The Need for Multi-disciplinary Approach to Housing Policies: A Case of Korea

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1. Introduction

Housing is much more than shelter. It encompasses broader residential settings. People purchase housing in a bundle; they buy not only the dwelling unit, but the location, privacy, community facilities and neighborhood amenities (Smith, 1970). Provision of decent housing is the primary objective of housing policy in most countries. Structural soundness, personal safety, access to work and public places, playing space for children and clean surroundings represent only a few of the many elements for a decent home and neighborhood.

With housing being defined as such, scholarly works have focused on selected measures of neighborhood quality and their impacts on physical and mental health as well as residential mobility. Neighborhood-based community development efforts were emphasized when the U. S. Department of Housing and Urban Development (HUD) announced new community development framework in the early 1970's. Around this time new breeds of design professionals emerged, who collaborated with social scientists, psychologists, and planners for neighborhood improvement. Many studies found that community development efforts in the U. S. succeeded in revitalizing inner city neighborhood, both physically and culturally. One important lesson learned from the U. S. experiences is that the renovation and rehabilitation of housing stock alone would not work unless it was accompanied by neighborhood preservation efforts.

How about Korea? Housing issues have drawn as much attention in Korea as in the U. S. With household net income steadily rising people strongly demanded decent housing, and their pent-up demand pushed the home price up. The government, however, did not consider housing as a priority sector. Instead, most of the government resources were devoted to strengthen the export oriented industries. Accordingly, housing policy was geared to controlling housing demand on the one hand and to stabilizing the housing price and rent on the other. But policy

makers soon realized that such a policy only intensified the housing problems, being characterized as housing shortage, housing price spiral and inadequate provision of low income housing. Housing shortage problem was getting severe; home price soared and so did the rent which hardpressed the low and moderate income families. Inner city redevelopments activities resulted in relocation of the poor and the disadvantaged and in destruction of old neighborhoods. Housing speculation got out of hand, and it prevailed as long as people expected housing price to continuously rise.

Housing policy direction changed overnight when Two-Million Unit Housing Construction Plan of 1988-1992 was announced. The government served as a conduit in providing a large amount of serviced land and channeling housing funds. It also relaxed various regulations and removed some to allow for maximum production of multi-family apartment units, e. g. land use and density control, design standards, etc.

The massive housing production policy helped alleviating housing shortage and related problems to a great extent, but it did not pay much attention to neighborhood improvement. In fact many old neighborhoods were torn down in the name of redevelopment and reconstruction. Though physically deteriorated, most of them provided relatively sound residential environments to the poor and the rural-to-urban migrants. Also poorly considered in this policy were environmental factors. Natural environments such as vegetation, hillsides, and streams were totally cleared away to make room for large scale housing development.

This paper is intended to review Korean housing policies rather critically from the vantage point of housing quality and neighborhood improvement. Massive housing production scheme will be discussed as it helped improve overall housing quality. Also examined is the degree to which such a mass production contributed to housing quality improvement. Various housing indicators will be used to measure it. Nonetheless, there are many important housing issues to which the plan did not address itself. The paper will discuss them. The final section discusses the need for in-depth researches on residential environment and its influence in housing decision. The research areas will be identified and methodologies to approach the housing issues will be elaborated.

2. Housing Problems : A Summary

Up until the late 1980's the most serious housing problem in Korea was perceived as housing shortage, being defined as the number of dwelling units that must be constructed if every household were to be housed. The shortage problem was more serious in major metropolitan areas, notably in Seoul, where the increase in housing stock fell far short of the household increase due to continuing in-migration and decrease in household size.

The shortage had its roots in the wartime destruction of the existing housing stock and the north-to-south migration of over a million people during and after the Korean war. The large initial gap between housing units and households was further aggravated by the high population growth in the 1960s, rural-to-urban migration and changes in the family structure in the 1970s and 1980s.

Table 1. Population, Household, and Housing Unit Change : 1960 to 1995

	1960	1970	1980	1990
Whole Country				
Population	24,982	30,882	37,436	39,445
Households(A)	4,198	5,576	7,471	10,167
Housing Units(B)	3,464	4,360	5,318	7,160
B / A (%)	82.5	78.2	71.2	70.4
Urban Areas				
Population	6,995	12,709	21,434	29,137
Households(A)	1,209	2,377	4,362	7,604
Housing Units(B)	805	1,398	2,468	4,646
B / A (%)	66.5	58,8	56.6	61.1
Rural Areas				
Population	17,987	18,173	16,002	10,308
Households(A)	2,989	3,199	3,109	2,563
Housing Units(B)	2,659	2,962	2,850	2,514
B / A (%)	88.9	92.6	91.7	98.1

Sources : Census of Population and Households(each year), Bureau of Census.

The situation is illustrated in table 1. Between 1960 and 1990, the number of households increased by 5.9 million (or 242 percent), but there were only a net addition of 3.7 million housing units to the inventory or an increase of 207 percent. As a result, the housing shortage rate increased from 17.5 percent in 1960 to 29.6 percent in 1990. The geographic variation was large, however; in 1990, for example, the housing shortage in urban areas was 38.9 percent while it was only 1.9 percent in rural areas.

Housing shortage affected the housing tenure pattern. Korea had long been a country predominantly of home owners, as indicated in table 2. In 1970, 91.7 percent of the housing unit were owner occupied, whereas only 8.3 percent were of rental status. In the ensuing 20 years the ratio of home-ownership decreased substantially

to 78.9 percent in 1990. In 1990 less than three quaters of urban households owned their homes (73.6 percent), a sharp drop from 85.8 percent in 1960. But nine out of ten rural dwellings were owner-occupied in 1990.

Table 2. Changes in Home Ownership: 1960 to 1990

	1970		1980		1990	
	Number	Percent	Number	Percent	Number	Percent
Whole Country						
Total Units	4,360	100.0	5,318	100.0	7,160	100.0
Owner Occupied	3,996	91.7	4,621	86.9	5,653	78.9
Renter Occupied	364	8.3	697	13.1	1,507	21.1
Urban Areas						
Total Units	1,397	100.0	2,468	100.0	4,646	100.0
Owner Occupied	1,198	85.8	1,970	79.8	3,420	73.6
Renter Occupied	199	14.2	498	20.2	1,226	26.4
Rural Areas						
Total Units	2,961	100.0	2,850	100.0	2,514	100.0
Owner Occupied	2,797	94.5	2,650	92.9	2,233	88.8
Renter Occupied	164	5.5	200	7.1	281	11.2

Source : ibid

Housing shortage also resulted in overcrowding. The degree of overcrowding is measured either as a ratio of persons per room or per capita floor space. The

former is considered as a better indicator of function and privacy to determine over- and under-occupied dwellings. It is believed that the effect of overcrowding on mental health and family may be more severe than the effects of physically substandard conditions(Frieder and Solomon, 1977).

The table 3 below shows that living conditions gradually improved in the past three decades. Average persons per room decreased from 2.5 in 1960 to 1.5 in 1990; and per capita floor space increased from 6.6㎡ in 1980 to 13.9㎡ in 1990. For international comparison, the United Nations-recommended room occupancy density is 1.5 persons per room and per capita floor space is 13.2㎡. Korea narrowly passed the overcrowding test in 1990, but overcrowding problem still prevails among the low and moderate income households. It should also be noted that

Table 3. Average Persons Per Room and Per Capita Floor Space : 1960 to 1995

	1960	1970	1980	1990
Persons per Room				
Whole Country	2.5	2.3	2.0	1.5
Urban Areas	2.8	2.7	2.2	1.5
Rural Areas	2.4	2.1	1.7	1.5
Per Capita Floor Space (Unit : ㎡)				
Whole Country	NA	6.6	9.9	13.9
Urban Areas	NA	5.5	8.3	13.3
Rural Areas	NA	7.5	11.6	15.6

NA : Not available
Source : KRIHS

the improvement in room occupancy density and floor space was attributable primarily to the decrease in household size rather than the improvement in housing size *per se*.

Finally, housing shortage pushed the housing price and rent up. The housing price rose steadily throughout 1980's, and it almost peaked in 1990 as the table 4 below indicates.

Table 4. Changes in housing price and rent in Seoul : 87-92

(Unit : %)

	1987	1988	1989	1990	1991	1992
Nations a whole						
• price	△2.1	△9.0	△16.7	△24.2	▼2.2	▼5.4
• rent	△18.3	△7.4	△23.7	△16.1	△3.9	△7.8
Single family Unit						
• price	△1.1	△1.7	△14.8	△16.0	▼0.9	▼5.8
• rent	△15.4	△7.8	△20.1	△10.0	△3.2	△5.4
High rise apart						
• price	△4.7	△1.7	△18.8	△37.7	▼4.5	▼4.4
• rent	△24.3	△7.8	△29.5	△23.8	△4.7	△10.2

Source : KRIHS, Evaluation of Housing Policies and New Housing Policy Direction, 1994.

The rate of increase in rent was much higher, which hanpressed the tenants. The rent increased relatively high in 89-90 period at over 20 percent on an average, almost three times the rate of inflation. The nation's economy was pretty stable during this period of time.

3. Government Responses

3.1 Housing Policies Before 1988 : A Critical Review

Housing policies before 1988 were geared basically to two objectives; one, to arbitrarily reduce housing demand and the other, to keep the housing price down. Policy makers regarded excess demand as speculative demand and various measures were devised to discourage speculative motives. At the same time they attempted to keep the home prices and rents under control. Real estate transfer income tax was extensively employed to control speculative demand - for both remedial and preventive purposes. The tax measure was modified occasionally; tax rate was downwardly adjusted when the real estate market was in recess, and upwardly adjusted when it was overheated.

The government introduced "bond-bidding" system in 1983 as a device to discourage speculative motives in housing purchase and to "tax away" a large portion of windfall gains from both real and potential speculators. A home

purchaser had to participate in the competitive bidding process when purchasing a newly built condominium unit. The highest bidder won the unit and was obligated to purchase government bonds (the type II bonds) in an amount as pledged in the bid before the sale was officially executed.

Some measures were administrative in nature. For example, the government modified the regulations on apartment sale to disqualify some people from apartment purchase. At the same time, the Office of National Tax Adminstration occasionally investigated "professional speculators" for tax evasions and announced in public their names and "wrong doings."

The other important measure was the sale price ceiling system. It was basically designed to control the sale price of the newly built condominium unit and thus, to stabilize housing price. Home builders could not set the sale price on their own. They had to abide by the price as "uniformly" set forth by the government. This scheme was initiated in 1983 as a temporary device to put a lid on "escalating" sale price of newly constructed apartment unit. No attempt was made, however, on the part of the government to do away with the measure until very recently, although it was recognized that such a device had adverse effects on the housing market.

Thus far, some of the key policy measures have been highlighted. Evidently, some of them were adversely affecting the housing market, thus, leading eventually to "market failure." The anti-speculation measures were basically intended to discourage "speculative minds," but there was little evidence that they had been effective in controlling speculative behavior. Some worked, but only temporarily, and none of them provided permanent solution. Besides, most of the anti-speculation measures cost the government a lot of tax money to enforce. Furthermore, since almost all of them were taken remedially, i. e., after the facts, those who had made speculative profits already left the market, and thus, the preventive functions of them were in doubt. Instead these measures reduced land supply, thus, raising housing price in the long run. For example, the strengthening of the real estate transfer income tax was often accompanied by "lock-in effects," and therefore, it substantially reduced the supply of residential land.

Government interventions of this nature distorted the housing demand structure. Housing demand was less sensitive to the changes in market price and in income as evidenced by a number of economic studies. Instead, the demand turned out to be

more responsive to the changes in capital gain(or user cost), i. e., the difference between the purchase price and the price at which the unit was sold, being discounted at the curb market interest rate.[1] Therefore, government policies seemed to be partly responsible for change in housing demand behavior in a way that housing was viewed more as an investment asset than as a consumption good.

In conclusion, the government intervention with the housing market was largely responsible for market distortion. Policy failure eventually led to market failure, thus, aggravating the housing problems.

3.2 Housing Policies of 1988-1992

Government officials now realized that a permanent, and in fact, the most feasible, solution would be to expand housing production in a massive scale, and such an attempt was materialized by the Two Million Unit Housing Construction Plan of 1988 - 1992. The plan was actively implemented when Roh Tae Woo inaugurated as a new president in 1988.

For massive housing production the government had to zero in on three things ; large supply of residential land, expansion of housing credit, and removal of various regulations restricting residential developments. In order to supply residential land it revised the National Land Use and Management Law and rezoned a large amount of "green space" into residential land. And public developers, e.g. KLDC, KNHC, and municipalities, were authorized to purchase them cheaply and to make improvements thereupon. The serviced lands were then sold to home builders at the market equivalent prices.

Equally important was the large supply of housing funds. Fund supply quadrupled in less than four years from 1.3 trillion won in 1987 to 5.32 trillion won in 1990. Over a half of the funds were publicly mobilized and put into the National Housing Fund (NHF). The other half were privately mobilized primarily through the Korea Housing Bank (KHB) and other financial institutions.

Another important factor that contributed to the mass production was relaxation of land use regulations. Density control was substantially eased to allow for more intensive residential development. Deregulation of land use control was followed by relaxation of design standards. Land use conversion was also made

1) For further discussion, see Kim J.(1987)

easier for housing development. Also revised were the city planning law and urban redevelopment law, both of which allowed residents and developers to demolish deteriorated residential structures in order to build high rise apartment complex. This practice was called "reconstruction," being differentiated from "redevelopment or renewal."[2] The primary intent of these measures was obviously to build as many housing units as possible, given the limited amount of residential land in inner city areas, but they also brought about disorderly developments in downtown areas where land was very costly. Worse yet was housing deprivation of low income households, many of whom were rural-to-urban migrants and settled in downtown area.

The plan was very successful in promoting housing construction in a massive scale. As shown in table 6 below, the first year saw new construction of 317,000 dwelling units (based on building permits), but from the second year on, the number of residential building permits issued accelerated and reached maximum of 750,000 units in 1990. Accordingly the two million unit construction target was achieved one year ahead of the schedule. The year of 1992 issued over 600,000 units of building permits, implying that over 2.77 million units were supplied for the entire five-year planning period, approximately 35 percent more than initially targeted two million units. Over-achievement was observed on the basis of housing completion as well. The number of housing completions doubled within a two-year period from 287,000 units in 1988 to 572,000 in 1990. The figure was quite remarkable, given the fact that the total number of housing units produced up until 1987 averaged less than 240,000 units a year. Note that the housing completion peaked as 695,000 units in 1992.

Table 6. Numerical Achievements

(Unit: 1,000, percent)

	88	89	90	91	92	88-91	88-92
Permit Based							
Total	317	462	750	648	600	2,177	2,777
- Public	115	161	270	220	250	766	1,016
- Private	202	301	480	428	350	1,411	1,761
Completion Based Total	287	353	572	695	631	191	2,538

. Source : MOC, and EPB

2) The former project is undertaken at the initiative of neighborhood association, members of which must unanimously approve the reconstruction plan. The latter project is initiated by the local government as it officially designates the area and establishes a redevelopment plan.

Expansion of housing stock obviously helped raise the housing supply ratio. The ratio reached 79.1% percent by the end of 1994, up almost by 10 percent from 69 percent in 1987. It also helped stabilize home price and rent. In fact the percentage increase in home price gradually declined at a rate of 0.3 to 1 percentage point per month since May 1991 according to a monthly housing market survey conducted by the Korea Housing Bank. The same survey found rent falling between 0.7 percent and 1.6 percent over the same period. Further declines in both home prices and rent were recorded in ensuing years.

Such a quantitative achievement notwithstanding, the plan was subject to many criticism, First of all it was not implemented in close coordination with the national economic policy. Secondly, spatial elements were totally missing in the plan. In other words the plan was not spatially integrated although it would change the spatial configuration once implemented.

The country invested a large share of its valuable resources into housing during this period. For example, in 1990 somewhere near the peak of the housing construction cycle, gross housing investment represented 21 percent of the total fixed capital investment and contributed 8.4 percent to the nation's GDP, far above the desirable level of 6 to 6.5 percent. The ratio rose as high as 9.7 percent in 1991.

The commutative effects of housing investment on national economy were enormous indeed. Also excessive investment in housing were hard pressing various input markets ; land, capital, construction material and labor market in particular. The average wage of construction workers rose by 34.4 percent annually during the 1989-1992 period. The prices of construction materials also soared during the same period. It is very clear that the housing sector was overly invested to the extent that it almost jeopardized the normal operation of the national economy.

Another issue was inadequate policy attention to residential environment. Interior space became more spacious and better facilitated with modernized furnitures and appliances, but the environment that surrounded the residential structures remained unimproved. The importance of neighborhood concept in building new residential community was little appreciated.

What the plan aimed at was to produce as many units as possible by means of successive replication. Environmental as well as socio-cultural aspects of housing were totally ignored. Only the better-off could take them into account,

but the prices that they had to pay for them were very high indeed.

4. Housing Quality Improvement and Housing Satisfaction

4.1 Some Measures of Housing Quality [3)]

Mass production, nonetheless, helped raise housing quality standards. Various indicators were used to assess the degree to which overall housing qualities improved. A nation-wide survey was conducted in 1992 for the evaluation study. Much of the discussion to follow is based on the sample drawn from the city of Seoul.

The one-room occupying households accounted for 21.5 percent of the total households for the country as a whole, but this was an improvement, given the fact that they represented almost 31 percent in 1980. Most of them lived in large cities; for example, the figure for the cities of Seoul and Pusan is 26.6 percent and 26.2 percent, respectively. The floor area per person measured the adequacy of housing space consumption. A low value was indicative of overcrowding due partly to housing shortage. The measure averaged about 15.2 square meters for the country as a whole, but it declined substantially to 12 square meters in large cities. The figure was relatively low as compared to other countries. The United Nations suggested it to be a minimum of 15 square meters. The median space occupied per person was 18.2 square meters, ranging from 3.7 to 68.7 square meters for the sample cities throughout the world. The figure for the city of Seoul was somewhat skewed toward the bottom 30 to 40 percent with a median of 13 square meters, almost twice as large as that of Hong Kong (7.1 square meters). The upper twenty percentile of households consumed much larger space, almost three times the median figure, whereas the bottom twenty percent consumed less than one half of the median.

An alternative measure of crowding was the number of persons per room, i.e. the

3) Housing quality indicators include measures of housing density, i.e. crowding, physical quality and durability, amenities, and accessibility. Housing crowding was in turn measured by the percentage proportion of one room households and net floor area per person in square meters. The physical quality of a housing unit was measured in terms of its durability and the degree of physical deterioration. Amenity levels were examined in various aspects as well: the percentage ratio of households using kitchen exclusively, of using modern kitchen facilities, of flush toilets, of hot water running, and types of heating. Finally, accessibility measures included the commuting time taken to and from the office, access to markets, hospitals, bus/transit depot, subway station, parks and recreation facilities.

inverse of the floor area per person. The number of persons per room of Seoul was 1.48, which was rather high as compared to 70 in cities of advanced countries. This means that many households were in fact doubling up in Seoul.

The proportion of the old housing units was growing; the percentage share of the units of 30 years or older was 36.5 percent of the total stock. About 47 percent of them were single family units whereas only 1 percent of the apartments was in this category. Almost 70 percent of the homes being built in recent years were apartment complexes.

Noticeable improvements were made with respect to housing amenities according to a recent survey. Over 94 percent of the households exclusively used kitchen facility and about 68.5 percent of the households throughout the country enjoyed modernized kitchen. And the figure for the city was much higher, ranging from 62 percent to 78 percent with a mean of 70.5 percent. Also 70.6 percent of households used flush toilets for the country as a whole while that for the city of Seoul went as high as 80.6 percent, about 45 percentage point increase within a ten year period. And 58.4 percent of households throughout the country enjoyed hot water running while that for the homeowners and renters living in the city of Seoul was 91.9 percent and 80.3 percent, respectively. The number of households who enjoyed central heating system increased substantially. For example, about 27.6 percent of homeowners and 20 percent of renters lived in homes being equipped with centralized heating system.

Finally, the issue of accessibility was extensively discussed by the public at large especially when the five new towns were developed. Clearly, accessibility was getting worse and there was little hope to improve it at least for the foreseeable future unless massive investment was made into the mass transit facility construction. However, the access problem was not limited to large cities: it was as much serious in small and medium cities as well. According to a survey by KRIHS, normally an average commuter spent 75 minutes for a round trip to workplace in Seoul. Commuters in small and medium cities were expected to spend 61 minutes for daily commuting. Some variations were observed in commuting time among cities, depending on the location of each and availability of transit system. It varied from a low of 48 minutes (Kumi and Ulsan, both industrial cities) to a high of 78 minutes (Inchun, Kuri, and Buchun, all satellite cities surrounding Seoul).

The same survey indicated that access to various public facilities posed little problem. For example, over 90 percent of the households being surveyed spent less than 20 minutes on foot to reach department stores, super markets, banks, schools, bus stops or subway stations, and parks and recreation centers. And there was very little variation in time spent on these facilities among different income groups.

4.2 Measures of Housing Satisfaction

Three sets of measures were used to assess housing attitudes of the households. The first set measured the degree to which households were satisfied with physical features of dwelling units, interior facilities, the other persons living together (co-habitants), and neighborhood environment as a whole. The second set measured household attitude toward housing tenure and tenure choice. Tenure choice questions were addressed to those households who planed to move within the next two years. Also asked were the question of prioritizing housing attributes when both tenure choice and moving decisions were made.

The overall satisfaction level was 3.8 on Likert scale of 1 (least satisfied) to 7 (most satisfied) when the 1991 survey data were analyzed. It was an improvement as compared to 3.2 on the same scale according to an analysis based on the 1988 survey data for the households in the same cities. Least satisfied were the housing size and residential neighborhood conditions (below 3 on the scale of 7), whereas relatively more satisfied were various interior facilities, e.g. kitchen, toilets, heating, etc., and access to various public places (above 4 on the same scale). Home owning households living in apartment complexes were more likely to be satisfied with their current residence. Rental households who sublet a room or two of single family units were least satisfied with their accommodations. The table below defines the current accommodation levels for both the satisfied and dissatisfied household groups. Note that there exists a significant difference in the amenity level between the two groups.

Table 7. Current Accommodation Levels: Satisfied vs. Dissatisfied Groups

	1988		1991	
	Satisfied	Dissatisfied	Satisfied	Dissatisfied
net floor are (sq. mtr)	65.0	38.6	100.1	42.6
number of rooms	2.7	1.9	2.4	1.8
number of persons	4.0	4.1	3.7	3.8
net area per person	16.2	9.6	27.0	11.2

Source : An Assesment of Korean Housing Policy and Future Housing Policy Direction, the Ministry of Construction, 1994.

Households preferred homeownership and if they could afford to own one, a majority of them wanted to purchase an apartment/ condominium of 25.7 peong in net floor space (equivalent to 84.81 square meters). The potential home buyers, however, must have lowered their expectation and compromised with smaller unit for the time being. But they were not satisfied with the units they purchased and thus, planed to move sooner when financially ready for new and more spacious homes. About one out of three families moved each year among the home owners in Seoul Metropolitan Area and most of them were upwardly mobile. Only about 10 percent of the households surveyed would move in five years whereas 48.5 percent would move within two to five years.

According the KRIHS survey, those households who planed to move within the next two years tended to consider such factors as residential location, housing size and dwelling type in the order of priority when they would purchase homes. The higher income households tended to put residential location above all other factors while the low income households considered housing size as much as dwelling type.

5. Some Caveats

The survey findings strongly suggested that households were consistently dissatisfied with their neighborhoods. Least satisfied were the low and moderate income households.

Then the question is why? Reasons may vary with socio-economic backgrounds of residents as much as physical features of a particular neighborhood. However,

from the standpoint of government policy and program there may be four plausible causes which led to household dissatisfaction with neighborhood. They are : filtering hypothesis, destruction of old neighborhoods for redevelopment and reconstruction, mass construction of high rise apartment, and absence of conservation/preservation efforts at community level.

5.1 Filtering hypothesis and low income housing problem

The massive housing construction plan assumed that low and moderate income households would benefit from massive production via filtering process. New housing is provided for those who can afford it and older housing is passed along successively to other households who want to make housing improvement incrementally. But the process might have had opposite effects ; for those middle and upper income families who could occupy new housing, it in most respects improved the residential environment. However, for low and moderate income families living in concentrated, poverty neighborhood, the trickle down process probably worsened the housing situation. Over one third of the households could not enter the owner-occupied housing market and so had to remain as renters, but a large number of rental properties were destroyed and replaced by high rise, owner-occupied, middle income condominiums. Both redevelopment and reconstruction programs intensified low income housing problem as they destroyed old neighborhoods.

The government decided to build "permanent rental housing" in order to accommodate the most disadvantaged low income families. A total of 190 thousand units of permanent rental housing units were constructed with over 3.5 trillion won of tax monies.

Most of them were very small in size and built in high-rise, reinforced concrete form at the periphery of large cities. They were highly concentrated in a few low income housing estates. The size of low income household tends to be larger than that of an average household. Then, the public housing unit was too small for them. Low income households got used to low rise and open neighborhoods in downtown location. But the new residential setting was located too far from downtown area, and relatively closed and high-rise. The residential environment might make them feel rather intimidating and in that setting sense of community was completely lost, which they used to appreciate before moving to new

residence. Furthermore, access problem was as critical as the environmental setting. There was no way for them to rebuild the kind of neighborhood that they had before. In fact some studies found that a large majority of the original occupants had left the public housing.

5.2 Redevelopment and reconstruction

Redevelopment and reconstruction activities are necessary for more efficient land uses in inner city areas. But they intensified low and moderate income housing problem because they destroyed old neighborhoods. The old neighborhoods provided low and moderate income households not only with affordable shelter, but with local cultures and areas of trust and exchange of various information. Jane Jacobs correctly observed way back in the 60's that "in destroying old urban neighborhoods and replacing them with new, but sterile housing program - mostly high rise apartments - planners are destroying all the mechanisms that allow people to take responsibility for one another in the city ; rather than heal the ills of the inner city, large project developments often intensify them."

Clearly decaying urban neighborhoods must be reconstructed, but in doing so, one should pay more attention to possibilities for the continuation and rebirth of neighborhood cultures. For the rural-to-urban migrant families to large cities, the experiences of coming to a new culture and creating new communities always left indelible marks on their personalities. When a neighborhood is torn down to make room for middle class housing, the displaced people would suffer from mental stress. There are a number of studies in the U. S. which focused on the relationship between community and personality formation, but such studies are rare in Korea. Housing scholars must exert more efforts for neighborhood or community based housing studies.

5.3 High-rise living

High rise housing projects drew considerable attention in the U. S. and Great Britain. High rise apartment are often the connotate with public housing and high density living. Many studies focused on impact of high-rise housing on the lives of its residents, and general conclusion is that high-rise housing does not suit families with younger children. A Canadian study(Gillis, 1977) found that for women in families with children, the higher their residence, the greater

their experience of psychological strain. Newman in his book "Defensible Space" stresses the vulnerability of high rise apartment buildings to criminal assault.(1973, 193) He suggests reinforcement of architectural arrangements and the practice of cooperative human surveillance.

The British government once stopped subsidizing flats over six stories high in the 1960's because they were crime prone. In the U. S. public housing was built on high-rise structures. High density accompanied high-rise housing, and some studies pointed out that high density strongly correlated with mental illness and psychological stress. But other study (Baldassare, 1978) finds no consistent relationship between density and mental or psychological health. It suggests that people learn to organize their space and other resources under high density living while minimizing intereference and conflict.

Koreans are very much used to high-rise housing. It has been argued that in a densely populated country like Korea the only way to provide sufficiently large amount of housing is to build high density, high rise structures. In fact over 70 percent of dwelling units being built 1988-1992 were high rise buildings and the figure was over 90% in new towns. A few studies were carried out to assess high rise living and found that those who live in high rise apartments are consistently more satisfied with their dwellings than those who live in low-rise apartments and single family units. The crime rate is much lower in high rise apartment neighborhood than in another type of neighborhoods. But very few academic researches have been carried out on the impact of high rise dwelling on mental and psychological health.

Whether in the designs of Two Million-Housing Plan or in new housing provision thereafter, the spatio-functional aspects of neighborhood planning were directed only to achieve intended number of apartments. In the process the focus on achieving socially cohesive, culturally vibrant housing, where communities could have retained their lost identity was missing.

In a high-rise high density development there is no scope for private open space some times resulting in cross-ventilation and circulation problems. Studies in the West proved that similar densities with in the same area could be achived through a properly designed layout containing low-rise high density with public open spaces and semi-public private open spaces. Such a hierarchically planned public, semi-public and private open spaces would have gone in along way

enhancing the community's overall productivity both outarelly and socially.

The high-rise high-density development was as such commercial in nature to maximize the floor area. In the process per capita space allotted for community activities or for public utilities was often kept to bare minimum leading to the overcrowding of the facilities, ultimately discouraging the community interaction.

The scope in the design of a dwelling for either horizontal or vertical expansion through incremental housing coinciding with change in households family size and economic circumstances is totally missing. Such a design provision would enhance the cultural, social and psychological developments of the households.

It should be noted that the preference structure gradually changes. The rich and the upper middle income group prefer low rise, spacious setting e. g. 3-4 story townhouse or villa to a high rise apartment. Neighborhood counts highly when they search for new homes. The ideal type of neighborhood they prefer is characterized as being moderately scaled, homeogenous, crime-free, easily accessible to employment location and public facilities, and widely open to natural environment. In other words they want high quality neighborhood as much as spacious interior space. The demand for high-rise apartments will rapidly decline as household income rises and people's perception changes toward valuing open space, natural settings, neighborhoods and sense of community.

5.4 Absens of Housing Conservation and Neighborhood Preservation Efforts

As pointed out, housing the inner city poor was difficult task indeed. Residential redevelopment and reconstruction activities were actively promoted during the period of 1988-1992. Relevant laws and regulations were relaxed to allow private developers to easily pursue home building business in both redevelopment and reconstruction area. Residential redevelopment takes place under the city planning law and therefore, it takes into account necessary urban facilities and infrastructures. Furthermore, developers are mandated to present a concrete plan to deal with the housing problems of the relocatees. But the reconstruction activities are managed under the Housing Construction Promotion Law which often disregards housing welfare of the displaced and also installation of urban infrastructure facilities. Basic intent of the law is simple : build

maximum amount of apartment units.

Most of the reconstruction projects were undertaken in decaying neighborhoods and resulted in displacing a large number of low income tenents. Both homeowners and landowners wanted to have their properties rebuilt through outside source of funding. The poor tenents had to leave the neighborhood and settle somewhere, but they could hardly find one nearby, because even the relatively sound neighborhoods were destroyed with a profit motive.

In early days most of the reconstruction projects were undertaken in decaying neighborhoods, but more recently reconstruction activities have taken place even in old, but sound low-rise apartment districts. Both homeowners and landowners want their properties rebuilt more densely through outside financing. The developers share the profit with them, which comes from high density, high-rise apartment development. If reconstruction businesses are allowed continuously, it is most likely that most of the old neighborhoods will be destroyed and replaced by high-rise, high density apartment. And even more serious is the absolute reduction of low and moderate income housing units. The displaced tenants and even the low income homeowners can't easily locate another accommodations nearby.

Witnessing that even the relatively sound neighborhoods were destroyed with a profit motive and also that low and moderate income households suffered from shortage of affordable housing the government enacted a special law on Housing Environment Improvement Profits in 1990. The basic intent of the law was to conserve comparatively sound housing and to preserve viable neighborhoods. Government set aside some funds to support community based conservation efforts. Low cost loans were provided for housing rehabilitation and remodeling. Some of the run-down structures were allowed to be torn down and rebuilt. Local government helped upgrading infrastructure facilities.

The neighborhood preservation effort was modeled after the U. S. community development framework. It was considered as a better alternative to reconstruction or redevelopment. But community based improvement effort turned out to be rather a failure. The reason is simple ; there is no incentive for the homeowners and land owners to actively participate in the cause. As profit motives are not there, they opt for reconstruction.

6. Concluding Remarks

This paper has briefly reviewed Korean housing policies and found that they have been simple and straitforward in a sense that policies before 1988 were characterized as absolute control over the market and those after 1989, as full support on mass production. Housing policies were formulated as a part of macro economic policy and thus, most of the policy instruments were economic in nature, e. g. taxation, financing, subsidies, etc.

The country succeeded in mass production and most Koreans are better housed, but that dose not necessarily mean that they are satisfied with residential setting. Some problems became more intensified, including inadequate provision of low and moderate income housing, destruction of traditional neighborhoods and degradation of residential environment. These problems demanded as much policy attention as housing shortage itself.

Why then have these problems not been simultaneously dealt with in the first place? Government officials were responsible who spearheaded mass production strategy all along. Equally responsible were housing scholars who should have strongly advocated the need for a comprehensive approach to the multi-facet, complex housing problems. Numerous studies were performed but most of them were economic theory oriented and directed to supporting massive housing supply. Other discipline oriented housing studies were also conducted, but they were not so powerfully influencing the housing policy decisions. Some studies adhered to a particular group, e. g. the elderly. the poor or the highly mobile. More recently elderly housing drew some scholarly attention.

Abundance of housing studies notwithstanding, neighborhood/ community related housing studies were rare. There were some, but they were largely concerned with those who were dislocated by redevelopment projects. Only a handful of studies seem to focus on the impacts of neighborhood on individuals and families with a particular respect to social cohesion, identity, crime, as well as psychological stress, mental illness and any other disease. Many studies in the western world clearly pointed out that housing environment affects human behavior; productivity, family relationship, social interaction, and change in value system. But very little academic effort seems to be devoted to test this hypothesis in Korea.

Neighborhood was never considered as a subject that requires in-depth study from various disciplines - sociology, anthropology, political science, and behavioral science. Neighborhood change is dynamic phenomenon, being affected by the people, physical structure and interaction between the two. Neighborhood declines, improves or maintains steady state, depending on how and what it is made of. In order to diagnose current state of a neighborhood, one must study physical as well as socio-cultural aspects. Socio-cultural aspects of housing have rarely been analyzed. And thus, they have been totally ignored in housing policy decision.

Time has come now to approach the housing issues in multi-disciplinary manner. The study results so approached will be more convincing and thus, carry a lot of weight in housing policy decision making process.

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Biography

Dr. Jeong-ho Kim is considered as one of the leading experts on Korean housing policies. Prior to joining the Korea Research Institute for Human Settlements(KRIHS), he worked for the cities of San Francisco and Oakland in the U.S. both as a practicing planner and as a community development program coordinator. Currently he is heading the Center for Housing and Urban Studies at KRIHS. Since early 1980's he has conducted numerous housing and urban research projects on such items as housing market analysis, housing finance, housing industry, macroeconomic impacts of housing business cycle, residential mobility, housing indicators, etc.

He has served various government agencies: some of the key positions included serving as an advisor to the Economic Planning Board, the Prime Minister's Office, and the Ministry of Construction and Transportation as well as for the city governments of Seoul and Pusan. he has also been consultant to such housing related institutions as the Korea National Housing Corporation, the Korea Land Corporation, the Korea Housing and Commercial Bank, the Korea Housing Finance Corporation, the Korea Home Builders' Association, etc. He Worked closely with the World Bank and ADB on their missions.

Dr. Kim received BA in political science and Master of City Planning(MCP), both from the university of California, Berkeley and Ph.D. in urban planning and policy analysis from the University of Michigan, Ann Arbor. He has many publications; books, monographs, articles, working papers as well as research reports. He taught at some of the leading universities in Seoul and supervised a large number of graduate students leading to masters and Ph.D. degrees.