

# Methodological Evolution and Issues of Regional Development Planning in Korea\*

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## Introduction

This paper is primarily an attempt at reviewing how regional development planning methodologies have evolved over the last twenty years in Korea and what some salient

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lessons could be drawn for improving the method of planning for regional development. Although regional development efforts have been intensified both by government agencies and academic circle, methodology or the way of coping with these efforts has largely remained unimproved, and theoretical construe for the development of new methodological breakthrough has been still experimental. This is a very challenging task waiting to be solved.

Given a state of art in dealing with informational requirements for regional development planning, most countries are facing with more difficulties than ever, as a rising expectation fulfilled by regional development has added its scope and complexities. In Korea, elsewhere in the world to a degree, regional planning exercise deeply rooted in the tradition of physical planning. But, today, all the complexities which are usually involved with social, economic, institutional considerations are to be housed under the theoretical shell in the course of regional development, but very few useful methodologies are available, while leaving a large proportion of practitioners to work on a sort of common sense approach.

Moreover, planning environment in which regional planners have to work is not enthusiastic enough to hear the pleas of regional planners for comprehensive regional development. In addition to this constraints, the know-hows and practical experiences are very slowly accumulated. A couple of international seminars and colloquia have been organized to find for a desirable and feasible getaway to this annoying questions. In this respect, this colloquium is a timely undertaking in the sense that the countries participating in this colloquium have accumulated not negligible number of planning studies and seems to share some commonalities in many points.

This paper is divided into four parts. Part I is concerned with the analytical framework which aims at facilitating to bring together the fragmented, discontinuous facts about regional development into a number of general themes. Part II is devoted to problems of phasing regional development activities into a number of recognizable time-block in terms of methodological change of Korca's regional development planning. Part III begins with the analysis of actual cases. Selection of the cases are made to highlight important methodological changes and issues. The cases seem to be representative as sub-national studies in terms of the length of the study period and a number of working staffs involved. They are relatively well-documented into readable format which may provide a ground for comparative study among the countries. Last part involves the

interpretation of findings and suggestion for the improvements of planning methodologies and is intended to highlight a few critical methodological issues in the Korean practice of regional development planning.

## I. Analytical Framework

Being clearly stated in the programme of research, the method of planning for regional development is an intervening variable for the fulfillment of regional development goals in a given set of capacity and constraints by which a region/country is characterized. It also implies that, under a given set of capacity/constraints of region/country, the best method of planning would be found at least in short term.

But, in practice, this assumption may not always hold true, because a set of capacity/constraints characterizing a region/country is also changing from time to time especially in the country whereas developmental activities are greatly contingent to external resources and social turbulence. In other words, it seems that the method of planning may not be independent for achieving regional development goals. The method of planning and capacity/constraints in which a region/country is situated is, therefore, rather interactive. However, a certain prototype of planning methodology is prevailing under a given planning environment. In this respect, it would be very helpful for the study to begin with some characterizations or styles of regional development planning.

First, definitional problems of regional development and planning are assumed to be extremely boring. One is faced with the task of finding equivalences between terms in different languages. The Korean term *kukto kaehyuk* literally means national land planning. To quote Despicht's words,<sup>(1)</sup> it is nearly impossible to be translated 'Amenagement Du Territoire' in France, 'Raumordnung' in Germany, 'town and country planning' in England and *kokudo kaihasu* in Japanese without creating substantial confusion.

As the styles of regional planning of the tradition of regional development vary, the meaning of comprehensiveness in regional development is not always identically accepted. Within these cleavages, the Korean style of regional development planning has been moulded by strong concern with land as compared with the American concern with

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(1) Niegel Despicht, "Long-range Planning and Regional Policy," *Long-range Planning* (Vol. 2, No. 4, June 1970), p. 28.

housing and education in regional development.

Second, the term 'regional' is too broad to be practical, a distinction can be made between national-regional planning, which is interchangeably called the regionalization of the national plan mostly being initiated by the national government, and local-regional planning such as the local plan-making effort initiated by one and more local government units. Depending on the country's historical and political tradition, one of the above two directive modes of regional planning becomes more prominent.<sup>(2)</sup> One point upon which many people may agree is that, in a country where local government is relatively weak and the political system is highly centralized, regional planning tends to take the form of national-regional planning or the regionalization of a national plan. But many countries adopt some form of combination between these two different modes of planning. Korea has also experienced some significant fluctuations along these two modes of regional development planning.

Third, useful distinction of modes of regional planning for analytical purpose is the concept of micro and macro-regional planning.<sup>(3)</sup> Micro-regional planning emerges as a product from two intellectual, social and political traditions. This is deeply rooted in the tradition of city planning, transferring methods and approaches tested in the design of urban patterns to the solution of regional problems. This tradition is strongly promoted by the profession of physical planners. It would be interesting to study the British and Australian experiences from this point of view. Micro regional planning has also grown out from the tradition of community development which emerges as a sometimes spontaneous, sometimes guided popular movement, trying to improve the social and environmental conditions at the grass-root level.

Nevertheless, some features can be indicated in the micro regional planning. the concentration of attention of relatively small areas, and the implicit or explicit acceptance of the assumption that the regional plan for given area can be prepared in an autonomous or semi-autonomous way.

This means that micro-regional planning is influenced very little, if at all, by the problems and solutions applied on a national scale. In the country adopting micro-regional planning, the ideal of comprehensiveness in regional development is very often of being

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(2) E. Kalk, *Regional Planning and Regional Government in Europe*, The Hague: International Union of Local Authorities, 1971, pp. 37-51.

(3) Antoni Kukulinski, *Macro Regional Planning in the Developed Countries: Problems and Issues*, Geneva: United Nations Research Institute for Social Development, March 1971, (mimeo)

taken in consideration relevant elements of the concerned region for developmental purpose, which does not necessarily mean interregional/intersectoral coordination.

On the other hand, macro-regional planning methodologies first introduced in the socialist countries and began to be given attention by the capitalist countries in the early 1930s. Macro regional planning introduced in the beginning in the selected regions (underdeveloped, depressed or overcongested) and at a later stage extended the national scale.<sup>(4)</sup> Another impetus to bring about macro regional planning approach in fashion is especially relevant to experiences of the developing countries. In most developing countries, as Wingo has found in the study of Venezuela,<sup>(5)</sup> the preoccupation of national planners with global sectors of the economy has been accomplished by a through-going indifference to the subnational dimensions of development. An exclusive focus on sectoral consistency in the aggregate economic planning model led to the planners to neglect a number of issues of vital concern to policy-makers. Among other mistakes one of the most critical was failure to take into account of the spatial and regional factors in economic planning. However, socio-political pressure for balanced regional growth increases.

As many developing countries have its inner dynamic which seems to make for an ever-increasing pace of change and which in turn requires a growing sophistication of planning, the most popular response of planners to this problem is to try to superimpose the neo-classical equilibrium model for integrating of national economic and disaggregate regional planning exercises along one dimension. More sophisticated tools and techniques of planning are introduced. Enormous increase of informational requirement to make the model workable, unrealistic assumptions and inherently low degree of statistical reliability has degraded the model-building effort as an intellectual exercise which methodologically is not greatly different from an expanded version of national economic planning model with spatial consideration.

In theory, the macro regional planning approach is accepted as the better framework for the reconciliation of the conflicts of sectoral and regional approaches and for the formulation of proper policies and plans. There are very few macro-models which are readily available for integrating central, sectoral and regional approaches to one global scheme of planning and decision-making process. We have not yet arrived at a valid or

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(4) J. Cumberland, *Regional Development-Experiences and Prospects in the United States*, The Hague, Mouton Publishers, 1971.

(5) Lowdon Wingo., "Latin American Urbanization: Plan or Process," in B.J. Frieden and W.W. Nash Jr. ed., *Shaping An Urban Future*, Cambridge, MIT Press, 1969, p. 139.

satisfactory solution.

With regard to the distinctive nature of the method of planning adopted by the country, another swing of the pendulum between comprehensive planning and disjointed incrementalism has been the object of concern. Admittedly, the ideal political requirements for comprehensive planning may seldom or never exist. But the degree of centralization, to take only one of the determinants of comprehensive planning, may differ from one society to another. Although nobody argue that comprehensive planning is better than disjointed and piecemeal approach, the multiplicity of values, their instability and fluidity, conflicts among values and combinations of values, and the reality of the whole of the democratic process use to hinder from doing so. The dilemma of comprehensive regional developmnt is accentuated by unavailability of suitable planning techniques. We cannot divide a country into exclusive one category but, depending on the historical and political tradition, it is plausible to say that a country has more inclination to comprehensive planning than others.

We have glanced through analytical elements which seems to have closely related to specific mode of the planning method adopted by a country. In addition to the above-mentioned elements, the size of country both in terms of area and popultaion, and a kind of regional syndrome which a country may have obsession to be resolved are also the determining factors for the characteristic nature of planning method of a country. Therefore, only one feasible and desirable method of planning for comprehensive regional development may not exist but, depending on the combination of the characteristics of planning environment, many variants of method can be derived.

For example, the country like India which has the federal system of government and of which area is continental scale is simply not possible to adopt the stereotyped ideal of comprehensive regional development on the national scale. The Soviet Union may reach a much higher degree of comprehensiveness than American planning could concernably do. The socialist countries may be much easier to implement the ideal of macro-regional planning than the capitalist countries could possibly do. Therefore, the planning method for regional development which is proven to be appropriate for a country can not be transplanted to another country without substantial changes. So is true for the country which has gone through rapid social changes and has development regions having problems of greatly different nature. The method of planning valid at one time may not guarantee that it will successfully work out at another time. Except for the heuristic

purpose of learning, over emphasis of a straight forward reliance on the prototype of comprehensive regional planning method would result in a degenerated form of comprehensiveness. Although the coverage of the plan may give an impression of comprehensiveness the practical contribution to the problems in hand is very much in doubt.

The following chapter is intended to highlight major methodological changes being taken place over last twenty years exercise with regional development planning in Korea and to draw some lessons which may facilitate to devise the improved method of planning for regional development. The analytical elements discussed in this chapter will be reference points for the inquiry into defining of major methodological changes and improvements.

## **II. Phasing of Regional Development Planning: Its Methodological Characteristics and Problems**

### **1. Method of Regional Planning Prior to 1961**

Although the historical root of regional development would be retraced before 1950, directed efforts, which are now considered regional development planning was not until in the early 1950s. By regional development planning through 1950s it was meant the deliberation of spatial layout of the infrastructure such as roads, railways, ports and public works in general. The era was characterized by a task-force project planning which geared to overcome immediate problems generated by the territorial division after the World War II and during the Korean War.

The locational disruption being raised by the territorial division jeopardized more severely the southern part of the country, since the North as the chief supplier of electricity, providing 80 per cent of the electricity generated. Thus, of prime importance to South Korea was to overcome the shortage of power and intermediate goods because South Korea's manufacturing sectors consisted largely of small, labor-intensive establishments producing consumer goods. Worse yet, the Korean War resulted in the complete destruction of industrial facilities remaining in the South. Meanwhile, the post War migration from the North and overseas of approximately four million Korean, who mostly settled in a few large cities of South Korea, aggravated the hardships of the South. Consequently, the horizontal and vertical linkages, agriculture and manufacture, between

heavy and light industries, between raw materials and finished products, and between the distribution of population and industrial location were completely disorganized by successive national misfortunes.

The immediate task for South Korea was then the recovery of the pre-war production level and the minimum provision of infrastructure investments. In the course of responding to these urgent needs, public work programs and policies which now at least would be regarded as constituting an element of regional development were seen both on the national and local levels. Main concerns focussed on using an integrated river-basin development scheme to coordinate public investment in irrigation, hydroelectric power, flood control and other social overhead capital. Since the four river basins of Han, Nakdong, Kum and Youngsan cover 64 per cent of the nation's territory, regional development programs based on multi-purpose river basin development were the first kind of attempt for comprehensive regional development. The method of planning for multi-purpose river-basin development had its own many merits for comprehensive regional development which seem still relevant for the country of which regional delineation or planning regions are river-basin bounded. The successful story of the Tennessee Valley Authority and the Damodar Valley Authority in India were the major reference points of the method for comprehensive regional developments.

In the late 1950s, the government was pressured to formulate a long-range development plan. Motivations to move in this direction could be found in many sources rather than the endogenous need for planned national development. Firstly, the philosophy of planning became so popular it almost became a type of fetishism in the great majority of developing countries and any country not having a national development plan was thought to be underdeveloped. Secondly, the government very much needed to prepare a plan for the justification of foreign assistance and loans. The giving of aid and loan has been made contingent on the preparation of a national plan. In 1960, the government attempted to incorporate the multipurpose river-basin development programs with the anxiety of preparing a comprehensive national development plan which was finally materialized as "the Three-Year Economic Plan".

The plan was never brought its full implementation because of the military coup in 1961. However, the plan might have been the modern origin of comprehensive national development planning in Korea. In terms of the method of planning, regional development planning before 1961 was dominated by engineer-planners' view of comprehensive regional

development, which is very often coined with blue-print physical determinism. As Friedmann pointed out, planning for transportation, electric energy development, irrigation and housing is more prevalent than for other activities. They are fields closely allied with architecture and engineering and consequently built on a certain tradition of physical planning.<sup>(6)</sup> Physical determinism has been easily identified with blue-print view of planning outcome which contains public works programs with a certain, predetermined degree of precision. It is to pretend that the structuring of physical environment leads to the attainment of the common good in a determinate way.<sup>(7)</sup>

Under the circumstance, regional development planning document usually gave impression of the containment of blue-prints with engineering specification, while very little consideration being given to the socio-economic impacts of public works program on the regional scale. Blue-print physical planning tradition has been persisting through Korea's history of regional development planning. Time horizon of the type of planning was essentially short-ranged annual one. The tools and techniques adopted in blue-print physical planning were largely come from a sort of project evaluation methods. According to our distinction between national-regional planning and local-regional planning, regional development planning prior to 1961 belongs to the latter. The spatial scope of planning did not go beyond the local government's jurisdiction. Therefore, issues of inter-jurisdictional conflict and the need for coordination were rarely raised.

## 2. Method of Regional Planning (1962-1971)

Soon after the military coup in 1961, the new government made clear its intention to manage the national in a more articulated manner than its precedents. The government launched an overall organizational reform by which the Economic Planning Board (EPB) and the Ministry of Construction(MOC) were created. These two ministries were expected to work on two distinct aspects of national development planning; the former on economic planning and the latter on physical and regional planning and, therefore, these two planning units were expected to be complement each other in a comprehensive manner. However, this somewhat naive dichotomy of administrative reform did not work well from the outset and has finally resulted in a continuous split of the two forms of planning.

Contrary to EPB's visible performance of formulating the First Five-Year Economic

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(6) John Friedmann, *The Social Context of National Planning: A Comparative Approach*, Paper delivered at the 1964 Annual Meeting of APSA in Chicago, p. 27.

(7) A. Faludi, "The Planning Environment and the Meaning of Planning," *Regional Studies*, Vol. 4, 1970. p. 3.

Plan (1962-1966). which was essentially aggregate sectoral plan with no consideration of regional dimension, MOS's physical and regional development planning dragged on without any recognizable outcome. MOC struggled with very definition of regional planning and, from the start, could not expect too much out of its assignment as compared with economic planning exercise. No data existed into the format of disaggregate, regional scale. Theoretical model for comprehensive regional planning was barely developed. In this sense, race between EPB and MOC predetermined to loose against MOC. As a result of this, a meaningful coordination between economic planning and regional planning was not possible. Furthermore, two distinct lines of planning mechanisms and thoughts developed in a vacuum of indifference toward each other, while being accentuated by bureaucratic departmentalism and professional territoriality.<sup>(8)</sup>

While MOC was struggling with voluminous paperwork, EPB's economic planning activities became the most powerful reference point above all other national sectoral plans. As national priority and resource allocation expressed in the economic plans seemed to dictate the fundamental course of actions, other planning efforts like MOC's regional planning were regarded to be peripheral or technical aid to economic planning. MOC's regional development planning almost lost its ground under the strong shadow of the prestigious aggregate economic plan.

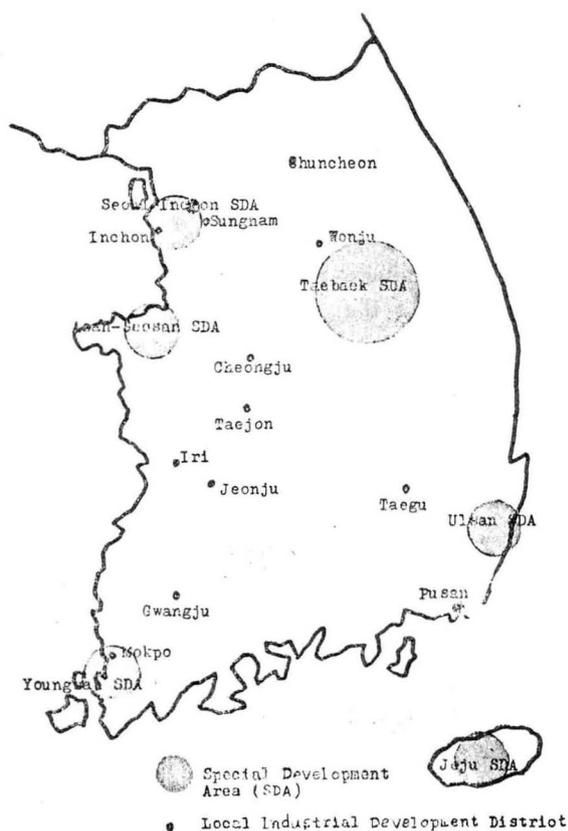
The question in the First and Second Five-Year Economic Plans(1962-1971) was "how fast can Korea grow?"<sup>(9)</sup> It inveiled justification for the successive economic plans based on the premise that industrialization must be attained at all costs. The basic objectives of economic plans were to promote the modernization of the industrial structure and to build the foundations for a self-supporting economy. In general, economic planners were not prepared to consider regional factors as an important element of national development. They used to think of regional development as one of the luxury items waiting to be solved. Regional development planning had to content itself with a somewhat redundant and tangential role.

(8) The two kinds of economic and regional planners have differing established territories, languages, customs and habits. More than 60 per cent of the planning officials then working at MOC were engineer-planners who would have liked to have been called an engineer rather than planner, as compared with young economists equipped with fresh techniques and tools for economic planning.

(9) Lawrence Westphal and Irma Adelman, "Reflections on the Political Economy of Planning," in S.H. Jo. and S.Y. Park ed., *Basic Documents and Selected Papers of Korea's Third Five-Year Economic Plan (1972-1976)*, Seoul. Sogang University Press, 1973, p. 14.

Although regional development planning was set aside from the main stream of national development planning, some methodological lessons could be taken from the following points.

First, *local industrial development program* was initiated as one of the most important policy measures. Local industrial development program, though it was appraised as a means for balanced regional growth, was largely a derivative function of the national priority of industrialization throughout in the 1960s. It would not be too difficult to predict an expected outcome of this all-or-nothing effort for industrialization at the national level would tend to scale down to local industrial development at the local level. An ambitious local industrial development program was initiated by local authorities. However, there was little analytical deliberation of what kind of industries might be induced or of how it could be achieved. Eleven local industrial districts were developed as shown



Map 1. Special Development Areas and Local Industrial Development Districts

on Map 1. Local governments competed with each other as expression of eagerness for local boosterism and to soothe local political outbreaks. As MOC would neither have a deliberate plan to direct local industrial development program nor a mean to control it, the precariousness of local sentiment of being left behind other regions would have resulted in a confusion of planned regional development as a whole.<sup>(10)</sup> It throws us very difficult question of how to reconcile between the rationality of industrial location policy and local aspiration, which may usually not solved within the practical domain of regional planning methodology.

*Second source of uncertainty with regional development planning throughout the period was the method of coordinating national-regional planning and local-regional planning under a given political and administrative system of the country.* The central government in general tended lockdown upon local governments (provincial and municipal governments) as being its *de facto* field office. The weakened local governments made it exceedingly difficult to harness local initiative and aspirations to regional development planning.

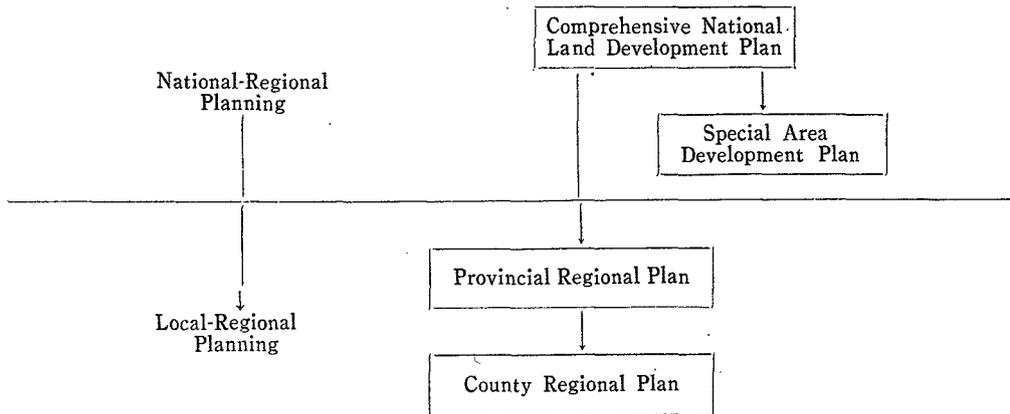
According to the Comprehensive National Land Development Planning Law of 1963 which provided legal base for the government's intervention to regional development and planning activities, the concept of regional planning was set up for four level of plans: 1) nation-wide plan, 2) special regional plan, 3) provincial plan, and 4) country and city plan. As shown in Figure 1, the hierarchy of the plans was supposed to be from the top-downward but no clear rule was provided for possible conflict and plan-making coordination between the four sets of plans. The underlying philosophy of this logic was that local-regional plans (provincial and county regional plans) should be a mosaic of national-regional plan should not be allowed for local-regional plans.

The prime task for MOC, as a natural extension of the foregoing logic, was to formulate a flawless national-regional plan in its inter-regional and inter-sectoral consistencies. But it was not very difficult to predict the consequences of these efforts. MOC spent about six years on countless paper plans. While the national-regional plan was still strug-

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(10) As Masahiko Honjo pointed out in relation to the result of the New Industrial City Construction Promotion Act of 1962 in Japan, the designation of the new industrial cities became a major political issue, involving local political groups which made active move to get their cities appointed. As a result, the number of cities was increased and the program became far different from the one originally intended. (Masahiko Honjo, "Urban Development Administration; The Case of Japan," in John D. Herbert and Alfred P. Van Huyck, *Urban Planning in the Developing Countries*, Praeger, 1968. p. 44)

Fig 1. Regional Planning Hierarchy



gling in methodological constraints and unfriendly relationship with other central ministries, especially with EPB and the Ministry of Home Affairs, MOC sent instructions to provincial and local governments to formulate local-regional plans. A rough working guideline and a set of indicators concerning national economy and population were accompanied with the instructions, stating local-regional plans were expected to be formulated into a given format within mandatory period. Provincial and county governments did not have a choice but follow the instructions from the central ministry without even knowing what they were doing. A large number of provincial and county plans were submitted to MOC. They were conflicting, demanding and improvised blue-prints of local imaginations and wish-wash. MOC did not prepare to coordinate all these provincial and county regional plans into a integrated national-regional plan.

Reason for this frustrating exercise might have not been blamed on methodological incompetence of MOC for coordinating the plans, but rapid social and economic changes were not making it possible to work out such regional plans both at the national and local levels. As the social and economic situation of the nation as a whole changed, a new working guideline was sent to provincial and county governments for revision of those provincial and county regional plans. Entirely different blue-prints were submitted to MOC at one time or another. This sort of forward-backward confusion that was a vicious cricle of top-down instructions and bottom-up submission of local-regional planning documents had continued until MOC and local governments became tired out by 1970. Finally, they tended to stop working altogether, though each province and county had its own provincial and county regional plans. In terms of planning methodology, it is

seemed not to be greatly wrong with the process but, practically, nobody seriously referred to those plans and the contents of the plans never materialized into action programs. Many optimistic assumptions and the neglect of institutional constraints might have been underlined for this unacceptable result.

In a highly centralized country like Korea, local governments are barely able to formulate their own plans without very kind instructions and strong endorsement of the central government and, even if a plan can be worked out at the discretion of local government, provincial and county officials know that the probability implementing the plan is almost zero. Since more than fifty per cent of local revenue comes from the central government, any kind of long-range financial commitment and investment in the form of a provincial and county regional plan is highly contingent upon changes in national priority.

MOC's working guidelines and indicators sent to local governments were usually far from being clear and internally consistent even at the national sectoral level. Since no tests for consistency between EPB's aggregate economic plan and MOC's national-regional plan, namely the Comprehensive National Land Development Plan, were made, it was too much to expect that internal consistency between national-regional plan and local-regional plans would naturally come out.

Sectionalism between the central ministries is widely known. Each central ministry wanted to be implemented at the local level and to assimilate local plan with its plan. Under the circumstance, local-regional planning units like province and county governments whose main responsibility is the horizontal coordination of functions within local government are unable to perform a proper role because conflicting interests and cleavages unsolved at the central level are transferred to the local level. Coordinating problems between inter-sectoral and inter-regional inconsistencies again should be solved in relation to the style of political system as well as to bureaucratic phenomena.

To recapitulate the foregoing discussion, a top-down approach to comprehensive regional development planning was felt in the Korean context that it was not workable. Fatal weaknesses in this approach would have been detected from two fronts: MOC's failure to provide specific and consistent guidelines and indicators for local-regional planning, and the impossibility of horizontal coordination in vertically aligned political-administrative systems.

*Third methodological issue was the effectiveness of the Special Development Area (SDA) as a policy measure for regional development.* The Special Development Area can be desig-

nated by the provisions of the Comprehensive National Land Development Planning Law if an area requires special measures to promote economic and regional development. The Special Development Area must not necessarily be a depressed area. The main objective of this provision is to provide national government a legitimate ground for integrated area development covering more than one local jurisdiction. The Special Development Area has had great potential as policy instrument for comprehensive regional developments if it could be properly used. In many countries the concept of a special development and/or designated area has been considered to be one of the most useful policy instruments which the central government can take in initiation and intervention in regional development without resorting to local sectionalism.

But the efficacy of SDA as a policy instrument has been greatly reduced and inoperative. There is no provision as to how the conditions for the designation of SDA can be met or for what kinds of special measures are to be provided. The time horizon of SDA was almost out of imagination extending from twenty to thirty years. No specific investment measures for this special purpose have been allocated. The designation of SDA, therefore, has not generated much excitement politically or economically. The designated area eventually extended to almost all part of the country. MOC has designated six SDA covering about twenty per cent of national territory as shown in Table 1.

Although specifying criteria raises several thorny problems and, as being known from the experiences of other countries, nobody would wholeheartedly be satisfied with it, policy decisions and implementation require the development of a set of specified criteria that will take account of both economic and social considerations, not only forcing one kind into the mold of another, but by integrating them at a higher level of abstraction. In many countries the selection of criteria and the use of it for policy implementation has been the object of a heated argument.<sup>(11)</sup> Predetermined criteria must be viewed as a part of the larger regional planning and development systems. Fundamental problems concerning designation criteria may reside with generally poor regional information it was virtually impossible. As Hagerstrand pointed out, a sound set of criteria will not possible until particular attention is given to the problems of how to improve regional

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(11) See Organization for Economic Cooperation and Development, *The Regional Factor in Economic Development* (1970) pp. 31-32 and *Multidisciplinary Aspects of Regional Development* (1968), p. 86-87. In the case of Great Britain, Gerald Manners et al., *Regional Development in Britain* (1972), p. 429.

Table 1. Designation of Special Development Areas

Areas	Date Designated	Term of Validity	Area (km <sup>2</sup> )	Boundary	Purposes
Seoul-Inchon	Jan. 11 1965	30 yrs	3,325	Seoul and Gyeonggi province (part)	integrated provision of public facilities and spatial order as the nation's capital
Ulsan	July 20 1966	7 yrs	1,005	Ulsan City and Ulju County	industrial complex development
Jeju	Oct. 26 1966	30 yrs	1,972	Jeju province	promotion of tourism, economic development and strategic depot for national security
Taebaek	Feb. 1 1967	30 yrs	9,488	Gangweon, Chungbuk, Gyeongbuk provinces (parts)	mineral and energy resources development and regional economic growth
Youngsan	Feb. 1 1967	30 yrs	2,323	Jeonnam province	land reclamation and water resource development and promotion of fishery industry
Asan-Seosan	Feb. 1 1967	30 yrs	3,914	Gyeonggi Chungnam (parts)	land reclamation and water resource development and promotion of tourism and fishery

information systems with particular focus on the issues.<sup>(12)</sup>

An overall evaluation of regional development planning in terms of planning methodology in the 1960s was characterized by local industrial development program, provincial and county regional plan, and the designation of SDA. All these policy measures were far from the ideal of comprehensive regional development, but there had been continuous efforts toward improving of planning methodology.

After all, methodological and institutional problems for comprehensive regional development planning in the 1960s resulted in a degenerated form of regional planning, concentrating attention on marginal and fictitious problems and avoiding the issues that are really important for the society. The time horizon of both national-regional and local-regional plans was too long, extending the next twenty years. By taking a longer perspective, the plans was intended to be protected from direct confrontation by other short and middle-range plans like annual budgetary plan and the Five-Year Economic Plan. However, unimpressive performance that regional development planning could possibly attained for the period should not solely attributed to the matter of methodology but it may be fair to say that general socio-economic situation seems not prepare to accept regional development efforts, being overshadowed by low degree of national commitment and by aggregate or aspatial economic growth strategy.

(12) T. Hagerstrand and A.R. Kukulinski, *Information Systems for Regional Development*, Sweden: The Royal University of Lund, 1971, p. IX.

As Jakobson succinctly pointed out,<sup>(13)</sup> urban and regional problems had continued to be derivative functions of the overall national economic process itself.

### 3. Method of Regional Planning (1972 to Date)

It is disputable as to whether the specific year of 1972 can be sufficiently justified as the turning point of Korea's regional development in terms of planning method. But the following points might have contributed for taking 1972 as a turning point.

First, urban concentration of people and industry into a few large cities, especially into Seoul and its suburb, and its spatial consequences of regional growth and national security was judged to be no longer ignored. As shown in Table 2, 36.5 per cent of the population of the nation were in urban areas over 1,700 thousands inhabitants in 1955. Urbanization leaped by 50 per cent in 1970 and 58.7 per cent in 1975. In 1970, one out of two Korean was living in an urban area. From the viewpoint of regional development policy, urbanization has been characterized by the fact that, among the urban areas, the very largest have been growing the fastest. The fact that the biggest cities grow the fastest is shown in Table 3. Between 1955 and 1975 the population of Seoul increased 404 per cent as compared with 242 per cent for the next five largest urban areas, and 206 per cent for

Table 2. Urbanization Trend in Korea (population in thousands)

	1955	1960	1965	1970	1975
Nation's Population	21,502	24,987	29,160	31,460	34,680
Urban Population (Seoul)	7,847 (1,705)	9,767 (2,600)	12,426 (3,793)	15,735 (5,510)	20,369 (6,880)
Urbanization Index(%) (Seoul)	36.5 (7.9)	39.0 (10.4)	42.5 (13.0)	50.0 (17.5)	58.7 (19.8)

Table 3. Growth of Urban Area by Size (population in thousands)

	1955 (A)	1960	1965	1970	1975 (B)	B/A (%)
Urban Population	7,847	9,767	12,426	15,735	20,369	263
Seoul	1,705	2,600	3,793	5,510	6,880	404
Next Five Largest Urban Areas*	2,346	2,778	3,516	4,530	5,668	242
Other Urban Areas	3,795	4,422	5,120	5,695	7,821	206

\* The Cities of Busan, Taegu, Inchon, Kwangju and Taejon

all urban areas. In 1955, Seoul had 7.9 per cent of the nation's population. But the ratio increased to 19.8 per cent in 1975.

Although the government had often expressed to curb the over-concentration of people

(13) Leo Jakobson and Ved Prakash ed., *Urbanization and National Development*, Beverly Hills: Sage Publications, 1971, p.7.

and industry into the nation's capital city, the government's uneasiness about this trend could not be materialized in practical policy terms. Beginning in 1971, the urban problems over-looked until then began to erupt all at once: urban revolt of slum resettlers, the worsened public utilities situation, and some side-effects of shabby public works projects.

Moreover, the government critically realized that one third of the nation's population and one half of the nation's industrial facilities was laid under the possibility of North Korea's direct bomb attack. As Seoul is situated in 40 miles from the Demilitarized Zone and relationship between North and South Korea has worsened, the government determined to devise strong measures for population decentralization and industrial dispersal. After 1971, Korea's regional development policy would be hard to understand without taking into account this specific issue. The above factor should be considered to be very important reversal of attitude toward urban problems, naturally leading to more attention to the need for regional development since the concentration of people and industry should be considered as the consequence of the nation's economic and spatial systems.

Another specific issue underlined Korea's regional development has not come about solely in response to an economic rationale. Regional issues are very often rooted in historical incidents or socio-political factors, though main causes may be different from one country to another. Korea is not an exception to the case. Nevertheless, Korea, having a homogeneous racial composition, has been able to concentrate her resources quite successfully upon achieving goals for industrialization and economic growth without being hampered by racial conflicts or disputes over religion and language. But one tinging regionalism dies hard.

The south-western provinces of Jeonnam and Jeonbug are a poverty stricken area, in which development lags behind the rest of the country. In terms of gross regional product the region was below the national average by 0.75 in 1972 as shown in Table 4. Jeonnam region has become relatively poorer or has, at best, remained as same as before. If regional policy is how to reduce the gap in incomes between regions, the absolute gap between the richest and poorest regions in the country becomes sometimes more sensitive than an aggregate index. As shown in Table 5, the richest region is, of course, Seoul and the poorest is the Jeonnam region, although the gap closes somewhat in 1972 as compared with the preceding years. But policy impetus to impel the government to an action for regional development has not been purely economic concern but a

Table 4. Gross Regional Product Per Capita (1961—1972)

(Unit : Won)

	1961	1965	1970	1972
Seoul	19,906	48,441	138,422	171,351
Gyeonggi	9,116	24,071	76,218	109,212
Gangwon	9,617	23,267	64,264	89,585
Chungbug	8,326	24,117	69,915	102,229
Chungnam	7,586	22,080	63,898	95,605
Jeonbug	8,330	22,856	61,359	98,525
Jeonnam(A)	7,517	21,105	56,494	86,727
Gyeongbuk	8,196	24,332	79,139	91,877
Gyeongnam	8,526	29,226	73,612	120,854
Jeju	7,982	31,037	65,684	99,808
National(B)	9,580	27,226	81,421	115,809
(A)/(B)	0.78	0.78	0.69	0.75

Table 5. Regional Disparity of Gross Regional Product Between Richest and Poorest Regions

	1971	1965	1970	1972
Richest (Seoul)	2.65	2.29	2.45	1.98
Poorest (Jeonnam)	1.00	1.00	1.00	1.00

mixed feeling of socio-political one being accelerated by economic backwardness. Jeonnam and Jeonbug provinces, namely *honam*, has been the object of ridicule. The founder of Koryo Dynasty (A.D.918-1392), King Taejo admonished that the people of *honam* region should not given government position because they are distrustful and rebellious.

Since that time, the people of this region had officially been discriminated against until the abolition of the monarchy in 1910. This superstitious legacy dies hard and many people still live with this bias. Therefore, the perceived degree of distress of the people of this region might have been greater than other quantitative measures. Subtle regional issue, which was commonly expressed by the discriminated treatment of the *honam* region and was delicately exploited for political reasons, forced the government to take action to reduce socio-political tension as well as regional growth disparity.

The two facts above-mentioned have largely determined the development objectives and methodological orientations of regional planning after 1971 in Korea. The two cases which were chosen here for the study of planning method have been the most comprehensive and elaborated plan-making experiences. The Regional Physical Planning Study (1970-1980), which was carried out by a French consulting firm, the OTAM-Metra International on the base of technical service agreement between the Government of the Republic

of Korea and the United Nations Development Programme in 1971, was directed to formulate the future course of actions to curb the concentration of people and industry into Seoul region and to achieve goals for balanced regional development. The second case was initiated to tackle the problem of *honam* region. The development of Regional Plans of the Gwangju Region was prepared for the Ministry of Construction and the United Nations by the Robert R. Nathan Associates Inc. The methods of planning studies which seem to have some distinctnesses will be discussed in the proceeding paragraphs.

Regarding to the institutional involvement, Korea's regional development planning since 1971 has been carried by a tripod of administrative organs; Ministry of Construction(MOC), Economic Planning Board(EPB) and Ministry of Home Affairs(MOHA) at the national level, although the Ministry of Construction is given authority over other central ministries in the matter of regional development planning. MOHA's legitimate supervision over local governments and EPB's power over national budgetary decisions and coordinative capacity by means of economic planning have made it nearly impossible for MOC to underestimate the involvement of EPB and MOHA. Since they are inseparable elements if regional development planning is to be a viable proposition for the years to come. Korea's regional development planning in its third phase is seemingly moving toward a comprehensive state in the sense that the base for broad involvement, at least in the administration, has evolved and the importance of regional issues is recognized by more than one planning unit in the central government.

As the central ministries other than MOC begin to meddle in regional development which was formerly thought as MOC's exclusive territory, policy measures have been also diversified. Many of new policies measures were announced without horizontal coordination among the central ministries. Among others, the New Village Movement(Saemaul Undong) was in the scene in 1971 and, after then, has been intensified by MOHA with a strong endorsement of the President. This movement has been nationally activated to promote rural development ranging from the spiritual armament through self-help, the replacement of thatched roofs with tile, the alignment of agricultural service roads, to the rebuilding of entire rural village. This movement may have many implications with respect to regional development in the sense that it aims at rejuvenating relatively neglected rural areas as a means of holding back or, at least, slowing down the out-migration of population from psychologically and economically depressed rural areas.

The New Village Movement may have its own merits for comprehensive regional de-

velopment than a a fragmented piecemeal approach, since it has been motivated to mobilize all potentialities which a village may have. Although the method of planning has largely patterned from traditional community development, a new approach to local-regional planning has been in formation

Beside the New Village Movement, many new policy measures have been formulated and implemented; differential resident tax by the size of citis,<sup>(14)</sup> the government office dispersal program,<sup>(15)</sup> the faculty exchange program between universities in Seoul and local cities,<sup>(16)</sup> the school district systems,<sup>(17)</sup> and the designation of the Development Restriction Zone around large urban areas.<sup>(18)</sup> All these policy measures have been underlined with the prevailing motivation of dispersing the people and industry to the regions other than Seoul.

Regional development planning after 1972 has tended to deviate farther from the ideal of comprehensive regional development planning, but to move toward solving a clash issue which is to devise effective anti-concentration measures into Seoul. In terms of Waterston,<sup>(19)</sup> partial planning method has become more common. Partial planning is of the problem-solving type and hence multidiciplinary in approach. The sequence of partial planning method begins with 1) the identification of basic social problems to be solved. It then proceeds to 2) the selection of appropriate means for resolving the problems, 3) the setting of targets and 4) the choice of objectives.

Having been known from the experiences of regional planning and implementation in Korea, we may draw a conclusion that a disguised comprehensive regional development planning would not be better than structured partial planning approach. Many clash problems with which most developing countries are facing will not wait time for regional planner working for comprehensive planning over the longer period of time. Beyond the institutional and environmental constraints, there are still too many problems of technical inadequacies and data gap. Regional planners cannot be idle until more sophisticated method and information for plan formulation is readily available. A method coping with immediate problems has to be developed. Realistic approach to regional development

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(14) Refer Appendix 1)

(15) Refer Appendix 2)

(16) Refer Appendix 3)

(17) Refer Appendix 4)

(18) Refer Appendix 5)

(19) Albert Waterston, "Resolving the Three-Horned Planning Dilemma," in *Planning*, 1971, pp. 162-163.

planning is to develop a package of methods which will help specific regional issues in hand. A taxonomy of regional problems may be suggested in order to share problem-solving experiences with the country which is struggling with a similar problem and hence a case-book of planning methods would be possible.

### III. The Case Studies

#### 1. Method of the Regional Physical Development Planning

The main purpose of the planning study was to incorporate a spatial element in the Third Five-Year Economic Development Plan (1972-1976) then in preparation.

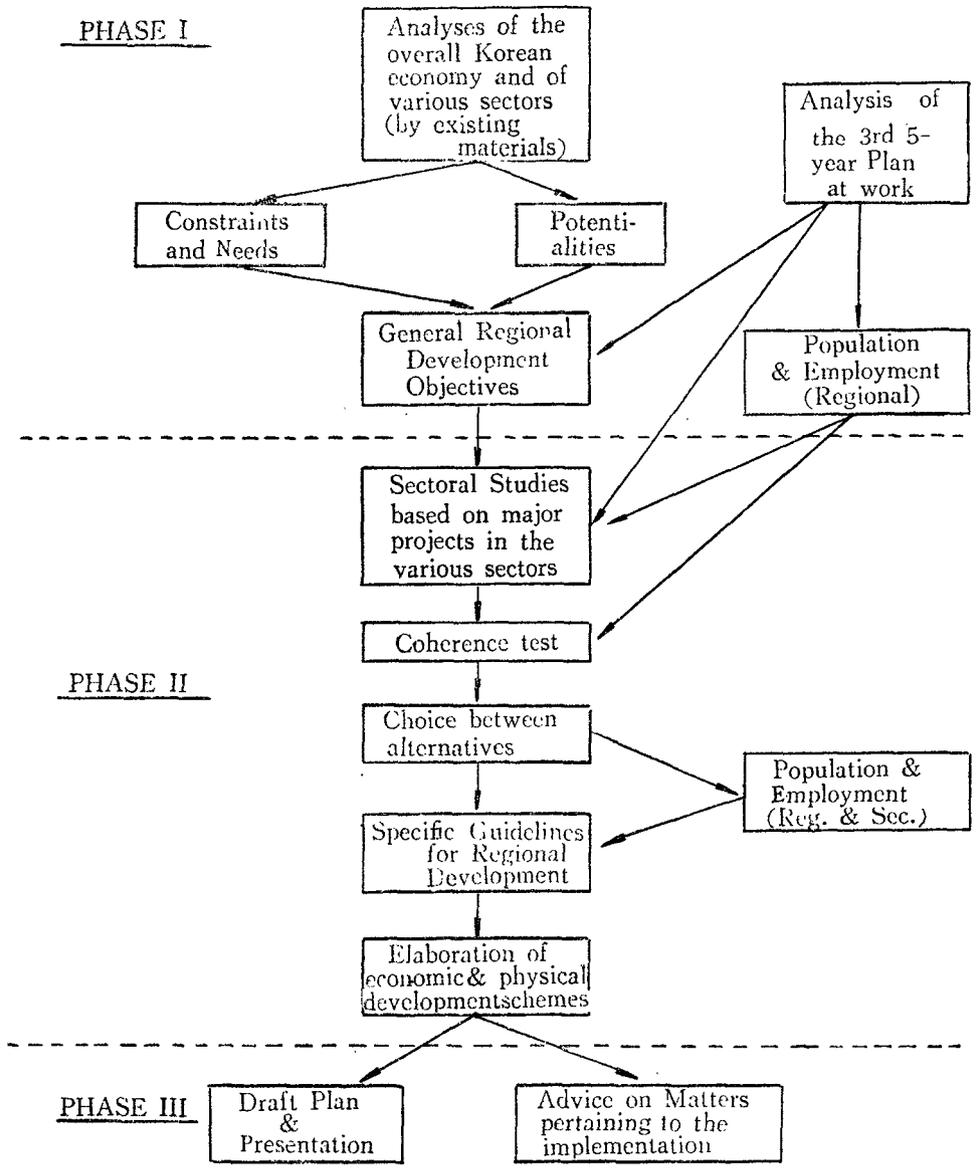
Such a task has a dual nature: on the one hand it is concerned with economic objectives and thus requires close, constant cooperation with EPB. On the other hand, it involves the transposition of the economic and social development objectives into consistent plan for the physical requirement.

The working process shown in Figure 2 will give some ideas of how the whole plan-making exercise proceeded. The first phase is to take stock of various studies both general and of a specific or sectoral nature that have already been made and to draw up some critical analysis of them to determine the use of the available material and the need for further analysis. The first phase is, therefore, expected to provide an insight into potentialities on the one hand and constraints and needs on the other. The second phase is to proceed to the projections of population and employment on a regional basis and to a series of sectoral analysis, taking into account the global objective for spatial development.

After testing the coherence between these projections for sectoral development and those concerning population and employment on a regional basis, alternatives for both spatial and regional development on which the development authority can make a decisive choice are elaborated. The third phase consists of the preparation and presentation of the draft plan and the elaboration of various devices pertaining to its implementation: legislation, administration, economic, financial and social policies.

As already expressed in its purpose of the plan, the principle of the method is a dual approach. In the first place, an essentially sectoral approach is based on national goals and permits the verification of economic coherence. Considerable change in the socio-economic structure for the ten-year time span will be accompanied by a geographical redistribution of economic activity and of the population. Furthermore, structural changes in socio-

Fig 2. Working Process Formulating the Ten-Year Regional Physical Plan



economic pattern will have to be adjusted by a remodelling of the spatial organization of the country. Given the two alternative development schemes,\* it is necessary to check that the geographical distribution of the proposed economic activities is coherent with national objectives and to verify that at the level of each of the planning regions, there is a satisfactory balance between population and job opportunities.

The coherence test which is one of the most important methodological contribution to the formulation of regional development planning is a sort of method checking internal consistency between the proposed scheme and policy measures. The coherence test is schematically demonstrated in Figure 3. The next step is more problem-oriented and is geared to solve specific problems of each of the eight planning regions. Regional problems and methods of development are assumed to be different by the planning regions.

In this way, the planning process is given a logical framework around which specific programmes for each of the eight planning regions can be developed.

In short, the method of planning applied for the formulation of the Regional Physical Development Plan is hard to pin down but uniqueness as plan-making exercise reside with the coherence test, provided alternative spatial distribution of population. In this sense, the population of a region exogenously given as it is desired and other requirements supporting population distribution are internally adjusted by the so-called coherence test.

The two alternatives of settlement pattern for the country's population in 1981 or the two schemes are suggested. The two schemes, namely the reference scheme and the proposed schemes, differ by the assumptions concerning spatial population distribution. The reference scheme is based on the assumption that fast urbanization and concentration of the population in the two or three main centres of the country will continue. The proposed scheme is characterized by the fact that it allows for a slower urbanization trend than that of the reference scheme, for less urban concentration in a few cities and that

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\* The two alternative schemes are derived from the different assumption about the spatial distribution of population. Derivation of the two schemes is made by means of both analytical and common-sense considerations. No scientifically sound quantitative demonstration could have been envisaged.

1) *Proposed scheme* slow down urbanization trend, less urban concentration in Seoul, increase the capacity of rural areas to hold population and close the level of living gap between urban and rural sectors.

2) *Reference scheme*  
continuation of fast urbanization and concentration of the population and industry in the two or three large cities.

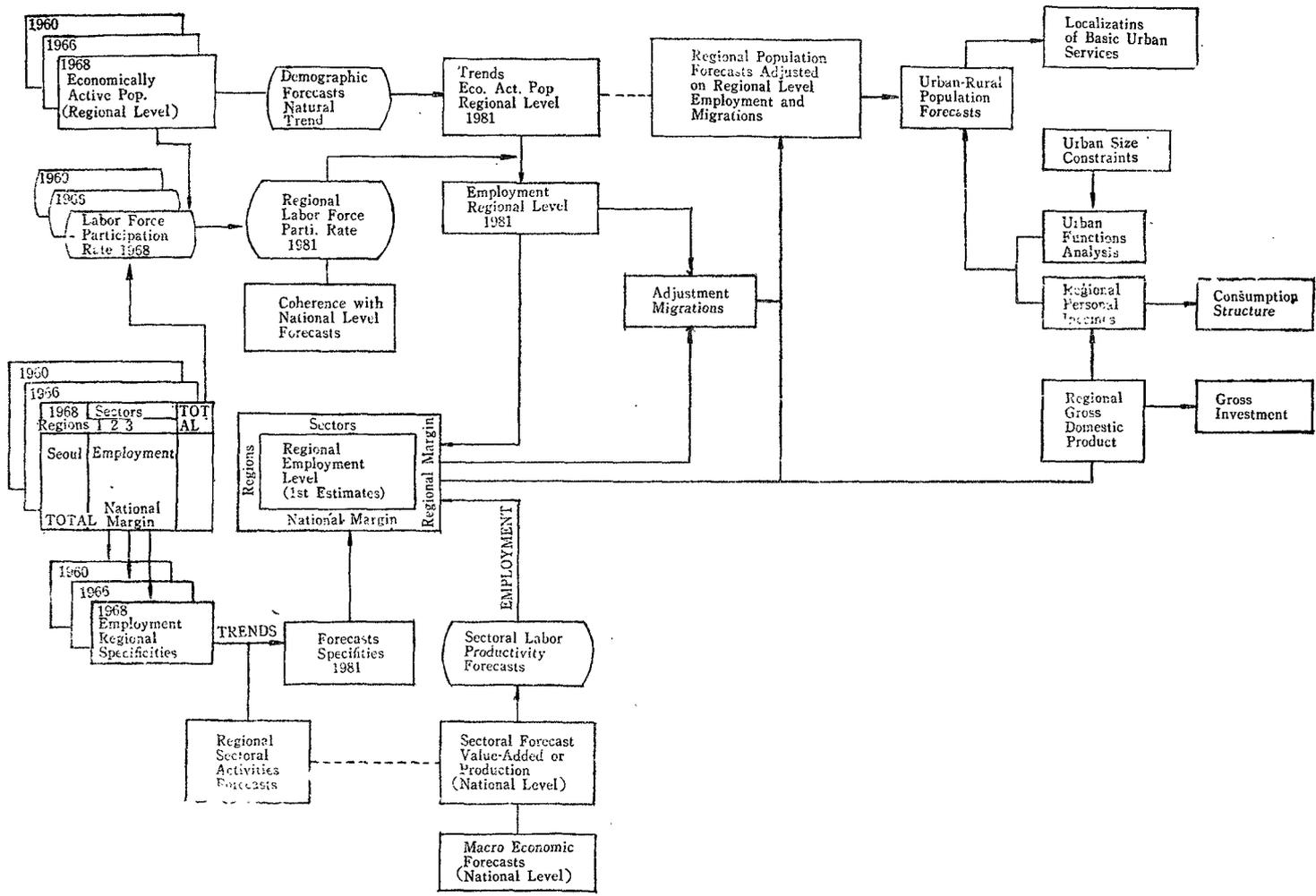


Fig 3. Schematic Flows of the Coherence Test

it tends to increase the capacity of rural areas to hold population over longer period of time. The proposed scheme has been selected on the ground that it offers some possibilities of slowing down the urban concentration of population in one or two cities and of promoting a more balanced regional development.

Final outcome of this planning exercise was inconclusive. The study did not give an answer which is better scheme for the future action for regional development in Korea. After all, the study team made it clear that no scientifically sound quantitative demonstration of the superiority of the proposed scheme as compared with the reference scheme could have been envisaged.<sup>(20)</sup> In this respect, Ten-Year Regional Physical Plan has its own characteristics in terms of planning method as compared with the second case in this paper in the sense that the plan was trying to give a maximum discretion for the policy makers as to the future course of action.

## 2. Method of the Gwangju Regional Development Planning

The project for the Gwangju Regional Development Planning is an outgrowth of an earlier project, the Regional Physical Planning of Korea. According to the recommendation of the Regional Physical Planning, the country is delineated eight regions and seventeen sub-regions; three of the latter are in the Gwangju Region as shown on Map 2. As the earlier study concluded that the Gwangju Region is one main problem regions,<sup>(21)</sup> the Gwangju Region was chosen as a priority project for comprehensive regional development planning. Regional issues concerning the Gwangju Region has been reviewed in the earlier part of this study.

The objectives of the Gwangju Regional Plan, as already suggested in the Regional Physical Plan of Korea and the comprehensive National Land Development Plan, can be summarized as follows: a) the maximum reduction in net out-migration from the region, consistent with b) below, and national policy objectives of continued high rates of growth in gross national product, improvement in the nation's balance of payments position and price stability;

b) a reduction in the disparity between per capita income in the region;

c) raising of the level of infrastructure facilities and services, particularly in the urban areas; and

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(20) Regional Physical Planning of the Republic of Korea Vol. 1 (General Report), Seoul, Korea, 1972, p. 40.

(21) Republic of Korea, *Regional Physical Planning*, Vol. I. General Report, 1972, p. XII.



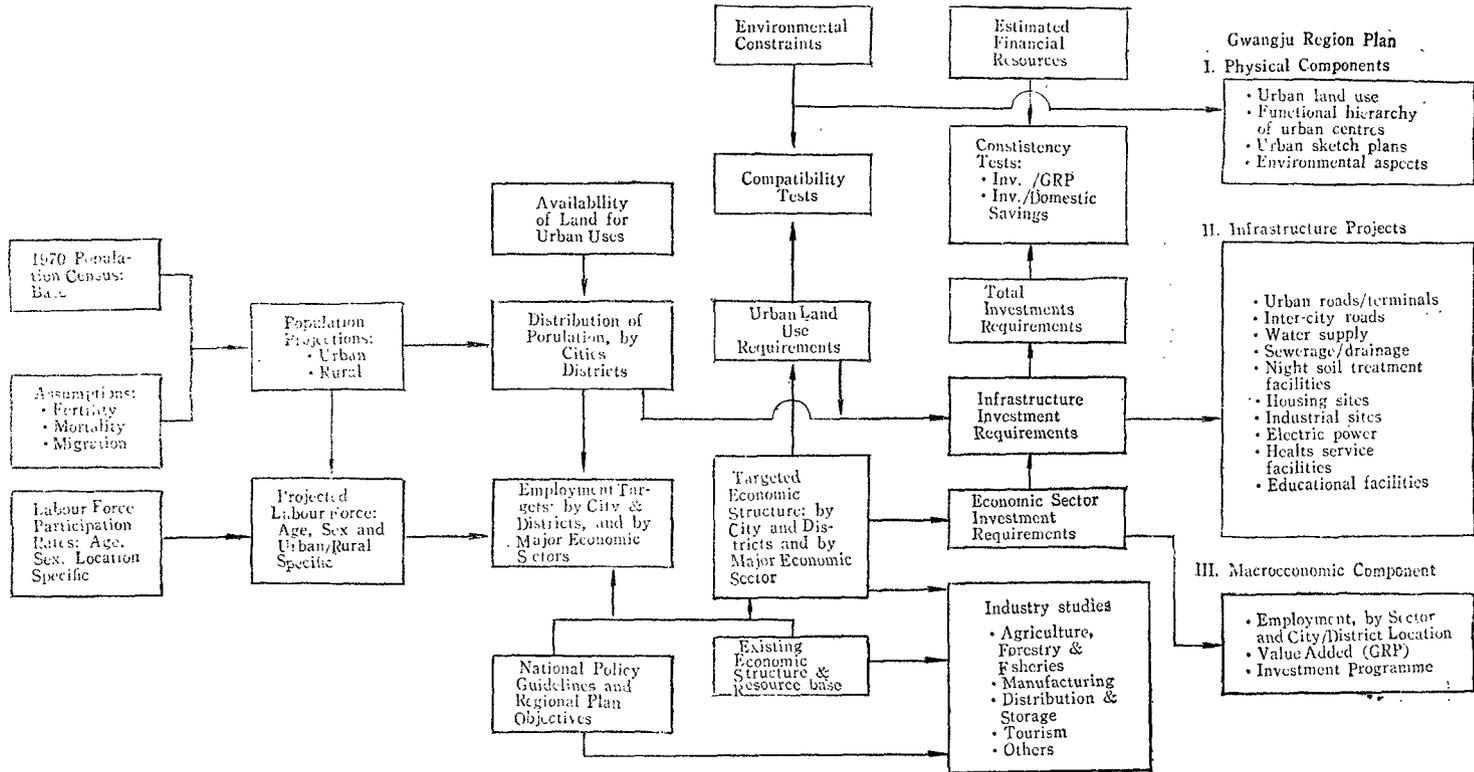
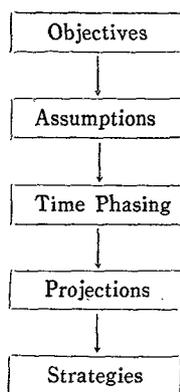


Fig. 4. Planning Method of the Gwangju Regional Development Plan

Basic process of the plan-formulation is five-step work as given below.



Assumptions concerning the rate of growth in gross domestic product, population growth via fertility rate, mortality rate and migration, labor force composition, land absorption for urbanization and infrastructure facilities standards are exogenously given. With those of the given assumptions, projections about population labor force, economic sector, investment requirements and potentially propulsive industries of the region are made in somewhat straight-forward manner.

Selection of a strategy for the Gwangju Regional Plan was based on analysis of the region's physical characteristics and regional and national goals and policies. In terms of employment, value added and land use, the region is predominantly agricultural. The characteristics of the region's dominant sector suggest one of the major components of the basic strategy for the Regional Plan. Any substantial narrowing of the gap in per capita income produced in the region and in the nation as a whole, as between rural and urban population, requires a restructuring of regional employment in manufacturing, as the leading sector, with internally consistent increasing tertiary sectors.<sup>(22)</sup> Given the resource base of the region, there does not appear to be any one type of manufacturing industry that is suitable for expansion on a scale large enough to absorb both the projected decline in employment in the primary sectors, and the growth in the labor force.

Reviewing the method applied for the formulation of Gwangju Regional Plan, it is an impression that no particular methodologies have been developed and adopted. Being based on an easy acceptance of many critical assumptions at the start, projections are checked through a process of iteration and feedback. However, there seems very little logical

(22) Robert R. Nathan Associates Inc., *Assistance Development of Regional Plan for Gwangju Region, Summary of Methodology*, 1975, pp. 33-35.

ground for the selection of development strategies from the preceding analytical works. This kind of plan-making project may represent a common draw-back which the conventional planning process has to be solved. A long, round-about process of tracking out a set of feasible and rational strategies for development of a region in the conventional planning usually ends with compromise between the prevailing regional problems and the suggestion of policy measures, which is not always derived from analytical rigorously.

#### IV. Problems and Suggestions for Improving of the Method of Regional Development Planning in Korea

It is not easy task to give the picture of methodologies being applied by various regional development planning efforts of a country, because of different context and national institutional set-ups. As discussed in the very beginning of this study, regional planning *per se* is accepted with different connotations by one country to another. For example, the meaning of comprehensiveness in methodological terms for regional development greatly varies between macro regional planning and micro regional planning, between the top-down regional planning and the bottom-up regional planning, between national-regional planning and local planning and local-regional planning,

We have observed in Korea that the method of planning for regional development has evolved from the engineer's physical planning approach in the earlier phase to the unsuccessful effort of regionalizing the national development planning, depending upon changes in socio-political acceptability and in regional issues. Thanks to the rising concern about the importance of regional factor in national development, planning methodology for regional development has been gradually improving.

However, there are some confusions about regional planning system itself by which a specific method of planning can be elaborated. Part of these confusions would have been raised by the coerciveness of immediate problems like the dispersal program of people and industries from the Seoul metropolitan area which the government thinks to be solved with prime urgency. Coerciveness to tackle an urgent problem in hand would not leave regional planners to work on a time-consuming process of formulating regional development plan and tends to spoil efforts of making a plan in coherent manner.

When we carefully review the whole plan-making process of the two projects, OTAM-Metra's regional physical plan and Nathan's Gwangju regional plan, the projects tried to

build the internal logic and provide measures the objectives already given by the government. The regional development objectives and the means to achieve these objectives for one region may not be compatible with those of another region. Since no national-regional plan has existed to coordinate selfish regional interests built on for own region's sake, regional planning studies have not gone beyond the nature of intra-regional comprehensive development planning exercise. Given the ministerial structure and orientation at the central government, it is hard to expect that the method of top-down national-regional planning will be successfully applied in the near future. The Fourth Five-Year Economic Plan (1977-1981) has failed to regionalize its macro economic planning model. MOC is not prepared to play a coordinating role over the local planning units and to provide consistent spatial strategies to EPB's economic planning model. In order to overcome the current confusions, the method of coordinating sectoral plans at the central government level should be developed among others.

There may basically be two ways of resolving this dilemma. One is to reinforce the top-down planning method by the creation of a single national planning agency including EPB's economic planning and MOC's regional planning functions, whether it be the presidential authority itself or a super-organizational unit of national planning. Another is to decentralize planning decisions, confining the role of the central planning units to a range of indicative planning. The latter approach implies that the pursuance of the planned objectives and the implementation may substantially be delegated to local planning authorities. Given the two alternatives, the feasible and realistic approach may be to strengthen local-regional planning systems and to develop the method of planning for intra-regional comprehensive development. Out of the eight planning regions, the two regions have formulated their own regional development plans and another region, the Jeonju region, is under work by the Asiatic Research Center of the Korea University.<sup>(23)</sup>

The Taebaek region is proposed for the formulation of regional development plan as the third phase project of UNDP/SF in Korea which is expected to begin in 1977. The Jeju region has long been the Special Development Area which should have been given special consideration because of its locational uniqueness as an isolated island and prospects for tourism development. The remaining three planning regions: Taegu, Pusan and Taejon are relatively advanced as compared with other regions. In this context, the role of

(23) The Jeonju Regional Development Planning Project has been undertaken by the Asiatic Research Center of the Korea University in cooperation with two local universities in the region. The project is funded from the International Development Research Center in Canada for two-year period beginning September 1975.

MOC is to provide some basic socio-economic indicators which the respective local planning agencies can refer to and to take time for the formulation of national-regional planning.

We have mainly discussed methodological issues from the viewpoint of institutional set-ups of planning policy-making environment. But there are many critical areas of analytical methodology which is meant by planning activities involved in the construction of a plan which, broadly speaking, deal with choice of such things allocations and distributions in terms of material-economic categories. The United Nations Centre for Regional Development suggested seven steps which constitute entire process of the method of planning for comprehensive regional development(MPCRD). Still another suggested that the method of planning basically passes through the following process;<sup>(24)</sup>

- A) Specification of the objectives,
- B) Selection of the instruments to be used for realizing the objectives, and
- C) the use of instruments.

Comparing with Hilhorst's, MPCRD does not explicitly introduce when the specification of the objectives for the development of given region is made while Hilhorst's view missing the sequential process to reach at the selection of relevant instruments and at the integration of various policy instrument as a whole.

In this sense, Hilhorst's view of planning process and MPCRD paradigm seems to be complement, although macro-framework building and sectoral projection steps in MPCRD are inclusive of the specification of goals and objectives, defining alternative paths to attain these objectives, and the specification of sectoral objectives and means for each alternative. Therefore, it may be suggested to introduce explicitly the steps of generating and evaluating of alternatives since these steps are the most critical sequences in planning process.

- A. Diagnosis
- B. Macro-Framework Building
  - 1) Specification of the goals and objectives
  - 2) Defining alternative paths to attain the objectives
- C. Sectoral Projection
  - 1) Specification of sectoral objectives
  - 2) Selection of instruments

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(24) Jos G.M. Hilhorst, *Regional Planning: A Systems Approach*, Rotterdam University Press, 1971. p. 108.

D. Intersectoral Coordination

E. Plan Finalization

F. Action Programme Formulation

G. Implementation Planning

These steps form together the process of planning but though intimately related, need not be performed by the same authority or organization. The close interrelation between these steps is based upon flows of information and of feedback that will run smoothly when the process is efficiently organized.

The specification of goals and objectives consists basically in determining the characteristics of a desired situation, given those of a given regional situation. Once the objectives have been determined, the next step is to define alternative paths to achieve the desired situation in the future. The range of alternatives should be as wide as is practicable and should be representative of the more important possibilities. The phase of evaluation is to reduce the number of alternatives in order that a desirable and feasible alternative is selected by comparing the advantages and disadvantages of the alternatives. Steps following the phase of evaluation is well defined in MPCR paradigm. Given the seven steps, the steps of diagnosis, intersectoral coordination and implementation are highlighted for further discussion since these three steps are the most crucial elements which most practitioners use to face with.

### 1. Diagnosis

It is a general experience in most countries that regional development planning in the first stage of its existence had to overcome fundamental difficulties generated by insufficient quantity and quality of regional statistics and other forms of information. The collection of information, not merely impression about the region but large quantities of statistical data, must be a starting point of whole planning process. As diagnosis is meant by something more than data collection, quantitative and qualitative data have to be translated into the use of planning purposes concerning regional pathology and the specification of goals and objectives. However, this step has raised many problems of what kind of data must be collected, of how to process the collected data, and to delineate areal scope for which data are to be collected for planning purposes. The time horizon of data collection is very often a self-limiting factor because quantitative data is hardly retraced and even have not ever existed. Although data are available, the sectoral classification and areal units not consistent over the period of collecting data.

Reviewing the regional planning studies which have been undertaken last ten years, no systematic way to collect information has been evolved, not being greatly different from one to another, although some studies went on in detail to the specific aspect of regional pathology. Even though general headings of the data collected covers natural resources, physical conditions, demography, economic situation and infrastructure facilities of the region, the time-horizon and sectoral classification varied from time to time and the depth of data base was not consistent.

The poorest areas of information have been data on regional social accounting and interregional/intraregional migration of population. Regional income accounts have been available since 1961 but the reliability of the accounting is still in question. Regional input-output analysis has not been tried, although efforts for regionalizing of national input-output table by so-called non-survey techniques have been attempted. As it is very time-consuming and the availability of data at the right time is critical in meeting deadlines for plan formulation, regional social accounting has been the object of negligence. For the region which few data are available, all feasible alternative accounting schemes must be exploited in order to utilize fully the few figures available.

Another weak point in the phase of diagnosis is the data availability concerning the migration of people. From the population and housing census of 1970, interregional and urban-rural magnitude of migration flows has been available of migrants is hardly found. In recent years interest has been growing in demographic accounts analogous to such economic accounts as input-output.<sup>(25)</sup>

Although piecemeal improvements of data base for the analysis of current situation and policy evaluation by regional social accounting and migration flows are made, basic issues concerning regional data bank and regional information system in general should be studied with high priority. Now that facilities are available for processing large amounts of statistical information. This brings obvious benefits though eliminating duplicate records, greater accessibility and more intensive use of the data.

However, the richness of data and the permutations of that data may not always guarantee the clarification of regional situation and living conditions. Being widely discussed over the years, the concept of social indicator can be translated into a kind of regional

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(25) William Alonso, *Policy-Oriented Interregional Demographic Accounting and A Generalization of Population Flow Models*, Working Paper No. 247. Institute of Urban and Regional Development, University of California Berkeley, 1974.

social indicator or the quality of life index. General direction toward developing regional social indicator is to begin with the survey of living condition of the people as against an aggregate economic abstraction like gross regional product or regional income disparity. In order to identify the criteria of the quality of life in the region or the basic minimum needs, regional information system should be incorporated with traditional formula of "survey-analysis-plan".

## 2. Intersectoral Coordination

Intersectoral coordination is all about what regional planning process is aiming at. Problems raised in relation to intersectoral coordination at the national level in Korea have been reviewed in the preceding chapter. Given regional development objectives and constraints, the approaches to intersectoral coordination were illustrated under the name of the coherence test in the Regional Physical Planning of Korea and the consistency check in the Regional Planning Study for Gwangju Region.

At the regional level, the most critical sectoral components to be checked are people, economy and infrastructure facilities. People refer here to the demographic characteristics of population, labor force, employment and human resource in general. As the welfare of people living in the region is always an ultimate goal for regional development, economic growth and the provision of infrastructure facilities are meaningful when they are translated for the enhancement of people's welfare. Economic Growth and the decreased regional income disparity which is usually expressed in monetary terms may not always accompany that the actual living conditions of people in the region is improved. Regional economic indicator like gross regional product may be misleading, without quoting the persuasive dichotomy of people prosperity versus place prosperity. Straightforward efforts for regional economic growth is very risky undertaking unless job creation and hence income increase of the residents already living in the region is thoroughly taken into account. Without a deliberate calculation of possible local benefits in terms of jobs newly created and actual income generated by a new industrial establishments, it may not hold the assumption that the increased gross regional product will automatically facilitate to the enhancement of regional welfare. The actual performance of regional economic growth for any given region depends on a number of factors such as the characteristics of newly generated employees, the nature of entering industrial establishments, the organizational structure of firms, and a region's initial capacity to use new industrial locations for its own benefit in the subsequent rounds of regional economic process.



supporting facilities for the people and industrial activities in the plan. Regional development efforts should go beyond providing an appropriate environment for industrial activities. The provision of a livable environment for the people should be weighed as much as the infrastructure requirements of industrial activities. A conceptual scheme is given below to help the understanding of the preceding discussion. The suggested methods in the boxes of Figure 5 serve only as an example form of internal consistency checks. According to this conceptual framework, the plan-making process of checking internal coherence adopted by the two cases above-mentioned seems to be appropriate but some weak points concerning intersectoral consistency between people and economy are revealed. However, the internal coherence test between infrastructure and economy gives many insights to the practitioners working on regional development planning.

### 3, Implementation Planning

Since the ultimate effectiveness of regional planning efforts has to be measured by the final outcome which is intended to attain in the plan, the implementality of the plan is very crucial. However, it has been said the soundness of substantial methodology is usually one thing and the way get done is another. Procedural methodologies covering the systematic channelization of the proposed action programmes/ projects through annual budgetary decision-making process, the strengthening of regional planning capability in provincial and national executing agencies, and ensuring adequate supply of skilled manpower is related to regional development system as a whole. As has already proven in practice, there is a close connection between the institutional aspects and procedural methods of regional development.

First, in order to increase the implementality of the plan, one approach may be reorganization of the decision-making process affecting physical-spatial planning and economic planning. There should be collaboration between the overall physical development unit and other appropriate planning units in preparing social and economic criteria to help guide planning-programming-budgeting system at local, regional, national levels of the country.

Second, the development of educational programs in regional planning must be the most challenging task. Technical competence and the planning capability of government officials are required in order to be prepared for the highest form and level of planning activities. Any development system is greatly affected by whom the system is technically operated by. Regional planning as a discipline and a profession has been the object of

continuous redefinition and is still profoundly in the transitional stage. Three types of regional planners might have been found in Korea's experience; engineer-planner, planners with social science specialties, and professionally educated planners. Although limited number of regional planners professionally trained have been engaged in regional development planning unit at the national level, local planning authorities are still dominated by the engineer-planners with the educational background of civil engineering and architecture.

Intensive training program for the reorientation of planning officials both at the national and local levels should be set if regional planning efforts are to be more than a refined public works program. Otherwise, the engineer-planner's unfamiliarity with socio-economic planner's views of comprehensive regional planning will continuously result in each group living within their own shell of professional inclination in sheer indifference toward each other.

Third, as it is known, actual environment in which regional planners have to work is not too generous to wait regional planning exercise to be done with enough time. Coerciveness of problem-solving is more than common. Problem-solving approach requires that the planning process be decentralized. While broad strategies and policy must be centrally determined, widest leeway must be delegated to local authorities to implement for themselves. Attempts to delegate planning and implementing authority to local communities have often produced unsatisfactory results. This has almost always been due to a lack of resources and technical skills or both. But it has also been made clear from the Korean experience with regional development planning that the regionalization of national plans of which approach is the nature of top-down ideal envisaging a set of regional/global and regional/sectoral targets to be aligned without little autonomous authority for local government, has brought a far-reaching problem involving greater conceptual and operational difficulties. Given the two alternatives, it may be suggested that the former approach is better than the latter, whereas the delegation of authority for implementing the plan are accompanied with resources to get a program started and with the appropriate kind of technical assistance is permitted.

### Concluding Remarks

Conceptualization efforts and empirical findings incorporated in this study must be taken

as purely suggestive. It is not pretended that any of those efforts and findings may be directly used for plan-formulation and the design of policy instruments. Too many critical issues and thorny questions have been simply brought in but not necessarily with answers. There are no quick or easy solution to the problems and current dilemma of planning methodologies both in the contexts of substantial and procedural relevance.

Korea's regional development planning over the last decade has set a base for further steps for improving the method of planning for comprehensive regional development. And has made it possible to accumulate some good and bad lessons. The recognition of the importance of regional development and planning is evident. Trial and error in the process of regional development planning have been costly. It is, however, a general belief that the Korean experiences in the method of regional planning in terms of theory and practice may give some relevances for the countries which would have commonalities with respect to socio-political structure and regional issues.

Regional planners trained in an inter-disciplinary approach have begun to enter into the field of regional development planning at many planning agencies of the government. But the gap between an adequate regional planning capacity and the formulation of regional planning and implementation is still substantial. However, the most annoying task for the improvement of planning methodology is to bring about institutional breakthrough rather than the refinement and sophistication of planning document itself.

## Appendix

### 1) Differential Resident Tax

The government passed the revised Local Tax Law(Law 2593) on March 12, 1973 which enables local governments to levy the resident tax on all the legal residents and corporations under their jurisdictions. Under the provision of the Law, the nation is divided into four districts for the purpose of differentiating the rate of the resident tax mainly by the size of city population.

The main purpose of the new tax is to discourage the influx of people and capital into large cities and simultaneously to provide a passive tax incentive for the industrialists to move out from the overcongested areas.

But it has been criticized from the viewpoint that the nature of the tax is the revival of a notorious head tax and is an implicit means for supplementing local revenue. The

rates by four different districts are shown below:

(Unit : Won)

	Districts	Base Rate	Proportional Rate
City over 5 millions	Individual	2,000won	5% of personal income tax
	Corporation	20,000	5% of corporation income tax
City over 500,000	Individual	1,000	Same as the above
	Corporation	10,000	Same as the above
Other cities over 50,000	Individual	500	Same as the above
	Corporation	5,000	Same as the above
Rural areas	Individual	300	Same as the above
	Corporation	3,000	Same as the above

## 2. Office Dispersal Program

The government office dispersal program is not very new. It has been frequently expressed in government circles but so far the Central Official Training Institute has been relocated in Taejon away from Seoul. A new research and university town to accommodate the Ship-building Institute, the National Oceanographic Research Institute, the Precision Machinery and Mechanic Center and Chungnam National University, which is proposed to be built in Taejon.

Government agencies like the National Health Institute, the Electricity and Communication Laboratory, the Railroad Technology Institute, the Inspection Office of Agricultural Equipment, the Agricultural Products Inspection Station, the Food Research Institute, the National Standardization office and Fisheries Experiment Station, which are already in Seoul, are considered to be subject to the program, although the details have not been materialized for full implementation.

## 3. Faculty Exchange Program

The faculty exchange program has just started in 1973. The Ministry of Education formulated this program as an instrument for reducing educational disparity between universities in Seoul and local universities by means of exchanging faculty on a voluntary base. So far about 50 faculty members have volunteered.

## 4. University and College Advancement District

The Ministry of Education promulgated "Administrative Measures for Reducing School Disparity, Controlling Urban Concentration and Promoting Technical Education" in June 1973. They are intended to restrict to advancement to college or university over the provincial jurisdictions. Previously, the high school graduates were able to go any college or

university in the nation, if they passed the entrance examination given by individual colleges or universities. According to the new measures, high school graduates will be given a limited choice of two provinces. First, high school graduates who want to advance to a college or an university must pass the preliminary examination auspiced by each province. Secondly, they can apply for the entrance examination of one of the colleges or universities in the province where they have passed the preliminary examination.

#### 5. Development Restriction Zone

By the provision of the City Planning Law of 1971, MOC has designated 15 Development Restriction Zones around major urban areas. Three main objectives of the Development Restriction Zone are: to preserve productive agricultural land, to control urban sprawl, and to promote natural amenity. This is quite comparable to the concept of the 'green belt' of Great Britain, restricting any kind of developmental activities excepts the repair of existing buildings and agricultural uses.

As of June 1973, the total area covered by the zones is 5,046 square kilometers, or approximately 5 per cent of the national territory. Seventeen cities are Seoul, Sungnam, Suweon, Anyang, Busan, Taegu, Kwangju, Jeju, Chuncheon, Cheongju, Taejon, Jeonju Ulsan, Masan, Jinhae, Jinju, and Chungju,

#### 6. New Village Movement (Saemaul Undong)

The purpose of the New Village Movement is not yet clearly defined. However, this movement has been nationally activated to promote rural development ranging from the spiritual armament through self-help, the replacement of thatched roofs with tile, the alignment of agricultural service roads, to the rebuilding of entire rural village. This movement may have many implications with respect to regional development in the sense that it aims at rejuvenating neglected rural areas as a means of holding back or at slowing down the emigration of population from psychologically and economically depressed rural areas.

It is too early to draw any conclusion about this movement. But it may deserve more recognition as a fragmented piecemeal approach, since it has been the most highlighted program in terms of socio-political mobilization and national conscience.