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KRIHS seeks to improve knowledge and understanding of the conditions and problems of the nation's resources and their interaction with people, to assist the government in formulating longrange development plans and make policy recommendations on related matters, to collaborate with international research community in solving theoretical and practical problems concerning human settlement issues and planning, and to provide research expertise and consulting services as well as training programs for foreign government and institutions.

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### SPACE and ENVIRONMENT

# Spatial Reorganization of the Seoul Metropolitan

espite considerable efforts to control growth in the Seoul metropolitan region, the capital has experienced steady increases in population and industry. In the last 30 years, the capital region has accounted for almost 80 percent of total population growth and 50 percent of growth in manufacturing employment.

Such over-concentration has not only exacerbated the imbalance between the capital and other regions, but also results in serious urban problems for Seoul and its environs. These problems include a shortage of housing, traffic congestion, air and water pollution, and a lack of amenities.

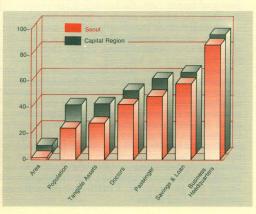
To solve these problems, Dr. Lee Jeong-sik and Dr. Kim Yong-woong of KRIHS have proposed a long-term development and management strategy of restructuring regional spatial organization of the population and the

manufacturing and service sectors. The primary focus of their study is the relocation of white-collar industries within the metropolitan area and restructuring the region-wide transportation network.

The study proposes a grid-iron model instead of the current concentric-radial pattern to facilitate the dispersal of

population and economic activities throughout the region. In the regional land-use system, major arterial roads and railways are to be readjusted in conformity with the grid-iron pattern of spatial organization. Traditional manufacturing centers are recommended to be relocated along the newly formed west coastal development axis of the nation, stretching from Inchon to the Asan Industrial Complex, while high-technology industries are urged to locate along the east-west axis in the southern part of the region.

The study also suggests a regional network of water supply and environmental management to ensure clean water, air, and green space. Moreover, it suggests ways in which the competitiveness of manufacturing and service industries can be strengthened in the region of the coming era of globalization.



#### The Third National Land **Development Plan Approved**

#### Foundation for the Construction of a "New Korea" in the Year 2000

he Third Comprehensive National Land Development Plan, which was prepared by the KRIHS, was officially approved and promulgated by the Korean government. The basic goal of the National Land Development scheme is, first, harmonious development of the capital and provincial regions, both urban and rural areas, and placing the development of provincial regions under the administrative purview of a single central authority. Second, measures will be taken to enhance global competitiveness through efficient allocation of human and natural resources, with development strategies tailored to the unique circumstances of individual regions for the optimum productive and resource-efficient use of national land. Third, the plan seeks to improve social welfare and protect the environment and, fourth, it outlines preparations for

potential changes following national reunification.

The KRIHS organized a planning committee of 70 researchers in January 1991 to lay the groundwork for the Third Comprehensive National Land Development Plan. A total of 110 experts from the public sector also formed an advisory committee. Related government agencies, including the Ministry of Construction, assisted the KRIHS in its research. Over 22 advisory meetings and several public hearings were held, and more than 90 separate agencies, both public and private, studied the plan and offered their input and opinions. The plan, thus prepared, officially came into force by presidential decree. Four types of booklets were published, including the basic plan itself, an English version, commentary on the plan, and various ministerial reports.

#### Study Completed for New **Towns Development Plan**

ur four-year study on the development of five new towns has recently been completed. During a single six-month period from late 1988 to early 1989, apartment prices in Kangnam district in Seoul rose 30-50%, a trend which seemed national in scope. Such phenomenon was diagnosed as the direct result of an acute housing shortage and the only solution to root out explosive housing prices was to dramatically increase the housing supply. There existed, however, a major difficulty in acquiring housing lots in the capital region due to exorbitant land prices combined with the general unavailability of land suitable for housing development. Therefore, the adequate supply of housing lots was a precondition to meeting growing housing demands, which eventually led to the idea of developing five new "satellite" towns, located 15-25 km from Seoul.

Pundang, with its existing telecommunications capabilities, was selected to serve as the center for service and financial industries. Ilsan, with its abundant land resources, was designated for the construction of a convention center, also serving as the center of broadcasting and publishing companies. Construction of highways and subways linking Seoul and the satellite cities was also deemed essential to their integration with the capital and surrounding regions. These development plans were finalized with close collaboration and consultation among the government, KRIHS and the selfautonomous local bodies.



The new town development projects were undertaken jointly by the public and private sectors. The public sector agencies prepared a development plan, acquired the necessary land, and built necessary infrastructure facilities. Then, housing lots were sold to private-sector construction companies for the building of apartments, shopping centers, office buildings, hotels, and other ancillary facilities.

Using funds from the private sector, the government was able to meet its development goals by adopting a two-tier pricing structure The land price for public-sector housing for low-income people was substantially lower than the price of the land sold to the private sector for large-sized apartments and other facilities.

The five new towns will supply 300,000 homes for 1.2 million people by 1993.

## Forecasting of Construction Activities

he impact of the construction industry on the national economy has grown precipitously, especially after 1990 when the construction of two-million-unit housing project commenced. The KRIHS publishes the Quarterly Construction Economic Review, and our short- and mid-term construction investment forecast is as follows: Investment in the construction sector will rise annually by 5-6%, reaching about 48-50 trillion won through 2001, based on 1985 constant prices. This is roughly 1.67 times the total investments made in 1992. We also predict that, in 1993, the construction industry will begin recovery with an expected growth of 3.7%, lower than the forecast 7% growth in the gross national product. (Kim, Jae Young)

#### Promotion Plan for Long-Term Rental Apartments

We tried to establish in this study specific ways to increase the supply of rental dwellings based on the results of recent surveys and research.

We made the following suggestions: First, creation of a rental system based on the lifespan of the building and expanded financial support, while simplifying regulations. Second, dwellings under 60 square meters in size should receive low interest housing loans from the National Housing Fund, as well as tax incentives. Third, landusage laws should be revised to allow construction of rental housing in large metropolitan areas. Fourth, rents should be standard-

### Two-Million-Unit Housing Construction Plan

The government's plan to construct two million housing units between 1988 and 1992 was accomplished one year in advance. This plan was ordered by the President of Korea himself, and the KRIHS worked closely with the Ministry of Construction on formulating the plan. The KRIHS also participated in the post-plan.

The primary policy goal of the government plan was to ease the housing shortage problem through a dramatic increase in the housing supply. Other objectives were to stabilize housing prices through controlling speculative demand for housing, as well as to provide housing

for low-income families.

To realize that goal, the government took several measures. The first was to develop sufficient land for housing construction; second, to promote housing construction and to lower the financial burden of the end-user by substantially expanding government financial assistance, including the use of public sector funds; third, the government reformed relevant administrative and other regulations to induce increased participation of the private sector; fourth, special incentives in land, loans, and taxes for the construction of the low-income homes were extended; and lastly, equal opportunities were given to the general public in buying homes built with the government assistance and sold at below market prices.

Due to such aggressive support from the government a total of 2.21 million housing units were constructed, by the end of 1992, resulting in a housing supply ratio (ratio of number of housing units to number of households) of 74.2% in 1992, up from 69.2% in 1987. Housing prices, which peaked in 1990, also started to decline significantly in 1992. The net effect of the two-million-unit housing project is the decline in market prices of housing by as much as 20%. As a result of housing price stability and decline in speculative demand for houses, we expect housing prices to continue on a downward trend. More importantly, the successful completion of the two million housing units helps build a foundation for low-income families to rent government-built housing units for life; it signifies a major shift in government policy toward the creation of a more social welfare-oriented nation. (Kim, Jeong Ho)

ized by revising laws relating to rental amount. Lastly, the supply of rental units should be increased through new land development policies.

The following are key approaches to foster the rental housing industry: First, encourage the participation of cash-rich large corporations and insurance companies with adequate long-term capital in promoting enterprises with apartment renting as their main business. Second, reduce the threshold for rental business from the current 20 units to 5-10 units so that small rental enterprises managed by small businessmen or retirees can be promoted. Third, allow trans-

actions between a tenant and owner in case the latter has difficulty in continuing his rental business. Fourth, encourage the participation of those who own multiple dwellings for rental purpose and are involved in rental business outside the legal framework the system by requiring them to register their business with the government or appropriate agencies. And lastly, the tenants must receive full tenure security, annual rental increase should be based on a sliding scale, and rental deposits made by tenants should receive full legal protection. (Ko, Chul)

#### Joint Research Project for Regional **Development in Northeast China**

joint research project is now being undertaken for the development of the northeastern region of China. The project involves the Korea Research Institute for Human Settlements, the East-West Center of the United States and the Science and Technology Commission of China. Research is aimed at assessing the feasibility of different development strategies and identifying measures to effectively implement the preferred development strategies for China's northeastern region.

The project is expected to provide general guidelines for regional development in relation to industrial and transportation development projects. Researchers from KRIHS provide their expertise in regional planning, transportation planning and in industrial development planning, acquired through consecutive economic and spatial plans over the past 30 years. The project, which is scheduled to be finished in 1993, will provide useful information and guidelines for policy-making in China, especially concerning China's northeastern provinces, as well as for the neighboring countries of South and North Korea, Japan, and Russia.

The KRIHS has recently completed another collaborative research project, Regional Development in the Yellow Sea Rimlands, with China's Asia-Pacific Institute and the East-West Center. These joint research efforts are expected to lay the foundation for future research on regional cooperation among the countries in Northeast Asia, which is emerging as an important part of the Western Pacific

economy.

#### **NEWS AND NOTES**

The First Korea-Japan **National Land Use Planning** Meeting was held in Seoul January 12-16, 1993. The Korean delegation was led by the first assistant minister of the Ministry of Construction, and included two research directors from KRIHS. From the Japanese side, the delegation was headed by the director of the National Land Board and members from the Regional Development Cor poration, and the Land Information Center. The following papers were presented: "National Land Development Policies for the 21st Century," "Evaluation of the Restructuring Policies for the Capital Region," and "Impact of Land Reform Act" (by Korea); and "Relocation of Government Agencies" and "Comprehensive Land Information System" (by Japan).

Minister of Construction of China, Hou Jie, visited KRIHS

on April 19, 1993 and discussed planning and policy matters of mutual interest with President Lee. Mr. Hou Jie and his delegation showed a particular interest in our role in preparing the Third National Development Plan and recent research efforts in the field of land and housing policies.

Eric Heikkila of University of Southern California had an internal seminar at KRIHS on "Sources of Change in Residential Property Value" on March 30,

Members of Tanzanian Presidential Commission on Land Reform came to KRIHS on October 9, 1992 and had a round table discussion on the backgrand and the nature of Land Reform Act recently enacted in Korea.

Bertrand Renaud of IBRD lectured on "Housing Problems in Eastern Europe" on July 10, 1992.

#### '93 Technical Training Program on Human Settlements

Under the sponsorship of KOICA (Korea International Cooperation Agency), KRIHS provided training for public servants from developing countries. A total of 100 participants from 15 countries partcipated as of 1992.

Training runs about two weeks and is taught by the KRHIS staff. The program will be held from September 6 to 18, 1993. Courses include: National Land Use Planning, Construction Economy and other relevant topics. Participants are also provided with on-site training.

For more information, please write to: Korea International Coopperation Agency 128, Yunkun-dong, Chongro-gu, Seoul, Korea Tel: 82-02-740-5114, Fax: 82-02-744-1092

Contact us with a response or a question, or comment on ideas we cover in the Gazette. Fax to SPACE and ENVIRON-MENT

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#### Working Papers Available

Hong, Sung-Woong, "Problems of Infrastructure Development in Newly-Developed Industrial Country" \$15

Hong, Sung-Woong and Kim, Heung-Soo, "Global City in a Nation of Growth: A Case of Seoul" \$15

Hong, Sung-Woong, "A Study on Korean FDI in Southeast Asia" \$15 Kim, Eui-June, "Social Welfare, Pollution Taxation and Regional Growth: An Application of Dynamic Intergrated Economic-Environmental Model to Seoul Metropolitan Area in Korea"\$15