon, Gunpo and Anyang. Accordingly, they were conceived as in-city new towns and expected to function as new CBDs for these cities respectively. Gunpo was a relatively small city with a population of less than 50,000, but both Buchon and Anyang were medium-sized cities, with populations of 500,000 and 400,000 respectively.

Land-Use Plan for the New Towns

The land-use plans for Bundang, Pyungchon and Ilsan were drafted by the Korea Research Institute for Human Settlements (KRIHS) in 1989 on behalf of the government. The Korea Land Development Corporation (KLDC) and the Korea National Housing Corporation (KNHC) designed those of Joongdong and Sanbon respectively. The major factors taken into consideration when KRIHS developed the land-use plans were the natural and man-

made characteristics, physical distance and travelling time from the city of Seoul, the location of the sites, existing transportation networks, existing land use and the proximity to nearby cities and towns. Much attention was paid to residential use and, to a lesser extent, to parks and open spaces, two of the most important features of the new towns. Planners made every effort to secure as much commercial space (and some industrial space) as possible in some new towns like Bundang so that it would accommodate not only people, but also businesses and jobs from Seoul.

As shown in Table 3, the percentage of residential area was high in comparison with land for other uses. It ranged from 32 percent in Bundang to 45.6 percent in Sanbon. Next came roads, from a high 24.5 percent in Joongdong to a low 13 percent in Sanbon, and parks and open spaces from 23.7 percent in Ilsan to 12.1 percent in Joongdong. The amount of land set aside for commercial and business uses also varied widely. Close to 10 percent of the total land was earmarked for commercial use in Joongdong against only 2.9 percent in Ilsan. Ilsan was noted for its spacious living conditions, with a high proportion of parks and open space. On the other hand, in a town like Bundang, a large chunk of land was reserved for roads because town planners paid particular attention to improving accessibility to Kangnam. In fact, the city's road network is fairly elaborate and connects to almost all the major arteries of the city as well as to highways and other trunk-roads that lead to the large cities and towns throughout the country.

Population and Residential Density

Table 4 shows the surface of the five new towns as well as population and housing density. The size of the land area for the five new towns ranges from 419 hectares in Sanbon to 1,894 hectares in Bundang. The planned size of the population was targeted at 70,000 persons in Sanbon, 390,000 in Bundang, and 276,000 in Ilsan. The average gross density of the five new

towns was 23,500 persons per sq. km against 18,100 in Seoul. The net residential density was even more impressive. It touched 68,600 persons, while it was only 36,400 in Seoul.

Planners had advocated low- and medium-density towns endowed with a wide variety of homes with indigenous architectural design and environmentally friendly and culturally rich neighborhoods. They had initially conceived some of them as "rurban" living areas for the middle and upper-middle classes, but government officials and home-builders shunned the idea and adhered to high-density and high-rise development.

Housing Allocation Plan

Initially each new town was targeted for households with different characteristics in terms of age-cohort, income, tenure and household size. Some of these features found their way into the housing allocation plan (Table 5). A survey study conducted by KRIHS helped in the drafting of the allocation plan. It was completed about six months before the public announcement of home sales in Bundang and other new towns. The study focused on the groups and households who were most likely to move to one of the five new towns. It covered the issues of residential location, price range, type of home, desired level of residential quality, preferred amenities and apartment size. The survey showed that a majority of the prospective movers lived close to the sites of the new town. For example, those who wanted to move to Bundang's new town resided in Kangnam, only 10 to 15 kilometers away from the designated new town.

The plan not only gave an indication of the number of multi-family condominium units to be provided in each new town, but specified the proportion of units of different sizes. Both Bundang and Ilsan were to supply relatively larger units compared with Joongdong and Pyungchon. The differences in apartment size and scale of neighborhood between the various towns came from the survey's findings.

Both government policy-makers and builders wanted to have the new homes sold off fast. In the absence of a formal financing mechanism for construction, only a quick turnover could help launch other new town projects.

Financing Infrastructure Facilities

A major question was the cost of infrastructure facilities and its distribution between private builders and public corporations. The total costs for roads and subway lines for the five new towns amounted to approximately 3.7 trillion won (Table 6). The cost of infrastructure per housing unit stood at 17 million won in Bundang, 12 million won in Ilsan, 11.6 million won in Pyungchon and Sanbon and 6.5 million won in Joongdong. The private developers were responsible for over 76 percent of the costs of construction of roads and subway lines. The central and local governments bore the remaining costs, 4.5 percent and 19 percent respectively. It was clear that the new home buyers would have to bear most of the expenditure on infrastructures. The developers actually shifted these costs on to them. A typical home in Bundang, for example, was priced as high as 80 to 90 percent of that of a comparable unit in Seoul. This was too expensive for low-income and middle-income households.

New-Town Development Process

The Goals of the Government

Prior to the official announcement of the new-town development scheme in late 1989, planners had worked on the prospective new towns in Bundang and Ilsan. Their concept was basically that of the self-contained compact city, free from the influence of the prime city of Seoul. By the time of the announcement, however, the government had opted for satellite cities or high-density and multi-family dormitory towns that would remain highly dependent on Seoul for employment, education, shopping, and cultural activities. Actually, for the three in-city new town pro-

jects - Pyungchon, Joongdong and Sanbon - planners were asked to come up with unprecedented high densities of land uses. The total number of housing units in the planned five new towns amounted to 300,000 units. They were to be built within the next five years (1989-1993).

To ensure the efficient implementation of the project, the government emphasized three points:

- its role as a coordinator of conflicting interests among the various actors: developers, local governments, land owners, homeowners, and tenants.
- the timely execution of housing construction schedules in tune with the dynamics of the housing market.
- the maximum utilization of private funds for infrastructure development⁹.

Public Developers and the Pre-Sale Scheme

Public developers were authorized to fully implement the new town plans under the 1979 "Residential Land Development Promotion Law," that was enacted to promote large-scale residential land development in urban areas. The Korea Land Development Corporation (KLDC), the Korea National Housing Corporation (KNHC) and the Local Development Corporations (LDCs) were entrusted with land acquisition, land regrouping and subdivision, land development and servicing, and the sale of the serviced parcels. The KLDC was responsible for the development of Bundang, Ilsan, Joongdong and Pyungchon while the KNHC was responsible for Sanbon. Earlier, the KNHC had helped build Guachon city, 10 km away from Seoul, where the government complex is located. The KNHC was primarily responsible for public housing construction and purchased serviced land parcels from the KLDC at much lower prices than the private developers.

At the initial stage of new-town development, a huge amount of capital was required for the

purchase and servicing of the land. The funds were raised through a pre-sale system whereby private home-builders had to pay in advance for the sites allocated to them. Similar deals were made between the builders and the home buyers. The latter had to pay about 80 percent of the price of the homes pre-sold to them under the pre-sale scheme. Thanks to this mechanism, the new town projects went ahead fairly smoothly with little financial burden on either the central government or the local municipalities.

The Koreans devised this rather unique home-ownership scheme partly to supplement the inadequate formal financing system for housing and partly to make prospective buyers wait for their turn in a context of high demand for new housing and low supply. Formally there were two types of home-ownership schemes. Both were administered by the Korea Housing Bank (KHB): the Housing Subscription Time Deposit (HSTD) and the National Housing Pre-emption Subscription Deposit (NHPSD). Those who joined the former scheme made a one-time deposit that ranged from 5 to 15 million won and waited for two years to be eligible for "priority" in purchasing a unit in one of the newly built multi-family condominiums. The NHPSD, on the other hand, was designed to draw deposits from the prospective purchasers of the National Housing Fund-financed condominium units that were provided by the KNHC and municipal governments. The participants paid monthly installments at their own discretion in order to receive "priority" in the purchase of public-funds-assisted housing units. Through these mechanisms, public and private builders were able to finance residential developments with little reliance on formal financial institutions¹⁰.

In late 1990, as many as two million participants in the scheme were waiting to purchase new apartment units — approximately 60 percent of them were Seoulites — while the number of housing units sold averaged only 40,000 to 60,000 units per year. Consequently, the

competition to acquire a condominium unit was very stiff in Seoul and, to a lesser degree, in the SMA. Those who were not registered under any scheme had to pay a "high premium" for the right to a priority.

The Sale Price Ceiling System and Speculative Demand

The other important housing policy measure was the condominium sale price ceiling system. It was adopted as a temporary measure in 1983 to put a lid on the "escalating" sale prices of newly-constructed homes. The government expected that the price ceiling system would help curb the price spiral. Home-builders were not allowed to set the sale price by themselves. They had to abide by a "standardized" price uniformly set by the government.

Although the price ceiling system was long recognized as having adverse effects on the housing market, no attempt was made to do away with it until very recently. This system only controlled the sale price within the allocation scheme, but it had nothing to do with the actual market price in subsequent sales. The system unnecessarily stimulated demand along with the widening gap between the market price and the government-set sale price. For example, the market price of a condominium unit of 130 square meters was about 300 million won, while the same unit was sold for only 100 million won to the beneficiaries of the Housing Subscription Time Deposit scheme. Similarly, an NHS-subsidized 66-square-meter unit was worth over 100 million won on the market, but it was officially sold at less than half this price¹¹. Consequently, the price ceiling system helped stimulate the housing market. The wider the gap between the two prices, the more speculators did it attract and the more inflationary did the market become. With these mechanisms and conditions, the sale of newly-built condominiums in the new towns posed few problems. For example, over 200 prospective buyers competed for a unit when they were pre-sold in Bundang. Builders and government

were guaranteed an almost limitless demand for home purchases, which partially explains why the new-town development program was

completed two years ahead of schedule. In short, the new towns owed much of their success to housing speculation¹².

The Impact of the New Towns on the Housing Market and Spatial Configuration

Impacts on the Housing Market

Overall Assessment

Some people thought that the development of the new towns had merely ignited another powerful wave of land speculation in which only the better-off made fortunes while the poor tenants suffered from the inflation of rents, despite massive housing production. Others criticized new-town development program because it severely damaged the nation's economy. The construction sector was overheating and absorbing much of the nation's capital at the expense of the other sectors. Wages soared and inflation became rampant, severely undermining the nation's economic competitiveness. In that sense, some economists assert that the massive housing construction plan of 1988-92 was partially responsible for the country's financial crisis of 1997¹³.

Despite these criticisms, the new-town project undoubtedly had some positive effects on the housing market. It alleviated the housing shortage in Seoul and helped stabilize home prices and rents in the long term. It also contributed to a rise in the home-ownership rate and a significant improvement in housing conditions. The housing supply ratio increased from 54 percent in 1985 to 68 percent in 1993 in Seoul and from 68 to 78 percent in the country as a whole. It helped keep down house prices after 1993 and contributed to the expansion of the middle class through increased home ownership¹⁴.

Effects on Home Ownership and Housing Welfare

A KRIHS study found that a majority of the new-town residents came from Seoul: 89 percent in Bundang, 65 percent in Ilsan, and 61 percent in Pyungchon. When renting is taken into account, it appears that 65 percent of the new-town occupants were *chonsei* tenants before their move, but almost 90 percent of them became homeowners afterwards¹⁵. Clearly the rate of home ownership rose substantially thanks to the new towns. Home ownership symbolized personal achievement in Korea. It was regarded as the most conspicuous way to gain middle-class status. For society as a whole, home ownership helped consolidate political and social stability. Most of the households who moved to the new towns enjoyed housing conditions that were more spacious and of better quality than in their former residences. In fact, the living space increased by 30 to 150 percent.

Obviously, in measuring the net benefits of moving to the new towns one should take account of the additional time and money that the residents have to spend in commuting and shopping downtown. One should also consider the social costs associated with the congestion and environmental degradation that result from new-town construction and dense traffic. Therefore, from an overall perspective, the welfare gained from the construction of new towns may not necessarily outweigh the losses

incurred by their development. Yet many surveys have clearly established the fact that the new-town residents are largely satisfied and willing to pay for the additional time and money spent in commuting.

The Impact of the New Towns on Home Prices in Seoul

The question we want to address is whether the new towns helped stabilize home prices — both purchase price and rents — in Seoul and its vicinity. If the two markets were interdependent and housing products in new towns were substitutable, the impact would be great. If not, the impact would be small and insignificant. A KRIHS survey clearly indicated that the housing market in the new towns was in fact considered to be an extension of the housing market of Seoul¹⁶. This is quite understandable

because the transportation system — the modern transit system and the new highways — makes the new towns easily accessible from downtown Seoul. Actually some new towns like Bundang and Pyungchon are more easily accessible than many parts of the city of Seoul¹⁷. The average price of homes in the city of Seoul sharply declined about six months before the actual occupancy of the Bandung new town in 1993. Further analysis also showed that macro-economic variables such as GDP growth, money supply and inflation played a more important role in the short term but that the quantity of housing supply — mostly the housing units of the new towns — was a more consistent and reliable predictor in the medium and long term. Producing more housing at the right time and place was the proper way to stabilize housing prices¹⁸.

The Impact on Spatial Configuration and Inter-Governmental Relations

Some experts strongly recommended the new-town concept because it could hopefully lead to a correction of the over-concentration problem in the primate city of Seoul through a process of suburbanization. Government officials also argued that a new town development scheme could serve as an effective means to de-concentrate and eventually decentralize the population and industries away from the city of Seoul. Judging from what happened over the last eight to ten years after the introduction of the five new towns, de-concentration in fact occurred, but hardly any decentralization took place. The city of Seoul has witnessed a gradual demographic decline since 1990. Its population increased by 2.3 percent in 1990, but thereafter it declined on average by 0.77 percent every

year until 1999. Between 1970 and 1990, Seoul's population had almost doubled from 5.6 millions to 10.5 millions. The new towns absorbed most of the out-migrants¹⁹. On the other hand, the SMA has consistently been gaining more residents to the extent that 48 percent of the nation's population now reside in the area. The new towns are to some degree responsible for this intensification of centralization since they have provided the necessary housing facilities. Obviously, the migrants from other regions of the country tended to fill the vacuum left by Seoul's out-migrants. The total number of people who moved out between 1990 and 1998 was estimated at close to one million — almost 10 percent of the city's population — but the actual

loss of population was less than 332,000. During the same period, the SMA gained of 2.72 millions new residents. The new town development has clearly helped the outward expansion of the SMA making the nation's spatial configuration even more skewed, in contradiction with the government's avowed support for balanced regional development in the country.

The new towns also had an effect on inter-governmental relations. When it conceived the new towns, the government's original goal was to build complete medium-density new towns that would be physically and administratively independent from the respective local governments in the original sites. The local authorities strongly objected to the plan and made it clear that they would not cooperate if this idea were to be maintained. Objections also came from the developers who wanted to make the most out of the booming housing business related to new-town development. Home-builders claimed that the mass production of multi-family homes was the only way to solve the housing shortage within a short period of time.

Consequently, the concerned local governments benefited almost overnight from large

increases in population and claimed that they would themselves become independent cities, beyond the reach of the Kyunggi provincial government. Actually the population had to reach at least one million to obtain the status of an independent city. The local governments wanted independence because this would make them free not only from interference in municipal affairs by the provincial government, but also from a tax-sharing obligation. The new towns brought in an enormous amount of property tax and the local governments' financial position would improve significantly if they did not have to share these revenues with the relatively poor localities of the province²⁰.

In conclusion, the new towns could help the concerned municipal governments become fiscally wealthy and politically independent. The provincial government would gradually lose its hold over the localities in a shift of power or jurisdiction that could be regarded as a step toward the democratization of the inter-governmental structure. The other correlated effect was the shift of the middle-class families from Seoul to suburbia. This shift of residence helped diversify as well as balance the population make-up of the SMA.

Caveats

New-town development was a successful undertaking from the government's perspective because it was probably the only way to achieve the massive production of housing within a short period of time and address the housing crisis in Seoul. It helped the city attenuate the twin problems of housing shortage and housing price inflation. However, the new towns also had some serious side effects that may serve as a reference for countries involved

in designing or constructing new towns for similar purposes.

Spatial Aspects

The Korean new-town development plan should have been more carefully thought out with respect to its spatial implications. It directly contradicted the long and consistently upheld principle of balanced regional development. Undoubtedly, development intensified

the centralization of population and industries in and around the capital region. Kyunggi province, where the five new towns are located, grew by leaps and bounds, but it experienced consistent sprawling development at the expense of the rest of the country. It also contributed to an extension of Seoul city's outlying residential districts, geographically as well as economically. Clearly the new towns substantially eased the problem of over-concentration in Seoul city, but Kyunggi province had to invest a lot of money for the modernization and expansion of infrastructure facilities out of its own resources.

In addition, the plan was prepared far too hastily with a view to solving only the imminent problem of residential land shortage without due consideration being given to the impact of the new towns on the internal structure of each city concerned. In particular, the old sections of these cities quickly deteriorated while economic activities flourished in and around the centers of the new towns, as in Anyang and Joongdong.

Economic Aspects

The development of the new towns and the plan for the construction of two million housing units plan sparked off excessive investment in construction, resulting in a shortage of construction materials and manpower. The lesson to be drawn is that a policy of new-town development of such a magnitude at the national level cannot be conceived without due consideration to macroeconomic policies and conditions as both interact very closely. Policy-makers must look at urban development policy from a broader perspective, considering all the major factors through which such a policy might influence the national economy. Particularly relevant in this context are pricing policies and credit allocation policies as well as the conventional fiscal and monetary policies.

Aspect of the Development Method

The PPD (Public Purchase and Development) method is rather undemocratic and non-market oriented. Land was acquired by public purchase and fully compensated for at market price. This put an extremely great financial strain on the public developer and was actually an obstacle to sound development. The funds came from the pre-sale of the serviced lots. They represented almost 80 percent of the total investment required for infrastructure development, with the remaining portion shared by the central and local government. This method resulted in land speculation because the developer put the serviced land parcels up for sale to the highest bidders. It made huge profits, much of which was invested in infrastructure facilities, but such a practice exemplifies a typical case of "moral hazard." The job could have been more efficiently undertaken, had the private developers been allowed to compete with the public developer.

Density Aspect

There are too many high-rise buildings in the new towns. Planners suggested low-density and medium-density development. The price of land is often determined by the intensity of its use. Accordingly, land parcels for high-rise condominiums were priced at a higher rate than those used for single-family detached homes. The original price of land was 10 to 30 times lower because it was mostly zoned as a green or agricultural area when it was appropriated for development.

The condominium sale price ceiling system was equally responsible for high-density development. Under this system, the profit margin per unit of housing was relatively low and developers were eager to build as many units as possible to maximize their revenues.

Logically, they preferred high-rise development that allowed mass production. In this way they could significantly reduce production costs.

These two reasons together meant that the new towns had to be high-density towns. The gross density of the five new towns ranged from 18,400 to 39,200, higher than in Mokdong, the most densely developed in-city new town in Seoul. The appearance of the densely developed towns is very monotonous, and lacks diversity and variety. High-density and high-rise development discouraged planners and architects alike, who had long hoped to introduce innovative design concepts into the new towns.

Aspects of Sustainable Urban Development

Finally, but most importantly, the country lost an opportunity to build a "sustainable city" for the future; a city that would be more humanistic, resource-efficient, environmentally friendly, socially cohesive and culturally rich. Policy makers and planners could have experimented with a truly livable city, a city that would help reduce energy consumption as well as pollution and waste.

Clearly the concept of "sustainability" was emphasized and explicitly stated in the urban design plans many years before Agenda 21 was

officially adopted at the Rio Summit. For example, Ilsan enjoys the highest proportion of parks and open spaces, followed by Bundang and Sanbon. Green networks have even recently been established, combining pedestrian roads with bike lanes. In Bundang, for example, any place can be reached through bike lanes that connect the residential neighborhoods with the city center via a scenic river bank.

But traffic is still a problem. Over 60 percent of the new town residents use automobiles for work and shopping. Traffic congestion has become worse, although there have been many citizen-initiated campaigns to reduce the flow of traffic. The core of the problem is the transportation system, which is not well integrated with land use planning. In retrospect, urban designers did not pay much attention to such an integrated approach to community planning. Most of the actions mentioned above are recent initiatives by groups of citizens in the new towns. They are successful because there is strong grass-roots support from the community at large. Early planners and government officials were in fact shortsighted when they disregarded the concept of "sustainability." It took many years for them to recognize the importance of sustainable development, but now oddly enough they act as if they were the forerunners of the "environmental movement."

Notes:

1. Kim Jeong-Ho, " Changing Perspective for Korean Housing Policy, " in Gill Lim, et al., *Dynamic Transformation of Societies* (Seoul: Namam Publishing House, 1993), pp.319-43
2. Kim Jeong-Ho, " Changing Perspective for Korean Housing Policy " , pp.319-43
3. Kim Jeong-Ho, " Changing Perspective for Korean Housing Policy " , pp. 319-43
4. The supply ratio is measured in terms of the number of housing units over that of households.
5. World Bank, *The Housing Indicators Program*, pp. 31-36
- 6 Kim Jeong-Ho, " Changing Perspective for Korean Housing Policy ", pp.319-43
7. Kim Jeong-Ho, " Housing Policies toward the Year 2001, " paper presented at the 12th Congress of EAROPH, " Major Planning Issues in the 1990's: Decade of Turning Point, " Seoul, 1990, pp. 208-35.
8. Kim Jeong-Ho, " Housing Sector Performance Evaluation " in Lee G.Y. (ed.), *Cities and Nation*, Seoul: Nanam Publishing House, 1995), pp. 335-69
9. Kim Jeong-Ho, " Housing Indicator Study, " *An Assessment of Korea's Housing Policy and Future Policy Directions* (Seoul: The Ministry of Construction, 1994), pp. 1-44
10. Kim Jeong-Ho, " Housing Policies toward the Year 2001. "
11. Kim Jeong-Ho, " Housing Policies toward the Year 2001. "
12. Kim Jeong-Ho, " Changing Perspective for Korean Housing Policy. "
13. Kim Jeong-Ho, " Massive Housing Construction Policy: Korean Experience, " unpublished mimeo), January 1999.
14. Kim Jeong-Ho, " Housing Indicator Study. "
15. Under the *chonsei* system, a tenant pays a lump sum of key money to the landlord, which is fully returnable to the tenant when the tenant moves out. *Chonse*i money may amount to as much as 50 to 70 percent of the market value of the rental unit. The monthly rent is equivalent to the interest foregone from the key money. From the homeowners' perspective the *chonsei* is a form of financing a new home purchase as they cannot easily secure funds from private financial institutions. And from the tenants' point of view it serves a means to save funds for future home purchase. The *chonsei* deposit grows as a tenant moves upward and ultimately is able to purchase a home once the *chonsei* deposit has accumulated sufficient interest. In recent years, however, the system has gradually been replaced by the monthly rental system, largely because people can have a better access to formal credit through financial institutions.
16. Kim Jeong-Ho, " Changing Perspective for Korean Housing Policy. "
17. Kim Jeong-Ho, " Housing Sector Performance Evaluation. "
18. Kim Jeong-Ho, " Changing Perspective for Korean Housing Policy. "
19. Shin J.C., *Shintoshi kabal-e joughap pyungka* [A Comprehensive Evaluation of New Town Development, Korea Land Development Corporation] (Seoul: Korea Land Development Corporation, Kyungki-do, 1999).
20. Kim Jeong-Ho, " A Comprehensive Overview of Housing Policies " .

