

Seoul city government during the same period.

In the early 1970's, during which the Korean government put all its efforts into promoting heavy and chemical industries, several industrial complexes and their support cities such as Changwon, Yecheon and Kumi were constructed.

During the 1970's, the population in large cities grew rapidly, while the supply of housing was sluggish. This resulted in housing shortage in urban areas, especially in the Seoul Metropolitan Area (SMA) and chronic house price inflation. What made the situation worse was the economic stagnation and political instability in the early 1980's. In order to alleviate the housing shortage, the government launched several large-scale housing projects in Seoul, such as Sangaedong and Mokdong, in the form of "new town in-town."

In the late 1980's, the "new town in-town" strategy pursued by the government revealed its limitation due to the lack of developable land in Seoul. This forced the government to move outside of the Green Belt Zone to acquire cheap land for housing.

In 1989, the government announced development of five new towns in the capital region. The purpose of this section is to review the physical characteristics of these five new towns and to propose directions for the future.

## (2) The Rationale for Developing New Towns

The prime factor of the new town decision of the government was population concentration in Seoul. Most developing countries have suffered from the size and continuing high growth rates of their largest cities. Korea is no exception. The population of Seoul increased to 10,798,700 persons in 1994 from 2,445,402 in 1960. About 25 percent of the nation's population is residing in an area comprising 0.06% of the national land. Population concentration in Seoul has led to overloaded public services and social

infrastructure. In order to relieve population concentration in Seoul, the government employed a wide spectrum of decentralization policy measures. None of them were very successful. Recently, the strategy to slow down population growth in Seoul has come to include an inter-regional component to promote the development of other regions remote from Seoul on the one hand, and an intra-regional component to foster Seoul and Kyonggi Province, the adjoining province of Seoul, as a polycentric metropolitan region. In other words, the government made the decision to develop five new towns as growth centers in the capital region.

The second factor was the increasing housing demand and lack of developable land. Housing prices in Seoul have increased by more than twenty percent a year since 1987. The causes of housing price inflation were the shortage of housing supply on the one hand, and the rapid growth of the Korean economy from 1986 through 1988 on the other hand. In order to accommodate the rapid population increase, Seoul has grown physically, by expanding its territory. Since Seoul is encircled by the Green Belt Zone, development beyond the Green Belt Zone was unavoidable in order to acquire cheap land for housing.

The last factor was the increased demand for suburban living. Partly due to the rise in income and the deterioration and crowding of the old inner city of Seoul, more and more Seoul residents have been turning their attention to the quality of the environment they live in. For those condemned to the stuffiness of the old inner city, modern accommodations with a well-preserved natural environment in suburban areas could be an alternative.

### (3) The Outline of the Five New Towns and Development of the System

#### (a) Policy Goals and Directions



(i) Development of a Model for New Town Development

The announcement of the New Development Plan in 1989 opened up an era of new town development in Korea. In the mood of increasing concern for better living that came with successful economic development during the last two decades, policymakers, planners and designers were ready to put their visions of the future into effect.

The Five New Towns will be designed as complete living and working entities: jobs, homes, shops, civic facilities, sport and leisure facilities, parks and open spaces - everything is to be created within one comprehensive plan. They offer a new start for Seoulites who have been suffering from the chronic overcrowding.

(ii) Creating Self-Contained Towns for Alleviating the Congestion in Seoul

Seoul has been suffering from severe traffic congestion. In spite of the strenuous efforts of the Korean government to expand roads and the subway system, the situation has not been alleviated. Recently, an increase in the number of automobiles and commuters from satellite cities surrounding Seoul commuting to the inner city of Seoul has made the situation even worse.

The Five New Towns will provide a great chance for improving the situation. Land and housing prices in the Five New Towns will be kept low enough to induce many Seoulites as well as private firms and public organizations to move out of congested areas of Seoul. And intercity transportation networks connecting the Five New Towns with Seoul will be constructed as a way of diverting traffic which would otherwise be concentrated into Seoul. With the support of such networks, relationships among the Five New Towns and satellite cities of Seoul, rather than between Seoul and each of them, will be diversified. It will ensure the growth of each of the Five New Towns to become a self-contained entity working as an integral part of the SMA, and induce more people and activities in congested areas of

Seoul to move into the Five New Towns.

(iii) Keeping the Development System Flexible and Cooperative

The development of the Five New Towns is an unprecedentedly enormous undertaking in Korea: over 300 thousand dwelling units are to be supplied in five years; sites and services including the intercity transportation system as well as shops, civic buildings, schools, sport and leisure facilities, parks and everything else will be provided; also, many private firms and public organizations will be relocated from Seoul during the same period. The urgent need for expanding the housing supply has forced the government to exert all its efforts to materialize the whole project as scheduled. To ensure the efficiency of the project, the government has emphasized three things: the role of government as a coordinator of conflicting interests among various actors; flexible operation of housing construction schedules in tune with the dynamics of the housing market; and maximum utilization of the private sector's potential.

(b) Development Strategies

(i) Development System

Residential land has been developed and supplied by the public sector, while development by the private sector is limited to very small projects. During the last fifteen years, in which the Land Development Promotion Act was promulgated and the Korea Land Development Corporation established, the public sector supplied almost two-thirds of the total volume of land development. New Town development is no exception.

A public developer prepares a development plan. And the central government reviews the suggested plan and, if it is feasible, permits its implementation. The developer, then, starts the project with the acquisition of land to be developed. The next step is land



development and disposal. The final step of development is for the private sector and local government. Housing and commercial facilities are developed by private developers, and the local government controls and administers these developments. It should be noted that the KLDC only provides serviced land; however, the Korea National Housing Corporation and local governments are involved in either land development or construction.

(ii) Financing of Land Development

In the initial stage of new town development, a great deal of funds are required for the purchase of land as well as for providing sites and services. The funds are raised by a kind of pre-sale system. The system is: private developers pay for their sites in advance based on a master plan; they are paid back through the sales of developed sites. Owing to this system the new town projects can be launched without any initial funds or public financing.

(iii) Strategies for Inducing Private Sector Housing

Provision of enough funds for private developers is crucial to speed up the housing supply. For this purpose, the Housing Redemption Bond System was introduced. This system, which allows private developers to issue bonds to be redeemed for houses works smoothly owing to the dual pricing system in the housing market, in spite of its very low rate of interest compared to any other kinds of bonds and/or savings. Significantly lower prices of new homes compared to those of second-hand homes guarantee capital gains for bondholders.

Another measure to induce private developers is the substitution of the fixed price ceiling. In this new system, the price ceiling is set to reflect changes in land and housing construction costs based on the standardized criteria of labor wages and material prices.

To promote rental and small-sized housing, land prices are

differentiated into three categories: the price of land for medium sized housing below the national standard, 85 square meters, constitutes the base price; land for rental housing is priced at 90 percent of the base price; the price of land for housing over the standard size is estimated based on the equivalent market value.

#### (iv) Design Control Strategy

The prime concern of private developers in designing housing complexes is cost-minimization due to the price ceiling system. As a matter of fact, it is hard to expect innovative ideas to improve the quality of the living environment. To control the design quality, a kind of planned unit development system was newly introduced. This system allows better harmony and integration not only between housing complexes but also between a housing complex and the town as a whole.

#### (c) Location and Characteristics

The five new towns are located within a 25km radius from the city center. Bundang is quite close to the Kangnam area, the newly growing urban center. Owing to this locational advantage, Bundang has been developed as a middle- and upper-income residential area, as well as a business and commercial subcenter of Seoul.

In spite of the fact that Ilsan is quite close to Kangbuk, the old CBD of Seoul, its development has been retarded due to its closeness to the DMZ. As the area, situated in the field developed along the Han River, has a well-kept natural environment, Ilsan has been characterized as a Garden City. It could also function as an integral part of Kangbuk, Seoul.

The other three new towns are located adjacent to the existing cities of Bucheon, Gunpo, and Anyang. These three new towns are considered as "new towns in-town" and are expected to function as new CBD's of their existing city. In other words, the first two are

characterized as self-contained independent new towns, and the rest are new towns in-town.

*Figure 1. Location of New Towns in Seoul Metropolitan Area*

*Table II-13. Sketch of Five New Towns*

Specification	Bundang	Ilsan	Joongdong	Pyungchon	Sanbon
Area (ha.)	1,984	1,573	544	495	419
Planned Pop.	390,000	276,000	170,000	170,000	170,000
No. of Housing Units	97,500	69,000	425,000	425,000	425,000
Developer	KLDC	KLDC	Ruchon City KLDC, KNHC	KLDC	KNHC
Construction Period	1989-93	1989-93	1989-93	1989-93	1989-93

(d) Land Use Plan

Land use planning is the most important factor of the new town



planning. Land use planning requires consideration of all components, such as densities of use, population, living standard, and other cultural and geographic factors.

As shown in Table II-14, the largest portion of the land is the residential area, ranging from 32.4% in Bundang to 45.6% in Sanbon. The next largest portions are roads and parks and open spaces which vary from one to the other. It is noticeable that the portion of the commercial and business area varies from one to the other. It must be noted that this figure for Joongdong is more than ten percent, whereas Sanbon is only about five percent. The rest are schools, administrative facilities and others.

**Table II-14. Land Use Plan**

(unit: ha.,%)

Specification	Bundang	Ilsan	Joongdong	Pyungchon	Sanbon
Residential	614.1(32.4)	528.3(33.6)	180.4(33.2)	193.6(39.1)	191.2(45.6)
Commercial	85.5 (4.5)	45.7 (2.9)	51.7 (9.5)	18.3 (3.7)	22.8 (5.4)
Business	72.5 (3.8)	106.3 (6.8)	72.5 (3.8)	4.1 (0.8)	( )
Schools	72.1 (3.8)	59.7 (3.8)	16.6 (7.8)	34.3 (6.9)	32.5 (7.8)
Administrative Facilities	16.0 (0.9)	9.0 (0.5)	42.5 (3.1)	15.3 (3.1)	8.7 (2.1)
Roads	380.4(20.1)	304.7(19.4)	133.3(24.5)	112.7(22.8)	54.5(13.0)
Parks and Open Space	365.5(20.1)	372.9(23.7)	66.3(12.1)	70.2(14.3)	63.6(15.2)
Other	287.9(15.2)	146.4( 9.3)	105.1(19.3)	46.2 (9.3)	45.6(10.9)
Total	1,894.0(100.0)	1,573.0(100.0)	543.9(100.0)	4,94.7(100.0)	418.9(100.0)

(e) Population and Housing Density

The size of the land area of the new towns ranges from 419 to 1,894 hectares. The planned population for each of the smaller new towns is 170,000, whereas the two others are planned to hold 390,000 and 276,000 residents, respectively. The average gross density of



the five new towns is 235 persons per hectare, much higher than that of Seoul, which stands at 181 persons per hectare. Net residential density figures are more dramatic. The average for the five new towns is 686 persons per hectare, while that of Seoul is 364 persons per hectare.

**Table III-15. Density for Population and Housing**

Specification	Bundang	Ilsan	Joongdong	Pyungchon	Sanbon
Area (ha.)	1,894	1,573	544	495	419
Planned Population	390,000	276,000	170,000	170,000	170,000
Gross Pop. Density (persons/ha)	198	176	312	344	392
Net Res. Pop. Density (persons/ha)	615	525	907	870	937
Floor Area Ratio for Residential Area (%)	184	169	226	204	205
Avc. Multi-family Housing Size (m <sup>2</sup> )	98	96	90	88	90

**Table III-16. Housing Allocation Plan by Size**

Specification	Bundang	Ilsan	Pyungchon	Sanbon	Joongdong	Total
Under 40m <sup>2</sup>	7,512	2,884	4,220	5,500	3,896	24,012
40-60m <sup>2</sup>	21,662	16,832	17,651	22,152	15,883	94,180
60-85m <sup>2</sup>	28,519	22,699	11,541	2,656	14,184	79,599
85-102m <sup>2</sup>	6,709	3,807	2,380	6,031	1,438	20,425
102-135m <sup>2</sup>	18,648	9,360	3,970	3,898	4,414	40,290
135m <sup>2</sup> and over	4,772	2,426	1,602	1,273	1,731	11,804
Total	87,992	59,008	41,364	41,510	41,546	270,310

Note: These numbers exclude single detached and row houses.

(f) Development Cost and Cost Sharing

Table II-17. Cost Sharing of Infrastructure Provision

(unit: 100 million won)

Specification		Total	Bundang	Ilsan	Pyungchon Sanbon	Joongdong	
Road	Construction Cost	19,838 (100.0)	7,775 (100.0)	3,366 (100.0)	5,901 (100.0)	2,796 (100.0)	
	Sharing	developer	14,265 (71.9)	6,514 (83.3)	3,366 (100.0)	1,738 (29.5)	2,647 (94.7)
		central govt.	1,517	235	-	1,197	85
		local govt	12,748	6,279	3,366	541	2,562
		5,573 (28.1)	1,261 (16.2)	-	4,163 (70.5)	149 (5.3)	
Sub- way	Construction Cost	17,780 (100.0)	8,839 (100.0)	4,950 (100.0)	3,991 (100.0)	-	
	Sharing	developer	14,495 (81.5)	7,013 (79.3)	4,950 (100.0)	2,532 (63.4)	-
		central govt.	4,070	2,542	1,200	328	-
		local govt	10,425	4,471	3,750	2,204	-
		1,700 (9.6)	878 (9.9)	-	822 (20.6)	-	
		1,585 (8.9)	948 (10.7)	-	637 (16.0)	-	
Total	Construction Cost	37,618 (100.0)	16,614 (100.0)	8,316 (100.0)	9,892 (100.0)	2,796 (100.0)	
	Sharing	developer	28,760 (76.5)	13,527 (81.4)	8,316 (100.0)	4,270 (43.2)	2,647 (94.7)
		central govt.	5,587	2,777	1,200	1,525	85
		local govt	23,173	10,750	7,116	2,745	2,562
		1,700 (4.5)	878 (5.3)	-	822 (8.3)	-	
		7,158 (19.0)	2,209 (13.3)	-	4,800 (48.5)	249 (5.3)	

Source: Ministry of Construction

- The total cost for roads and subway construction of the five new town is 3.7 trillion won.

- The cost for infrastructure provision per housing unit are as follows: Bundang 17 million, Ilsan 12 million, Pyungchon and Sanbon 11.6 million, and Joongdong 6.5 million won.

- Cost sharing among developer, central government and local government varies from one town to another.

- However, the major portion of the cost was provided by the developer.



#### (4) Lessons and Future Directions

The announcement of new town development in 1989 was considered in many respects an expression of a strong government will to alleviate the housing problem in the Seoul Metropolitan Area(SMA). Partly market, housing prices in SMA had risen extremely rapidly since 1987.

The KRIHS survey result shows that housing conditions of new town residents have improved significantly in terms of per capita floor area and housing quality. In fact, they increased their space in the range of from 30 up to 150 percent, depending on the tenure of their previous residence. Turnover survey reveals that the average chain length is about 2.4. In other words, low-income households are benefited either directly or indirectly from new housing construction in new towns. Another major impact is the stabilization of housing price, because the housing market experienced a supply of new town housing units in a large scale within a relatively short period of time. However, there are several flaws that need to be corrected. They are length of planning period, location financing land use planning and so on.

##### (a) The Length of the Planning Period

The creation of a city inevitably takes a long time; a city is a complex system comprising many intangible as well as tangible elements. The development of new towns is therefore a tremendous task not just in terms of the investment required, but also in terms of the socio-economic and cultural considerations which should be included in the process.

In the case of new towns in Korea, however, these preliminary stages have been undertaken too swiftly, with an average period of a year from planning to inception. In the cases of Bundang and Ilsan

new towns, the decision was made in a matter of a few weeks. This lack of prior deliberation, or rather the lack of careful examination from various perspectives, created serious problems which might hinder the successful implementation of these new towns.

For this reason, new towns should be conceived and planned very carefully over a considerable period of time, usually two or three years, during which time all the possible consequences of their development are examined before any actual construction takes place.

(b) Location of New Towns

In order to alleviate the housing shortage in the 1970s, the government launched several large-scale housing projects in Seoul, such as Sangaedong and Mokdong, in the form of "new towns in-town". In the late 1980s, however, the "new town in-town" strategy pursued by the government revealed its limitation due to lack of developable land in Seoul. This forced the government to move outside to the Green Belt Zone to acquire cheap land for housing. The five new towns are located within a 25km radius from the city center.

The five new towns became, however, like other similar developments in the capital region, a mere extension of Seoul's outlying residential districts. Although they belong administratively to Gyonggi Province, more than 60 percent of the residents commute to Seoul for jobs and other purposes. In other words, the five new towns are functionally dependent on and form a part of Seoul or are closely linked to it. The five new towns failed to fulfill the objective of new town development, which is to serve as a counter-magnet to divert migration pressures from Seoul. This means that a new town must have both residential and productive functions, and must be located 40km away from Seoul to discourage commuting.



#### (c) Land Acquisition and Financing

Perhaps the most immediate problem in the building of a new town is the acquisition and funding of land. With the exception of Yoido, where the entire area was under municipal ownership, the land needed for new town development in Korea has been acquired through public expropriation, with compensation at market prices. The initial investment requirements in public expropriation cases have therefore been relatively high and this has sometimes acted as an obstacle to development. In fact, since the acquisition of the entire land area has to precede any actual construction work, and as it occurs prior to any revenue acquired from the sale of lots, the burden can be substantial. Nevertheless, the adoption of the public expropriation method can avoid unnecessary conflicts and delays which might arise in the process of negotiation with the owners of each parcel of land.

The funds needed for new town development comes largely from the sale of serviced lots. These lots usually provide more than 90 percent of the total investment required, with the remaining portion being borne by the central and local governments. The cost sharing varies from one town to another. Especially, the contribution of the central government is very limited, and generally covers the cost of water supply and of railroad and major roads linking the project sites with the existing road networks.

Because land costs are extremely heavy in these developments, most new town construction is executed in phases on a rolling investment basis, with the sales of the serviced lots in the first phase, the provision of funds for the land development in the next phase, and so on. There has to be some cost-sharing method among the central and local governments and the developer.

#### (d) Land Use Planning

The proportion of the commercial and office area is dependent on population size, number of employees, income, and so on. The first problem to point out is the proportion of commercial and office use. Compared with previous new towns, the ratio of commercial and office area for the five new towns is higher. The fact that there have been many unsold lots in the five new towns indicates that commercial and business land has been over-supplied. The reasons why the developers created more commercial and business areas lie in their higher selling price than that of residential areas.

Another problem associated with land use planning is the size and location of parks and open-spaces. It is essential that open-space land and parks should be provided in the new town within walking distance of residential areas. However, the design concept of parks in the new towns is large-sized parks in small numbers rather than smaller neighborhood parks in larger numbers. From the point of view of users and the environment, the smaller park system in large numbers is recommended.

#### (e) Population and Housing Density

Gross density is the number of people per gross land area--measured either in hectares per thousand people or persons per hectare. It is generally believed that low density in the new towns is one step towards improving the environment. Such densities, however, require a large investment for the construction of infrastructure. This in turn has discouraged low-income people from moving to such new towns. Thus, in order to integrate different income groups into the new towns, integrated land use is necessary.

There is no universal standard for density. However, density is usually affected by variables such as per capita income, construction cost, standard of living, and the availability of land and its market value. The gross density of the five new towns ranges from 184 to 392



persons per hectare, which is lower than that of the previous new towns in-town. For international comparison, the gross population density of new towns in Japan usually ranges between 100 and 140 persons per hectare.

**Table II-18. Sketch of Previous New Towns**

Specification	Kwachon	Mokdong	Sanggyedong
Total area (ha.)	230	435	334
Population	54,000	114,500	146,000
Gross Pop. Density (persons/ha)	235	264	437
Net Residential Pop. Density (persons/ha)	542	495	954
Ave. Floor Area Ratio for Res. Area (%)	97	122	168

Land prices decline from the city center to the edge, a phenomenon usually described as a "bid-rent curve." This means that population density decreases from the CBD to the edge, since it is assumed that developers prefer to pile units up on a given lot by building vertically. Since the new developments took place at more distant locations than the previous new towns, we can see the decline in gross density.

On the contrary, net residential density figures are dramatic. The net residential density for the five new towns ranges from 525 to 907 persons per hectare. This means that net residential density is higher than that of the previous new towns in-town even though the gross density is lower. This is partly because the floor area ratio for the latter is higher than that of the former.

In contrast to the typical density and price gradient observed in other cities around the world, Seoul has a flat or even negatively

sloped residential density gradient. The first among many concerns is that this lack of a density gradient requires more investment in infrastructure, in particular in transportation. Second, this pattern disrupts the normal selection of locations that different users with different land intensities would choose.

These are the reflection of government policies on land-use regulation and housing price control. In other words, rigid land-use regulation has limited the supply of residential land, and in turn enhanced high-density development for available land. The present policy of controlling the price of new apartments rewards only those suppliers who can produce the maximum floor space at the minimum price. In short, the quality is more important than the quantity.

#### (f) Housing Type and Building Design

Another important reason for the new town development is the inducement of technological innovation and innovative techniques in planning and design. However, there has been very little change in house types and building designs. Approximately 90% of the housing is apartments and the appearance of the apartments is monotonous, lacking diversity and variety. Price control is also responsible for "uniformity" in housing developments, since there is no incentive for the firms to improve the quality of design for the apartments.

#### (g) Summary

A number of changes will put pressure on the housing market to provide more and better housing. First, the nation's gross national product will triple in constant dollars over the next ten years. The per capita income is expected to reach 11,000 U.S. Dollars in 1996 and 17,600 U.S. Dollars in 2001. Second, nuclear family formation will continue, resulting in over 13 million households by 1996 and



14.9 million households by 2001. All these changes imply that people will demand more housing in both quantity and quality. Especially, the demand for better quality of housing will rise as income rises.

In short, the salient characteristic of the Korean housing problem is the housing shortage. Over the last thirty years the Korean government has pursued an expansion of the housing supply. It is time to reconsider the new town policy. More emphasis has to be put on quality rather than quantity.

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### ***part III. Direction for Future Housing Policies***

#### **1. Changes in Housing Demand**

A number of changes will put the pressure on housing market to provide more and better housing.<sup>8)</sup> First, the nation's gross national products will triple in constant dollars over the next ten years, assuming the growth momentum to continue. The per capita income is expected to reach 11,000 dollars in 1996 and 17,600 dollars in 2001. Second, nuclear family formation will continue, resulting in over 13 million households by 1996 and 14.9 million households by 2001. And finally, urbanization will accelerate to the extent that over 87 percent of the country will be urbanized the year 2001.

All these changes imply that people will demand more housing in both quantity and quality. The quantity demand will accelerate with rapid increase in households and in per capita income, and the demand

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8) The discussion is an abstraction from a final report on the Housing of the Third Spatial Development Plan of 1992-2001, Korea Research Institute for Human Settlements, September 1991.

for better quality housing will rise as the middle class households rapidly expand. Large cities, Seoul and Busan in particular, will continuously experience housing shortage problem. The problem will aggravate due to a large influx of immigrants from rural areas and the demolition of existing stock. A significantly large number of existing stock will be destroyed to make room for redevelopment and replacement activities, which will exacerbate the housing situation among the low and moderate income families.

A recent estimate of new housing stock demand runs as high as 5.9 million units by the year 2001. The estimation is based on the assumption that a close relationship exists between per capita income and housing investment. The National Spatial Development Plan, however, expects that the country will have to produce a rather moderate figure of 5.3 million units over a ten year period of 1992-2001. About 45 percent of them should be produced in the first half (1992-1996), and over 90 percent of them be built in urban areas.

## 2. Future Housing Policy Direction

A few lessons can be learnt from the Korean housing policy efforts experimented with the massive housing production plan. One recognizes that tight market control policy would not work when demand for housing rapidly increase. Equally undesirable is any drastic measure to expand housing stock through new construction within a short period of time without due consideration on the input market constraints.

It must be also realized that housing market ought to be minimally controlled, and if there arises any need for government intervention, e.g., the discouragement of overconsuming housing and the promotion of housing industry, it must be done indirectly by means of taxation and financing. Also important is that housing policy at the national level can not be formulated and executed



independent from macro economic policies, because the interactions between the two are too great to ignore. In fact housing policy must be viewed as an integral element of the national economic policy if it is to work at all.

These lessons are emphasized here because they would shed some light on defining the future housing policy directions. As pointed out, Korean society is undergoing some drastic changes, and so is the housing sector. Housing demand changes in both quantity and quality, and market oriented solution' seem to be the most efficient way to deal with these changes. Nonetheless, the Seventh Five-Year Socio-Economic Plan attempts to arbitrarily cuts down housing investment. Housing investment will be made as long as investment return on housing exceeds those of other investments. What is required is a set of policies and programs designed to reduce excess demand for housing, but the plan has not touched on these issues at all. Deliberate reduction in housing investment through administrative measures would lead to market failure as discussed all along.

Taking all these matters into account, the following suggestions are made for the future housing policy directions. They are basically of the three types; deregulation consistent with market oriented economic and financial policy, promotion of housing industry, and improvement in policy instruments, housing finance and housing related taxation in particular.

As emphasized, various government controls have been partially, if not totally, responsible for market distortion as partly evinced by extremely low estimates of demand, supply, and production parameters. They are detrimental to the expansion of housing production as much as to the provision of a variety of housing. Housing industry has been slow to adjust to changes in input markets as well as in demand. The industry is overly regulated by way of special laws; e.g., the Housing construction Promotion Law, the City

Planning Law, the Land Use Law, the Housing Supply Regulations, the National Land Use and Management Law, etc. Even the Housing Construction Promotion Law seems to serve the industry poorly, because it emphasizes on "regulating" than promoting the industry.

Two types of regulations were of particular concern; one, land use control and the other, the control over the sale price. The latter is rather pervasive as it controlled the firm's cost of housing production, and thus, adversely affecting its financial position. With the price control there is no incentive for the home builders to improve quality of housing because they do not need to compete each other. Price control is also responsible for "uniformity" in housing developments, lacking diversity and variety. Home Builders would have two options to stay in business; one is to lower housing quality standards while maintaining an appropriate level of profit. The other option is to secure cheap lands in urban fringe areas, which results in distortion of spatial configuration and traffic congestion. Recently, the price ceiling system was modified to reflect cost increases in land, labor, and material, but this was only a short-term solution, and all the problems associated with the price control have remained unsolved. The system should not be eliminated overnight, however. It must be done gradually; otherwise the house price will rise without accompanying steady supply of housing units. Adequate supply of production inputs must precede before such an action is taken.

Other regulations which require revisions are those of controlling land uses, including zoning, subdivision controls, building codes, and design standards. Land conversion must also be made easy in order to increase supply of residential land. Simultaneous with these efforts, multi-purpose and mixed use of urban land must be strongly promoted, leading to a more efficient use of scarce urban land. Building codes and design standards must also be revised to allow for mixed developments. Zoning and land use



regulations need to be modified for promoting commercial and residential mix in urban development.

Secondly, the housing industry must be actively promoted. Most important is to strengthen the housing finance system in order to help the small and medium sized builders actively participate in housing development. The key strategy is to have many capable firms compete in quality housing production. Tax incentives are more effective in promoting the industry. They can be used to discourage production of luxury units and to promote low and moderate housing construction. Both local and national taxes can be combined to maximize the effects of tax incentives and disincentives. Studies may be required to determine the degree to which different types of tax will affect housing market, with particular emphasis on production, price, and supply.

Both financial and taxation tools can be employed to indirectly manage housing demand. For example, when excess demand occurs, one can adjust lending terms to reduce it. Similarly, when one either overconsumes or underconsumes housing, tax measures can be used to "normalize" housing consumption behavior. Up to now, however, these tools are not developed. One must realize that improvement in housing finance, both in volume and in allocative efficiency, is the key to effective housing policy.

The other important issue is the way how these policies are reconciled with those dealing with the national economy. The macro-economic policy, as briefly reviewed, is very likely to discourage housing investment deliberately. However, any arbitrary measures to substantially reduce housing investment may pose serious problems when the society demands more and better housing. If such a demand is tightly controlled, housing situation will get worse as evidenced in the 80's. Housing investment basically represents the average propensity to consume for housing, and thus, it should be considered as an anticipated aggregate consumption for housing. This

accelerates with rise in income. One must realize that housing investment is, therefore, affected by the underlying pattern of household demand for housing. What the government must do is to moderate housing investment in a manner that is consistent with the national economic policy direction, e.g., policies such as economic stabilization and full employment. The government must be a moderator and facilitator rather than a regulator.

### 3. National Plan of Action

Korea has achieved remarkable economic growth over the past three decades. In the process of economic development in Korea, however, housing investment has been given with a low priority. We have learned that economic development by itself does not necessarily improve housing conditions for all because of inequitable income distribution. In other words, there should be a conscious effort in national policy to improve the quality of life commensurate with economic growth.

Korea still has pressing housing problems yet to be solved, the most serious one being shortage of housing in large cities especially for low-income households. In order to improve the housing conditions for the urban poor, the government is proposing two programs for the next five years: urban renewal and public rental housing construction.

#### 1) Urban Renewal

Realizing the seriousness of the situation, the Korean government set the improvement of the living quality as the primary objectives within the general welfare of the citizens, and attempts to upgrade and eliminate the substandard housing through the enactment of Urban



Renewal Act.

Residential renewal is, by definition, a planning strategy which forces a planned change in a portion of city's residential areas, where structures within them are obsolete due to the changes in the socio-economic fabric of the city's micro structure.

In earlier days, urban renewal was primarily concerned with the improvement in the physical quality of the neighborhood. In recent years, however, the concept has expanded to comprehend not only the physical aspects, but also the socio-economic elements such as employment, education, and health, thus evolving as a truly comprehensive community renewal.

The first urban residential renewal in Korea can be traced back to the early efforts to reconstruct and revitalize the city after the Korean War. The issue became acute during the sixties when illegal squatter problem drew heavy attention with the rapid progress of urbanization. Soaring land prices and inherent changes in the urban land use structures during the 1970s brought wider attention to the problem of squatter development.

Together with the concern about the squatter settlements, the urban renewal in the '70s also paid attention to the deterioration of regular housing stocks and nonconforming(unsuitable) uses in the residential areas. Once restricted narrowly to the improvement of housing quality, the urban renewal thus became a critical part of the general urban planning activities in Korea.

Various approaches have been taken since the '50s to alleviate the substandard housing problems; clearance and relocation, clearance and rebuilding on sites, on-site improvement, authorization of the property rights, etc. However, none have been successful in solving the core of the problem. Residents of the renewal districts are, in general, urban poor who are not able to bear the cost and consequently receive benefits through urban renewal programs unless there are substantial pecuniary supports from the

government or other public entities. On the contrary, the past urban renewal programs lessened the opportunity of getting affordable housing services for the urban poor, and consequently deteriorated vitalized their living conditions. Urban renewal programs are, therefore, often accused of on the ground that they worsen the situation for the urban poor rather than alleviating them.

More specifically, excessive burden on each household of the renewal cost severely restricts the possibility of receiving the benefits of renewal by the original residents. This is due to the transfer of most renewal costs to individual households in the absence adequate financial support from public bodies. Consequently the households not capable of bearing the financial burdens are inevitably forced to move out to other poor residential districts. From the residents' point of view, therefore, their housing level remains unchanged while the benefits of renewal projects are allowed to the newly arriving higher income households.

Second, despite the evident improvements in the housing service levels through the implementation of renewal projects, the range of housing choice available for low-income households is severely reduced by shrinking the inexpensive housing stock.

Third, the lack of interim housing arrangements during the implementation or renewal projects adds extra financial burden for each affected household and expedite the moving of the native residents.

Fourth, the abrupt relocation of the socio-economically, homogeneous neighborhood groups severely damages their social relations with each other and might lead into a undesirable social unrest.

There are approximately 160 redevelopment areas with 63,000 units in Korea. In order to improve the housing welfare of the low-income households, urban renewal is inevitable in the future. Through the amendment of Urban Renewal Act, affordable small-sized sales and



rental housing will be provided, and temporary shelter will also be provided before the demolition.

KNHC will evaluate the urban renewal projects with special emphasis on socio-economic changes and resettlements rate of the residents.

## 2. Provision of Low-Rent Public Rental Housing

Housing problems in Korea can be defined as housing shortage, housing price inflation, speculation and a short supply of residential land. Obviously, these problems are all closely interrelated; there is a short supply of housing resulting from that of residential land, which in turn causes speculators into housing market.

Housing price inflation has created intense conflict between the haves and the have-nots. The acute unfairness of income distribution has formed two new classes; those who have their own house and those who do not. Due to the rise of housing prices, those who own their houses now have a small fortune without making any effort. On the contrary, those who do not have their own houses have complained bitterly about the rapid rise of housing prices which makes it harder and harder to own one's own house. Another outcome for a housing price inflation was weakening housing affordability for a great number of people and increasing over-crowdness of dwelling, especially for low-income households.

During the 1970s, the government housing program emphasized the construction of small-sized owner-occupied dwelling, not necessarily for low-income families. The government, then, switched to rental housing programs, which are proposed to be an alternative to home ownership programs. Rental housing programs certainly helped low-income households improve the quality of their housing but the

number of rental units provided was not large enough to reach the majority of the target group.

Accordingly, the government, as mentioned in the previous chapter, launched Two Million Housing Construction Plan over a five year period of 1988-1992. In implementing the plan, the government took charge in providing 190,000 units of public rental housing for the lowest-income households.

Significant housing improvement, as described in Part III, have been made through the provision of public rental housing. The residents are very much satisfied with the present housing condition, especially with availability of such facilities as flush toilet, modern kitchen, and hot water. For example, the benefit is estimated approximately 239 thousand won per month in Seoul. However, there are two problems associated with public rental housing. One is continuity of public rental housing program and the other is equity problem.

In Korea, 50.6 percent of households are rental status in 1990. However, there is only 490 thousand units of public or publicly assisted rental housing or 5.4 percent of the total housing stock. In other words, most of the renters share a housing with home owners. In order to improve housing welfare and to reduce rental burden for the low-income households, Korea needs more public rental housing. Public rental housing stock should be expanded up to ten percent of the housing stock.

The second issue is equity problem. Limiting benefits to welfare recipients have raised equity questions among the displaced people who have been uprooted from their previous houses by urban development activities. In addition, there are many other low-income households who are not designated as welfare recipient.

In order to increase public rental housing stock and to resolve equity problems among the low-income households, the government initiated Type II public rental housing in 1994. A construction of 20



thousand units a year for the next five years are initially planned. As described in Table III-1 the difference between Type I and Type II public rental housing is size of the unit, rent level, and eligibility criteria.

**Table III-1 Comparison of Type I and Type II Public Rental Housing**

	Type I	Type II
Construction Body	Local Govn't KNHC	Local Govn't KNHC
Supply Plan	Completed in 1992	20thousand unit a year for the next 5 years
Dwelling Size	25-40m <sup>2</sup>	40-60m <sup>2</sup>
Financing	Govn't Contribution:85% Tenant Deposit:15%	NHF: 70% <sup>1)</sup> Tenant Deposit:30%
Rent Level	30% of market rent	'50% of market rent

1) NHF provides loan up to 70 percent of the construction cost at a annual rate of 3 percent

Through the provision of type II public rental housing, improvement of housing conditions of low-income households are expected. As for the monitoring and evaluation of type II public rental housing, KRIHS is responsible.