TOWARD THE REGIONAL DISPERSAL OF INDUSTRIES IN THE PHILIPPINES

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SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE
DEGREE OF

MASTER IN CITY PLANNING

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

(MAY 1979)

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Submitted to the Department of Urban Studies and Planning in May 1979 in partial fulfillment of the requirements for the Degree of Master in City Planning.

ABSTRACT

This study aims to demonstrate how the interaction between the planning and political processes, given their different perceptions of spatial equity and efficiency objectives, influences the formulation and implementation of regional policies in the Philippines. It examines a number of past and current policies, with particular emphasis on those related to the regional dispersal of industries, and evaluates the outcome or identifies the possible consequences resulting from the frequent conflicts between these two processes. In addition, the complementarity of these various sectoral policies is analyzed in order to design an overall strategy for spatial equity. Finally the study presents some policy recommendations intended to strenghten the institutional machinery for regional development planning and to reduce the tensions between the planning and political processes.

Name and Title of Thesis Supervisor: William C. Wheaton, Associate Professor, Departments of Economics and Urban Studies and Planning.

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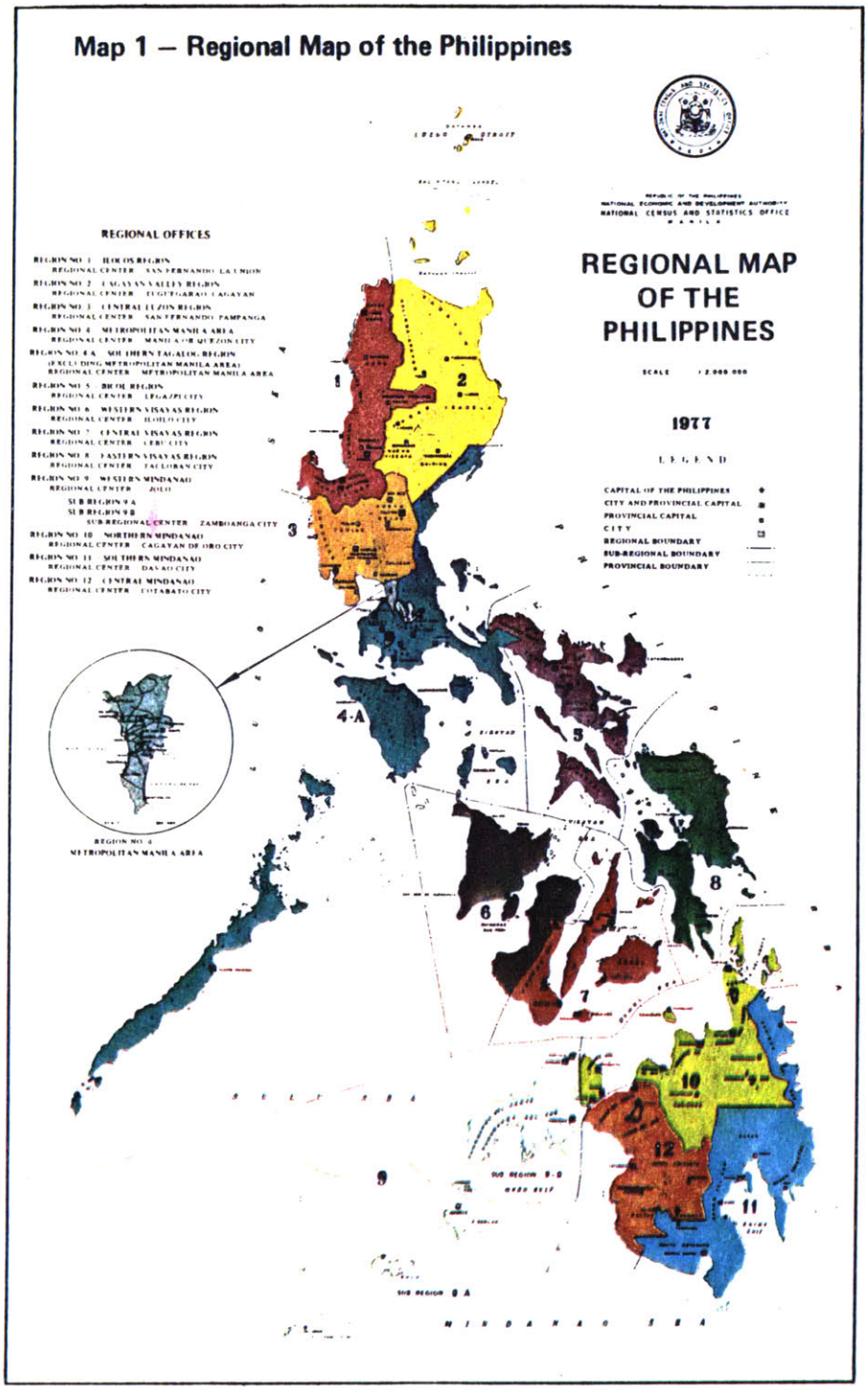

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PART I

In Part I the basic thesis and purpose of this study are defined. Subsequently the various theoretical and practical considerations that justify the formulation or regional development policies aimed at spatial equity are presented from both the planning and political viewpoints. Statements of Philippine regional policy are then reviewed in order to determine the underlying motivations behind policy initiatives and to identify the relevant policy issues which need to be addressed in this study. Finally a short summary of major findings and conclusions is outlined.

I. Issues in Regional Development Policy : The Philippine Case.

A. Basic Thesis of the Study.

Every policy has its own set of technical and political elements, which emanates from the interaction between the planning and political processes. Due to differences in objectives, these two processes attempt to influence in opposite directions the resolution of spatial equity and efficiency issues pertaining to the development of regional policy. The planning process considers decentralization from the Metropolitan Manila Area (MMA) as crucial to any regional development effort because 1) the dominance of the MMA is the main source of regional income inequality and 2) the MMA is apparently exhibiting signs of external diseconomies. While cognizant of such a development imperative, it proposes a more selective and discriminating method of decentralization in order to attain efficiency in growth as well as in resource allocation. On the other hand, the political process is concerned more with the impact of decentralization policies on equity as it effects the balance of power among the regions. Thus it advocates full budgetary equity through a broader participation of regions in programs for decentralization. As a result of these varying perceptions of decentralization and its objectives, the interplay between the planning and political processes largely determines the relative importance given to equity and efficiency goals in the formulation and implementation of regional policy. While it may be desirable to emphasize the technical element of policy for efficiency reasons, the political process subjects the policy making process to a series of adhoc revisions and pragmatic adjustments to particular pressures which reflect the constellation of factions and interest groups operating at various levels of the political system.[1/] The

final outcome for policy depends on which of the two processes and, correspondingly, which of the two elements will prevail and what compromises regarding equity and efficiency objectives can be reached.

In recognition of the technical and political elements of policy, the present regional planning set-up in the Philippines seeks to combine the technocracy and the political leadership in the region. However politics has traditionally been a dominant factor in national policy making and has often undermined the effectiveness of enunciated policies. With the advent of regional planning, another level of interaction between the planning and political processes has been added. While conflicts can occur at every level of policy making, potential conflict appears more imminent at the regional level because of interregional and intraregional pressures acting on decision-makers. When the planning process yields unnecessarily to these pressures during the formulation and implementation of regional policy, the success of decentralization efforts is greatly jeopardized.

B. Purpose and Scope of the Study.

This study aims to demonstrate how the planning and political processes, given their different perceptions of equity and efficiency, interact in policy making and to identify the consequences of such an interaction. A selected mix of regional policies and national policies with strong spatial impact will be evaluated in order to determine which of the two objectives - efficiency or equity - is accorded priority in each policy and to trace the factors that bear upon the resolution of the conflict between them. In addition, some trade-offs may be justified in order to improve the effectiveness and/or political acceptability of a particular policy. The evaluation exercise will attempt to highlight the instances where these

trade-offs are made.

While there are various regional policies, this study focuses on the strategy for the regional dispersal of industries because this particular policy, while being directed towards spatial equity and decentralization objectives, has strict efficiency requirements. Hence it provides a useful tool for demonstrating the conflict between the planning and political processes. Emphasis is laid on the assessment of the implications of policies on interregional disparities since industrial dispersal and decentralization policies are presently geared more towards this component of the spatial equity problem. Nevertheless, to the extent that available information permits, some general observations on the consequences of policies on intra-regional disparities will be presented.

In addition to examining the influences of the planning and political processes on policy making, the evaluation exercise will assess the various types of policies individually as a means of pinpointing their basic weaknesses or strengths which could be the basis for future policy reformulation. Subsequently the relationship of these policies to one another will be studied in order to verify whether they could serve as complementary schemes to the industrial dispersal policy in forming an overall strategy for spatial equity.

C. Rationale for the Development of Policies Aimed at Spatial Equity.

1. Theoretical Foundations for the Emergence of Spatial Disparities and Eventual Convergence.

Spatial equity as an objective of government policy is in itself a controversial and unsettled issue. It is argued that intervention strategies aimed at spatial equity are unnecessary since regional disparities

are a normal consequence of the whole process of economic development and are bound to disappear via market adjustments as development proceeds. The emergence of disparities is seen as inevitable because growth does not occur simultaneously and equally throughout a country but only in a few points.[2/] One plausible explanation in this regard is based on location theory which holds that economic activities first arise in areas with some initial advantages, either in market potential, natural rsource endowments, or transport, just to name a few possibilities. It is further theorized that the ensuing stages of polarization often lead to wider disparities until a certain point in time when growth diffuses more evenly and incomes converge. Eventual convergence in regional incomes is predicted on the assumption of perfect mobility of factors of production, whereby interregional movements will take place in response to varying factor prices in different locations and continue until an equilibrium point of equal returns in all areas is reached. Alternatively interregional trade can work as a substitute for interregional factor movements when the equalization of factor prices is achieved by the specialization of each region in commodities that require the greater amount of the factor that the region has.[3/]

2. Market Failure.

Although in theory spatial inequities are viewed as temporary economic features which can only persist via lags in dynamic adjustment,[4/] the experience of many countries casts doubt on this contention and appears to prove that regional convergence does not automatically occur in the course of development. Interregional adjustment, even when set in motion, is at best only partial since: 1) there are obstacles and costs to the free movements of labor and capital, 2) people are not governed purely by economic

motives and, even when they are, perfect information is not always available, and 3) market forces do not react efficiently enough to permit easy adjustment. Furthermore, due to the extreme selectivity of labor migration and the high risk, lack of entrepreneurial ability and inefficient capital markets in underdeveloped areas, regional disparities are likely to diverge even more, perhaps to some socially or politically unacceptable degree.

In recognition of the failure of the market mechanism to bring about regional convergence, government policies aimed at spatial equity are necessary to accelerate its occurrence and to mitigate the costs associated with regional disparities. Admittedly spatial equity or the attainment of regional balance cannot and does not mean a precise equality of economic and social conditions across the country. Basic differences in natural resource endowments as well as peculiar socio-cultural characteristics, just to name a few major factors, simply preclude such a possibility. The issue is what constitutes a proper regional balance or socially defensible degree of inequality, but this is unresolvable. The answer will be certainly subjective and political, highly dependent on how government views redistribution vis-a-vis its other social welfare functions.

3. Economic, Social and Political Justifications for Regional Policy.

a. From the planning viewpoint.

Essentially the planning process sees the development of regional policy, especially the regional dispersal of industries, as an attempt at economic efficiency, both in the short and long-run, with all the regions making a substantial contribution to overall national growth on the basis of their comparative advantages at different stages of their development. There are regions in a country with ample natural resources whose exploita-

tion can significantly contribute to overall growth objectives. Historically resource mobilization in these regions has proceeded slowly due to lack of investment or entreprenuerial interest. Development strategies geared towards exploiting these resource potentials are capable of raising regional incomes, reducing disparities without unduly hindering national growth since investment returns in these regions are considered to be higher. Subsequently, as incomes rise, domestic markets that are necessary to achieve a level of demand sufficient enough to sustain an efficient scale of operation of industries will be built up.

The aim of economic efficiency further supports the development of peripheral regions. In many developing countries, there is usually a marked concentration of all types of activities in a primate city which dominates the entire country. Although concentration of economic activities engenders efficiency, a point is reached when external diseconomies begin (or at least believed) to outweigh the external economies arising from agglomeration. Then the development of other regions through decentralization measures is initiated. Industrial dispersal strategies are pursued for this reason even though the theoretical basis surrounding the issue of the so-called "optimal city size" has not been fully established.[5/]

In addition to economic factors, social reasons further reinforce the need for altering regional structures. A skewed distribution of income, both interregional and intraregional, impedes a growth in local demand that could stimulate the emergence of secondary activities. In some regions of the country, there are heavy concentrations of poor people; their incomes are so low that the enjoyment of a decent quality of life is not attainable. Conditions in these areas are exacerbated when a depletion of the prime

labor force occurs as a result of migration to the big cities, eventually depressing agricultural productivities.[6] A substantial portion of the population does not gain access to resources nor basic human needs crucial to their personal development, which ultimately leads to a worsening of income distribution. Likewise this happens in the big cities. Despite high average incomes, unemployment and widespread poverty exist, inasmuch as the urban economy is incapable of fully absorbing migrants. In both the rural and urban areas, development efforts have not really benefitted those who most need help, with growth failing to trickle down to the poor masses.

Within any region, interpersonal differences in income, earning capacity and quality of life are always present. Due to these differences, a sizeable number of people is excluded from participating and sharing in the benefits of development since economic gains are usually monopolized by a powerful minority.[7] Therefore regional development should encompass not only income and productivity changes but should also aim, in the long-run, at basic structural changes in social class relations so that everybody shares equitably in progress.

Any attempt at reducing interregional disparities must ensure for social reasons that the benefits of the intervention strategy filter down to the majority of the people within the region. Very often the urban-industrial bias of government policies and programs has left the preponderant rural sector in a perennial state of underdevelopment and neglect. The result is a dualistic situation within the region that represents s microcosmic version of the dichotomy in the national economy. Standards of living vary within the region, creating tendencies for rural to urban migration. Massive migratory movements render the integration of the incoming

population into the urban social order highly impossible.

b. From the political viewpoint.

A major motivating factor for reducing regional disparities is the promotion of national integration and preservation of unity. The strengthening of the body politic poses a legitimate concern in any development strategy. Where the political climate is unstable and vulnerable to internal as well as external forces, central governments are more inclined to react positively to regional pressures even if such pressures are motivated by purely self-interests. At times the pressure of special groups or interests may be more effective than the resistance based on a less well-defined interest.[8/] It is not uncommon in many developing countries that some political, religious or racial factions are discontented with the performance of the government and clamor for its ouster. Threats of secession or outbreak of civil disturbances place heavy stress on the incumbent political leadership. It may succumb to pressures from regional groups and will try to show, even if by mere official pronouncements, that the government is giving more attention by initiating some regionally-oriented programs. Governments may also attempt to manifest sincere concern through budgetary appropriations for areas where tensions originate.

Fully aware of the critical importance of development policies in swaying the balance of power among and within regions, the political process strives to take advantage of any national or regional policy that it could use for solidifying its present power base. Within an interregional context, the regional group that is most effective in asserting its presence in the policy making process is likely to gain the most from regional policy.

Regional programs offer opportunities for extracting resources from the national government which could be utilized to finance projects that enhance the political image of the sponsoring elective officials. Thus regions try to capitalize on these opportunities by competing for centrally-allocated resources. Very often however, due to the diversity of needs and interests at the local level, an efficient allocation of resources is difficult to attain especially when political pressures are brought to bear heavily on decision-makers.

Finally, intraregional or personal income inequities may also create social and political tensions which could foment widespread dissatisfaction with the status quo. Discontent among the masses could ignite attempts to overthrow the present socio-political system and replace it with a new proletariat-based society.

4. Conflict between Spatial Equity and Efficiency.

The frequent contradiction in interests between the political and planning processes inevitably leads to conflict between the spatial equity and efficiency objectives of policy. The question as to whether these two objectives can be attained at the same time has been a major issue in regional policy.[9/] From the planning perspective, economic considerations favor concentration, or at least limited decentralization, of population, industries and capital resources to attain increasing returns to scale and external economies which in turn improves the productivity of capital. Diversion of resources to undeveloped areas takes place only when clear prospects of higher factor productivity are perceived there. In contrast, social and political factors advocate dispersion of human and capital resources largely for equity reasons. There may be a commonality of interests between

economic and political motivations if the decentralization of population, economic activities and supporting facilities results in the formation of more extensive markets which would provide additional growth opportunities. However such a decentralization often materializes only after a long lag time wherein inefficiencies are bound to crop up.

The conflict between equity and efficiency emanates from divergent expectations regarding the marginal productivity of capital in different areas. In general, higher returns are anticipated from more economically developed regions while, in depressed regions, opportunities for the productive use of capital are limited. Perhaps only a massive infusion of capital in these latter areas, i.e., investments in various complementary sectors analogous to the balanced growth strategy, can improve the outlook for capital productivity. Moreover, it is often argued that, in view of the scarcity of capital in developing nations, a wider geographical distribution of this resource unavoidably results in dilution, ultimately depressing the returns to capital or gains in national growth. Hence growth center or concentrated dispersal approaches have been designed to minimize probable efficiency losses. Unfortunately the effectivity of these approaches is still unconfirmed. Therefore, due to the need for maximizing national output, concentration of resources in a few areas with better potential for high returns is encouraged. But in so doing, spatial disparities usually follow unless spread effects are substantial. In many cases, therefore, spatial equity and efficiency are considered to be mutually-exclusive goals. How government attempts to resolve this dilemma is a matter of political rather than technical judgment.

Meanwhile the political process' conception of capital productivity

is greatly influenced by its relatively short time horizon. For the national government, for instance, it is more concerned with immediately quelling regionally-based opposition or threats to its continued stay in power by granting frequent budgetary appropriations to certain critical areas. Similarly this occurs at the local level where the impact of resources mobilized is easily seen and identified with political figures. Essentially therefore efficiency considerations are relegated to an oblivious position once political motivations dominate in resource allocation.

The controversy regarding spatial equity and efficiency is highlighted in the regional dispersal of industries, a strategy that has been adopted in many countries, both developed and less developed. Basically the pursuit of spatial equity through this approach entails certain costs in economic efficiency and personal equity during the course of its implementation.[10/] Government policies aimed at reducing disparities through investment subsidies and provision of infrastructure to lagging regions probably lead to an inefficient allocation of resources since alternative use in other regions is deemed to have higher marginal productivity. Especially in the early stages of economic growth, concentration may be preferable to dispersal in order to attain the advantages of scale and agglomeration economies. Moreover a substantial amount of subsidy is required to induce private investments into certain underdeveloped locations, particularly when such locations virtually do not possess any comparative advantage. Similarly most policies found to be effective for industrial decentralization tend to militate against a better personal income distribution because they often favor capitalists and encourage greater capital use. As industrialization proceeds, income inequality is expected to increase, at least

initially, as the income share of property or capital rises or as the rate of profit rises faster relative to real wages. This partially explains why the location of industries - the urban areas - show greater income inequality.

D. Philippine Regional Policy and Issues.

The Philippines first formalized its intention of promoting spatial equity with the inclusion of regional development and industrialization as one of the six major national development objectives in the Four-Year National Development Plan FY 1974-77.* (Prior to this, there have been fragmented efforts at developing specific areas as in the creation of the regional development authorities.) Since the early 1970s efforts have been vigorously pursued and the spatial implications of government policies are being evaluated in sectoral planning and policy formulation. More recently, in the Five-Year National Development Plan, the government reiterates its commitment to regional development.

1. Economic, Social and Political Justifications.

From relevant excerpts from national plans (See Appendix 1), we can note that economic, social and political considerations lie behind the policy on regional development and industrialization. The dominance of the MMA and the resource potentials of other regions serve as the economic basis for decentralization. It is contended in the plans that the negative externalities of spatial concentration in the MMA should be avoided by shifting the balance of public and private investments to other areas whose development could be accelerated with the mobilization of indigenous resources.

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* Actually in the FY 1972-75 Plan, mention was already made of regionalization as it relates to the government reorganization program.

For example, the river basins in the poor regions of the Cagayan Valley, Bicol and Mindanao offer tremendous possibilities for intensive resource exploitation. With lagging regions growing relatively faster, a wider distribution of income will ensue and reduce the primacy of the MMA. Hence it is emphasized that a redirection of policy thrusts must be effected in order to encourage location of economic activities in depressed regions depending on resource availability and market potential.

As an integral part of regional development efforts, basic services especially for the rural populace are essential in providing complementary schemes to productive activities. It has been noted that the agrarian unrest in the rural areas of Central Luzon had spawned communist insurgency activities in the 1950s and 1960s. Finally special attention is given to the development of the Muslim areas where separatist movements and unsettled peace and order conditions have persisted. In essence, the basic aim of regional development in the Philippines is to create the spatial framework within which the claims of investment efficiency and socio-economic equity can be substantiated and unified.[11/] Hence, given the underlying economic, political and social bases for regional growth policy, we see an attempt at pursuing spatial equity and efficiency simultaneously.

2. Levels of Interaction between the Planning and Political Processes.

The theoretical and practical arguments surrounding the issue of spatial equity and efficiency have been discussed in the preceding section. What appears to be more important at this stage is to examine how the planning and political processes determine the degree to which each objective is reflected and subsequently realized in each policy and the trade-offs that are necessary in order to increase its effectiveness as well as

political acceptability.

In the Philippines the influence of politics in public decision-making has been extraordinarily strong. The political process enters at different levels of the policy making system. Firstly, when the central government initiates a nationwide sectoral policy or program, e.g., the industrial estate program, all regions aspire to gain access to it. Ideally regional priorities should be established via the planning process because 1) in most cases, the potential contribution to the targets of the program varies widely among the regions, i.e., there are regions where present conditions are not suited to the program's requirements, and 2) scarcity of resources dictates that resources be allocated to regions where expected returns are highest. Notwithstanding these reasons, political pressures will be made to bear on national or regional decision-makers to include all regions in the program. This reaction is to be anticipated inasmuch as each policy or program is planned in isolation and, therefore, every region wants to capitalize on this present opportunity. Even when other programs are forthcoming, a region cannot afford to wait because it is uncertain whether it can benefit or participate in these future programs. When the planning process yields excessively to political pressures and fails to establish priorities, equity may be attained but losses in efficiency are the likely consequence.

It may therefore seem appropriate to plan various programs simultaneously as a package of proposals in an attempt to avoid excessive competition in each individual program. It can be claimed that this approach reduces uncertainty inasmuch as every region will be aware of available programs. As the array of choices is laid out before all of them, regions can decide which programs they prefer. To a certain extent, the present

comprehensive (multisectoral) regional planning process aims to achieve this simultaneous discussion of proposals. However the regional planning approach is basically patterned after national sectoral lines, thus the tendency for equal participation is still there. It is also doubtful whether the array of choices is wide enough for selection. Moreover there is no assurance that, once a region decides to confine itself to programs where it has some comparative advantage (can specialize) and foregoes participation in other programs, it will be given priority in the implementation of its preferred programs since final decisions on resource allocation still rests with the national government. For most regions, the devolution of decision-making is still limited, thereby constraining the ability to influence resource allocation. Within the regional planning set-up, conflicts in interests between political and technical proponents may militate against sound decision-making. Meanwhile, a few regions are favored in terms of greater delegation of substantive powers and the allocation of more resources. Hence the balance of power is very unequal among the regions, which in turn determines the degree of influence each region has on national decision-making. Therefore it is understandable that all regions aspire for inclusion in almost all programs even at the expense of an inefficient allocation of resources, both at the national and regional level.

Even assuming that reasonable regional plans, based on a compromise set of equity and efficiency objectives, are prepared, the succeeding implementation stage will be subject to political influence, probably even more. The national government is faced with competing demands from the regions for resources for plan implementation. Since the financial requirements of plans are usually very much in excess of available resources, priorities

will have to be set. Inasmuch as the balance of power among regions is unequal, favored regions with considerable access to central government may establish a prior claim on resources to the detriment of the other regions. In this particular stage of implementation, the political process works only for a few privileged regions.

3. The Regional Dispersal of Industries.

The interaction and conflict between the planning and political processes is best seen in the industrial dispersal program. The technical component espoused by the planning process will stress efficiency criteria in setting regional priorities since it recognizes the present limits to decentralization. Industrialization is essentially a long-term strategy requiring basic structural changes, therefore, industrial dispersal policies should be selective and their implementation well-phased in the sense that they do not indiscriminately call for a simultaneous industrialization of all regions at the same pace. Neither can regions share equally in future industrial expansion inasmuch as regional differences in natural resource endowments and comparative advantage for industrial location must be taken into account. In addition there is a need to establish a competitive magnitude of agglomeration and scale economies in a few areas that would be capable of counteracting, or at least lessening, the continued convergence of industries into the MMA and its environs.[12/] Therefore policy formulation and implementation must be realistic in terms of the financial, physical and institutional resources available to pursue decentralization. Constraints related to the indivisibility of capital, inadequate infrastructure support and complementary institutional reforms will determine the scale and timing of the intervention in the industrialization process.

In view of the long-term nature of the strategy of industrial decentralization and the constraints facing it, the planning process may opt for phasing the implementation of the strategy into different time horizons and subsequently defining the acceptable mix of equity and efficiency objectives sought in each phase. A prioritization scheme can be adopted to determine the degree of regional participation at each phase of implementation. This will necessarily exclude, or at least relegate to a minor position, some regions for which other strategies will have to be identified as a means of averting a further deterioration in spatial disparities.

In contrast to the setting of regional priorities, the political process will call for a broader participation of the regions. With the decentralization of planning to the regional level, political pressures demanding the inclusion each region in the industrial dispersal program will be experienced. The planning process may yield to such pressures as a means of gaining acceptability for its program. If equal treatment of all regions is given, political pressures will ultimately complicate and dilute the effectiveness of development policies.[13/] Alternatively when the time comes for making resource allocation decisions to substantiate policy, we will be forced to reckon with the issue as to which of the two elements - technical or political - and which objectives - equity or efficiency - is finally going to dominate and therefore should be emphasized. Initial priorities may be changed accordingly. In short, government may find it convenient to talk in one way and act in another. It is easier politically to advocate dispersal and then allocate resources otherwise.

E. Summary of Major Findings and Conclusions.

While decentralization from the MMA is recognized by both the planning

and political processes as instrumental to regional development, the pervasive influence of the political element in Philippine policy making militates against the formulation and implementation of regional policies that could effect real decentralization and, at the same time, combine and harmonize spatial equity and efficiency objectives. Attempts to reduce or resolve the conflict and mutual exclusivity between these two objectives through the design of an appropriate policy mix,that takes explicit account of present obstacles to decentralization, encounter difficulties caused by demands for equal regional participation in programs initiated by the national government. Centrally generated programs are more vulnerable to pressures originating from the regions unless the national government firmly specifies and follows criteria for regional involvement in these programs. Usually program or policy guidelines are so broadly defined to the point that regions can almost always try to justify their inclusion or oppose their exclusion. Hence policy making strives to give more emphasis to equity, the primary concern of the political process, through equal treatment of regions. However, even assuming that equity is achieved, the adverse consequence will likely be a considerable loss in efficiency in growth and in resource allocation. This phenomenon has been noted in past as well as in present regional development efforts, such as in the cases of the regional development authorities and the nationwide industrial estate program. The planning process, in a bid to gain political acceptability for its proposals during the policy formulation stage, makes concessions or succumbs to pressure calling for equal treatment for regions in centrally generated programs. However a dilution in financial, human and institutional resources often results, thereby hampering the effective implementation of policies

and programs.

When national objectives clearly override regional goals, pressure coming from the regions can be conveniently ignored. Strict efficiency requirements of policies are followed, notwithstanding the possibility of further regional income divergence. Among the dominant national objectives in the past are: rapid industrial growth to spur national economic development and the goal of national food self-sufficiency. These objectives necessitate a certain degree of concentration of public investments in a few areas with the best potential for growth in productivity. However such concentration unavoidably leads to spatial disparities. On an intraregional basis, most of the current subnational policies and programs aim for efficiency as a means of accelerating overall regional growth. Resources are usually concentrated on the more productive elements in the urban areas and the modernized component of the agricultural sector. On the other hand, the regions' poor population, whose interests are unrepresented by either the planning and political processes, does not benefit from development programs.

In contrast to the frequent conflict between equity and efficiency objectives, the Integrated Rural Development Projects provide the exception. They are likely to attain these two objectives simultaneously. This has been made possible through the organization of an efficient and powerful planning mechanism that is capable, not only of identifying real needs and establishing investment priorities, but also of surmounting political intrusion. Continuous national government support has been a pivotal element to the operation of such a planning machinery. This commitment is manifested also in the budgetary process wherein proposed massive multisectoral

investments have been adequately backed up by the national government.

The interaction between the planning and political processes is further complicated by problems related to institutional development. Varying degrees of institutional decentralization among the regions coupled with the preferential treatment accorded to a few regions have led to an uneven distribution of power which is inimical to the design of meaningful regional policy. These confound the political picture and increase the tendency for excessive competition among the regions, especially the disadvantaged ones, for scarce financial resources in centrally generated programs. Even in sectors or program areas where regions do not have any clear advantage, they still aspire for inclusion inasmuch as participation in any program is not at all certain. Ultimately the potential for regional specialization is not realized.

Very often the favored regions appear to receive utmost priority in resource allocation, notwithstanding the valid claims of the other regions. In addition the limited authority of most regional bodies exposes the planning process to extreme political pressures against which it is inadequately equipped to resist. On an interregional scale, their bargaining power vis-a-vis the favored regions becomes even weaker. Accordingly the provision of additional substantive and executive powers to the regional bodies and a build-up in their technical capability commensurate with their enlarged responsibilities are essential in promoting economic and institutional decentralization. These would make the distribution of power less lopsided and improve the prospects for better resource allocation decisions at the regional level that would be consistent with priorities established through the planning process.

In the pursuit of decentralization through a strategy that harmonizes spatial equity and efficiency objectives, the industrial dispersal policy shall assume the leading role, with the Integrated Rural Development Projects providing a complementary regional development scheme. Due to the undiminished dominance of the MMA and the existing constraints to decentralization, the phasing of the implementation of the industrial dispersal policy is recommended such that, in the short term, it is used not so much as a strategy for accelerating the growth of the lagging regions, but as a strategy for controlling the growth of the MMA. Accordingly short term priorities should favor the existing industrializing regions which are, at present, the best alternative industrial locations and are most suitable for promotion into countermagnets to the MMA. Furthermore these areas are also faced with restricted possibilities for agricultural expansion. Meanwhile the non-priority regions should be given preference in the choice of the sites for Integrated Rural Development Projects. Preferential treatment for these latter regions in non-industrial programs may reduce the opposition arising from the recommended phasing and regional prioritization procedure in the industrial dispersal strategy. Moreover these programs will lay the groundwork for future industrialization efforts. It is anticipated that a lower degree of regional income inequality can be attained in this approach to the implementation of the industrial dispersal policy, while at the same time efficiency requirements for industrial location are being met.

PART II

Chapter II presents an overview of interregional and intraregional disparities in the Philippines. It is intended to provide a concise introduction to the problem of spatial inequity which has persisted for a number of decades now. In particular, the primacy of the Metropolitan Manila Area (MMA) is stressed because this sets the central argument for the initiation of decentralization policy.

Chapter III attempts to partially explain the origins of present glaring spatial disparities through an analysis of the historical pattern of industrial location in the country. This is aimed at justifying the choice of the regional dispersal of industries as the focus of the overall strategy for spatial equity. Furthermore we expect to extract from this analysis the important factors which led to the present geographical distribution of industrial activities. These factors can be subsequently used as criteria for evaluating the potential effectiveness of current industrial dispersal measures.

II. Regional Disparities: A Description of the Patterns.

In Williamson's famous work "Regional Income Inequality and the Process of National Development," the Philippines disrupts the neat pattern relating spatial disparities to the level of a country's economic development. Inspite of its relatively low level of development, the Philippines exhibits a high degree of inequality in regional incomes, contrary to what was expected of countries falling within its income range. This section provides an overview of spatial (interregional and intraregional) disparities in the country on the basis of selected economic, social and physical indicators.*

The Philippine national output per capita amounted to ₱1618 in 1975. Only three out of thirteen regions, namely, the MMA, Southern Mindanao and Western Visayas, enjoy levels of regional output per capita higher than the national average. (Table 1). What is especially conspicuous is the fact that the MMA's regional output per capita is almost three times as much as the national average and about six times that of the poorest regions,

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*Three measures of income inequality will be used in this section, with values reflecting more inequality. These are:

1. Coefficient of variation - is a summary measure of interregional inequality which basically compares the deviation of the regional figures from the national average. It can be weighted or unweighted. Williamson used the population shares of each region as weights.
2. Mean/median ratio - is a measure of intraregional inequality. The median income divides the number of families into two equal groups. If the mean is very high relative to the median, this indicates that the proportion of families falling below the mean is much greater than the proportion lying above the mean, i.e., there is a small number of families with very high incomes which raises the mean to a level much above the median.
3. Gini coefficient - is a measure of the inequality in the size distribution of income within a certain geographical area. It is equal to the area enclosed by the line of perfect income equality in a Lorenz curve and the line describing the prevailing income distribution. Interregional comparisons simply show that the personal income distribution in one region is better or worse than another region's.

Eastern Visayas and Bicol. In addition the premier region generates more than one-third of national output while it has only less than one-eight of total population and one per cent of the country's land area. Its neighboring regions, Central Luzon and Southern Tagalog, further contribute about twenty per cent to national output.

In terms of average and median family incomes, the superiority of the MMA still stands out prominently. (Table 2). The region registered in 1975 an average family income of about ₱10,400 which is almost twice the national average. On the other hand, slight changes in the lower positions of the regional income ladder are noticeable, with Northern Mindanao becoming the poorest region, followed by Eastern Visayas and Bicol. Due to its high average incomes, the MMA has the smallest share of poor families (bottom 40 per cent) while having the largest concentration of upper income families (upper 20 per cent).* (Table 3). Low income families are found in large numbers in Eastern Visayas, Southern Mindanao and Bicol. Meanwhile rich families, other than those in the MMA, are living mostly in Central Luzon and Southern Tagalog.

Within the regions, marked disparities in income exist between the rural and urban areas, with the former having only a little more than half the urban income in some regions. (Table 4). It is in the predominantly agricultural regions like Eastern Visayas and Cagayan Valley that the rural-urban gap is narrowest. On the basis of Gini and mean/median ratios, the distribution of income is most skewed in the MMA. In general, income inequality is more serious in urban areas than rural areas. (Table 5). In a study

*These comparisons, however, do not take into account interregional differences in standards of living.

on income inequality, it was found that an overwhelming portion of the inequality between regions is due to the inequality between the MMA and the rest of the regions.[15/] Moreover the inequality between the MMA and other urban areas is much smaller than that between the MMA and rural areas. Thus the study concludes that the main source of inequality is between the distribution of income in the MMA and the distribution of income in the rural sectors of the regions.

Among and within regions, the dominance of the MMA appears to be the main source of spatial income inequality. In fact, if it is excluded from interregional comparisons, the most developed region has only twice the per capita product of the least developed region and the unweighted Gini coefficient drops drastically from 0.63 to 0.34. When the average family income data is used as a basis, the ratio between the richest and the most depressed region is about 1.5, while the Gini coefficient is reduced from 0.26 to 0.15. In addition, as the Gini and mean/median ratios suggest, intraregional inequality is likewise egregious in the MMA.

Spatial disparities, both interregional and intraregional, in the Philippines are undoubtedly serious. What is more alarming, however, is that these have persisted over the years with only slight improvements occurring from the postwar period up to the present. Polarization forces apparently engendered by the industrialization strategies in the 1950s appear to have aggravated regional disparities. Empirical evidence points to the spectacular increase in the MMA's output per capita , from just more than thrice the national level in 1948 to about four times in 1961. In contrast the growth performance of the other regions was sluggish, especially in the Mindanao, Eastern Visayas and Bicol regions. (Table 6). Meanwhile

the regions near Manila, Central Luzon and Southern Tagalog, have gained in the economic ladder, showing family income levels higher than the national average since 1957. The poor regions of Cagayan Valley, Eastern Visayas and Bicol had merely shifted positions at different years. Nevertheless their positions relative to the MMA had somewhat appreciated as the latter's average income level decreased from about three times the national average in 1957 to just about twice in 1971. (Table 7). During this period the problem of intraregional inequity has remained for the country as a whole. It has worsened in Eastern Visayas, Southern Tagalog and Ilocos while easing up marginally in Western Visayas and Bicol. (Table 8).

Major social indicators likewise reflect the premier position of the MMA which has the highest literacy rate and the longest life expectancy. Literacy rates are low in Western and Central Mindanao, the Muslim regions, while the life span is shortest in the Cagayan Valley and Northern Mindanao. The largest concentrations of malnourished children are situated in Western Visayas and Southern Tagalog, two relatively well-off regions with large populations. In terms of housing facilities, only one per cent of dwelling units in the MMA do not have safe water supply while, for the country as a whole, more than three-fourths lack this type of service. (Table 9).

Similar observations regarding the dominance of the MMA can be made on the basis of selected physical indicators. (Table 10). The area is totally electrified while, for most regions, only half of their cities and municipalities have electric service. Consequently MMA's annual per capita power consumption is highest at more than 1200 kilowatt-hours while, for the depressed regions, Cagayan Valley and Eastern Visayas, consumption is only 2.8 and 7.8 kilowatt-hours per capita, respectively.

After describing the past and present patterns of regional disparities in the Philippines, we shall briefly analyze the various factors that explain these disparities. Although only an incisive analysis can truly identify all these factors, some generalizations can be made to provide a glimpse of three of these important factors, namely; economic, political and goegraphical, and the regions where each is significant in accounting for current disparities. The type of industrialization strategy after World War II and the ensuing public investment program supportive of such a strategy are the economic bases that catapulted the MMA into its present position. Industrial growth eventually spilled over to its neighboring regions when it could no longer be absorbed within its confines. (This will be discussed in detail in the next chapter.) Export promotion appeared to have been the stimulus for growth in Western Visayas and Southern Mindanao, since their main products, sugarcane and timber, respectively, are the country's major export commodities. With the increased emphasis since the 1960s on the processing of traditional export products, the economies of these two regions have expanded very rapidly.

Meanwhile Central Visayas was able to capitalize on its strategic location in the archipelago in becoming an alternative and commercial center outside the MMA. Similarly geographical location is important in explaining the low level of development in the three poorest regions, Cagayan Valley, Bicol and Eastern Visayas. These regions are all situated in the eastern section of the country which bears the brunt of typhoons. Heavy dmage on the economic (agriculture in particular) activities in these regions is frequently inflicted by typhoons. Moreover they have, until recently, been physically isolated from the rest of the country because of large deficien-

cies in the transport system in these areas.

In the case of the other regions of Mindanao, it should be pointed out that this large island was a sparsely populated and undeveloped area before the government sponsored settlement schemes in the 1950s and early 1960s. Population inflow was inadequately complemented with physical development, e.g., infrastructure, which in turn slowed down the mobilization of virtually untapped natural resources. Due to its considerable distance from the national capital and the under-representation of its Muslim interests in national government affairs, most regions in Mindanao were for a long time not significant beneficiaries of development programs. Only recently, in the midst of political pressures, have these regions been given some priority in resource allocation.

Concluding Remarks.

The pattern of regional disparities in the Philippines can be characterized by the striking dominance of the MMA over the rest of the country. There are a few other relatively developed regions which have benefitted from national economic policies related to industrialization and export promotion. However the gains of development in the past three decades have not, for a variety of reasons, trickled down to the rest of the regions, thereby leaving them in a state of underdevelopment.

Table 1 Gross Regional Product*, Population, Per Capita Product, By Region, 1975

		Gross Regional Product (in millions of pesos)	% Share	Population (in thousands)	% Share	Per Capita Product	Index
PHILIPPINES		68,056	100.0	42,071	100.0	1,618	100.0
LUZON		43,826	64.4	22,790	54.1	1,923	118.9
I	Ilocos	3,162	4.6	3,269	7.7	967	59.8
II	Cagayan Valley	1,774	2.6	1,933	4.6	918	56.7
III	Central Luzon	5,413	8.0	4,210	10.0	1,286	79.5
IV	Metropolitan Manila	23,532	34.6	4,970	11.8	4,735	292.6
IV-A	Southern Tagalog	7,376	10.8	5,214	12.4	1,415	87.5
V	Bicol	2,569	3.8	3,194	7.6	804	49.7
VISAYAS		13,051	19.2	10,133	24.2	1,288	79.6
VI	Western Visayas	6,731	9.9	4,146	9.9	1,623	100.3
VII	Central Visayas	4,238	6.2	3,387	8.1	1,251	77.3
VIII	Eastern Visayas	2,082	3.1	2,600	6.2	801	49.5
MINDANAO		11,179	16.3	9,147	21.8	1,222	75.5
IX	Western Mindanao	2,073	3.0	2,048	4.9	1,012	62.5
X	Northern Mindanao	2,658	3.9	2,341	5.5	1,149	71.0
XI	Southern Mindanao	4,581	6.7	2,715	6.5	1,687	104.3
XII	Central Mindanao	1,867	2.7	2,070	4.9	902	55.7

* in constant 1972 prices
Note: Details may not add up to totals because of rounding

Source: National Census and Statistics Office (NCSO)

Table 2 Total Families, Total Family Income*, Average Family Income, By Region, 1975

		Families	% Share	Family Income	% Share	Mean Family Income (pesos)	Median Family Income (pesos)	Mean/ Median Ratio
PHILIPPINES		6,859	100.0	40,058	100.0	5,840	4,480	1.30
LUZON								
I	Ilocos	558	8.1	3,082	7.7	5,525	4,558	1.21
II	Cagayan Valley	329	4.8	1,679	4.2	5,102	4,093	1.24
III	Central Luzon	662	9.7	3,824	9.6	5,773	4,940	1.17
IV	Metropolitan Manila	770	11.2	8,057	20.1	10,439	6,840	1.53
IV-A	Southern Tagalog	888	12.9	4,832	12.1	5,441	4,472	1.22
V	Bicol	518	7.6	2,216	5.5	4,280	3,572	1.20
VISAYAS								
VI	Western Visayas	679	9.9	3,722	9.3	5,484	4,150	1.32
VII	Central Visayas	595	8.7	3,078	7.7	5,172	4,129	1.25
VIII	Eastern Visayas	441	6.4	2,134	5.3	4,834	3,751	1.29
MINDANAO								
IX	Western Mindanao	314	4.6	1,779	4.4	5,662	3,680	1.54
X	Northern Mindanao	370	5.4	1,408	3.5	3,803	3,286	1.16
XI	Southern Mindanao	433	6.3	2,731	6.8	6,307	4,560	1.38
XII	Central Mindanao	301	4.4	1,515	3.8	5,025	4,737	1.06

* in current prices (millions of pesos)
Note: Details may not add up to totals because of rounding

Source: National Sample Survey of Households on Family Income and Expenditures, National Census and Statistics Office

Table 3 Families in the Bottom 40% and Top 20% of Income Range, 1971, By Region*

Regions	Total Number Families No.(000's)	%	Families in Bottom 40% of Income Range No.(000's)	%	Families in Top 20% of Income Range No.(000's)	%
PHILIPPINES	6,348	100.0	2,539	40.0	1,267	20.0
LUZON AND ISLAND GROUPS	3,351	52.8	1,167	18.4	829	13.0
Metropolitan Manila	525	8.3	34	0.5	262	4.1
Southern Luzon	869	13.7	285	4.5	220	3.5
Central Luzon	855	13.5	250	3.9	211	3.3
Ilocos and Mt. Province	346	5.4	185	2.9	56	0.9
Bicol	496	7.8	257	4.1	60	0.9
Cagayan Valley & Batanes	260	4.1	156	2.5	20	0.3
THE VISAYAS	1,650	26.0	834	13.1	213	3.4
Western Vasayas	670	10.6	267	4.1	97	1.6
Eastern Visayas	980	15.4	572	9.0	116	1.8
MINDANAO	1,347	21.2	538	8.5	225	3.6
Northern Mindanao	522	8.2	235	3.7	67	1.1
Southern Mindanao	825	1.3	303	4.8	158	2.5

* Based on old regional classification. The regions in Luzon follow closely the present delineation, with minor variations in Metropolitan Manila and Southern Tagalog. The old Eastern Visayas covers the present Eastern Visayas and Central Visayas. The old Northern Mindanao includes the present Northern Mindanao plus the Lanao provinces and Surigao del Sur, which belong now to Central and Southern Mindanao, respectively. The old Southern Mindanao encompasses the present Southern Mindanao plus the Cotabato provinces (presently in Central Mindanao) and the present Western Mindanao.

Source: Family Income and Expenditure Survey of the Philippines, 1971; Bureau of Census and Statistics.

Table 4 Average Family Incomes*, Urban and Rural, By Region, 1975 (in pesos)

		Average Family Income Urban	Rural	Rural/Urban Income Ratio (%)
PHILIPPINES		8,328	4,744	57.0**
LUZON				
I	Ilocos	7,959	5,004	62.8
II	Cagayan Valley	6,184	4,962	80.2
III	Central Luzon	7,497	5,096	68.0
IV	Metropolitan Manila	10,463	-	-
IV-A	Southern Tagalog	7,137	4,784	67.0
V	Bicol	5,770	3,986	69.2
VISAYAS				
VI	Western Visayas	7,321	4,905	67.0
VII	Central Visayas	6,471	4,697	72.6
VIII	Eastern Visayas	5,400	4,702	87.1
MINDANAO				
IX	Western Mindanao	7,088	5,451	76.8
X	Northern Mindanao	5,657	3,396	60.0
XI	Southern Mindanao	9,543	5,126	53.7
XII	Central Mindanao	6,660	4,752	71.0

* in current prices

** If Metropolitan Manila's families and income is excluded from the computation of average urban incomes, this ratio rises to 66.5 percent as average urban income drops to $7,088.

Source: National Sample Survey of Households on Family Income and Expenditures, National Census and Statistics Office

Table 5 Gini Ratios, By Region, Urban and Rural, 1975

		Whole Region	Urban	Rural
PHILIPPINES		0.4518	0.4727	0.3803
LUZON				
I	Ilocos	0.3887	0.4251	0.3502
II	Cagayan Valley	0.3949	0.3864	0.3939
III	Central Luzon	0.3674	0.3844	0.3463
IV	Metropolitan Manila	0.5083	0.5083	---
IV-A	Southern Tagalog	0.4102	0.4098	0.3880
V	Bicol	0.3950	0.4263	0.3680
VISAYAS				
VI	Western Visayas	0.4243	0.4496	0.3789
VII	Central Visayas	0.4297	0.4553	0.4155
VIII	Eastern Visayas	0.3945	0.3999	0.3945
MINDANAO				
IX	Western Mindanao	0.4770	0.5501	0.5264
X	Northern Mindanao	0.4393	0.3713	0.4594
XI	Southern Mindanao	0.4858	0.5847	0.3849
XII	Central Mindanao	0.3450	0.3666	0.3384

Source of Basic Data: National Sample Survey of Households on Family Income and Expenditures, National Census and Statistics Office

Table 6 Per Capita Output, 1948 & 1961, By Region*
(in pesos)

		Per Capita Output 1948 Level	Per Capita Output 1948 Index	Per Capita Output 1961 Level	Per Capita Output 1961 Index	Population Shares 1948	Population Shares 1960
PHILIPPINES		287	100.0	442	100.0	100.0	100.0
LUZON						(50.8)	(51.4)
I	Llocos	113	39.4	182	41.2	10.1	9.0
II	Cagayan Valley	224	78.0	313	70.8	4.0	4.4
III	Central Luzon	330	115.0	455	102.9	9.6	9.3
IV	Metropolitan Manila	932	324.7	1,800	407.2	8.2	9.1
V	Southern Tagalog	328	114.3	546	123.5	10.3	10.9
VI	Bicol	171	59.6	182	41.2	8.7	8.7
VISAYAS						33.9	28.7
VII	Western Visayas	257	89.5	382	86.4	13.7	11.8
VIII	Eastern Visayas	170	59.2	186	42.1	20.2	16.9
MINDANAO						15.3	19.9
IX	Northern Mindanao	263	91.6	275	62.2	6.6	7.2
X	Southern Mindanao	266	92.7	267	60.4	8.7	12.7

Note: Details may not add up to totals because of rounding

* Based on old regional classification

Source of Basic Data: National Census and Statistics Office, and A. Carreon's Study on "A Regional Study on Income Distribution: Case for the Philippines," December 1973.

Table 7 Average Family Incomes, 1957-1961-1965-1971
By Region* (in current prices)

		1957		1961		1965		1975	
		Level	Index	Level	Index	Level	Index	Level	Index
PHILIPPINES		1,471	100.0	1,804	100.0	2,541	100.0	3,736	100.0
LUZON									
I	Ilocos	1,292	87.8	1,242	68.8	1,433	64.3	3,299	88.3
II	Cagayan Valley	1,273	86.5	1,189	65.9	1,322	52.0	2,390	64.0
III	Central Luzon	1,509	102.6	1,713	95.0	2,595	102.1	4,127	110.5
IV	Metropolitan Manila	4,255	289.3	4,790	265.5	6,590	259.3	7,785	208.4
V	Southern Tagalog	1,504	102.2	2,092	116.0	3,025	119.0	4,332	116.0
VI	Bicol	1,084	73.7	1,501	83.2	2,024	79.7	2,784	74.5
VISAYAS									
VII	Western Visayas	1,303	88.6	1,614	89.5	1,990	78.3	3,206	85.8
VIII	Eastern Visayas	928	63.1	1,166	64.6	1,622	63.8	2,548	68.2
MINDANAO									
IX	Northern Mindanao	1,178	80.1	1,560	86.5	2,342	92.9	3,062	82.0
X	Southern Mindanao	1,146	77.9	1,463	81.0	2,004	78.9	3,577	95.7

* Based on old regional classification

Source: M. Mangahas, "Income Inequality in the Philippines: A Decomposition Analysis," Table 8, p. 52.

Table 8 Gini Ratios of Regional Income Distribution By Region*, 1961-1965-1971

		1961	1965	1971
PHILIPPINES		0.50	0.50	0.49
LUZON				
I	Ilocos	0.42	0.46	0.54
II	Cagayan Valley	0.44	0.44	0.44
III	Central Luzon	0.43	0.43	0.44
IV	Metropolitan Manila	0.48	0.50	0.45
V	Southern Tagalog	0.44	0.46	0.48
VI	Bicol	0.45	0.44	0.45
VISAYAS				
VII	Western Visayas	0.47	0.43	0.42
VIII	Eastern Visayas	0.44	0.47	0.51
MINDANAO				
IX	Northern Mindanao	0.53	0.45	0.45
X	Southern Mindanao	0.43	0.45	0.44

* Based on old regional classification

Source: M. Mangahas, "Income Inequality in the Philippines: A Decomposition Analysis," Table 8, p. 52.

Table 9 Social Indicators By Region

		Literacy Rate	Life Expectancy	Malnourished Child Population (in thousands)	Households without Safe Water Supply[2] (in percent)
PHILIPPINES		81.7	60.0	1,205.3	76.7
LUZON					
I	Ilocos	83.1	61.0	13.9	83.5
II	Cagayan Valley	78.7	56.6	49.8	95.0
III	Central Luzon	90.3	61.5	138.3	85.0
IV	Metropolitan Manila	96.7	63.8	70.8	1.0
IV-A	Southern Tagalog	92.0	61.0	160.9	50.2
V	Bicol	86.4	59.7	137.7	80.0
VISAYAS					
VI	Western Visayas	82.1	58.9	210.5	80.6
VII	Central Visayas	77.8	58.8	121.4	82.5
VIII	Eastern Visayas	77.7	58.6	65.3	76.7
MINDANAO					
IX	Western Mindanao	15.4	60.5	49.5	84.0
X	Northern Mindanao	83.4	58.0	58.8	71.3
XI	Southern Mindanao	81.8	62.0	93.3	94.0
XII	Central Mindanao	66.6	60.4	35.3	88.0

[1] Second and third degree malnutrition

[2] Assumes water supply sources other than piped water or artesian wells

Sources: National Census and Statistics Office
National Nutrition Service, Ministry of Health
Boulier's Estimates on Life Expectancy

Table 10 Selected Physical Indicators By Region

		Percent of Cities and Municipalities with Electric Service	Telephone Density[1]	Per Capita Power Consumption (KWH)	National Roads[2] Per Square Kilometer Area
LUZON					
I	Ilocos	56.97	1.47	72.90	0.095
II	Cagayan Valley	20.56	0.76	2.82	0.055
III	Central Luzon	90.65	4.73	126.10	0.082
IV	Metropolitan Manila	100.00	71.48	1,239.37	1.222
IV-A	Southern Tagalog	74.31	3.30	660.09	0.071
V	Bicol	63.16	1.23	13.12	0.089
VISAYAS					
VI	Western Visayas	53.85	5.38	26.38	0.990
VII	Central Visayas	52.67	7.30	56.83	0.110
VIII	Eastern Visayas	48.91	1.15	7.83	0.087
MINDANAO					
IX	Western Mindanao	39.19	1.15	15.98	0.046
X	Northern Mindanao	50.00	2.75	115.08	0.063
XI	Southern Mindanao	48.05	5.70	99.02	0.049
XII	Central Mindanao	37.35	1.15	797.24	0.047

[1] Telephones per 1,000 population

[2] National roads are roads of nationwide or inter-provincial significance

Sources: NEDA Annual Report 1973
Bureau of Communications
Physical Planning Strategy for the Philippines, Vol. X, Power 1973
Project Monitoring Staff, NEDA

III. Philippine Industrial Development and Regional Disparities.

The Philippine industrial structure manifests a high degree of geographical concentration in the MMA, with small but gradually growing industrial centers spread across the country. The latter's level of industrial development pales in comparison with the dominance of the former, which accounts for 42 per cent of national industrial output. (Table 11). MMA's neighboring regions, Central Luzon and Southern Tagalog,* account for another 23 per cent, clearly depicting the marked spatial imbalance in the industrial growth of the country. The present locational pattern of industry has emerged as a result of both government industrialization strategy and natural market forces, which have shaped the country's economic history since colonial times.

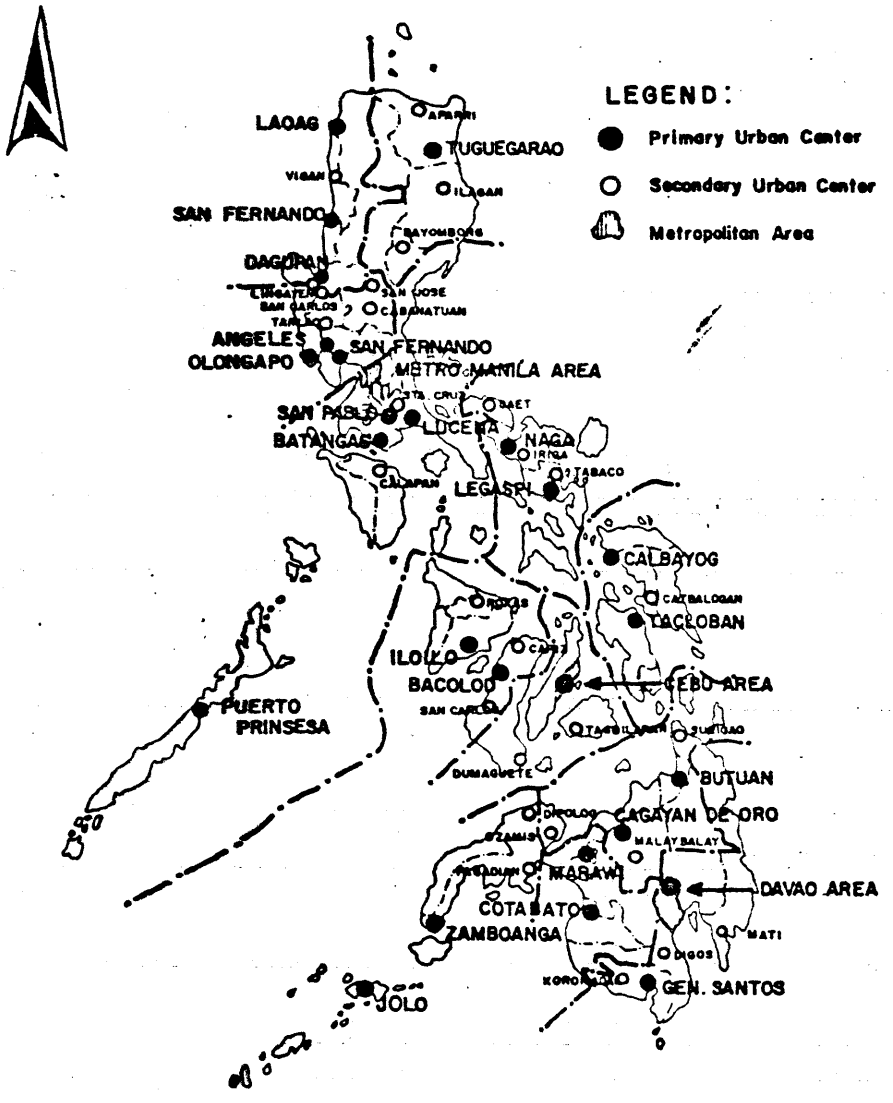
This section of the study describes the various factors which contributed to the present distribution of industrial activities and then relates them to location theory. The intent here is to identify these factors insofar as they influence location decisions so that they can used to evaluate present measures aimed at industrial dispersal and also to draw up different alternatives to support this policy. Subsequently the impact of the historical pattern of industrial location on the growth of regional income differentials and on the development of the national urban heirarchy will be assessed.

A. The Historical Pattern of Industrial Location.

Initially we will trace the history of the MMA as a political, religious and educational center of the country from the 16th century up to the early 1900s. It was in this period that the social and institutional foundations were laid. Subsequently we will explore in detail the impact of the

*Actually industrial activity in these two regions is found mostly in four provinces surrounding the MMA.

Map 2 – Major Philippine Industrial Centers



Source: HSC

industrialization strategy on the growth of the MMA as the country's industrial center and identify the factors that guided the location of firms into the area. These factors will surface again as we analyze the emergence of manufacturing agglomerations in the other regions.

1. The Emergence of Manila as the Major industrial Center.

Since the colonial era, Metropolitan Manila* has been the nation's capital. It was the seat of the Spanish colonial administration, dating back to 1571 and continuing up to the time the American forces took over in 1898 and ruled the country until 1946. Ideally situated in the midwest section of Luzon island, Manila became an entrepot of people coming from the different regions of the archipelago. Its harbor has also served as a major link in the Orient trade because of the Philippines' strategic location in this part of Asia. In fact, during the 18th century, the port of Manila was a terminal point in the galleon trade between the Philippines and Acapulco which brought goods from the Western world for distribution in the Orient. In addition, typical of many colonial cities, it was the source of exports shipped to the colonial ruler.

Due to the traditionally close association between Church and State in the Spanish system of colonial rule, Manila also became the religious center of the country, with the Archbishop of Manila always assuming a powerful political role. In areas outside Manila, Spanish priests acted as

*The city of Manila which used to be the political capital represents only about 1.4 per cent of the land area of what is presently considered as MMA. However its population share as of 1975 is 1.5 milllion out of a metropolitan population of close to 5 million. One of the cities of the MMA, Quezon City, is the current official national capital.

administrators of towns.[16] The collaboration between political and religious groups was also instrumental in the establishment of educational institutions in Manila for the local population. Most of the early schools were founded by the different religious orders. In the area of finance, the first banks called "obras pias" were organized by the Church. From these early origins, the city of Manila grew into an urban area, serving political, educational, commercial and other functions.

By the time the American occupation began in 1898, Manila was undisputably the nation's major city and remained as the national capital. In 1903 it had a population of about 300,000. Its dominance in the national setting was strengthened with the foreign trade, especially with the preferential treatment given to Philippine exports in the US market. Most of the country's agricultural exports were shipped from the port of Manila even though the processing of some exports like sugarcane and copra was done in ither regions. Under American rule, political as well as economic activities were centered around the Manila area.

When the United States relinquished control of the Philippines in 1946, the country began to rebuid its economy. Industrial operations recovered rapidly with reconstruction being aided by the United States and favorable export prices. After this immediate postwar boom, foreign exchange difficulties arose once reconstruction aid was terminated and as a recession was experienced by the American economy, the country's major trading partner. Consequently import and foreign exchange controls were imposed. These controls set the stage for import-substituting industrialization strategy in the 1950s whereby scarce foreign exchange resources were allocated on the basis of "essential" gooods defined as capital and intermediate goods

goods to be used for industry. These commodities were considered relatively cheap because of the overvaluation of the Philippine peso.

Emphasis was laid on the finishing stages of consumer goods manufacture which was heavily protected by import restrictions on foreign consumer goods and undervalued imported inputs. Hence the types of industries encouraged by government policy were import-dependent industries engaged in the final stages of manufacturing.[17/] Manila, being the principal port, was strongly favored as location for industry. With industries mainly producing for domestic consumption, the city also provided a large potential market inasmuch as income growth from industrialization and population increases were concentrated here. These considerations reinforced location preferences for Manila due to its transport cost advantage. Furthermore, from the operational management point of view, it was virtually a necessity to be close to the seat of government to facilitate the approval of import and foreign exchange applications. The bureaucratic set-up of government offices necessitated personal interaction or contact with officials who could expedite action on pending matters. Besides, the financial institutions were mostly based in Manila and frequent follow-ups on loan applications required proximity.

With most of the country's foreign exchange already committed to purchases of producer and intermediate goods which were essential to the operation of existing firms, decontrol and devaluation were instituted. The use of foreign exchange controls which was effective in guiding the economic growth of the 1950s had lost its efficacy.[18/] Moreover the adverse impacts of the undervaluation of foreign exchange on the performance of exports, which failed to keep up with import requirements, were very much

in evidence with the recurrence of balance of payment difficulties.

Notwithstanding decontrol and devaluation, import substitution policy persisted through the 1960s inasmuch as the highly protective tariff structure merely replaced direct import controls. On the other hand the traditional export sector was able to gain from devaluation. In the late 1960s the need for altering the strategy for industrial growth was increasingly felt, once the domestic market potential of import-substituting manufactured goods was being exhausted.[19/] In an effort to guide industrial investments into preferred areas and promote exports, two pieces of legislation were passed, namely: the Investment Incentives Act of 1967 and the Export Incentives Act of 1970. The Board of Investments (BOI) was organized to draw up investments and exports priorities plans on an annual basis and administer the system of incentives.

Based on the analysis of the industrial development of Manila, it can be seen how the choice of industrialization strategy can confer upon a certain location a significant level of transport advantage. In general, proximity to either the market or the raw material source is instrumental for the growth of industrial centers. In the case of Manila, the locations of the market and the input base were effectively identical as a result of the import-substituting strategy, hence, the tendency for agglomeration was doubly strong. In addition the technology of import-substituting firms was basically borrowed from advanced nations. Skill requirements were high and Manila, being the educational center, was the main source of technically skilled labor. Corrollary to this, technical personnel usually prefer locations where urban amenities are available.

Not only was Manila favored by the import-substitution strategy, its

natural locational advantages were solidified by public investments since it was the nation's capital, the source of economic and political power that is crucial in determining budgetary allocations. The bulk of government expenditures was on highway; Manila and Central Luzon had more than 30 per cent of expenditures in this category from 1967-72, while for seaprots, Manila alone had a 40 per cent share from 1966-72.[20/] The combination of population concentration, a well-developed infrastructure, broad industrial and commercial base, service quality and labor supply contributed to the attainment of agglomeration and scale economies in Manila.

Even after the shift in industrialization strategy from one that was largely import-dependent to one that placed greater emphasis on utilization of indigenous resources, the MMA was still a preferred location, particularly for footloose industries. It had reached a level of economic and physical development which produced substantial external economies in the form of a well-developed infrastructure and a high potential for industrial interdependence. Theory expects that with the diminution of imports for industry, port cities like Manila will lose some attraction power.[21/] This prediction however discounts the possibility that the industrial base and supporting facilities built up in the previous import-substitution stage will provide an opportunity for further agglomeration. This seems to be precisely what happened in Manila. What subsequently took over as an important factor influencing location was the external economies engendered by import-substitution and public investment programs. Hence it may be posited that the impact of the import-substitution strategy extends beyond the actual period of its adoption.

Continued concentration in Manila materialized due to scale and agglo-

meration economies emanating from the interaction of physical, economic and social factors. These economies favorably affect the efficiency of a firm and therefore offer a market-induced incentive for prospective industries. In some cases, these may even compensate for higher cost of transport, labor and other production elements.[22/] For new industries which have to rely on others for some services and materials, external economies are particularly critical. To reduce uncertainty in service and material availability, location in a large is preferable. Moreover it offers better market opportunities in view of greater potential for personal contact and a more rapid flow of information. All these advantages reinforced the tendency towards spatial concentration of industries in Manila.

From the foregoing analysis, a number of important factors can be identified as crucial to location decisions. These are: 1) transport cost advantage, 2) the provision of infrastructure and 3) the role of external economies. At different stages of the growth in Manila, these factors figured prominently. Transport cost advantage was the initial stimulus; it was subsequently reinforced by public expenditures for infrastructure, and eventually external economies wer realized and led to further agglomeration.

2. Growth of Other Industrial Centers.

In the following sections we will observe that the industrial location factors which led to the growth of Manila were also significant contributory elements to the emergence of other industrial areas in the country today. We shall explain how these factors, either singly or in combination, can provide the impetus to a more dispersed pattern of industrial location. In many cases like Davao City (Region XI), Bacolod (Region VI), transport cost advantage triggered industrialization based on the processing of a few

primary agricultural and mineral resources. After the initial growth stage, ancillary activities with forward and backward linkages to major resource-based industries were established.

With the expansion of infrastructure usually attendant to the rise of these industrial areas, public investment in physical facilities has become a stabilizing force to continued growth. It has also served as an impetus to other industrial centers like Iligan City (Region X). The reasons for these are: 1)basic services and facilities needed by industry are made available, thus reducing production costs, 2) a well-developed physical infrastructure induces external economies, and 3) infrastructure provision manifests government support for a particular area's development. The importance of infrastructure provision and the reliance on external economies vary according to the size of the firm. Additionally therefore we shall analyze how the size of firm affects location decisions and how a few large companies were responsible for the rise of a number of hitherto remote areas.

a. Transport Advantage due to the Emphasis on Resource-Oriented Industries.

With the passing of the Investment and Export Incentives Acts, greater processing of traditional primary export products was strongly encouraged. As local industrial linkages with the natural resource base were being established, a certain degree of dispersion took place inasmuch as location near input sources was essential in view of the bulkiness and weight of raw materials like timber and mineral ores. Resource-based industries contributed to the emergence of other industrial centers and laid the foundations for subsequent industrial expansion.

Export promotion was aided by another devaluation in early 1970 which

stemmed from a massive increase in money supply just prior to the November 1969 elections.[23/] This devaluation somehow removed distortions in the price of foreign exchange vis-a-vis the peso and enhanced the competitive position of Philippine exports in the world market. Wood processing and coconut processing in the Mindanao regions, mining in the Ilocos and Central Visayas and sugar processing in Western Visayas, Southern Tagalog and Central Luzon* expanded and manufactured exports increased impressively. More recently the planned gradual phaseout of log and copra exports will further encourage resource-based industries.

b. The Role of Infrastructure and External Economies.

The experience in Manila points to the importance of infrastructure availability in location decisions. Fortunately infrastructure investments are made by the public sector. Thus they represent an instrument for influencing the geographical dispersion of industries to other areas of the country. A firm's profitability in a certain location depends heavily on the costs of services associated with that location. If the government through its expenditure program provides such services or minimizes their cost to users, then the prospects for industries moving into that location are better. In industrial development in the Philippines, government traditionally relies on private initiative to undertake the necessary industrial investments. Its role is restricted primarily to providing the supporting industrial infrastructure that would promote a healthy investment environ-

*These areas have traditionally been the major sugar producers. However hectarage increased not only here but in other regions too, particularly when sugar prices reached record levels in 1973. Presently almost all regions have at least one sugar mill each.

ment, enhance private profitability and serve as incentives for location. Only in rare instances, e.g., "critical" and pioneering enterprises, has the government been directly involved in industrial operations and even this is only resorted to when private initiative is deemed lacking.

The potency of the role of government infrastructure expenditures in guiding industrial investments into suitable locations can be strong when the experience of the Maria Cristina hydroelectric project and the industrial estates is studied. In the 1960s a major power development project was initiated in Iligan City in Northern Mindanao with the generation of inexpensive hydroelectric power from the Maria Cristina Falls. The government then decided to set up within the vicinity its pioneering National Steel Corporation engaged in steel production, perhaps as an assurance of support for the development of the area. Subsequently other power-intensive industries, e.g., cement plants, chemical factories, etc., followed suit, converting the area into a major industrial location. Hence it can be seen that firms are likely to take advantage of facilities and services provided at low cost by the government. Mere availability of cheap power, coupled with apparent government commitment, was sufficient inducement for industrial location.

The lack of infrastructure can be a major impediment to industrial location even in regions where labor costs are low and raw materials are available. In fact the establishment of the industrial estates, the Export Processing Zone in Bataan (Region III) and the PHIVIDEC Industrial Estate in Misamis Occidental (Region X) is intended to overcome the problem of infrastructure deficiency. The advantages of central location are replicated in undeveloped areas through infrastructure provision by government so that

such areas can become more attractive industrial sites. Industrial estate development is based on the strategy of attaining external economies through concentrated dispersal of infrastructure and industry. Infrastructure provision and the sharing or interdependence among firms in the use of facilities and supply of certain goods and services are aimed at attracting industry to locations where otherwise firms would have had to bear the full costs of these facilities and services. In a way government subsidizes the firms' production costs by supplying basic industrial requirements. Furthermore other financial and fiscal incentives usually granted to locating industries favorably alter cost efficiency.

c. The Sensitivity of Location Decisions to Size of Firm.

The profitability of small firms is highly sensitive to the availability of basic facilities and services. This is why even in rural areas where small firms are considered adapatiable to the meager size of the market, their growth has been impeded by the general deficiency in rural infrastructure. Due to their limited capital resources, they are not in a position to provide essential services for their operation.

Probably the only firms that were able to locate in relatively remote sites and overcome the disadvantages of such locations were large firms, mostly multinational corporations attracted to thePhilippines by low labor costs and incentives granted to foreign investments. These firms have been capable of providing their own basic industrial infrastructure needs like roads, water supply, and power, because of their ample capital resources. Their political leverage is also considerable such that government investments are sometimes directed towards their sole benefit. Furthermore even the amenities of urban locations could be provided, hence, personnel

recruitment does not pose an insurmountable problem. The sheer size of these firms and their potential impact not only on their immediate vicinity but also on peripheral areas can attract skilled and unskilled laborers. Among the industries that located in remote areas are the pineapple growing and canning firms in Northern and Southern Mindanao, and the mining companies in the Ilocos and Central Visayas.

Without the participation of government, the disadvantages of remote locations, e.g., the risk of cost due to uncertain local conditions, and the cost of performing functions that would normally be external,[24/] can only be surmounted by large firms that are in a financial position to modify significantly the conditions in their selected sites. This is essentially what has been achieved by multinational corporations and other large firms as they internalized the external economies normally found in developed areas. Physical facilities that have been set up are basically long term investments intended to reduce production costs.

3. The Unique Case of Cebu City.

In the rise of other industrial locations inthe country, the contribution of transport advantage, infrastructure and external economies is easily noted. To a certain extent, the case of Cebu City exhibits the same features which influenced the growth of Manila, but in a more subtle manner. Ideally situated in the central section of the archipelago, this area has become a major industrial and commercial center, second only to Manila. Firms have found Cebu City a good vantage point for undertaking manufacturing and distribution operations to serve the markets in the southern parts of the capital. Initially, only warehouses and other storage facilities were set up by Manila-based firms for southern operations. However with the

growth in demand due to population and income increases, the establishment of branch plants proved economic and subsequently industrial activities expanded. To date most establishments serving a national market have offices in Cebu. In some cases. Cebu City has become the base of operations of new nationally-oriented firms. Moreover its strategic location makes it one of the busiest ports in the country. With the rise in sea traffic volume, industries like ship construction and repair and related ancillary operations have also emerged.

Viewed in one way, location in Cebu minimizes transport cost for distribution while in another, it maximizes market potential by increasing the catchment area for goods and enhancing reliability of supply and service. Its industrial growth was also supported by public investments in physical infrastructure. Educational, financial and other institutions are found here. Now the city of Cebu has, not only a broad manufacturing and commercial base, but also a well-organized physical and social system of supporting facilities and services, all of which have complemented one another in producing agglomeration economies.

4. Market-Induced Spillovers into other Areas.

With the growth in national demand, a significant degree of dispersion has taken place, with firms being able to establish economic-sized plants in different regional/provincial locations to service specific portions of the country. A case in point are the provincial and city bottling plants of soft drink companies operating on a national scale. Likewise local food processing firms like rice mills and bakeries are spread throughout the country, enjoying virtual monopolies over their market areas.

Meanwhile the city of Manila could no longer accomodate the rapid

growth of industry. The provinces bordering Manila like Cavite, Laguna and Rizal in Southern Tagalog and Bulacan in Central Luzon have absorbed the spillover. Location in these areas was facilitated by the extension of road networks originating radially from Manila. Moreover, with the heavy in-migration into Manila, residential location has spread into the suburbs, resulting in a co-location of industry and residences. Today these neighboring regions rank behind Manila in terms of contribution to national industrial output.

Concluding Remarks

Looking back at the historical pattern of industrial location, we can assert that the growth of industrial centers was a consequence of both government policy and the free functioning of the market mechanism. Policies aimed at building up the infrastructure base and other activities exert a favorable impact in attracting industries. Other government programs directed at improving the general level of incomes or increasing the physical accessibility of various areas indirectly support the dispersion of industrial activity as firms take advantage of market opportunities.

B. The Impact of the Historical Pattern of Industrial Location.

The preceding discussion traced the historical pattern of industrial location in the Philippines. As was mentioned in Chapter I, industrial location theory explains partly the emergence of regional income disparities inasmuch as areas enjoying transport advantage, market and other resource potentials, are usually the regions which first benefit from any development strategy. Moreover the growth of these industrial areas influence population movements as these centers undergo a rapid process of urbanization. The experience of the Philippines confirms these expectations. In this section we will examine the impact of the spatial patterns of industrial development on regional disparities and on the development of the national urban hierarchy. This task is intended to rationalize the policy of regional dispersal of industries for pursuing the goal of spatial equity. In another perspective, this policy is conducive to a more balanced urbanization process since industrial growth is a key prerequisite to the development of urban centers.

1. On Regional Income Disparities.

The regional distribution of industrial output closely parallels the regional distribution of income, i.e., the regions with large shares of industrial output generally enjoy high per capita output. In addition, most regions with sizeable industry shares to total regional output are basically better off. For example, the major industrial center, the MMA, is the most developed, followed by industrializing regions like Central Luzon, Southern Tagalog, Western Visayas and Southern Mindanao. (Table 11). These observations are not particularly striking when one reviews the patterns of industrial location. Economic growth in the 1950s and 1960s through rapid

industrialization benefitted mainly the MMA. Its share of industrial output, already high at 42 per cent in 1948, rose further to 50 per cent by 1961. (Table 12). The industrial structure that was in effect promoted by import-substitution and various government policies involved very few backward linkages to the natural resource base of the regions since it was heavily dependent on undervalued imported raw materials.[25/] Aside from the MMA, only regions which were fortunate enough to be exporters of primary or processed agricultural products like Western Visayas and Southern Mindanao, or whose location is strategic for industrial activity like Cebu, were able to participate in the industrial drive. Growth in the rest of the country gained momentum only quite recently as a consequence of government policies related to power development and agri-industrial processing. The dominance of the MMA has been somewhat diminished. However its neighboring regions are generating additional output to compensate for this loss.

Agriculture - the lifeblood of many rural regions - was virtually neglected during the import-substitution era, resulting not only in low regional productivities but also in wide urban-rural gaps in development. Incomes of people dependent on agriculture were depressed. The general economic strategy based on import-substitution did not encourage the linking between industry and agriculture through the utilization of domestic raw materials. Due to the heavy protection of manufactured goods, investment in manufacturing was more profitiable and less risky. Meanwhile, in the domestic market, with prices of manufactured goods increasing as a result of government protectionist policies, the terms of trade turned against agriculture. In addition, the competitive position of the country's agricultural exports in the international market was weakened by the over-

valuation of the local currency.

Although general economic policy did not promote faster agricultural expansion, the agricultural areas near Manila, Central Luzon and Southern Tagalog, benefitted from rapid economic growth due to import-substitution. The growth in incomes in Manila raised the demand for food products which were supplied mostly by these regions. Because of their importance to the MMA, they were given preference in irrigation and transport investments.

In more recent years, Central Luzon and Southern Tagalog have industrialized rapidly. New industries which could no longer be accomodated in the MMA have chosen to locate in the adjacent provinces of these regions. If one considers the industrial expansion here as an extension of the growth influence of the MMA, then it can be said that there is further concentration rather than dispersion of manufacturing activities in this part of the country. This is why the regional dispersal of industries must become a more positive policy of developing other industrial locations in the country in order to counteract the continued gravitation of industries towards Manila and its environs.

2. <u>On the Development of the National Urban Hierarchy.</u>

The pattern of industrial location has exerted considerable impact on Philippine urban development in a variety of ways. Most apparent is the dominance of the MMA over all other areas of the country which, in turn, has influenced massive outmigration from the different regions. Likewise other industrial centers are growing rapidly such that these, together with the MMA, are beset with problems associated with mounting and incessant population pressure.

The national urban hierarchy exhibits primacy with the MMA visibly as

the major urban center. The metropolis has a population of about five million people as of 1975, which is almost four times the combined population of the next four largest cities. (Table 13). Its population, growing at an average of 4.6 per cent annually from 1970-75, represents approximately 40 per cent of national urban population. Furthermore population density in the central city of Manila is close to 40,000 persons per square kilometer and household size is 6.9 persons, the largest in the country. Due to the primacy of the MMA, the national urban structure is distorted. In fact, if its population is excluded from the national urban population, the degree of urbanization among the regions does not vary substantially. The problem of primacy is a direct result of historical economic and political forces. Certainly the fast rate of industrialization of the MMA can be considered as a primary factor in its growth into the primate city.

Although considered slow on the basis of inter-country comparisons, urbanization in the Philippines has been unbalanced, with the MMA and a few big cities like Cebu, Davao and Bacolod accounting for a large share of urban population growth.[26/] Moreover the expansion of these large cities has been at the expense of the smaller cities, further skewing the national urban hierarchy. An analysis of the sources of urban population growth indicates that migration has been a significant contributor to the growth of these cities. The MMA has been the prime destination of migration streams from both urbanized and less urbanized regions;[27/] consequently, about half of its population growth rate is due to migration. Besides, the neglect of agriculture in the rural areas of the regions did not promote employment generation there and induced migration to areas with better economic prospects. Rural to urban migration has also been selective with migrants to

the MMA being highly educated young adults.[28] These factors reinforced the primacy of the MMA and aggravated regional disparities, which in turn affect the direction of population movements.

Rapid population growth in the MMA brings with it numerous difficulties. Despite the high average incomes in urban areas, significant disparities exist within and among cities. Urban poverty appears to be more concentrated in the MMA and in the key urban centers of the Visayas which have absorbed some of the spillovers of the rural poor.[29] In general low income households in the MMA have tended to concentrate in the central city section, e.g., the Tondo slums, although there are also large concentrations of poor families in the inner ring, e.g., Quezon City, Caloocan. Moreover the provision of public services has not coped with population growth in urban areas, as evidenced by substantial deficiencies in the supply of transport services, water, sewerage and drainage, and housing, especially in low income areas.

Similarly industrial expansion has also led to the urbanization of other areas in the country. The cities of Davao, Iligan, Cebu and Iloilo, not to mention the cities of Central Luzon and Southern Tagalog, are registering significant in-migration, both from other regions and their surrounding rural areas. Slowly they are beginning to experience the urban problems which population pressure brings.

The consequences of the pattern of industrial location on the country's urbanization process are clear. In an effort to rationalize the national urban structure, the regional dispersal of industries must play a key role in strengthening as well as developing other urban centers of varying sizes. A more balanced settlement pattern is the ultimate goal.

Table 11. Regional Per Capita Output, Distribution of Industrial Output, and Industry Share of Total Regional Output. (1977)

	Regional Per Capita Output (in pesos)	Per Cent to MMA	Per Cent Share of Philippine Industrial Output	Per Cent Share of Industry of Total Regional Output
PHILIPPINES	1,733	38.7	100.0	29.1
LUZON	2,034	45.5	72.7	33.1
I Ilocos	1,068	23.9	4.3	27.5
II Cagayan Valley	1,072	24.0	1.2	13.0
III Central Luzon	1,379	30.8	9.4	33.1
IV Metropolitan Manila	4,474	100.0	42.2	36.4
IV-A Southern Tagalog	1,694	37.9	13.5	35.9
V Bicol	906	20.3	2.1	15.8
VISAYAS	1,494	33.4	17.9	27.7
VI Western Visayas	1,933	43.2	8.6	26.0
VII Central Visayas	1,405	31.4	7.0	32.6
VIII Eastern Visayas	935	20.9	2.3	22.9
MINDANAO	1,273	28.5	9.4	15.9
IX Western Mindanao	1,014	22.7	1.3	12.0
X Northern Mindanao	1,275	28.5	2.5	17.5
XI Southern Mindanao	1,769	39.5	4.0	16.0
XII Central Mindanao	905	20.2	1.7	17.7

Source: National Accounts Staff, National Economic and Development Authority (NEDA).

Table 12-A Growth in Industrial Output*
1948-1961

	1948		1961		Average Annual
	Level (in million pesos)	Share (in %)	Level (in million pesos)	Share (in %)	Growth Rate (in %) 1948-61
PHILIPPINES	747	100.0	2,647	100.0	10.2
LUZON					
Ilocos	18	2.4	34	1.3	5.0
Cagayan Valley	7	0.9	15	0.6	6.0
Central Luzon	43	5.7	249	9.4	14.5
Metropolitan Manila	315	42.2	1,340	50.6	11.8
Southern Tagalog	143	19.1	441	16.7	9.0
Bicol	19	2.5	21	0.8	0.8
VISAYAS					
Western Visayas	76	10.2	305	11.5	11.3
Eastern Visayas	70	9.4	109	4.1	3.5
MINDANAO					
Northern Mindanao	21	2.8	68	2.6	9.5
Southern Mindanao	36	4.9	65	2.4	4.7

Note: Old regional classification for 1948-61

* Industrial output figures for 1948 & 1961 include only manufacturing and construction.

Source: NEDA and A. Carreon, op. cit.

Table 12-B Growth in Industrial Output*
1971-1977

	1971		1977		
	Level (in million pesos)	Share (in %)	Level (in million pesos)	Share (in %)	Average Annual Growth Rate (in %)
PHILIPPINES	16,222	100.0	22,783	100.0	5.8
LUZON					
Ilocos	746	4.6	970	4.3	4.5
Cagayan Valley	144	0.9	269	1.2	11.0
Central Luzon	1,541	9.5	2,152	9.4	5.7
Metropolitan Manila	6,791	41.9	9,606	42.2	6.0
Southern Tagalog	1,935	11.9	3,086	13.5	8.1
Bicol	478	2.9	470	2.1	0.3
VISAYAS					
Western Visayas	1,508	9.3	1,952	8.6	4.4
Central Visayas	1,085	6.7	1,603	7.0	6.7
Eastern Visayas	346	2.1	532	2.3	7.4
MINDANAO					
Western Mindanao	294	1.8	292	1.3	0.0
Northern Mindanao	397	2.4	567	2.5	6.1
Southern Mindanao	633	3.9	900	4.0	6.0
Central Mindano	325	2.0	384	1.7	2.8

* Industrial output figures for 1971 & 1977 include manufacturing, construction, mining, quarrying, and utilities.

Source: NEDA and A. Carreon, op. cit.

Table 13 Urban Population for Major Cities, 1960-1970-1975

				Percent of Urban Population			Average Annual Growth in %	
	1960	1970	1975	1960	1970	1975	1960-70	1970-75
Metropolitan Manila	2,462	3,967	4,970	30.1	32.9	37.4	4.5	4.6
Manila City	1,139	1,331	1,479	13.9	11.0	11.1	1.6	2.1
Quezon City	398	754	957	4.9	6.2	7.2	6.6	4.9
Caloocan City	146	274	397	1.8	2.3	3.0	6.5	7.7
Pasay City	133	206	255	1.6	1.7	1.9	4.5	4.4
Others	646	1,402	1,882	7.9	11.6	14.2	8.1	6.1
Davao	226	392	485	2.8	3.2	3.6	5.6	4.3
Cebu	251	347	413	3.1	2.9	3.1	3.3	3.5
Iloilo	151	200	227	1.8	1.7	1.7	3.4	3.4
Zamboanga	131	200	265	1.6	1.7	2.0	4.3	5.8
Bacolod	119	187	223	1.5	1.5	1.7	4.6	3.6
Angeles	76	135	151	1.0	1.1	1.1	5.9	2.3
Butuan	80	131	133	1.0	1.0	1.0	3.3	0.0
Cagayan de Oro	69	124	165	1.0	1.1	1.2	6.0	5.9
Cadiz	89	124	128	1.1	1.0	1.0	3.4	0.1
Batangas	83	109	125	1.0	1.0	1.0	2.8	2.8
Olongapo	45	108	147	1.0	1.0	1.1	9.2	6.4
San Pablo	71	106	117	1.0	1.0	0.9	4.1	2.0
Iligan	58	104	119	1.0	1.0	0.9	6.0	2.7
Other Urban Areas	4,101	5,863	5,653	50.2	48.6	42.5	3.6	-0.8
Total Urban	8,168	12,071	13,304	100.0	100.0	100.0	4.0	2.0
Total Philippines	27,088	36,684	42,071				3.0	2.8

Source: National Census and Statistics Office

PART III

The problem of spatial inequity arising from the unbalanced growth of the country has been duly recognized in policy making. Accordingly the formulation and implementation of regional policies aimed at rectifying spatial disparities in income is now formally instituted into the regular functions of government. A number of regional policies are presently in force, aside from national policies with varying degrees of spatial significance.

In Part III of this study, regional policies and national policies with strong spatial implications will be evaluated. The purposes of this exercise are: 1) to examine how the planning and political processes have influenced policy making in terms of the relative importance given to efficiency and equity objectives, and 2) to analyze the consequences or to predict the possible outcomes which originate from the interaction of these two processes. In addition each policy will be initially reviewed in isolation in order to assess its impact on interregional disparities and, to a lesser extent, on intraregional disparities and to identify its weak and strong points in relation to its stated goals. Subsequently these policies will be appraised with respect to one another as a means of verifying their complementarity and consistency as components of an overall strategy for spatial equity.

The succeeding chapters will deal with four types of policies. These are related to: 1) the institutional machinery for regional planning which is charged with the development of regional policies, 2) the regional dispersal of industries, 3) agriculture and rural development, and 4) the allocation of public expenditures. Likewise the experience with the regional development authorities will be introduced as a historical background.

IV. The Regional Development Authorities.*

To provide a historical component into the analysis of present regional policies in the Philippines, the experience with the regional development authorities, of which fourteen (14) were set up (at least by enacting legislation) from 1961-1972, will be briefly reviewed. These authorities were organized for the development of specific areas of the country and, thus , can be considered as the first real attempt at regional policy and planning. Their creation was based on a strategy of joining planning with effective power, a strategy which has been found successful in many countries. Unfortunately the operations of the Philippines' regional development authorities encountered numerous difficulties from the very start, arising primarily from the political factors behind their establishment. Although the excessive influence of politics is not at all uncommon in the policy making process of the country, the experience of these development authorities was probably the first visible indication of the unceasing political pressures which are brought to bear on any initiative towards regional development. And as we shall see later in the succeeding chapters, present regional policy making still has to learn from the valuable lessons provided by this past experience. In this section, the reasons for the creation of the regional development suthorities, their eventual operationalization, problems and performance will be discussed.

A. The First Two Regional Development Authorities.

The Mindanao Development Authority (MDA) and the Central Luzon-Cagayan Valley Authority (CLCVA) were the first two regional development authorities

*This chapter benefitted greatly from the work of Richard Prado, a colleague at NEDA-RDS, who studied in cosiderable detail the experience of the regional development authorities.

created by the defunct Congress of the Philippines in June 1961. The former covers the southern part of the country - Mindanao, Sulu and Palawan - a frontier region and the source of political tension between its Christian and Muslim populations. Its establishment was spearheaded by a group of nationally prominent political leaders coming from the area. On the other hand, the latter's areas of responsibility are Cagayan Valley which was, and still is, one of the poorest regions of the country and Central Luzon which was then the center of communist insurgency activities caused by agrarian unrest. Even at this stage, the political motivations behind this regional development effort is easily seen. The creation of these two regional bodies was further justified by their sponsors inCongress on the grounds that Mindanao, Central Luzon and Cagayan Valley were resource-rich areas in terms of land and water resources, the exploitation of which could best be undertaken by autonomous development agencies. Both of them were established as public corporations, with the MDA and CLCVA, having authorized capitalizations of ₱300 million and ₱200 million, respectively. It was expected that, with adequate financial back-up, these two public corporations could function efficiently. The MDA was envisioned as a vehicle for setting up pioneering industrial and agricultural ventures, coordinating private and public sectoral programs within the area and extending financial and technical assistance to worthwhile projects. Meanwhile the CLCVA was patterned closely after the Tennessee Valley Authority in the United States and was primarily concerned with comprehensive river basin development for hydropower generation, irrigation and flood control.

B. Political Opportunism.

The establishment of these two authorities was too irresistible an

opportunity for legislators to forego, hence, congressional leaders from different regions initiated moves to replicate these authorities in their own regions. It could be an easy way for extracting financial resources from the national government to support projects in the legislator's area. Moreover it was good publicity and public relations.[30/] By 1969 there were already 12 more such bodies established by enacting legislation. (Table 14). The sponsoring bills were passed without much political opposition inasmuch as some "horse-trading" was resorted to.[31/]

Essentially the basic objectives and functions of the regional development authorities can be stated into the following: 1) to translate national goals formulated in the national development plan into regional objectives for easier identification of appropriate regional programs and projects, 2) to spread proportionately public expenditures among regions, 3) to provide a close working relationship with government agencies and the private sector in undertaking directly productive activities, and 4) to prepare an inventory of the regions' resources.[32/]

The rate at which the authorities mushroomed supports the observation that they were more manifestations of a political fad than deliberate efforts toward an effective approach to regional development.[33/] Furthermore it indicates ignorance on the part of the sponsors as to the requirements for a viable use of this corporate approach. Or one can detect a lack of seriousness in pursuing spatial redistribution. More importantly, however, the issue that rises to the fore is that any attempt by the central power to favor particular sections of the country, no matter how rightly justified it may be, will bring considerable pressure on government to mount similar efforts in other areas. It leads to a sense of relative deprivation and

and therefore will raise clamor for equal treatment. Once government yields to this pressure, the success or effectiveness of the initial attempts is jeopardized. The demonstration effect of the first two regional development authorities turned out to be difficult to control and eventually led to a multiplication of regional agencies. The impact of this corporate approach to regional development hinges on the amount of resources at the disposal of the regional body and the commitment of the national government. The experience of other countries, e.g., the Guayana project in Venezuela, the SUDENE in Brazil, attests to this contention. With the establishment of too many regional authorities, resources for promoting development are diluted. Only the very largest or richest country with adequate financial and technical resources can undertake more than one or two large-scale concerted efforts like the regional development authorities.[34/] Once the proliferation of agencies and consequent dilution of resources occur, very few results can be expected from these corporate bodies.

C. Problems in Operation.

These expectations were confirmed in the subsequent performance of the regional authorities. The ₱1.5 billion capitalization for all the authorities (Table 15) translates into ₱150 million annually for the national government appropriations for ten years, aside from operating expenses. Obviously the legislated appropriations were not within the financial capacity of the national budget.[35/] Not surprsingly only five of the fourteen regional authorities were activated insofar as an organization was formed and funded. In addition to this, only 2.3 per cent of the programmed releases were actually released, most of which went to operating costs. (Table 16). Finally, because Congress, with the establishment of so many regional

authorities, passed appropriation acts not within government capability, it paradoxically relinquished its function as the originator of laws requiring the use of public funds, since it in effect gave the Presidency wide discretion to choose its own priorities in fund releases. Hence particular members of Congress were subject to the patronage of the President in pushing through their favored projects.[36/]

To compound their financial problems, mismanagement, graft and political intervention haunted the operations of the regional authorities. For instance, the sponsor-legislator would usually use his influence to place his proteges and followers in the Board of Directors or in some important positions in the staff, without any regard for the requirements of the job. Agency funds were sometimes diverted to personal businesses of officers, or some illegal transactions were entered into, to the detriment of the authority.[37/] In effect the regional authorities became a source of political patronage and corruption.

At the technical level, inspite of the fact that interagency coordination at the regional level was one of the main objectives in their establishment, the regional authorities were often caught in conflicts with existing regional agencies regarding jurisdictional responsibilities. Furthermore duplication and overlapping of function among agencies operating in the region were not uncommon. Apparently at the outset, the role of the regional authorities vis-a-vis other agencies was not clearly specified. This is especially crucial since their financial and technical resources were inadequate and therefore, these authorities had to rely on other agencies for assistance in undertaking some activities. Even at the national level, there was virtually no integrative or coordinative body to link

together the activities of the authorities in order to relate them to national development efforts of the government.[38/]

Concluding Remarks.

In contrast to the experience of regional authorities in other countries which were supported with ample financial resources and technical manpower capability and were set up with a clear understanding of their contribution to national and regional development, the regional authorities in the Philippines badly lacked the basic ingredients essential to successful and efficient operations which characterized the regional bodies after which they were patterned. They were an ill-fated attempt at joining planning to effective power since it was expected that, with planning and implementation under one umbrella, impact projects could be easily undertaken. Unfortunately the sponsors in Congress were not aware of the resources necessary to efficiently operationalize this corporate approach to regional development. Powers and resources of the authority should be commensurate with its envisaged objectives and functions.

Nevertheless, before their abolition or absorption into other bodies, some accomplishments were achieved by the regional authorities which cannot be totally ignored. Industrial and agricultural enterprises were started, socio-economic surveys, industry and feasibility studies were completed. Some of these proved later on to lay the basic groundwork for the identification or implementation of important regional development projects. Notable among these are the water resource studies prepared by the CLCVA for the Magat, Casecnan, Cagayan and Pampanga Rivers, in which multi-purpose investments in irrigation, flood control and power generation are currently being undertaken.

Table 14 Regional Authorities Established After the Creation of MDA & CLCVA

	Date of Formal Creation	Official Name	Legal Basis	Regional Locations
1)	June 22, 1963	Hundred Islands Conservation and Development Authority	R.A. 3655	III
2)	June 1, 1964	Panay Development Authority	R.A. 3856	IV
3)	June 18, 1964	Mountain Province Development Authority	R.A. 4071	II
4)	June 18, 1964	San Juanico Strait Tourist Development Authority	R.A. 3961	VIII
5)	June 20, 1964	Northern Samar Development Authority	R.A. 4132	VIII
6)	May 4, 1965	Mindoro Development Authority	R.A. 4188	IV
7)	August 4, 1965	Sulu Development Company	R.A. 6042	IX
8)	June 19, 1965	Catanduanes Development Authority	R.A. 4412	V
9)	June 19, 1966	Bicol Development Company	R.A. 4690	V
10)	June 19, 1966	Laguna Lake Development Authority	R.A. 4859	IV
11)	June 21, 1969	Southeastern Samar	R.A. 5920	VIII
12)	August 4, 1969	Ilocos Development Authority	R.A. 6077	I

Note: R.A. = Republic Act

Table 15 Capital Structure of Regional Development Authorities
(in million pesos)

Development Authorities	Authorized Capital	Programmed Amounts of Paid-up Capital Upon Approval of charter	Programmed Amounts of Paid-up Capital Succeeding Fiscal Year (annually)	Appropriations for Operations and Expenses Initial Appropriation	Appropriations for Operations and Expenses Annual Appropriation
1. Mindanao Development Authority	300	30	30	.5	1
2. Central Luzon-Cagayan Valley Authority	200	200	-	.5	.5
3. Hundred Islands	-	-	-	.5	.5 (Up to fiscal year 1967)
4. Panay Development Authority	150	30	30 fiscal yr.'65 20 fiscal yr.'66-67 10 fiscal yr.'68-71 5 fiscal yr.'72-73	1	1
5. Mountain Province Development Authority	300	30	30	.5	1
6. Northern Samar Development Authority	100	10	10	.5	1
7. San Juanico Strait Development Authority	-	-	-	.5	1 (or any such sum needed or necessary)
8. Mindoro Development Authority	-	-	-	20	20 (up to fiscal year 1969)
9. Catanduanes Development Authority	20	5	3 (up to fiscal year 1970)	.5	1
10. Bicol Development Company	300	30	30	.5	1
11. Laguna Lake Development	100	5	not indicated	.5	(Such sums as may be necessary)
TOTALS	1,470	340	-	25.5	-

Source of Table: Samonte, A., "Regional Development Authorities: Role, Structure and Feasibility," Philippine Journal of Public Administration, vol. XII, no. 2 (April 1968), p. 117.

Table 16 A Comparison of Programmed Fund Releases with Actual Fund Releases of Four Regional Development Authorities up to Fiscal Year 1967

Development Authorities	Total programmed releases up to fiscal year 1967 (in ₱ million)	Total actual releases 1967 (in ₱ million)	% of actual to programmed
1. Mindanao Development Authority	215.50	12.01	5.57
2. Central Luzon-Cagayan Valley Authority	203.5	1.30	0.64
3. Mountain Province Development Authority	122.5	0.24	0.20
4. Bicol Development Company	61.5	0.30	0.49
T O T A L	603.0	13.85	2.30

Source: Samonte, op. cit.

Table 17 Summary of Accomplishments of Regional Authorities

Development Authorities	Accomplished Tasks and/or Projects Undertaken	Nature/Description
1. Mindanao Development Authority (MDA)	a) survey of the region's physical and natural resources, and plan for regional development	
	b) investment in the stocks of Pacific Cement Corporation, Inc., Surigao del Norte	A joint venture between the Authority and the private sector with the former having 10% worth of shares of the common stocks at par value placed at ₱10 million.
	c) construction of Zamboanga Ice and Cold Storage Plant	This plant is the first and largest of its kind in Mindanao. It has a storage capacity of 150 tons, a cold storage capacity of 300 tons. Designed to cater to the needs of trading firms engaged in the export of frozen tuna and shrimps.
	d) supervised Pilot Rice Project at Cotabato and Misamis Occidental	A deal with 173 farmers Cotabato and Misamis Occidental, with a combined rice farm area of 65 hectares. The role of the MDA is to provide technical assistance and operating capital for seeds, fertilizers, chemicals and hired labor. Farmers in turn agreed to be under the supervision of MDA technicians.

*The Mindanao Development Authority was abolished in 1975 and was superseded by the Southern Philippines Development Administration. Mountain Province Development Authority was abolished in 1973 and was not reconstituted. The CLCVA was attached to the Department of Public Works, while Bicol Development Company and Laguna Lake Development Authority were attached to the central planning ministry (National Economic and Development Authority) for policy direction.

Development Authorities	Accomplished Tasks and/or Projects Undertaken	Nature/Description
	e) Palawan Cannery and Fishing Development Corporation	A subsidiary corporation designed to encourage the sector to construct a cannery with capacity to process 75 to 100 tons of fish daily. MDA undertook construction of fishing vessels to put project into operation.
	f) Bukidnon Livestock farm	A joint venture with Central Mindanao University, to raise improved livestock breeds through the Bukidnon Central livestock farm.
	g) Davao Rice and Corn Corporation	This is a ₱100,000 loan accomodation to the said corporation.
2. Central Luzon - Cagayan Valley Authority (CLCVA)	a) Magat River Multi-Purpose Project	A report
	b) Casecnan River Multi-Purpose Project	A report
	c) Cagayan Valley and Pampanga River	Master plan
	d) Potential damsites at Cagayan River	Feasibility studies
3. Mountain Province Development Authority	a) Kalinga and Apayao	Socio-economic survey
	b) Vegetable industry	A project study for the region
	c) Sericulture and mushroom culture	A feasibility study
4. Laguna Lake Development Authority (LLDA)	a) Alternative water supply for Manila and suburbs	Feasibility studies
	b) Irrigation, fishing and recreation	Feasibility studies

Development Authorities	Accomplished Tasks and/or Projects Undertaken	Nature/Description
	c) Physical and institutional aspects of lake water quality management	Feasibility studies
5. Bicol Development Company (BIDECO)	a) Rice Production Project	Establishment of "show-window farms" demonstrating the effective use of modern techniques and scientific rice production methods.
	b) Bicol Livestock and Agricultural Development Corporation (BLADCOR)	A subsidiary of the Authority (BIDECO) which is capitalized at ₱100,000; 51% of which was subscribed and fully paid for by the same. Formed to engage in and carry on the business of breeding and raising livestock and poultry, also of processing and preparing them for sale locally or export to foreign markets.
	c) Bicol Swine and Poultry Development Corporation (BSPDC)	Another subsidiary of BIDECO capitalized at ₱100,000. This practically duplicated the functions and objectives of BLADCOR (see above).
	d) Sugar Central Project	Another subsidiary: the Bicol Sugar Development Authority (BISUDECO) was created to manage a sugar mill which is export oriented. The mill is also designed to provide employment opportunities.
	e) Pilot Vegetable Project	A vegetable farm demonstration project in Albay and Naga City to encourage farmers to plant vegetables for local consumption and regional export.

Source: R. Pradu, "The Politico-Administrative Context and the Implementation of Regional Policies."

V. The Present Institutional Machinery for Regional Development Planning.

Due to the traditional centralization of powers in the national government and the limited autonomy and resources of local governments, the adoption of regional development and industrialization as a national objective necessitated the creation of a new institution at the intermediate level which would be mainly responsible for the development of policies aimed at this particular objective. This institution would not be confined to the articulation of purely local and parochial interests but rather would be involved in the integration of such interests into a unified set applicable to a broader geographical area - the region. Ultimately these regional interests would be harmonized with national development goals.

The Regional Development Councils (RDCs), whose formation was part of the regionalization program, were the response to the need for an institutional mechanism midway between the national and local levels. Corrollarily, to support the regionalization process, the gradual devolution of decision-making to the regional level was planned. It was expected that, with greater decision-making powers at the regional level, theoretical and bureaucratic rationality could be infused into the planning system to complement the political process. Unfortunately the devolution of decision-making proceeded slowly, thereby incapacitating planning activities of the RDCs.

In view of the problems facing the RDCs and emerging political issues, more adhoc and informal approaches were resorted to. A special type of region was created in areas which were politically very critical, e.g., the Muslim Mindanao regions, or in areas where the political leaders were personally close to the central power, e.g., the MMA. Another type of arrangement was Integrated Area Development. It is in these regions or subregions

where more substantive powers were delegated, in addtion to adequate financial support. Their subsequent better performance appeared to undermine the effectiveness of the RDCs.

Since then institutional reforms have been made to correct the initial technical deficiencies and to strengthen the RDC organization. But still the slow pace at which national decision-making functions are being devolved poses a constraint to improved performance by the RDCs. Moreover, with the political support being enjoyed by the special regions, one tends to doubt the influence the RDCs can exert in national decisions regardless of additional powers vested in them.

In this section we will trace the different stages of evolution of the RDCs and other regional bodies. Special emphasis will be laid on the problems encountered by the RDCs and the institutuional reforms implemented in response to these problems. The effectiveness of the RDCs will be compared with that of the special regions through an analysis of the effects of institutional reforms on the power of the RDCs, in order to verify the potential influence over policy formulation and implementation.

The discussion is divided into two main parts. Phase I covers the period from 1972 to 1975,* which represents the early stages of the regionalization program. Phase II extends from 1976 to the present, in which reforms were instituted as a response to the problems encountered in the preceding period. A new set of issues has emerged and innovative approaches are currently being tested to improve regional planning operations.

*It was also from 1974-75 that the author was actively involved in regional planning as a member of the staff of the NEDA Region XI office.

A. Phase I - Regionalization and the Creation of the RDCs.

1. The Regionalization Scheme

Regionalization was mandated by the Integrated Reorganization Plan (IRP) of 1972 (as set forth in Presidential Decree (PD) No. 1*) which aimed to decentralize national government functions by dividing the country into eleven regions. Prior to this, there was no uniform regional set-up, with each national agency maintaining its own regional subdivision according to its discretion and needs. The present regional delineation proposed by the IRP is largely based on a study conducted by the Physical Planning Strategy of the Philippines and is for "administrative, planning and management purposes, with special attention given to problems of regional equity and existing administrative, political and ethnic boundaries." 39/

The regionalization scheme which requires national government agencies to establish regional offices accroding to the prescribed regional delineation, preferably on a department-wide basis, is intended to provide administrative and substantive powers to regional offices. Through the delegation of these powers it is expected that transaction of public business and the implementation of government development projects at the regional level will be facilitated. Moreover more coordination is anticipated inasmuch as it is proposed that regional offices will all be located physically close to one another in a regional center. Viewed from another perspective, the designated regional capitals would be gradually built up into strong urban

*The Philippines has been under martial law since September 21, 1972, whereby legislative and executive powers are assumed by the President. Presidential Decrees (PDs) and Letters of Instruction (LOIs) are issued by the Office of the President, the former becoming laws of the land. Recently the representatives to the National Legislature have been elected.

centers through infrastructure provision.

Aside from administrative decentralization, the IRP advanced the following objectives.[40/]

a. the promotion of the socio-economic development of the various regions within the country by providing the institutional framework for the conduct of regional planning and development, within the context of aggregative planning at the national level and the specific planning and programming at the local level.

b. the creation of a regional development council for each of the eleven administrative regions of the country. The councils shall be broadly representative of local governments and sectoral departments of the national government operating in the region.

c. the adoption of a policy that will provide the broad framework for the integration of development efforts in each of the eleven administrative regions.

In effect the IRP provided the institutional machinery for pursuing the objective of regional development and industrialization embodied in the national plan, with its provisions for administrative decentralization and the creation of the RDCs.

2. Organizational Structure of the RDCs.

The RDCs, activated under Letter of Instruction (LOI) No. 22 (See Appendix 2 for salient features of the organization and operation of the RDC), are composed of provincial governors, mayors of chartered cities, regional directors of some national government offices and heads of regional development authorities in the region. Tasked with coordinating planning activities and monitoring program implementation, the RDC is assisted by a technical staff, the regional office of the National Economic and Development Authority (NEDA), the country's economic planning body. At the provincial and municipal levels, the organization of local development councils with their own planning staffs had been ordered under Executive Order

No. 121 in 1970 but very few had actually been set up by 1972.

It is interesting to note at this point that the RDC is a replica of the NEDA Board, the country's highest policy making body composed of the President and heads of ministries and assisted by NEDA Central Office, at the national level and the local development councils at the local level. While there are similarities in organizational structure, the NEDA Board and the local development councils are political units in the hierarchy of the government system of administration, but the region is not. It is merely a creation for planning purposes. What this implies is that the RDC Chairman, unlike the President or provincial governor, does not have direct authority over the regional agencies which fall under the umbrella of the RDC. Moreover the RDC, as an organization, is limited to planning activities with virtually no direct control over plan implementation. Perhaps this separation of planning and implementation functions is an offshoot of the disappointing performance of the regional development authorities which were vested with these dual functions. Consequently the RDC has had to coordinate and plan mainly by persuasion because of its limited powers.

The organization of the RDCs reflects an attempt at combining the political leadership with the government bureaucracy in order to secure commitment to development programs conceived at the regional level and enhance the participation of local elective representatives in the planning process. Local issues can be discussed and settled within the region; at the same time national objectives are brought into direct relationship with local situations.[41/] However the danger in the RDC approach lies in the possibility that the political leaders would overwhelmingly assert their supremacy over the appointed regional directors, in which case, politics

becomes the dominant ideological perspective, not bureaucratic rationality.[42/] The very purposes for which the regionalization program was undertaken and the RDCs established will be nullified if there is excessive political intrusion into the decision-making process. The pace at which the decentralization scheme is pursued will be affected adversely.

3. The Presidential Officers.

Complementing the RDCs at the regional level are the Presidential Regional Officers for Development (PROD) and the Presidential Regional Action Officer (PRAO), who are presidential appointees charged with monitoring important development programs and projects, the latter specifically with the food production drive. They are "extensions of the President" and have been vested with the prerogatives of his office in the solution of local problems and those affecting priority government projects. In some regions of the country are also found the project offices for Integrated Area Development Proojects (IAD) which undertake planning activities for subregional areas. Their work also involve the various regional line agencies in both planning and implementation. In July 1973 a coordinating committee, the Cabinet Coordinating Committee for Integrated Rural Development Projects (CCC-IRDP) was set up to oversee the progress of the IADs and identify areas where the IAD approach is warranted.

4. Sectoral Planning Exercises.

The different RDCs in the country were activated between 1973 and 1975. Then the planning exercises at the regional level commenced immediately after the activation of an RDC with the formation of sectoral* task forces,

* The sectoral groupings are patterned after the major planning sectors covered by the national plan for easy integration. However the RDC, at its discretion, can form more task forces as well as expand membership.

empowered by the RDC to prepare a regional development plan. Every task force was composed initially of representatives of government agencies whose functions are related to the sector, e.g., agriculture task force - Bureaus of Plant Industry, Agricultural Extension, etc. Coordinated by the RDC Technical Staff, each task force's expected main output was a sectoral development plan for the region. Various sectoral plans were checked for consistency and integrated to form the regional plan, submitted to the RDC for approval. Eventually the RDC plans were reviewed at the national level and incorporated into the national development plan.

During the establishment of the RDCs, the NEDA regional offices and the formation of the task forces, a multitude of problems was encountered. As was expected, there was difficulty in staffing the NEDA regional offices because of the lack of qualified personnel at the regional level and the unattractiveness of regional assignments to competent specialists based in Manila. This was partially alleviated by NEDA-sponsored training programs in Manila whose participants were assigned to the different regions upon the termination of studies. The personnel problem was more acute at the provincial and municipal levels[43/] where pay scales are low and non-competitive. However, during the first few months of operation of the NEDA regional offices, RDC-organized seminars and workshops were held at the regional level to build up capability of local planning staffs. Likewise during the planning exercises, the work of the sectoral task forces suffered from the lack of planning experience of most participants. This problem was further complicated by the varying degrees of decentralization among the different line agencies such that their participation in the planning exercises was constrained by the amount of decision-making powers delegated to them.

Hence the success of the whole planning activity came torest on the initiative of the RDC Technical Staff who were responsible for organizing, planning and catalyzing the work of the task forces.

Despite the problems encountered in the early stages of their operation, the RDCs were able to complete their regional plans before the end of 1975. This is a tribute mostly to the improvisation of their technical staffs.[44/] The regional plans are wider in scope and content than those covered by the currently available machinery for implementation at the regional level. For example, while plans for housing and industry have been prepared, there are no region-specific entities specifically mandated to implement the plan. Furthermore the degree of detail varies but analysis is generally more developed for those sectors in which public expenditures dominate, for which there are regional field offices or where statistical information is relatively better developed.[45/]

5. Technical Issues.

Even as early as the first planning exercises, a number of technical issues surfaced. The manner in which the regional plans were evolved varied widely from one region to another. No concrete guidelines were set or agreed upon beforehand among the NEDA regional offices and the main office. In some cases the preparation of the regional plan was done by putting "spacetags" to the programs and projects contained in the different sectoral components of the national plan and then collecting those belonging to a certain region. Regional objectives and goals were lifted from the national plan and reworded to give the impression of its regional conception. In other cases the programs and projects submitted by agencies belonging to the task force were compiled, after which a broad conceptual framework was made up to relate

these projects to regional objectives. It should be borne in mind that these projects were often not identified by the regional office itself but by some study groups organized by the head office to undertake a nation-wide project identification activity. In either case, the regional planning exercise does not produce a set of objectives and a listing of programs and projects that truly reflect the peculiar aspirations and conditions within the region. Probably the attempt to use nationally conceived projects was inevitiable since the RDC as an organization does not possess implementation powers.

It was also to be anticipated that the region, in its planning exercises, would tend to consider itself in isolation and not as part of a national space economy inasmuch as there had been no previous intensive studies on interregional differences in resource endowments nor assessments of comparative advantage. Hence overambitious targets were often set, making integration more difficult. Even at present the mechanism by which targets are set is still not fully developed.

Aside from the problems present in plan formulation, the RDCs were faced with unsettling predicaments in performing coordinative functions. Apparently the PRODs have built up their own constituency among regional offices because of their broader powers and the speed at which they could respond to crisis situations. On the other hand, the relationship of the RDC vis-a-vis these regional agencies was not clear except perhaps those involving the planning exercises. As mentioned earlier, the RDC has no direct control over line agencies. Even with respect to the local government units in the region, its relationship is ambiguous since these units are administratively controlled by the Department of Local Government and

Community Development (DLGCD) particularly in areas of local planning and implementation.[46/] Some agencies or local governments resent or, at least, consider as an unnecessary work burden the requirements of the RDC to submit periodic reports on the progress of implementation of development projects. It was mainly in instances where the PROD or PRAO, if he was not the RDC Chairman himself, gave his support to the RDC that the latter was able to mobilize the line agencies and local governments. Hence a common strategy adopted by the NEDA Regional Executive Director is to start and sustain a close personal relationship with the PROD with the view of capitalizing on it in his coordinative endeavors.[47/] Moreover the RDC Technical Staff started to form a constituency of its own by extending technical assistance to line agencies and local governments. The previous training seminars and workshops on local development planning and project development proved to be invaluable in gaining recognition for the expertise of the RDC personnel and in establishing personal contacts with local planners.

In the case of the IADs, although in principle they fall within the jurisdiction of the RDC, coordination is more dependent on the interpersonal relationships established by the RDC staff with the project offices. Similar to the PRODs and PRAOs, the IAD project offices were given more powers and therefore tended to duplicate or even challenge the policy making power of the RDC. Their powers come from the fact that they are under the supervision of the CCC-IRDP which is composed of high ranking cabinet members. In addition they receive more funding from both national as well as foreign sources; they can avail of the services of foreign experts through the technical assistance components of loans and grants; and lastly, they are empowered to undertake direct project implementation. On the other hand, the IADs

have a self-declared short life span unlike the RDCs which have been organized as permanent institutions in the regions.[48] To a certain extent, therefore, the presence of the IAD in a particular region puts additional pressure on the RDC in its coordinative efforts.

Even if no difficulties had been met during the planning exercises and in coordinative efforts, the RDC still had to contend with a major deficiency of the regional planning system - the lack of control over financial resources necessary to implement the plan it conceives. All the budgetary appropriations come through the national line agencies and from local governments. Budgeting by line agencies was not done on a regional basis and the regional directors had little influence over their department budgets. Hence the RDCs not only must plan by persuasion but their role is severely restircted by the absence of regional budgets for the line agencies and by the lack of any effective mechanism to deal with conflicts in resource allocation at the regional level.[49]

At this juncture, it appears rather obvious that the problems which faced the regional development authorities in the 1960s were also hampering the operations of the RDCs. The superimposition of another regional body, without an accompanying precise specification of its functional relationship with other government entities based in the region, raises eventually the problem of coordination. The RDC, although tasked with coordination, has no powers to enforce cooperation; responsibilities are well-defined but lines of authority are ambiguous. Of course, apathy and indifference do not stem purely from technical considerations but from behavioral issues as well. It is to be expected that some resistance will be met once a coordinating "superbody" emerges on the scene. Resistance comes from the pattern

of personal loyalties and institutional autonomy.[50/] Coordination always implies a cost, not the least of which is the cost of freedom of action. No administrative agency will therefore acquiesce to being coordinated because such relationships are postulated theoretically.[51/] Moreover, until it is clear how regional planning is undertaken, coordination among sectors will always pose a problem.

Similarly the problem of resources which constantly plagued the regional development authorities reappeared during the early phase of the RDC activities. Financing provides the vital link between planning and implementation; without it programs and projects cannot be matched with available resources. Because of the inability of the RDCs to provide the financial leverage for pushing through important regional projects, its effectiveness has been undermined by politicians who manage to gain access to the President and secure funding for projects within their area.[52/] Consequently plans, which represent the output of long periods of technical work, are just relegated to the bookshelves and do not receive the support of implementing agencies.

6. The Special Regions.

Probably the only regions that were able to avoid or minimize these problems were the two Muslim regions and the MMA. It was in 1975 that the three regions in Mindanao were regrouped into four regions because of the clamor of the Muslim segment of the population for more representation in government affairs. (At this time and even up to the present, there have been moves calling for their secession from the republic.) Region XII was formed by combining three provinces of Region XI with two provinces of Region X, all of which have large Muslim populations. Subsequently the

Muslim regions IX and XII were declared as semi-autonomous regions with a regional commission as the governing body. The Regional Commissioners in these two areas, one a local political leader and the other a military officer, are also the RDC Chairmen.

Meanwhile Region IV was divided into two regions, the MMA covering four cities and thirteen neighboring municipalities and Southern Tagalog region. Even before this, the MMA was already considered as a separate region for planning purposes because of its distinct socio-economic characteristics and this move merely formalized such a division. The MMA is under a governorship type of administration, with the First Lady, Mrs. Imelda R. Marcos as governor and general manager. The Metropolitan Manila Commission (MMC) is charged with planning the integrated development of the area. There is an RDC for Southern Tagalog.

The Regional Commissioners in the Muslim regions are appointed by the President, report to him directly and are his "personal representatives" in the region. They were given more authority in financial and budgetary matters and authority to call upon any agency of the government at any level to undertake action related to coordination, planning and project implementation. Besides these already overwhelming powers, they were also given administrative supervision and control over local governments and share the full powers of the Secretary of the DLGCD to investigate and decide on administrative cases involving local elective officials.

In these commission-type regional organizations, it appears that most of the coordination and control problems of the RDCs over regional planning and implementation are not evident. In fact, during the Third Regional Consultative Meeting (August 5-7, 1976) of the various RDCs held in Western

Visayas, there was a strong consensus towards the adoption of a regional commission-type set-up for the other regions.[53/]

The MMC was empowered to act, not only as a special planning and implementing institution, but a de jure central government to perform policy making, executive and administrative function for the local governments under its jurisdiction.[54/] It is an attempt at coordinating and integrating efforts in the metropolitan region where serious problems transcend political boundaries and therefore a concerted move guided at the metropolitan level is necessary. Because of its extensive powers and undisputed leadership, the MMC is assured of considerable financial support at both the local and national level. This can be deduced from its 5-year plan (1977-81) budget of ₱8.9 billion, of which 27 per cent will come from local sources while the rest will be provided by the national government.

On the basis of the preceding description, we can see that the special regions - the MMA and the Muslim areas - enjoy greater delegation of substantive powers and preferential treatment in resource allocation, compared to the other regions. Their political clout provides the main source of their power.

Concluding Remarks for Phase I.

In evaluating the overall performance of the RDCs during the first phase, what appears to be important is not the quality of the plans prepared by the regions nor the success at plan implementation. The constrainsts on these two aspects of their operations have been discussed earlier. It should be borne in mind that regionalization is a long-term process and many apparently insurmountable obstacles and issues, which may frustrate its success unless threshed out properly, are bound to arise in the early stages

of evolution. The identification of problems and constraints during these stages, e.g., the absence of regional budgets, lack of planning expertise, differences in competencies and decision-making powers among regional agencies, etc., can be considered by itself as a major breakthrough in the planning process because, as we shall see later on, it served as the basis for determining and instituting remedial measures to rectify the deficiencies in the regional planning system. Moreover the RDC, despite its shortcomings, was able to mobilize the different instituions operating at the regional level and organize them into a permanent planning machinery. It served as a forum for dialogue between regional officers of line agencies of the national government and local political leaders. Not inappropriately the early phase of the RDC operations can be termed as a consciousness raising exercise at exploring more regional and locally oriented issues which could be inputed into the formulation of regional and national policies as a means of ensuring their responsiveness and relevance to needs at the grassroots level.

On the technical side, critical issues were raised for consideration regarding the linkages that need to be developed among the different levels- local, regional and national- of the planning hierarchy and the mechanics of integration among sectors and among regions. The regional disaggregation of national targets, the responsibility for target setting and the translation of objectives into meaninglful action programs and projects are other pressing issues. Nevertheless, during the early phase of the RDCs, the regional planning process was initiated and became an important function of regional institutions.

The better performance of the commission-type regions and the IADs

underscored the need for joining planning with effective power, a link that has eluded the regional development authorities and the RDCs. Effective power emanates from the control over the legal and monetary resources necessary to carry out intended actions.[55/] Undoubtedly the regional commissions, the MMC and the IADs have this type of control in view of the broad powers delegated to them by the central government.

One is led to ask why it is only to the so-called special regions that broad powers have been given, and not to the other RDCs as well. Perhaps the greater degree of decentralization to the Muslim regions is considered by the national government as a politically expedient way of meeting demands on the state; by planning divisive issues at lower levels of government, conflict with central government is reduced. It may even further reinforce the acceptance of legitimacy of the central government.[56/] Alternatively the inadequacy of RDC powers may reflect a lack of sincerity or commitment to the entire process of decentralization as one may be led to believe from the slow pace of devolving decision-making duties. It appears that political circumstances carry more weight and influence over national government's response whenever objective criteria are unclear. Hence there is unequal treatment in the delegation of substantive powers to regional bodies, with the special regions enjoying the favor of the central government largely because of their political strength or strategic importance. With the joining of planning to effective power in these latter regions, their capability for more independent action has been enhanced.

In the next section, the measures taken to strengthen the RDCs will be assessed in order to verify whether these are capable of altering the balance of power among the regions, i.e., whether the RDCs if vested with

more powers will be capable of building up their influence over national decisions especially with regard to resource allocation. These measures were a reaction to the difficulties met in Phase I which emanated primarily from the slow progress of decentralization of national government powers inspite of the regionalization program.

B. Phase II - A Period of Institutional Reform.

1. Preparation of Five, Ten and Twenty-five Year Plans.

The initial plans prepared by the RDCs were superseded with the issuance of LOI 363 in late 1975 directing the simultaneous preparation of 5, 10 and 25-year plans. During this time the Philippine government was finalizing the agreements with the United Nations Development Programme and the International Bank for Reconstruction and Development for the Regional Planning Assistance Project which started in 1976. This project involving the NEDA, especially its Regional Development Staff, the regional offices and a small team of foreign experts, was instrumental in prviding the planning guidelines to the RDCs for the preparation the multiyear regional development plans. In addition to this, it spearheaded efforts at rationalizing the regional planning organization as well as the planning process itself through continuous interaction with NEDA regional offices and through research. As organizational reform measures were being considered, the project staff performed the necessary technical studies to evaluate the proposals and make recommendations. Training seminars and workshops were also conducted to develop regional planning capabilities.

The RDCs completed their 25-year plans before the end of 1976 and their 5- and 10-year plans by early 1977. These plans were evaluated by the Regional Development Staff and subsequently integrated into the National

Development Plan through the interagency technical sectoral subcommittees, in which the RDS staff was actively involved as proponents of the regional "cause". It is gratifying to note that the present national plans contain a regional development framework and the regional dimension is evident in their sectoral components.

2. Organizational Improvements.

Largely as a response to the difficulties met during the early stages of operation of the RDCs, a number of significant reform measures have been undertaken since 1975. Among these are the appointment of the RDC Chairman by the President, the establishment of the regional budgeting system and the regional development fund, the creation of planning positions in regional offices of line agencies and the expansion of powers of the RDC.

In recognition of the need to strengthen the RDC, it was deemed that the appointment of its chairman by the President could bring bout a more positive realization by the line agencies and local governments of the role of the RDC in the region. This move was an admission of the ineffectiveness of the RDC Chairman if he does not enjoy the confidence of the central power in a martial law regime. Personal access to the Presidency is of paramount importance to regional bodies as exemplified by the PRODs, the regional commissioners and local political leaders close to the President. The central power, with its extensive authoritarian powers, has great control over fiscal and financial resources and is in a position or reject or support any move initiated from below. The past inability of the RDC and its staff to command respect and deference was partly due to the agencies' awareness of its lack of authority over them.

In mid-1976 LOI No. 447 was issued instructing the regional offices

of the sectoral departments of the national government to appoint a planning officer for their office. It was followed soon by LOI No. 448 which directed the delegation to regional directors of a standard set of minimum administrative powers and ordered the heads of national departments, bureaus and agencies to determine substantive powers that may be delegated and to issue the corresponding directives for delegation. These instructions were an offshoot of the findings of the survey conducted to follow-up on the implementation of the IRP which revealed that, while physical decentralization was largely achieved, there was not enough delegation of authority on administrative and substantive powers.[57/]

Six months after the issuance of LOI no. 448, two surveys* conducted to determine the extent of its compliance showed that its provisions have not yet been implemented. In general the department orders/circulars indicate that the delegation of authority on administrative matters had been better achieved while the delegation of authority on substantive matters has been very partial, if not totally absent. Among the problems cited to account for the slow implementation are the lack of a clear definition of planning responsibility at the regional level vis-a-vis that of the national office, lack of competent personnel to fill the positions which only command low salaries.[58/]

3. The Regional Budgeting System and the Regional Development Fund.

LOI Nos. 447 and 448 mandated the Budget Commission to formulate the necessary systems and procedures to operationalize the regional budgeting

*One was conducted by the Budget Commission, the other by the University of the Philippines' College of Public Administration.

system. In early 1977 the system of regional budgeting* (RBS) was introduced with the organization and conduction by the Budget Commission, in coordination with the RDCs, of seminars and workshops to orient regional offices on the mechanics of the new system. The regional offices are instructed to evolve their own regional budgets in consonance with the priorities set in the RDC Plan. In effect the national budget of sectoral departments is regionalized to support the financial requirement of the regional plan. Since 1977 the system of regional budgeting has been gradually implemented, with its full operationalization by 1979.

To complement the RBS, a regional development fund (RDF) is set aside from the national budget to finance priority local projects of the RDC. In 1977 the General Appropriations Act (PD 1050) provided an allocation of P94.56 million, of which ₱50 million is made available for current outlays, ₱30 million for capital outlays, and the rest earmarked for a number of existing regional development authorities. The law specifically provides that the ₱30 million for capital outlays will be released on a matching

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*The main objective of the RBS is to enhance the effectiveness of the national budget as an instrument of regional and national development. Specifically the immediate aim is to develop a budget mechanism that will support and enhance the regional integration and interagency coordination of plans and operations for optimum results within specific geographic areas. The other objectives of the RBS are: 1) to make the budget system harmonize with the decentralized administrative and political structures, 2) to provide a mechanism with which to review, evaluate and monitor government program and project activities and relate them with those embodied in the regional plans, and 3) to make the budget more receptive to the aspirations and needs of the regions, local governments and communities.

The system is operational when 1) the regional allocation of each department budget is made, 2) the regional offices are aware of the level of resources allocated to their region, and 3) the regional offices can translate the regional plan into the budgetary program and project structure and can determine the level of budgetary requirements for such programs and projects.

Source: Regional Budgeting Manual prepared by the Budget Commission.

basis of P0.50 for every P1.00 of funding raised by local governments for regional projects. Accordingly implementing rules governing the disbursement and allocation of the RDF have been proposed. The RDC shall be directly accountable to the Budget Commission for the utilization of the fund.

4. More Attention for Local Planning.

With some of the administrative and financial issues already undergoing gradual resolution, the central government took the lead at supprting local level planning through the establishment of the Human Settlements Commission* (HSC), as a means of further improving the effectiveness of regional planning. Broadly the main functions of the HSC are to engage in physical planning and guide the development of the land resources of the country. In early 1977, the National Program on Town Planning, Housing and Zoning was initiated by the HSC, covering all chartered cities, regional capitals and important urban centers. Since it did not have any local counterparts, it relied on the NEDA regional office staff to head the program at the local level, in conjunction with the HSC regional coordinator. Planning teams were formed to assist and train the city/town planning staffs in the preparation of town plans, covering both economic and physical dimensions, a housing program and a land use plan, together with the necessary implementing measures, e.g., zoning ordinances, building standards, etc.

5. Shift Towards Plan Implementation.

More recently the RDCs, with the planning exercises behind them, are giving more attention to planning for plan implementation. In this connection, the NEDA through the NEDA-UNDP/IBRD Regional Planning Assistance Project

*The HSC is now under the newly-created Ministry of Human Settlements and Ecology.

is experimenting with a version of the IAD approach, whereby contiguous areas within a region are delimited for the purpose of the identification of functionally-linked programs and projects. A region is divided into a number of IADs. This approach is a reaction to the need to translate the regional plan into implementable programs and projects, which then would be prioritized and grouped into a Regional Investment Program (RIP) and eventually matched with available resources through the RBS. The IAD concept assumes a relatively advanced degree of decentralization since the provision of adequate substantive powers is a prerequisite to project development. Again some amount of coordination and interlink among agencies is needed in this approach, with a coordinating body envisaged at the sub-regional level.

6. A New Set of Emerging Issues.

With the periodic review and reform of the RDC structure and administrative decentralization, the organizational framework for the development of regional policy has undergone a great deal of transformation since its inception. The RDC in particular has been given more responsibilities and, accordingly, efforts to strengthen it have been made. As a result of these changes, a new and more complex set of issues and problems is on the scene.

The effectiveness of the institutional machinery for regional planning is contingent upon the speed and pattern at which central government functions are decentralized to the regional level.[59/] As discussed earlier, the reforms made in the past few years have placed new demands in terms of functions and responsibilities on regional offices, that presume a certain level of devolution of decision-making. With the increased tasks attendant to the RBS and the RDF, the regional offices, especially the RDC as a body,

are no longer confined to plan formulation but will be actively involved in project development, resource allocation , prioritization and programming, and monitoring. Compared to the original functions contained in LOI No. 22, the entire organizational structure of the RDC, e.g., its functions, manpower and operating resources, needs modification and upgrading to cope with the additional demands. In fact during the Regional Consultative Meeting held in May 1977, a number of proposals were presented and accepted in this regard, specifically calling for the expansion of RDC powers to include project prioritization, review and monitoring and the administration of the RDF.

The strengthening of the RDC becomes more crucial because one of the main bottlenecks facing regionalization and regional planning is that the region is not a political subdivision.[60/] What this implies is that the RDC as a body is divorced from the instruments of action. The experience in many countries has shown that planner's advice, separated from the uses of effective power, accomplishes but little.[61/] If the region cannot be converted into a political unit with its own system of government, the RDC should at least be clothe with more executive powers related to plan implementation as a means of checking compliance with its decisions by regional bodies.

The effectiveness in resource allocation at the regional level depends to a large extent on how the RDC can influence the line agencies during the regional budgeting process. But before the regional budget and the RDF can become powerful tools for pursuing regional development objectives, the regional offices have to be given more leeway and control in project development so that identified programs are truly directed towards a set of

strictly regional aims. Programs and projects can subsequently be reviewed and ranked by the RDC using its own scheme for prioritization and then programmed for implementation.

The planning experience has also raised the need for flexibility in national government intervention in traditional local concerns. Certain activities which are strongly influenced by location-specific factors are more efficiently planned at the subnational level as in the case of planning for health services wherein conditions are affected by factors such as accessibility, geography and climate. On the other hand, planning for power development must be directed at the national levelto take heed of the requirements for industrial dispersal.62/

Finally the prennial problem of coordination is again present. With the proliferation of government agencies, a situation that is symptomatic of the excessive fragmentation of the system of administration, this will often be experienced. For example, with the entry of the HSC, the issue arises as to the distinction and theoretical boundaries between economic and physical planning which could guide planning agencies in their participation in the planning process. Conflicts will often emerge if there are no provisions for inter-organizational coordination . These are bound to defeat the very purpose of integrating the physical and economic dimensions and producing a comprehensive plan document. Even with the new IAD approach at the regional level, the requirements for interlink are even greater. Maybe another layer in the planning hierarchy will just be added without a proportional increase in organizational efficiency.

Concluding Remarks for Phase II

All the institutional reforms in Phase II undoubtedly strengthen the

RDCs. But what appears more important is whether these reforms provide the RDCs greater capability for utilizing regional resources efficiently and increasing their leverage in influencing national government decisions. As of now, the changes in the mechanisms within the RDC, like the RBS and the RDF, expand opportunities for more independent action. However the benefits which these recent changes offer may not be realized if decision-making powers are still limited. Political factors may intrude excessively in decision-making if the technical and objectives elements of proposed policies or programs cannot be decided and enforced by the RDC. Moreover the additional powers given to them have not reduced the overwhelming advantage of the special regions especially the MMA. Most of the substantive powers enjoyed by these latter regions have only been partially given to the RDCs.

Decisions on regional plan implementation, particularly on resource allocation, depends heavily on the national government. These are subject to competing demands from the various regions. Very often the regions which are politically stronger or close to the central power can influence these decisions in their favor. Hence, despite the rational criteria that can justify or support the valid claims on the national government, what eventually turns out to be the major determinant of the outcome of national decisions is the political influence of the favored regions like the MMA and the Muslim regions. Presently this is happening in the Philippines. The MMA, in particular, has been accorded preferential treatment because of its present leadership. Since the degree of influence of the MMA on central government action is very crucial to any policy towards decentralizing population and economic activities from the area, additional measures are therefore necessary to further strengthen the capability of the institutional

mechanism at the regional level for plan formulation and implementation and, at the same time, reduce effectively the significance of the political influence of the favored regions.

Even accepting that, for the meantime, most of the RDCs will be at a disadvantage vis-a-vis the special regions, any resources channeled to them, no matter how meager, have to be used efficiently for regional development. This is why the strengthening or expansion of the powers of the RDC becomes more important. The RBS, the RDF and the RIP and other reform measures aim to give the RDCs more control over resource allocation on the basis of priorities determined from the planning exercises. However, if the devolution of decision-making continues to proceed slowly and constrains the ability of the RDC to control resource allocation, the potential impact of these newly-installed systems and fund sources will be weak. In addition, the influence and interests of political leaders in the RDC are magnified if the capability for imposing more objective criteria in decision-making is impaired. The chances for an inefficient allocation of resources are very high. Later on, any inadequacies on the part of the RDC even if originally stemming from the central government's reluctance to share more powers may affect adversely future appropriations for the region. The primary essence in a decentralization scheme is the establishment of a strong regional institution that is capable of determining its own set of priorities based on an assessment of regional needs and potentials, utilizing resources for programs and projects consistent with these priorities and monitoring implementation effectively. This should be the ultimate goal in institutional development efforts.

With the requirement for a permanent planning machinery fulfilled by

the creation of the RDC, the formulation and implementation of policies directed towards regional development and industrialization could now be given adequate institutional support. The RDCs, as part of their planning function, have devised strategies for industrialization together with implementing measures. With each region aiming for economic structural change through an increasing emphasis on industry, the task of implementing the industrial dispersal policy becomes more problematic inasmuch as every region is unwilling to be left out in this policy. The RDC, as a body, assumes a political role in demanding the inclusion of its region in this nationwide effort. Its demands have been validated in its planning exercises. However, within an interregional framework, efficiency requirements dictate that only a few regions should be given priority. Thus some regions may lose out when measures of comparative advantage are made. It is at this stage of analysis where thorny issues regarding spatial equity and efficiency are bound to arise and where the political and planning processes must interact and resolve these issues before the substantive content of regional policies is finalized.

VI. The Regional Dispersal of Industries.

With the adoption of the industrial dispersal policy, various attempts have been made to support this new policy in ongoing industrial development schemes. Foremost among these is the amendment to the Board of Investments (BOI) Investment and Export Incentives Acts which had originally been enacted without any explicit regard for spatial objectives. Other piecemeal measures have been likewise tried, but all these were basically adhoc responses and lacked any clear direction. Since then, more positive approaches have been designed, specifically the Nationwide Industrial Estate Program and the promotion of small and medium-scale industries.

In the ensuing discussions, industrial dispersal measures will be evaluated largely with respect to their stated goals. Based on the findings in Chapter III, the potential effectiveness of these measures will similarly be assessed insofar as identifying the factors of industrial location these attempt to replicate. Furthermore their impact on interregional disparities will be the primary consideration in the appraisal since data availability limits us to this level of analysis. Nevertheless some qualitative assessment on intraregional disparities and dispersal will be made, especially in the case of the small and medium-scale industries and, to a lesser extent, the industrial estate program. Subsequently an interregional inventory of resource endowments and comparative advantage for industrial location will be conducted to provide a technical framework for the prioritization of the regions for the industrial dispersal program. Finally the implications of this prioritization exercise on equity and efficiency objectives and the issues it raises will be related to the interplay between the planning and political processes which determine the ultimate outcome for policy.

A. Investment Incentives and Other Initial Measures.

In 1967 the Investment Incentives Act (IIA) , R.A. 5186, was passed by the now defunct Congress of the Philippines. Hailed as a milestone in industrial policy, its primary objective is to stimulate economic activities which are preferred from the standpoint of the development program.[63/] To implement the law the BOI was immediately organized to administer the system of incentives. In 1970 another bill, the Export Incentives Act (EIA), R.A.6135, was introduced as a complement to the IIA and as an instrument for the export promotion drive. The BOI prepares on an annual basis an Investment Priorities Plan (IPP) and an Export Priorities Plan (EPP) which list the preferred areas of investment that can avail of incentives by registering with the BOI.*

1. Inclusion of Industrial Policy in Incentives Schemes.

Originally the IIA did not include the regional dispersal of industries as a criterion in the preparation of the IPP and in the evaluation of projects by the BOI. The major criteria used were economic viability, aggregate employment effects and foreign exchange savings/earnings. The IIA was amended in response to the regional development objective in the national plan

*Under the IIA, industries may be registered as preferred, pioneer or non-pioneer. Preferred industry is one that is included in the IPP while a pioneer industry is either engaged in the manufacture of goods that have not been or are not currently produced in the Philippines on a commercial scale or which uses a manufacturing technique that is new and untried in the country. Among the incentives given are: accelerated depreciation, tax exemptions on imported capital equipment, tax red-ction for expansion reinvestment, etc. For pioneer industries, tax allowances, capital gains tax exemption and a few others are further granted. The EIA added to the package of incentives by exempting exports from export taxes and providing additional credits on export sales and excise taxes on inputs, etc.

and Sec. 2 now states that investments shall be encouraged in pursuance of a "planned, economically feasible and practicable dispersal of industries." Inspite of this amendment, however, no new specific measures were instituted to effect this additional objective; neither was there any move to operationalize it in project evaluation.

The EIA was also amended and two extra incentives were provided to put more force to industrial dispersal. These are: 1) the deduction in taxable income of an amount equal to the total cost of direct labor and local raw materials used in the production of exports for the first five years after registration, and 2) deduction from income taxes payable of an amount equal to the cost and maintenance of necessary infrastructure works.

Although the IPP and the EPP have incorporated regional dispersal of industries as one of their main objectives, the present incentive scheme appears to be ineffective as a tool towards regional development. This can be deduced from an analysis of the regional distribution of BOI-registered industries throughout the country.* (Tables 18 & 19). Clearly Southern Tagalog (Region IV) which includes the MMA still has the most number of registered projects, followed by Northern Mindanao which has the advantage of the Maria Cristina Falls hydroelectric power and excellent ports location, and then by Central Mindanao where industries are mostly resource-based.64/ For export industries Region IV accounts for more than 60 per cent of investment. Even in recent periods, the dominance of Region IV has not been dimi-

*Data constraints do not permit a deeper analysis of regional distribution before and after the inclusion of regional dispersal as a criterion since available data is on a cumulative basis. Nevertheless the 1975 figures support strongly the contention regarding the ineffectiveness of the present incentives scheme.

nished as evidenced by its large share of enterprises availing of incentives in 1975.

Of late, there have been attempts by the BOI to correct its inadequacies vis-a-vis the industrial dispersal policy. For instance, it includes within its industrial priorities formula a factor to make industries located outside the MMA obtain a favorable treatment. Other promotional measures have been undertaken such as BOI regional seminars and an experimental regional development program in Northern Mindanao. Moreover the BOI has tried to make negotiations on the project approval before approval. But all these have not induced a movement away from the MMA.

2. Ineffectiveness of Initial Measures.

Three reasons for these ineffectual moves have been advanced,[65/] viz, 1) in making the industrial priority plan, regional location is only one of the numerous factors considered, 2) proposals for new industrial enterprises are critically dependent on the pattern of industrial protection and general economic policy which is biased towards the MMA, and 3) the industrial priorities formula is not the crucial policy variable for inducing regional dispersal of industries.

As described earlier, the main concerns in the preparation of the IPP and the EPP are economic viability, employment generation and foreign exchange savings. Even with the incorporation of industrial dispersal, it is still unclear how such a policy can be adequately supported in the IPP and in the granting of incentives. This new policy may even conflict with other national objectives in industrial development. It cannot always be asumed that incentives aiming to steer development to particular regions will always contribute to national growth because resources may be diverted away

from areas of high return to areas of low return.[66/]

3. Considerations for a Redesign of the Incentives Scheme.

In the design of an incentive scheme for industrial dispersal, several important factors have to be considered. The degree of influence of incentives on location decisions depends on the peculiar structure, e.g., cost, factor intensity, etc. and requirements of the industry and on the relevance of the type of incentives to the location concerned.[67/] Moreover the effectiveness varies over time, especially with situational changes in different locations and general economic conditions. The effects of other regional policies may alter the relative attractiveness of the regions which, in turn, would require a modification in the type of appropriate incentives. Lastly the possibility that firms do not always make rational decisions cannot be ignored. Even with the existence of incentives schemes, factors other than incentives, i.e., infrastructure, transport cost advantages, may prove to be more instrumental for encouragin dispersal. Much can be learned from the country's industrial location experience.

If incentives are to be successful in drawing industries away from the MMA, they should create distortions, i.e., bring about situations different from those that would result from the free play of market forces.[68/] General economic and market conditions presently favor MMA because of the numerous advantages in locating there. In view of this, the distortions that are required to change the relative competitive position of regions in attracting industries need to be substantial in magnitude. Although much has been said and written about the role of incentives, very little is precisely known about the type and magnitude of distortions they create and to what extent they can influence location decisions and induce a dispersal of

industries. As the historical pattern of industrial location shows, even without fiscal and financial incentives, industries have moved to certain areas once they perceive bright profitability prospects in locating there. It is also worthwhile reiterating that there may be adverse repercussions on economic viability and employment generation if incentives encourage the establishment of new enterprises on a wrong scale in unfavorable locations producing higher operational costs. Certainly the proper role of incentives in the industrial dispersal program deserves serious investigation before an appropriate scheme is designed.

4. Other Initial Measures.

Other policies have been implemented to shift the balance of investments away from the MMA. A ban on industrial location within a 50-km. radius of Manila, except for export industries, has been imposed. Also a Central Bank circular has been issued, requiring financing institutions to allocate 75 per cent of their accumulated deposits in their branch offices to investment projects in their areas of operation. Similarly these two measures did not work well. What has been observed is the tendency for new firms to locate just outside the 50-km radius, pointing to the fact that the attraction of the MMA due to its agglomeration economies still prevails. An indiscriminate proliferation of export-oriented industries has also been noted in the MMA. It is believed that many of these would possibly have been established even if the Manila area had been closed to them.[69/] The possibility of loopholes in the classification of an export-oriented industry cannot be discounted. On the overall these observations point to the continuing primacy of the MMA. While there have been spillover effects, these have been confined to the neighboring provinces of Regions III and IV-A,

a reflection of the extension of the MMA's dominance and sphere of influence. The industrial growth in these two regions further worsens the spatial imbalance in industrial development.

Meanwhile the impact of the Central Bank circular has not been encouraging. Bankers complain of inadequate investment demand in certain areas, leaving them with idle funds. The Central Bank also allows banks to comply with the 75 per cent requirement through the purchase of Central Bank Certificates of Indebtedness (CBCIs) which are relatively attractive because of tax-free interest payments and their use in meeting reserve requirements. Besides these, there are difficulties in monitoring interregional flows of funds within financial institutions.

The ineffectiveness of these early policies puts into question the more relevant variables that can influence location decisions. It appears that the present incentives by themselves do not suffice as instruments for diverting investments away from present concentrations, specifically the MMA. The provision of basic infrastructures like electricity, water, transport and communications, is very essential for location decisions aside from natural advantages arising from proximity to raw materials, labor and markets. A firm will usually prefer to locate near the MMA even if it incurs high transport costs in acquiring inputs or distributing output as long as it does not have to provide its own supporting facilities and services. This is especially true for small and new firms which are more dependent on the external economies of central location while large firms are capable of internalizing these economies. While some exceptions to these general observations can be cited, these have been supported by empirical evidence. Of course the impact of government action, e.g., incentives,

restraint systems, physical development programs, on location is sensitive to the peculiar characteristics of the firm. Accordingly the government is evaluating its policy instruments and is currently initiating different approaches to disperse industries away from the MMA and into the regions.

Technical Note: An Analysis of the Composition of BOI-Registered Projects.

Agri-based industrialization is a key element of the national development strategy. The BOI, through the IPP and the EPP, is tasked with promoting the greater utilization of indigenous raw materials and the absorption of labor in industrial undertakings. Progress in this direction will benefit the regions where the natural, agricultural and human resources are abundant.

Among the BOI-registered projects under R.A. 5186, agri-based industries dominate, with almost half of the total number of projects. (Table 20). These projects are also the most labor-intensive among a generally capital-intensive group of industries. Capital intensity of industries is partly attributable to the capital bias of incentives like accelerated depreciation, tax-free importation of capital equipment, etc. Moreover industries which were established during the import-substitution period are also eligible for availment of incentives. Most industries which have registered with the BOI are large firms so that on the average, investment per employee is about ₱140,000. However the capital-output ratio varies among types of projects, with agri-based firms needing only about ₱30,000 for every job generated while, for mining projects, the corresponding requirement is ₱230,000.

Export-oriented industries registered under R.A. 6135 are less capital-intensive compared with those registered under R.A. 5186. (Table 21). On the average, an investment of ₱45,000 generates one job. For the most

capital-intensive, the mining projects, the investment requirement is ₱145,000. Most export-oriented industries are engaged in chemical and metal projects, which together account for 75 per cent of total projects. Agri-based industries account for only 17 per cent. In all types of projects registered under both R.A. 5186 and R.A. 6135, Region IV which includes the MMA has the largest share.

Industrial investments generated by the BOI incentives schemes are increasingly linked to the natural resource base of the country. Typical of agri-based activities are grain and fruit processing, wood production, livestock, fishing, etc. Many projects have also been set up to extract and process mineral reserves of copper, nickel, cement and a few others. Despite the increased backward linkages to the resource base, the industrial concentration in the MMA still continues. Except for those which are resource-based, most industries prefer location in the MMA, an indication perhaps of the critical dependence on the pattern of industrial protection and general economic policy which is considered biased towards the MMA.

The industrial structure that has developed in the past ten years is a marked improvement from the import-dependent manufacturing activities promoted by import-substitution in the 1950s and 1960s. The indigenous resources of the country are being utilized more in industrial enterprises. However the degree of capital intensity is still not reflective of the country's factor endowments. Finally, with regards to regional distribution, the tendency for conglomeration in the MMA and its neighboring regions has remained unchanged.

B. The Nationwide Industrial Estate Program.

A major ongoing program in support of the regional dispersal of

industries is the Nationwide Industrial Estate Program (NIEP). Based on a study project undertaken by an interagency group in 1975-76, a two volume report was prepared. The report contains recommendations pertaining to: 1) potential sites for industrial estates in the different regions (with at least on in every region), 2) the possible industry mix in each estate, 3) the phasing of implementation, 4) management of the program, and 5) investment requirements.

1. Rationale for the Industrial Estate Approach.

The estabishment of industrial estates represents an approach to industrial development whereby sites and services are offerred to prospective enterprises. In addition technical assistance, training, common services and incentives may also be provided to locating fimrs. It is considered to be a more efficient use of government resources inasmuch as infrastructure facilities are concentrated in a particular site, making the area more conducive to industrial location. It is expected to pave the way for a rational pattern of land use and for the development of urban centers. Ultimately it is anticipated that the establishment of an industrial estate will provide a strong stimulus to the economy of a region, not only within the immediate vicinity of the estate but to other parts as well, by inducing the emergence of functionally linked economic activities.[70/]

The success of an industrial estate rests on its ability to create external economies through the concentration of firms and services. Accordingly, in the site selection process, preference was given to areas where other services like housing, schools, transport, etc. are already available. This is consistent with the objective of optimizing the use of investment resources. Moreover it obviates the need for starting from a very undeveloped

state of physical development. Looking at the economic criteria (Table 22), it is no wonder that the selected sites are in relatively developed urban areas with a high level of existing service and facility availability. It is duly recognized that these are the most efficient locations within the region since industries are not likely to locate in areas without some minimum level of basic services required for profitable operations.

2. Features of Selected Sites for Industrial Estates.

The selected regional sites and relevant details about the proposed industrial estates are presented in Tables 23 and 24. It can be noted that 15 industrial estates are programmed for implementation from 1978 to 1990 (Phase I) and another 8 estates from 1980-2000. An estimated ₱1060.7 million and ₱800.9 million are required for the program in Phases I and II, respectively. In simple terms, an average of one industrial estate with a project cost of about ₱70 million will be established every year up to 1990. Additionally most proposed estates are relatively large, based on the area proposed in the study, although they are still smaller than the Bataan Export Processing Zone (BEPZ) and the PHIVIDEC Industrial Estate (Region X) projects which cover 1600 hectares and 3000 hectares, respectively.

3. Some Potential Difficulties.

a. Capital Constraints.

Looking at the features of the NIEP, the question that immediately comes to mind is the feasibility of the plan with regards to actual implementation and construction. Considering the experiences of the BEPZ and the PHIVIDEC industrial estates, it is difficult to imagine how such a plan can materialize. The BEPZ required six years (1972-78) to implement the first two phases, with a third phase programmmed for construction up to

1982. The PHIVIDEC started planning in 1975; it is now only partially developed and complete development is expected to take a total of 18 years. Furthermore the financial requirements of the NIEP are huge relative to the government's financial capacity. While it is contemplated that the local governments and the private sector will actively participate in the developed of the industrial estate, the burden of financing most of the project cost requirements still falls on the government, either through subsidies or loans. It should be pointed out that the two existing industrial estates managed to attract industries because the government was able to allocate sufficient funds for the conversion of the sites into attractive locations. In contrast the present NIEP may strain government finances or result in a dilution of resources.

At this point it may be proper to assess different alternatives for government participation in industrial estate development in order to conserve scarce resources. The first alternative is to reduce the current plan requirements by establishing a set of priorities consistent with the regional priorities in the overall industrial dispersal Program. (This will be discussed in a later section which will deal with a framework for prioritization.) The other alternative is to explore the possibility of industrial areas or industrial zones* in lieu of industrial estates in cases where such a possibility merits serious consideration.

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* Industrial estate - a tract of land which is subdivided and developed according to a comprehensive plan for the use of a community of industrial firms.

Industrial area - offers improved sites an an incentive to the establishment of industries of all types and sizes, as differentiated from industrial estate.

Industrial zone - part of urban or suburban center restricted to industrial use, on which no improvements are made.

Instead of undertaking full scale development of sites, i.e., constructing an industrial estate, it may be worthwhile and less financially burdensome to regulate the participation of government according to the sites' present level of "attractiveness" for industries, the industrial mix and resources available to prospective firms, the degree of involvement or interest of the private sector or local governments, etc. As the experience with Iligan City (Maria Cristina Falls power project) shows, industries are quick enough to capitalize on a certain resource provided by government. There may be certain areas among the proposed sites which, as they exist, are already preferred by industries and for which only some improvements, e.g., infrastructure, or incentives need be granted in order to encourage location. In these cases the feasibility of industrial areas or zones appears promising.

In the site selection stage, more favorable treatment was already given to areas with existing facilities and services. Besides the sites are in, or very near, major urban centers such that even with a moderate degree of government inducement, they are at present the most probable choices for location in the regions. Aside from these considerations, most industries expected to locate in these estates are large firms which are capable of and willing to supply some services once an industrial area or zone has been set aside for them. Industrial estates are more important for small industries in view of their limited capital resources. Thus one may question the rationale for excessively subsidizing large firms which are financially equipped to pay direct and indirect development costs. Very often government policy unduly favors large industry even when profitability outlook is good.

The rather ambitious plan of putting up one industrial estate in every

region of the country is a reflection of the ambivalence and indecision of policy makers in determining priority regions for the industrial dispersal program. They probably fear that any decision on industrial estates favoring a particular region will almost always have political consequences and, reminiscent of the regional development authorities in the 1960s, will raise clamor for equal treatment. The present industrial estate program is an attempt at following the path of least resistance. While the planning process may recognize the need for establishing priorities to effectively implement the industrial dispersal policy, it is inevitably exposed to the adverse repercussions which any regional priority setting might entail. Political pressures enter into the planning process which has to make some adjustments in an effort to gain political acceptability for its proposals. However this often results in each region gaining a share of the development program, in this case the industrial estate program. If such an ambitious program is followed, the danger of a dilution of resources is imminent. Otherwise those regions which can exert greater influence on the national government during the implementation stage will be accorded priority in resource allocation regardless of the requirements which the planning process might establish for an efficient implementation of the policy. Therefore the political process opts for equal treatment for the regions in a nationwide program such as the NIEP.

b. Intraregional Imbalance.

In addition to the issue of interregional balance, the establishment of industrial estates will have repercussions on intraregional equity. As was mentioned earlier, the proposed sites are in relatively developed parts of the regions. While the intent is not to criticize the urban location

bias of industrial estates (since these selected sites may well be the most feasible locations), the probable consequences on intraregional disparities have to be identified beforehand since these affect the rate of rural to urban migration. It is expected that the establishment of an industrial estate in a region will stimulate the economy into a process of sustained growth, similar to the role of growth centers. This stimulus may be limited however if the estate's industries are not functionally linked to the rest of the local economy in terms of labor supply, raw materials, interindustry connections, etc. Even worse the industrial estate may just become an enclave. It is therefore essential that measures aimed at diffusing the growth emanating from the industrial estate be explored.

Analyzing the possible composition of industries in the various planned estates, some semblance of agricultural linkages is evident. Nevertheless most proposed industries like iron and steel, appliances, chemicals and other footloose industries, appear to have very little potential linkages with the regional economies. Their importance is more at the national rather than the regional level. In these industries, modern technical skills are often demanded; the market is largely national in orientation; and lastly, capital intensity is high. While it may be premature to make any firm statements without any clear picture of employment patterns, some possibilities can be roughly outlined. Heavy industries generally tend to rely on imported inputs. Moreover, because of the high technical requirements, the labor force is likely to be brought from outside the region. Even if policy guidelines encourage the hiring of more local labor, it is doubtful whether the available skills in the community will match the firms' requirements. If firms in the estate do not provide employment opportunities to the indigenous

population but instead brings its own workers, the impact on regional development cannot be substantial. The hypothesis is that as output increases from the industrial estate, incomes rise correspondingly. The implicit assumption is that a greater share of output is retained in the region as salaries and wages to the local people. However if the effect on employment generation for the local population is minimal, a growth in the regional product will not necessarily mean an improvement in regional incomes. Furthermore, because of the higher standards of living of the new "residents" there will be pressure on wages and prices to rise, thereby affecting adversely the original local population. It is also not clear to what extent subcontracting possibilities with existing industries outside the estate was considered, if at all, in the determination of the industry mix. Through interindustry complementation, the estate induces a wider spread of multiplier effects to the local economy.

C. The Promotion of Small and Medium-Scale Industries.

The promotion of small and medium-scale industries (SMSIs) is a vital component of the country's industrial development strategy. SMSIs are considered most adaptable to rural areas because they are basically agri-based and labor intensive operations whose production can be oriented towards small rural markets. Their promotion is also based on a realistic assessment of the managerial, technical and financial resources available in these areas. Thus in June 1974 the Commission on Small and Medium-Scale Industries under the Department of Industry (DI) was created under P.D. No. 488 "to promote, assist and develop small and medium-scale industries, particularly in the rural areas." This body would be responsible for coordinating the various programs of other government agencies.

1. Programs for the Development of SMSIs.

Various programs have been initiated in support of the development of SMSIs, encompassing financing, technical assistance, marketing and other aspects. Special financing progrmas are administered by the Development Bank of the Philippines (DBP) and other financial institutions; loan guarantees are being extended under the Industrial Guarantee and Loan Fund (IGLF); technical assistance in the preparation of pre-investment feasibility studies is being rendered for free by the Medium and Small-Scale Industries Coordinated Action Program (MASICAP); management services can be availed from the Small Business Advisory Center under the DI; market and marketing information is available from the Trade Assistance Center of the Department of Trade. In addition cottage industries under the National Cottage Industries Development Authority (NACIDA) enjoy tax exemption privileges, aside from financial and technical assistance. Meanwhile manpower training schemes are being conducted by the Regional Manpower Training Center. A nationwide rural electrification drive is being implemented with the formation of rural electric cooperatives.

SMSIs may prove crucial to the success of the industrial decentralization program because promotion activities are being undertaken up to the local level in the different regions. If more industrial activity is generated in the rural areas, excess labor can be mobilized for productive purposes, aside from stimulating increased agricultural output. This hopefully will raise income levels and arrest the heavy rural to urban migration.

2. Constraints to the Growth of SMSIs.

Unfortunately, despite the ongoing promotional activities, there are numerous constraints impeding the growth of SMSIs. Firstly, even now that

lending programs are specifically directed to SMSIs, the structure and procedures of financing institutions are ill-adapted to the needs and peculiarities of small investors. In evaluating loan applications, credit worthiness is measured principally in terms of collateral requirements rather than the viability of the project. Very often, small firms are unable to comply with collateral requirements. Banks tend to discriminate against small loans because administrative and processing costs are just the same as those incurred in dealing with larger loans. Also the maze of complex bank procedures baffles small investors and lengthens unnecessarily the loan processing time. In many cases loans have to be referred to head offices for final approval.

Even when SMSIs do get started, recurrent problems in marketing, production, e.g., quality control, raw materials procurement, etc., and general management place considerable stress on the operations of these fimrs and hamper efficiency. Without any external assistance, these problems may prove insurmountable and eventually cause the shutdown of small companies.

3. SMSIs and Industrial Estate Development.

As mentioned in the preceding section, the promotion of SMSIs can be related to the establishment of industrial estates in the regions.[71/] The location of small firms in an estate greatly facilitates the provision of some of the services under the ongoing promotional programs. For example, the extension of technical assistance, the processing of loan applications, the holding of training programs and the sharing of common facilities become easier if the firms are concentrated in a particular location. In the site selection, however, the need of SMSIs for proximity to the market

must be given more attention. In large industrial estates, subcontracting agreements entered into between big firms in the estate and SMSIs outside the estate will establish linkages and spread the benefits and growth generated by the industrial estate.

4. Initial Impact on Industrial Dispersal.

Notwithstanding the difficulties facing the development of SMSIs, the various government programs have generated a substantial amount of investment, judgin from the number of firms given financial and technical assistance. (Tables 25-28). Their impact on the regional dispersal of industries has been vsried. MASICAP-assisted projects are distributed more evenly throughout the country due to the deployment of field teams in all regions. Most projects are engaged in agricultural and manufacturing lines of activity. Meanwhile DBP's performance has been impressive in terms of amount of loans. However these loans have been concentrated in Regions III, IV and IV-A, although a slight but still encouraging dispersion has taken place in recent years. In contrast, when the number of loans is used as a basis, the percentage share of loans to Manila-based firms has decreased significantly but some of these loans have been big. Similarly for IGLF projects, the distribution has been in favor of the MMA, its neighboring regions, and a few years back, Region I, with these regions accounting for 60-70 per cent of total projects. Some plausible explanations for this situation is the procedure of referring all loan applications to the IGLF review committee based in Manila and the limited regional dissemination of information regarding the loan program.

5. A Reassessment of SMSIs and Rural Industrialization.

It has been observed that these new small investments are still largely

found in urban areas of the regions, in direct contrast to the original intentions for the promotion of SMSIs. Actually this should not be very surprising when one analyzes income and expenditure patterns in rural areas. While the rural sector represents a sizeable source of potential demand, levels of income here are much lower than those prevailing in urban areas. Moreover the incidence of poverty is higher, even after employing different poverty thresholds* for urban and rural areas, More than half of rural families can be considered as poor. (Table 29). In some regions like Regions V, IX and X is more widespread with two-thirds of rural families below the assumed poverty line.

Looking at expenditure patterns for rural families, about 60 per cent of income is spent for food, beverage and tobacco. Less than 20 per cent goes to expenses for clothing, footwear,housing, household furnishings and operations.[72/] It is in this latter category of expenditures toward which the production of SMSIs can be directed. When income rise, the proportion spent for these items increase correspondingly. But at present levels of rural incomes, the markets for SMSIs in rural areas are limited.

Even granting the existence of small rural markets, the location of SMSIs in rural areas is hindered by other constraints. An important one is the basic deficiency in rural infrastructure. Due to the dispersed population pattern in rural areas, the provision of facilities and services

*Strictly speaking we cannot just compare income levels in urban and rural areas without accounting for differences in prices, standards of living and other factors. Moreover it may be difficult to account accurately for income in kind which is a significant part of rural income. Under-reporting is another problem.

entails high costs. Hence many sections of rural areas are unserved by infrastructure. So-called rural centers in most towns have not reached levels of physical development that could induce the location of even simple industries. Besides these factors, the financial system has not really reached far-flung areas because of financial and manpower limitations. Most government entities pursuing the different SMSI-related programs are operating in urban areas and are generally unable to extend assistance to rural areas. Finally studies in many developing countries indicate the slow process of entrepreneural development in rural areas.[73/]

At this point in time, one tends to view with skepticism the feasibility of rural industrialization. Efficiency considerations preclude a more dispersed intraregional location pattern. Furthermore the present levels of rural incomes and the limited supply of basic infrastructure militate against the location of more SMSIs in the rural sector of the regions. Essentially rural industrialization is a long term goal that is predicated on attaining a certain level of economic development in the rural areas. Policies to support agriculture and rural development need to be given more emphasis and the promotion of SMSIs can be integrated with these efforts.

D. An Analysis of the Resource Endowments of the Regions. (A Framework for Prioritization for the Industrial Dispersal Program)

The regions are at different stages of their growth path; some are basically agricultural while others are relatively well-advanced in their industrialization. Nonetheless every region is presently aiming for an expanded role of industry as a means of transforming its economic structure and accelerating regional growth. However, as mentioned at the beginning

of this study, industrial decentralization is not and cannot be interpreted as the simultaneous industrialization of all regions because of differences in basic resource endowments, the need to establish agglomeration economies in certain areas, and other constraints related to implementation. A general issue, therefore, surrounding the goal of spatial equity via the regional dispersal of industries is the extent to which industrial expansion should be promoted and be a priority in the development strategy of each region. More broadly this encompasses the issue of phasing in the implementation of the industrial dispersal policy.

In planning a strategy for industrial decentralization, a selection or prioritization process within an interregional framework has to be undertaken to determine the regions where industries should be dispersed and which industries should occupy a major role in the region's growth process. In this connection, this section* presents an analysis of the resource endowments of the regions which can serve as the basis of an initial approximation of the relative levels of need among the regions for the expansion of non-agricultural activities. It will be largely on this basis that regional priorities will be set. To the extent possible this analysis will be supplemented by a qualitative evaluation of comparative advantage for industrial production.

The rationale behind the resource assessment is that traditionally the regions' thrust has been on agricultural development. However regions vary in their agricultural resource base and the extent to which this has been

*This section is based on a study entitled "The Natural Resource Base of the Regions" prepared in 1976-77 by the author and the members of the Agriculture, Natural Resources and Rural Development Sector under the NEDA-UNDP/IBRD Regional Planning Assistance Project.

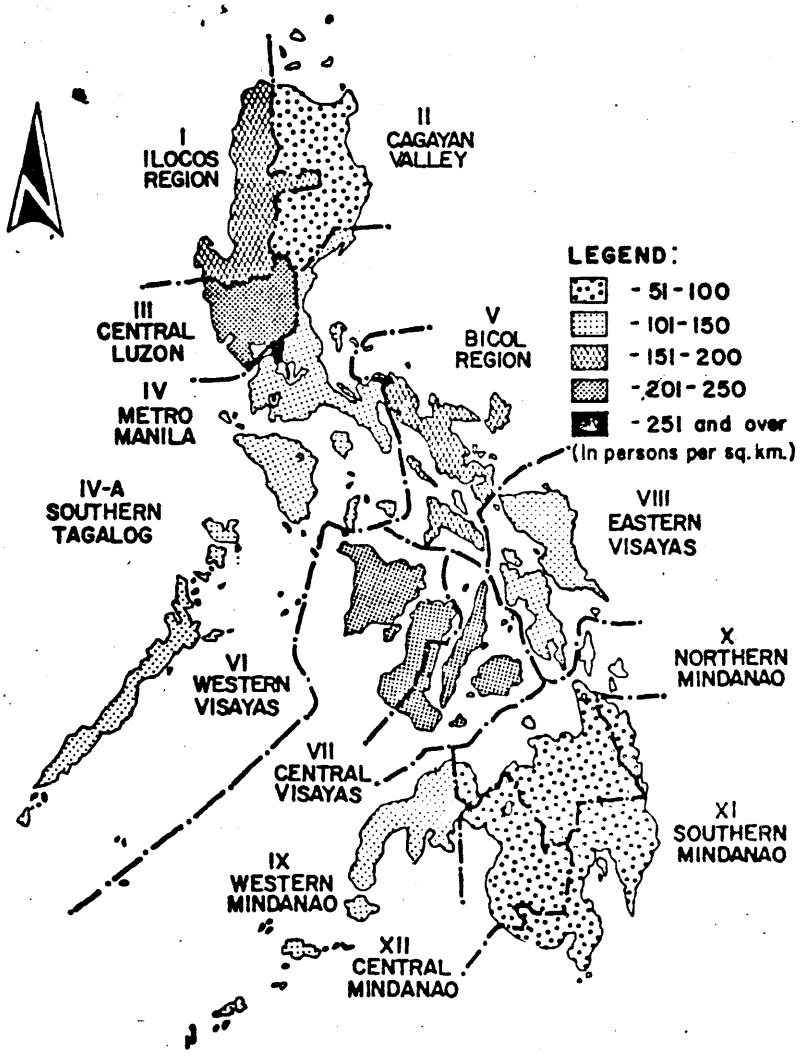
exploited. Thus agriculture can be a basis for economic expansion only up to a certain point, beyond which the region must resort to alternative sources of growth. Now that the national economy is moving towards a period of intensified industrialization, it is necessary to verify which regions have used up their agricultural resource potential and those which have not, in order to establish regional priorities for industrialization. Moreover if regional incomes are to converge, lagging regions must grow faster than those relatively advanced. Rapid growth can come either from agricultural and traditional sources or non-agriculture-based approaches. A region's scope for agricultural expansion and employment generation is measurable by relating land, irrigation and other resource potentials with projections of labor force. For regions with restricted agricultural possibilities, non-agricultural, e.g., industrial, expansion remains as the sole alternative for accelerating regional economic growth and raising regional incomes, probably in conjunction with some form of migration policy or resettlement program to encourage population transfers to areas with better economic prospects. In addition to agriculture, fishing, forestry and mineral resources can supply the inputs to industrial activities. The experience of a number of regions like Southern Mindanao and the Ilocos confirms the contribution of these resources to industrialization.

1. The Agriculture Resource Base of the Regions.

a. Agricultural Land and Irrigation Potential.

The extent of unused agricultural land and unexploited irrigation potential constitute two major dimensions of the agricultural resource base. Unused agricultural land offers opportunities for expansion at the extensive margin, while irrigation potential represents scope for intensification.

Map 3 – Population Density by Region, 1975



Source: NCSO

Estimates of land still available to agriculture and unexploited irrigation potential are presented on a region by region basis.(Tables 30 & 31) Refer to Appendix for supporting tables and projection methodology for land uses for 1975 and 2000, from which agricultural land estimates were derived.

Regional estimates reveal that Regions II and IV in Luzon have the greatest potential at both the intensive and extensive margins of cultivation. The Cagayan River Basin, the largest in the country, can serve as the focus of agricultural production in Region II because of its vast fertile lands and enormous irrigation potential. Likewise Regions X, XI and XII in Mindanao, because of the presence of the Cotabato and Agusan River Basins which cut across these three regions, have considerable scope for irrigation. There is also modest scope for expansion of the land area under cultivation. The regions of the Visayas have limited scope for further irrigation development and restricted possibilities for bringing more land into agriculture, except for the island of Samar. For Regions III and VI, which have used up most of their irrigation potential, possibilities lie in rehabilitation of silted irrigation systems and protection of watersheds.

Region III, which has the highest output per person in agriculture, is the most developed region in an agricultural sense, having 41 per cent of its cultivated area under irrigation. On the other hand, Region VII is illustrative of a region which has realized much of its potential in terms of land and irrigation, but which has stabilized at a lower level, with output per person in agriculture less than half that in Region III. This is a reflection of differences in basic resource endowments since Region VII has only 3 per cent of its cultivated land under irrigation, and only a 2 per cent share of national irrigation potential (Table 32).

On the basis of agricultural land and irrigation potential, the agricultural resource base of the regions can be characterized in the following way:

High potential - fully exploited	: Regions III, VI
High potential - not fully exploited	: Regions II, IV, X, XI, XII
Moderate potential - fully exploited	: Regions I, VII
Moderate potential - not fully exploited	: Regions V, VIII, IX

b. Soil and Climate.

The preceding two dimensional analysis oversimplifies the meaning of the agricultural resource base which should also include climatic and soil factors as additional components. It needs to be recognized that the unused agricultural land potential in most regions will be of lower productivity than that currently being farmed.

It is only in Regions II, IV-A and VIII where there are still areas of unused land falling under ABCD soil types. Other regions have used up this type of land and cultivation has extended into intermediate land (M soil type). With the exception of Region VIII the unused agricultural land in the regions consists mostly of M and X soil types. Also slope considerations limit the possibilities for which land can be used. (Table 33).

Rainfall distribution and typhoon frequency affect the exploitation of the agricultural resource base. (Table 34). In relatively dry areas like Region I, unused agricultural land offers scope for intensified livestock grazing while in regions with even distribution of rainfall, e.g., Mindanao, the variety of crops that can be grown is wider. Interseasonal water storage in regions with distinct dry and wet seasons, e.g., Regions I, III, should be given consideration in harnessing irrigation potential. Likewise, in

typhoon-frequented areas like Regions V and VIII, flood control is a pre-condition for maintaining the productive form of agricultural land.

c. Agricultural Technology.

Regional variations in crop yields which cannot be atributed to differences in climate and soil characteristics seem to indicate regional variation in the rate of adoption of new technology or on the impact of new technology. In rice production, for example, average yields of irrigated ricelands are 40 per cent higher in Region III than in Region VIII. Corn yields per hectare in Region XII are more than twice the level in Region VII. It appears that the impact of technology varies among regions precisely because of differences in resource endowments. For instance, high yielding variety (HYV) technology has benefitted primarily regions with extensive irrigated areas while rainfed ricelands ahev not received attention in technology development.

d. Population vis-a-vis Land Availability.

Differences in population/farmland ratios and farm sizes between regions are quite significant. (Refer back to Table 32). Farm sizes are smallest and population/farmland ratios are highest in Regions I and VII. Larger farm sizes and lower population/farmland ratios predominate in the Mindanao regions. Over time continuing interregional migration within agriculture will tend to equalize these differences subject to land capability variations related to soil fertility and irrigation potential. A wider distribution of land through land reform, resettlement or planned migration schemes is more conducive to a fuller exploitation of this natural resource.

2. Fisheries, Forestry and Mineral Resources.

In inland fisheries, about 176,000 hectares of fishponds and 530,000

hectares of freshwater and mangrove swamps are available for development in the country. Regions VI, IV and III have the largest shares for the former while Regions VIII, IX and X account for almost 50 per cent of the latter. (Table 35). In commercial fishing, meanwhile, it is estimated that around 125 million hectares or bout three-fourths of the country's marine waters still has to be explored.74/ At present, the seas of Sulu, Palawan and Visayas, which are close to Regions IV, VI, VII and IX are among the country's major fishing grounds. It is expected that fishing effort in Manila Bay, the Visayas Sea and Lingayen Gulf are approaching the point of maximum sustainable yield. Conversely the fishing gorunds around Palawan and the islands of Region IX have substantial potentials which are far from being fully exploited.

The Philippines has considerable forest resources, with 8 million hectares of commercial forests having an estimated timber reserves of about 1.5 billion cubic meters. Luzon has the largest forest land area but the commercial forests in Mindanao contain 20 per cent more timber reserves, thus making the latter area more attractive for exploitation. Almost three-fourths of the country's total timber reserves are found in five regions with Cagayan Valley and Southern Tagalog having 17 per cent each while Northern Mindanao, Southern Mindanao and Central Mindanao's shares are 13, 12 and 11 per cent, respectively. (Table 36).

Most of the commercial forest lands are already licensed. In the Mindanao regions practically all commercial forest lands are under concession. Nearly three-fourths of the national log supply come from Mindanao, most of which are for export markets.

With regards to minerals, the major known metallic minerals in the

Philippines are copper, nickle, gold and iron ore. Small amounts of zinc, chromite, lead, manganese and other minerals are also know to exist. In the case of copper, there are roughly 1.76 billion tons of copper deposits, of which 40 per cent is in Western Visayas, 24 per cent in Central Visayas, and 18 per cent in Ilocos. The latter two regions are currently the two main producers of copper concentrates. (Table 37).

Nickle reserves are estimated at about 3,140 million tons. About 64 per cent of these is located in Northern Mindanao, where a newly-built nickel plant is already in operation, while the bulk of the remainder is in Soutthern Tagalog and Southern Mindanao.

The total reserves of iron ore amount to about 2,820 million tons, mostly found in Mindanao. However ore reserves have a relatively low iron content of 40 per cent. For non-metallic minerals, cement raw materials constitute the bulk. Most of the known reserves are in Southern Tagalog and Bicol but other deposits are also found in the Ilocos, Northern Mindanao and Southern Mindanao where cement plants are located.

3. Implications for Regional Priorities in Industrial Dispersal.

On the basis of the two dimensional analysis presented earlier, the magnitude of each region's potential for agricultural expansion is indicated. To further substantiate the process of determining the priority regions in the industrial dispersal program, the population and employment dimensions shall be included in the analysis.

Estimates of employment potential of farmland expansion have been nade, after which these are compared with projections of additional labor force in each region from 1975-2000. (Table 38). Approximately 3.4 million jobs can be generated through the utilization of the unused agricultural

land and irrigation potential of the regions. Agriculture will be major provider of employment to jobseekers in Regions II, VIII and XII, while in most regions, especially Regions III, IV-A, VII, X, XI and, of course, the MMA, entrants to the labor force will have to find work mainly in non-agricultural activities. These latter regions also happen to be the most industrialized or, at least, account for a sizeable portion of national industrial output. It is very plausible that their present levels of industrialization was necessitated precisely by resource constraints in agriculture, Needless to say, they have high per capita output. At the other extreme, the regions where there is still substantial scope for agricultural expansion are among the poorest in the country.

If the regions' development strategies are dictated primarily by resource endowments, the poor regions where agricultural potential is still considerable may lose ground vis-a-vis the other regions. The large part of land expansion will occur mainly in steeply sloping marginal lands of poor soil quality. Consequently agricultural productivity will be low unless efforts can be directed toward increasing the productivity of these lands. Studies[75/] show that in lands of this type presently under cultivation, land productivity is low and labor requirements are high, hence, most farmers of these lands belong to the rural poor. In upland farming, there are low gross margins per hectare because poor accessiblity leads to low farm gate prices or high transport costs. On the other hand, regions growing along industrial lines will be able to raise incomes faster on the presumption that industry ahs higher productivity.

We are faced with a serious dilemma regarding the selection of the priority regions for the industrial dispersal program. If the scope for

agricultural expansion shall serve as the primary basis for selecting priority regions, then the presently industrialized and more developed regions will be given preference because of their limited agricultural expansion potential. On the other hand, the poor regions will continue along present lines of activity which generate only small returns. The likely consequence of the prioritization scheme for industrial dispersal is wide differentials in rates of growth in favor of the more developed regions, thereby leading to a divergence in regional levels of development. This runs directly counter to the main objective of the industrial dispersal policy - spatial equity.

Thus it can be counter-argued that resource constraints should not be the major criterion for prioritization. If spatial equity is the objective of industrial dispersal, then the present levels of regional income should be adopted as dominant criterion and, therefore, the poor regions must be given utmost priority. Intuitively this may make more sense. However the conditions necessary for industrial location are usually lacking or even non-existent in poor underdeveloped areas. For example, Regions II and VIII, due to lack of an industrial base and infrastructures may not be able to support any large scale enterprises and to have a competitive edge over other regions in industrial production. Unless the government is willing and able to mount a massive effort to transform underdeveloped areas into attractive industrial sites, priorities set on this basis will have to be modified in order to give industrial decentralization a better chance at success. Intertemporal priorities should reflect the immediate, intermediate and long run objectives of industrial dispersal policy.

At this stage of pursuing the strategy of industrial decentralization,

what appears to be a more realistic short term goal is to counteract the gravitation towards Manila rather than to industrialize the poor regions. This can be achieved by strengthening present industrial centers in the regions so that they can serve as countermagnets. The more logical candidates for such a function are Cebu City (Region VII), Cagayan de Oro (Region X), Davao (Region XI), Iloilo (Region VI), just to mention the major ones. Fortunately these are located in regions with restricted agricultural apoortunities where the need for generation of non-agricultural employment is most evident. Hence some complications are avoided becuase of this coincidence. In the long-run, a more dispersed pattern of location will be sought and industrial development in every region shall be the ultimate objective. In essence the phasing of the industrial dispersal strategy reflects a trade-off between a certain level of inequity in exchange for some efficiency gains.

This phasing of the implementation of industrial dispersal is not without any concomitant bad consequences. Aside from forcing a reconsideration and moderation of spatial equity objectives, it is possible that regional disparities may even deteriorate in the short-run even if other industrial centers are built up. Of course the outcome will be determined partly by how these new growth points can establish linkages with neighboring provinces or regions in order to diffuse the benefits of industrialization. In addition, this will depend on complementary measures to ensure that industrial expansion in these centers is at the expense of the MMA rather than the other regions. The application of restraint systems, e.g., disincentives, in the MMA therefore becomes an immediate requisite in order to set in motion centrifugal forces. Moreover policy initiatives directed

towards the welfare of the regions which are, in the interim, not accorded priority in the industrial dispersal program, are crucial for influecing the direction of this outcome regarding divergence in regional incomes. In order to reduce the probability of a deterioration of regional priorities, strategies specific to the needs of the poor regions become critically important. Subsumed in the prediction of divergence between agricultural and industrial regions is that industry has higher productivity. Accordingly programs that enhance the productivity of agriculture or policies that improve the terms of trade for the agriculture sector will reduce divergence effects.

After the development of alternative industrial location and a sustained parallel thrust in agriculture, the prospeces for achieving spatial equity become more promising. An appropriate policy mix aimed at supporting a wider participation of the regions in the industrial dispersal drive must be formulated. With the growing proportion of the rural labor force seeking jobs outside agriculture, rural development efforts must be increasingly concerned with the generation of off-farm employment and have to be integrated with industrialization strategy.

Concluding Remarks.

The preceding analysis is based on a combination of spatial equity and efficiency objectives which the planning process deems appropriate for effective implementation of the industrial dispersal policy. However the controversial implications of the prioritization exercise will be subject to scrutiny by the political process. In fact, because of the attempt to resolve the conflict between equity and efficiency made by the planning process, it will be pitted against the political process. Their divergent

views on the relative importance of these objectives are amplified in the prioritization scheme.

The inclination of the political process towards equity can be surmised from the industrial estate program. As was stressed earlier, this ambitious program reflects the apprehension of policy makers in setting priority regions for industrial dispersal because of the possible political consequences. It can be even asserted that the plan for establishing at least one estate in every region rather than a combination of industrial estates in some regions and industrial areas or zones in others (or none at all) is an attempt at avoiding these consequences. Hence equal treatment is resorted to since it offers less politically adverse effects. But by such a move, efficiency requirements (generally favored by the planning process) are compromised. Some regions do not have the comparative advantage for industrial location nor are their present level of need for industrialization very pressing. Furthermore, even in the use of scarce resources, investments in industrial estates may be inefficient if,all that is required to convert an area into an attractive manufacturing location, is the provision of land plus some physical improvements, i.e., an industrial area. In other words, the social costs of excess investments will be greater than the marginal benefits which can be derived from such investments.

The preference for equal treatment as opposed to prioritization is linked to the issue of phasing in the implementation of the industrial dispersal policy. The political process is not agreeable to phasing since it views this particular policy in isolation. Regions are unwilling to make sacrifices now in the hope that programs for their benefit will be initiated later on. Uncertainty about the future forces the political

process to take advantage of present opportunities, in this case, the industrial estate program. It cannot rely on other future policies for which there is no assurance of their sharing in the benefits. Hence, at each stage of policy implementation, the tendency is for equal participation even when the planning process recognizes the need for priority setting as a means for effective implementation. Only when the planning process overcomes the objections of the political process can it impose its own requirements and preferences.

Assuming that there are no priorities set and, if at each stage of implementation, equal treatment is given, a dilution of resources and inefficiency in application will most likely occur. Even upon the construction of an industrial estate, some regions may not be able to make a significant contribution to national industrial growth because of the inherent deficiencies of decision-making processes. The absence of priorities exposes the implementation to political pressures during the resource allocation stage. The huge financial requirements of a proposed program based on equal participation will inevitably force a prioritization in fund releases but this will be determined more on the grounds of political expediency.

Table 18 Project Cost and Employment by Region for BOI-Registered Firms

Region	RA 5186 (July 1968 - June 1976) Project Cost (in millions)	RA 5186 (July 1968 - June 1976) Employment	RA 6135 (1970 - June 1976) Project Cost (in millions)	RA 6135 (1970 - June 1976) Employment
PHILIPPINES	15,699	111,164	2,121	47,167
LUZON				
I Ilocos	2,563	22,265	10	254
II Cagayan Valley	45	1,149	-	-
III Central Luzon	202	3,572	129	4,257
IV[1] Southern Tagalog	3,560	33,225	1,572	38,930
V Bicol	82	3,587	-	-
VISAYAS				
VI Western Visayas	113	2,383	20	189
VII Central Visayas	1,203	13,462	26	448
VIII Eastern Visayas	607	2,396	-	-
MINDANAO				
IX Western Mindanao	270	2,575	-	-
X Northern Mindanao	4,040	12,543	11	166
XI Southern Mindanao	765	9,100	50	1,631
XII Central Mindanao	2,250	4,907	303	1,292

[1] Includes Metropolitan Manila

Source: Board of Investments

Table 19 Regional Distribution of Projects Approved by the Board of Investment, 1975 (Percentages)

Region	9th Investment Priorities Plan (RA 5186)	7th Export Priorities Plan (RA 6135)	Population Distribution 1975
PHILIPPINES	100.0	100.0	100.0
I	4.4	0.9	7.8
II	1.5	-	4.6
III	6.8	6.1	10.3
IV + IV-A	43.7	79.0	23.6
V	3.2	1.3	7.6
VI	3.2	1.6	9.1
VII	6.8	5.2	8.0
VIII	2.4	0.3	5.9
IX	3.5	0.3	5.3
X	9.7	1.3	5.7
XI	7.4	2.9	6.6
XII	7.4	1.1	5.5

Source: Board of Investment, (BOI) 1976

Table 20 No. of BOI-Registered Projects - R.A. 5186
(By Type of Project)

Region	Total Number	Agro	Mining & Mineral Processing	Chemical	Metal
PHILIPPINES	422	207	79	55	81
LUZON					
I Ilocos	29	5	20	2	2
II Cagayan Valley	7	6	-	-	1
III Central Luzon	31	10	3	11	7
IV Metropolitan Manila	176	64	24	29	59
V Bicol	12	8	4	-	-
VISAYAS					
VI Western Visayas	11	8	-	3	-
VII Central Visayas	26	8	7	4	7
VIII Eastern Visayas	13	4	9	-	-
MINDANAO					
IX Western Mindanao	13	9	3	-	1
X Northern Mindanao	34	26	6	2	-
XI Southern Mindanao	49	45	-	-	4
XII Central Mindanao	21	14	3	4	-
(Total Project Cost in Pmillion)	15,699	5,347	7,494	2,371	487
(Total Employment)	111,163	52,378	32,712	11,386	14,688

Table 21 No. of BOI-Registered Projects - R.A. 6135
(By Type of Project)

Region	Total Number	Agro	Mining & Mineral Processing	Chemical	Metal
PHILIPPINES	121	24	6	53	38
LUZON					
I Ilocos	2	1	-	1	-
II Cagayan Valley	-	-	-	-	-
III Central Luzon	9	1	1	4	3
IV Metropolitan Manila	88	11	4	39	34
V Bicol	-	-	-	-	-
VISAYAS					
VI Western Visayas	2	1	-	1	-
VII Central Visayas	4	2	-	1	1
VIII Eastern Visayas	-	-	-	-	-
MINDANAO					
IX Western Mindanao	-	-	-	-	-
X Northern Mindanao	2	1	-	1	-
XI Southern Mindanao	10	5	-	5	-
XII Central Mindanao	4	2	1	1	-
(Total Project Cost in ₱million)	2,121	91	399	1,260	371
(Total Employment)	47,167	3,367	2,751	23,287	17,762

Table 22 Criteria for Industrial Estate Site Selection

A. Economic Criteria	Points (in per cent)
1. Proximity to Urban Center	20
2. Proximity to Resources	20
3. Land Acquisition Cost	10
4. Availability and Condition of Transport System	15
5. Availability of Power and Potential Supply	10
6. Availability and Capacity of Water Supply	10
7. Size of Provincial Population	10
8. Availability of Skills	5
	100

B. Social Criteria	Points (in per cent)
1. Unemployment	35
2. Low Income	25
3. Out-Migration	30
4. Experienced Workers	10
	100

Source: Nationwide Industrial Estate Program Report - vol. II.

Table 23 Probable Sites of Industrial Estate Development Program, 1978-2000

Phase I (1978-1990) Regions	Target Start of Commercial Operation	Number of Firms	Number of Employed	Phase II (1980-2000)
I. Bacnotan, La Union	-	-	-	Bugallon, Pangasinan
II. Tuguegarao, Cagayan	-	-	-	
III. San Fernando, Pampanga				Subic, Zambales
Sapang Palay, Bulacan**	1979 (20 ha. initially)	29	5,000	
	1981 (50 ha.)	40	10,000	
IV. Batangas City	-	-	-	
Dasmariñas, Cavite**	1978 (6 ha. initially)	10	2,000	
	1981 (50 ha.)	65	15,000	
V. Malilipot, Albay*	possibly 1981 or 1982	-	-	
VI. Talisay, Negros Occidental	-	-	-	
VII. Mactan Export Processing Zone	1978 (41 ha. initially)	25	9,500	Sibulan, Negros Oriental
Lapu-Lapu City	1985 (full occupancy)	82	-	
Talisay, Cebu*	possibly 1981 or 1982	-	-	
VIII. Palo, Leyte	-	-	-	Catbalogan, Catarman, Samar
IX. Zamboanga City	-	-	-	
X. PHIVIDEC Industrial Estate Misamis Oriental	partly ongoing	-	-	
Cagayan de Oro City*	possibly 1983	-	-	Agusan Piqueno, Butuan City
XI. Davao City	possibly 1983			Tagum, Davao del Norte
General Santos City	-	-		
XII. Matalam, North Cotabato	-	-	-	Marawi City

* Feasibility study and construction to be initiated within the period up to 1982
** Special Projects (for social reasons)

Note: 1. Phasing of individual projects under NIEP may be altered, subject to the recommendation of the respective Regional Development Councils.
2. It is envisioned that private industrial estates will be developed in the areas of Calamba San Pedro, and Sta. Rosa, Laguna, Batangas, Surigao, Angeles, Pampanga and others.

Source: IUS-NEDA

Table 24 Summary of Priority Sites' Features Phase I (1978-2000)

REGION	Name and Site Location	Available Area (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost ₱ M	Labor Force 1970		Other Features: Growth Center, Gov't Project, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
I	Bacnotan, La Union (Study Area-2)	1,098	-Manufacture of fabricated metal products, iron & steel basic industries -Manufacture of basic chemicals -Hand and loom weaving -Manufacture, assembly & repair of industrial machinery -Tobacco manufacturing	San Fernando	14	Manila Baguio City	283	Luzon Grid Hydroplant 115-138 kv.	Maragayap River 2,600 Baroro River 11,500	204.3	113,178	978,759	Proximity to San Fernando Port
II	Tuguegarao Cagayan (Study Area-1)	700	-Meat processing -Food processing -Manufacture of grain mill products -Manufacture of basic Industrial chemicals -Manufacture of electri-appliances for household use	Claveria	185	Baguio City Manila	311 432	Luzon Grid 115-138 kv.	Pinaanan-nan River 10,800	110.7	211,938	632,800	Primary Urban Center, Growth Point for the Region
III	San Fernando Barrio Calulut & De la Paz (Study Area-3)	500	-Manufacture of beverages -Manufacture of electrical lamps & fixtures -Manufacture of textile Products -Manufacture of wood & related products -Manufacture of cigar, cigarettes, and tobacco -Manufacture of miscellaneous paper & paper board -Commercial and job printing	San Fernando	4	Manila Angeles	73 8	Luzon Grid Mexico Sub-Station 100 mv. thru 69 kv. lines SFELAP diesel gen. plants 3,191 kw.	Pasig Potroro River 2,120	163.6	255,417	1,095,097	Growth Center for the Manila Bay

REGION	Name and Site Location	Available Area (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost P M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
			-Terminal food market & food processing -Manufacture of clay products -Manufacture of vehicles & parts -Manufacture of medical & surgical supplies -Manufacture of optical products -Manufacture of metal cans & boxes -Manufacture of pens & office materials -Manufacture of cork products					NPC Substation at San Fernando 10 mva.					
III	Sapang Palay* (Study Area-3)	42	-Small & medium scale industries -Food processing plants -Shoe manufacturing -Machine tools manufacturing -Shell & wood products -Electronics -Optical products -Garments manufacturing	Quezon City	38	Manila	48	NEA Electric Cooperative	MWSS Reservoir Sta. Maria River 1,960	34.7 San Jose Gel Monte 11,576	279,110	1,095,097	Resettlement Area for 8,000 families
IV	Tabangao, Batangas City (Study Area-4)	250	-Integrated food processing plant -Beverage plant & warehouse -Electronics & elect. appliances -Ice plant & cold storage -Cacao, chocolate & confectionery plants	Batangas City	4	Manila Tagaytay City	111 54	Luzon Grid 19,558 kw. Proposed 69 kv. line to substation	Ground Water 5,000 25,000 gal./day/ft. Sto. Nifio River 227	86.1	312,932	2,780,942	Proximity to to National Port Growth Center in the Manila Bay Region

*Special Project

REGION	Name and Site Location	Available Area (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost P M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
IV	Tabangao, Batangas City (Study Area-4)		-Steel & non-ferrous -Foundry/machine shop -Coco chemical plant -Grain milling plants -Manufacture of agricultural implements & garden tools -Actuated carbon plant -Charcoal manufacturing plant -Furfural -Spinning and weaving of jusi										
IV	Dasmariñas, Cavite* Bo. Palapala	100	-Fruit processing -Dairy & milk processing -Coco by-products plant -Fish meal & poultry feeds -Vegetable oil factory -Coffee & cocoa processing -Charcoal processing plant			Manila		Substation of First Cavite Elec. Coop.	Pabparan and Banal River Dasmariñas River 370	39.5	369,414		Resettlement Area
V	Tiwi, Albay (Study Area-6)	200	-Steam based industries -Rice milling -Confectionery -Pulp, paper & paperboard mills -Iron castings -Aluminum products -Basic industrial chemicals -Industrial machinery	Legaspi	40	Naga Sorsogon	150	Tiwi Geothermal Power Project 100 mega watts	Bacolod 190	126.3	231,982	965,277	Goethermal Project at Tiwi

*Special Project

REGION	Name and Site Location	Available Areas (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost ₱ M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
V	Tiwi, Albay (Study Area-6)		-Electrical appliances -Fabricated structural metal products -Automotive industries -Fabricated wire products -Iron & steel basic industries -Dairy products										
VI	Talisay, Negros Occidental (Study Area-8)	100	-Canning & processing of fish & other sea foods -Manufacture of grain mill products -Iron & steel basic industries -Food manufacturing -Manufacture of basic industrial chemicals -Manufacture of medicinal preparations -Manufacture, assembly & repair of industrial machinery -Manufacture of electrical appliances -Manufacture of bakery product -Manufacture of paints & varnishes -Manufacture of fabricated structural metal products	Bacolod City	7	Cebu Manila Dumaguete	303 678 632	Sipalay Plant 108 mega watts in 1979 & 162 mega watts by 1980. From other sources by 1985	Imbang River 350	43.1	526,799	1,243,873	

REGION	Name and Site Location	Available Areas (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost ₱ M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
VII	Talisay, Cebu City (Study Area-9)	200	-Manufacture of traditional handicrafts -Shell craft, wood-craft, ceramics, rattan craft -Food processing, such as biscuit making, food preserving & candy making	Cebu City Proper				Generating plant for area-34.5-69 kv.	Tabunac River 5,791,200 gals./day Linao River 4,064	25.7	241,000	1,107,586	Relocation Site of Shell Craft Industries
VIII	Palo, Leyte (Study Area-10)	50	-Meat processing -Corn & rice milling -Industrial machinery -Structural metal products -Fabricated wire products -Automotive engine products -Ceramics -Dairy products -Basic industrial chemicals -Household appliances -Beverages -Misc. fabricated metal products	Tacloban City	10	Cebu Catbalogan	209 110	Tongonan Geothermal Project	Malirong River 2,000	30.2	388,092	842,472	
IX	Ayala-Recodo, Zamboanga City (Study Area-14)	50-100	-Corn milling -Confectionery -Animal feeds -Fish processing -Pulp, paper & paperboard mills -Iron & steel basic industries -Dairy products -Basic industrial chemicals	Zamboanga City Proper	14-16	Debu Pagadian	479 247	Hydro & diesel plant for city 3,600 kw. Proposed Zamcello plans will be tapped	Ayala River 60	42.3	362,937	642,755	Growth Center of the Region

REGION	Name and Site Location	Available Areas (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost P M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
X	Cagayan de Oro City, Misami Oriental (Study Area-13)	200	-Non-ferrous metal basic industries -Machine & vehicle repair shops -Manufacturing shops engaged in metal, wood & concrete based activities -Cottage industries	Cagayan de Oro City	31			Beg.1980 Add'l 165 mega watts. Sub-station 1,000 kva to 10,000 kva Ma. Cristina Hydro Electric Plant line 69,000 volt line	Main pipe-line of City Water-works. 3.9 million gal/day	22.9	113,926	632,723	Relocation site of industries affected by the widening of the Iligan-Butuan Highway.
XI	Panacan, Davao City (Study Area-11)	350	-Meat processing -Corn milling -Fruit processing -Corn & vegetable oil -Coffee products -Miscellaneous fabricated metal products -Electrical appliances -Bakery products -Motorcycles -Dairy products -Industrial pumps	Davao City	7	General Santos Cagayan de Oro Butuan Cebu	247 307 372 532	Thermal, diesel & hydroelectric plant in Davao City. 60,000 kv Line (69kv) from Davao to Tagum & 138 kv to Compostella by 1977.	Lian River 213	35.5	260,659	736,471	
XI	General Santos City, South Cotabato (Study Area-12)	1,000	-Rice & corn milling -Fruit processing -Corn & vegetable oil -Meat processing -Dairy products -Soft drinks -Fish processing	City Proper	7	Davao Cebu	137	Soteco expansion program -15,000 kw by 1977	Makar River 56	99.6	156,011	732,471	

REGION	Name and Site Location	Available Areas (has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost P M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
			-Fish mill -Basic industrial chemicals -Iron castings -Fabricated wire products -Automotive engine parts -Electric motors										
XII	Matalam, North Cotabato (Study	100	-Food processing: meat processing & canning vegetable & corn oil sugar milling confectionary rice milling coffee products -Tobacco products -Wood products -Agricultural machinery -Metal wares	Kidapawan	20	Debu Davao Digos	692 130 77	Diesel run electric plant 202 kw. 69 kv line from Kabacan to be completed by 1980.	Simnay	46.2	384,504	939,872	

PHASE II

REGION	Name and Site Location	Available Areas (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost P M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
I	Bugallon, Pangasinan (Study Area-2)	40	-Fish canning, drying & smoking -Processing of coconut products -Patis & Bagoong factory -Rice & corn milling -Manufacture of synthetic coffee -Manufacturing of unprepared animal feeds -Manufacture of wood & stone products -Manufacture of wood housing components -Trucking, machinery repair & engineering services	Dagupan	20	Manila	205	Hydro-plant Capacity 34.5-69 kv.	Agno River 1,000 1/sec.	31.7	402,972	978,789	Proximity to Gov't Project -Sual Fishing Port
III	Subic, Olongapo City (Study Area-3)	200	-Iron & Steel processing mill -Iron & steel foundry -Copper & non-ferrous metals smelting plant -Ship building & repair ship yard -Manufacture of electrical machinery apparatus, appliances and supplies -Manufacture of fabricated metal, machinery and equipment	Olongapo City Proper	10	Marivelles Manila	95 142	Extension of 69 kv transmission line from Olongapo City to Botolan Sub-station at Antonio 5 mva 67/13.8 kva	Boton River 248 1/sec. Sta. Rita 1020 1/sec. Panatawan River 820 1/sec.	127.5	105,904	105,907	Growth Center in the Manila Bay Region

REGION	Name and Site Location	Available Areas (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost P M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
VII	Sibulan, Negros Or. (Study Area-8)	50	-Ceramics manufacturing -Sheelcraft -Food processing -Grain milling -Wood carving & products -Furniture shops -Fiber products -Metal sheet fabrication -Iron works -Machinery repair shop -Agricultural implements fabrication	Dumaguette City	5	Bacolod Cebu Manila	315 127mm 785	Elec. plant 34.5-69 kv Power Plant (Negros Grid) 860-1000 kw.	Ocon River 120 1/sec. Tutuban 190 1/sec.	31.7	168,186	1,107,586	
VIII	Catarman, N. Samar (Study Area-10)	30	-Corn & rice milling -Corn oil -Confectionery -Fish processing -Pulp, paper & paper board -Vegetable oils & fats -Cement products -Meat processing -Dairy products -Bakery products	Calbayog	55	Sorsogon Cebu	89 233	Sub-station (Visayas Grid) 69 kv transmission line	Catarman River 10,000	24.3	388,082	842,272	
VIII	Catbalogan, N. Samar (Study Area-10)	100	-Rice & corn milling -Confectionery -Fish processing -Pulp, paper & paper board -Vegetable oils & fats -Dairy products -Meat processing	Calbayog	60	Tacloban	85	Proposed sub-station at Catbalogan 69 kv & 138 kv lines. Proposed Ulot proj. 48 kv line in 1984.	Malanog River 430 1/sec.	32.9	165,216	842,272	

REGION	Name and Site Location	Available Areas (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost P M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
X	Agusan Pequeño, Butuan City Agusan del Norte (Study Area-13)	800	-Rice and corn milling -Confectionery -Vegetable and oil fats -Fruit processing -Fish processing -Meat processing -Animal feed -Pulp, paper & paper board mills -Iron and steel basic industries -Steel bars and related shops -Pipes and iron castings -Aluminum products -Dairy products -Basic industrial chemicals -Metal products -Industrial machineries -Mechanical appliances -Electrical appliances -Bakery products -Wood based products	Butuan City	8	Cebu Surigao	28 30	Electric Co. 230 kw. Maria Cristina power lines	Agusan Pequeño 300 l/sec.	298.9	92,773	632,731	
XI	Madaum Tagum Davao del Norte (Study Area-11)	1,000 2,000	-Aluminum products -Medicinal preparations -Industrial machinery -Soap and detergent -Fabricated structural metal products -Fishing boats, inter-island and ocean going vessels -Fertilizers -Glass factory	Davao City	45	Gen. Santos City Cagayan de Oro Butuan Cebu	285 395 220 478	Sub-station at Tagum 69 kv. transmission line	Hijo River 15,000 l/sec.	198.1	153,762	732,491	

REGION	Name and Site Location	Available Area (Has.)	Possible Industry Mix and Type of Estate	MARKETS				Infrastructure		Indicative Cost ₱ M	Labor Force 1970		Other Features: Growth Center, Gov't Projects, etc.
				Nearest Urban Center	Distance (Km.)	Other Markets	Distance (Km.)	Power Source & Capacity	Water Source & Capacity L/Second		Prov'l	Reg'l	
			-Bricks and ceramics -Wood products -Bakery products										
XII	Marawi City Lanao del Sur (Study Area-13)	100	-Rice and corn milling -Animals feeds -Confectionery -Vegetable oil milling -Abaca products -Coffee processing -Agricultural machinery -Fabricated metal products -Fruit processing -Wood processing -Metal ware -Meat processing -Dairy products -Bakery products -Cement products -Pulp, paper and paper board mills -Soaps and table preparation	Marawi	5	Cebu Iligan	285 35	Maria Cristina hydroelectric plant	Agus River 124,561 l/sec.	55.8	121,088	939,872	

Source: Nationwide Industrial Estate Program

Table 25 Distribution of Projects Assisted by Masicap by Type of Industry

	Agriculture Fishing and Forestry	Mining and Processing	Manufac-turing	Construc-tion	Commerce	Transport Warehousing and Com.	Services	Activities Adequately Described	TOTAL
PHILIPPINES	961	12	1,393	4	24	129	56	26	2,605*
LUZON	324	5	690	1	11	61	18	11	1,121
I	78	1	173	1	1	35	7	2	298
II	29	0	62	0	1	7	4	1	104
III	69	1	174	0	4	10	1	5	264
IV[1]	61	2	163	0	2	5	3	1	237
V	87	1	118	0	3	4	3	2	218
VISAYAS	226	4	338	3	3	33	8	4	608
VI	135	1	155	2	1	10	2	0	306
VII	53	3	137	1	2	8	4	4	201
VIII	38	0	46	0	0	15	2	0	101
MINDANAO	411	3	375	0	10	35	30	11	876
IX	104	1	60	0	1	16	6	1	189
X	119	1	127	0	4	7	14	3	276
XI	82	0	106	0	5	8	6	3	210
XII	106	1	82	0	0	4	4	4	201

[1]Includes Metro Manila

* Source: MASICAP Quarterly Reports

Table 26 Amount of Industrial Loans Approved by DBP, By Year and By Region
(in thousand pesos)

	1971-72	%	1972-73	%	1973-74	%	1974-75	%	1975-76[1]	%
PHILIPPINES	61,377	100.0	55,205	100.0	94,923	100.0	749,985	100.0	1,351,589	100.0
LUZON	48,567	79.1	29,621	53.7	69,920	73.7	581,397	77.5	682,529	50.5
I	12,752	20.8	2,992	5.4	13,001	13.7	5,195	0.7	40,576	3.0
II	268	0.4	2,462	4.5	1,268	1.3	4,710	0.6	6,548	0.5
III	7,922	12.9	4,766	8.7	13,982	14.7	67,580	9.0	85,893	6.4
IV	26,864	43.8	16,817	30.5	33,397	35.2	277,164	37.0	440,289	32.6
IV-A	519	0.8	2,399	4.3	6,476	6.8	168,729	22.5	92,513	6.8
V	242	0.4	185	0.3	1,796	1.9	58,019	7.7	16,710	1.2
VISAYAS	4,022	6.6	9,207	16.7	11,467	12.1	65,959	8.8	171,023	12.7
VI	305	0.5	955	1.7	4,237	4.4	26,933	3.6	88,978	6.6
VII	3,679	6.0	945	1.7	6,987	7.4	17,362	2.3	62,499	4.6
VIII	38	0.1	7,307	13.2	243	0.3	21,664	2.9	19,546	1.5
MINDANAO	8,788	14.1	16,377	29.6	13,536	14.2	102,629	13.7	498,037	36.8
IX	286	0.4	468	0.8	559	0.6	20,453	2.7	8,756	0.6
X	27	0.1	505	0.9	1,531	1.6	71,816	9.6	359,565	26.6
XI	7,870	12.8	14,523	26.3	4,684	4.9	5,833	0.8	44,141	3.3
XII	605	1.0	881	1.6	6,762	7.1	4,527	0.6	85,575	6.3

[1]July 1975 - December 1976

Source: DBP

Table 27 Number of Industrial Loans Approved by DBP, By Region, 1971-1976

	1971-72	%	1972-73	%	1973-74	%	1974-75	%	1975-76[1]	%
PHILIPPINES	246	100.0	277	100.0	684	100.0	2,381	100.0	8,306	100.0
LUZON	167	67.9	152	54.9	470	68.7	1,587	66.7	4,718	56.8
I	34	13.8	23	8.3	127	18.6	79	3.3	569	6.9
II	10	4.1	12	4.3	29	4.2	283	11.9	456	5.5
III	57	23.1	24	8.7	55	8.0	606	25.5	2,139	25.8
IV	41	16.7	62	22.4	128	18.7	251	10.5	338	4.1
IV-A	12	4.9	24	8.7	97	14.2	282	11.9	869	10.4
V	13	5.3	7	2.5	34	5.0	86	3.6	347	4.1
VISAYAS	47	19.1	82	29.6	125	18.3	378	15.8	1,268	15.3
VI	6	2.4	10	3.6	20	3.0	176	7.4	526	6.3
VII	34	13.8	67	24.2	97	14.1	142	5.9	478	5.8
VIII	7	2.9	5	1.8	8	1.2	60	2.5	264	3.2
MINDANAO	32	13.0	43	15.5	89	13.0	416	17.5	2,320	27.9
IX	14	5.7	11	3.9	18	2.6	147	6.2	748	9.0
X	9	3.7	8	2.9	30	4.4	142	5.9	676	8.1
XI	7	2.8	16	5.8	15	2.2	83	3.4	573	6.9
XII	2	0.8	8	2.9	26	3.8	44	2.0	323	3.9

[1]July 1975 - December 1976

Source: DBP

Table 28 Regional Distribution of IGLF Loan Approvals, 1973-1976

	1973-74	%	1974-75	%	1975-76	%	Total	%
PHILIPPINES	7,159	100.0	52,572.5	100.0	41,748	100.0	101,479.5	100.0
LUZON	7,159	100.0	41,188.5	78.3	33,037	79.2	81,385.5	80.3
I	1,931	27.0	6,922.5	13.2	2,699	6.5	11,552.5	11.4
II	-		70	0.1			70	0.1
III	-		5,588.5	10.6	4,620	11.1	10,208.5	10.1
IV	3,189	44.5	22,612	43.0	17,527	42.0	43,328	42.7
IV-A	2,039	28.5	5,895.5	11.2	6,479	15.5	14,413.5	14.2
V	-	-	100	0.2	1,712	4.1	1,812	1.8
VISAYAS	-		9,934	18.9	5,848	14.0	15,782	15.5
VI	-		3,800	7.2	2,010	4.8	5,810	5.7
VII	-		5,322	10.1	3,073	7.4	8,395	8.3
VIII	-		812	1.6	765	1.8	1,577	1.5
MINDANAO	-		1,450	2.8	2,863	6.8	4,313	4.2
IX	-		-	-	740	1.8	740	0.7
X	-		50	0.1	1,315	3.1	1,365	1.3
XI	-		1,400	2.7	660	1.6	2,060	2.0
XII	-		-	-	148	.3	148	0.2

Source: IGLF

Table 29 Number of Families and Percent Below Poverty Line[1] Urban and Rural, By Region, 1975

Region	RURAL		URBAN	
	No. of Families (000)	Percent of Families Below ₱4,000 Income	No. of Families (000)	Percent of Families Below ₱5,000 Income
PHILIPPINES	4,764	56.3	2,096	48.1
LUZON				
I	460	40.0	98	46.6
II	291	54.3	38	53.5
III	478	48.2	185	43.2
IV	-	-	770	40.8
IV-A	640	56.5	248	49.6
V	430	64.5	87	63.9
VISAYAS				
VI	517	56.3	162	53.8
VII	439	54.0	157	55.6
VIII	362	58.9	80	60.2
MINDANAO				
IX	273	65.2	41	55.2
X	303	74.2	67	56.5
XI	317	46.8	116	55.3
XII	254	51.5	47	44.8

[1]For rural areas, the assumed poverty threshold is an annual income of ₱4,000, while for urban areas, it is ₱5,000. These are still conservative compared to the food threshold levels estimated in 1974 of ₱4,630 and ₱5,310 for rural and urban areas, respectively.

Source: Family Income and Expenditure Survey, NCSO

Table 30 Farmland Expansion Potential, 1975-2000
(in 000 hectares)

		Farmland Area 1975	Farmland Available to Agriculture, 2000	Farmland Potential	Percent
PHILIPPINES		8,802	15,351	6,549	100.0
LUZON		3,599	7,003	3,404	52.0
I	Ilocos	379	1,039	660	10.1
II	Cagayan Valley	617	1,766	1,149	17.5
III	Central Luzon	539	807	268	4.1
IV	Metropolitan Manila	-	-	-	-
IV-A	Southern Tagalog	1,110	1,988	878	13.4
V	Bicol	954	1,403	449	6.9
VISAYAS		1,946	3,111	1,165	17.8
VI	Western Visayas	783	1,281	498	7.6
VII	Central Visayas	488	775	287	4 4
VIII	Eastern Visayas	675	1,055	380	5.8
MINDANAO		3,257	5,237	1,980	30.2
IX	Western Mindanao	671	1,194	473	7.2
X	Northern Mindanao	788	1,123	335	5.1
XI	Southern Mindanao	955	1,550	595	9.1
XII	Central Mindanao	843	1,420	577	8.8

Source: "Natural Resource Bases of the Regions," NEDA-UNDP/IBRD
Regional Planning Assitance Project
Refer to Appendices 3 and 4 for Land Use Projections 1975 and 2000.

Table 31 Actual and Potential Irrigable Land By Region

	Land Areas Under Irrigation		Land Areas Potentially Available for Irrigation		TOTAL		Existing Irrigated as % of Total Irrigable
	Thousand Hectares	Percent	Thousand Hectares	Percent	Thousand Hectares	Percent	
PHILIPPINES	951	100.0	1,580	100.0	2,531	100.0	37.6
LUZON	706	74.3	790	50.0	1,496	59.1	47.2
I	179	18.8	141	8.9	320	12.6	55.8
II	127	13.4	224	14.2	351	13.9	36.1
III	249	26.2	68	4.3	317	12.5	78.4
IV-A	100	10.5	240	15.2	339	13.4	29.4
V	53	5.6	116	7.3	168	6.7	31.3
VISAYAS	119	12.5	191	12.1	310	15.6	38.3
VI	77	8.1	91	5.8	168	6.7	45.8
VII	12	1.3	36	2.3	48	1.9	25.5
VIII	29	3.1	65	4.1	94	3.7	31.2
MINDANAO	125	13.2	599	37.9	724	28.6	17.3
IX	20	2.1	65	4.1	85	3.4	21.9
X	23	2.5	177	11.2	200	7.9	11.7
XI	37	3.9	161	10.2	198	7.8	18.5
XII	46	4.8	195	12.4	241	9.5	19.0

Source: National Irrigation Administration

Table 32 Agricultural Land and Farm Population

Region	Farm[1] Population ('000)	Irrigated[2] Area ('000 ha)	Cultivated[3] Land Area ('000 ha)	Farmland[4] Area ('000 ha)	Average Farm Size (Hectares)	Farm Popu-[1] lation per Hectare of Farmland	GVA per[4] Person in Agriculture (P)
PHILIPPINES	16,055	952	6,429	8,494	4.61	1.89	
LUZON	6,956	708	2,842	3,496	3.33	1.99	
I	1,354	179	425	380	1.74	3.56	477
II	1,080	127	417	581	3.38	1.86	948
III	1,154	249	431	540	3.20	2.13	1,766
IV-A	1,805	100	752	1,074	3.97	1.68	1,166
V	1,663	53	818	921	4.13	1.70	680
VISAYAS	4,074	118	1,437	1,935	3.16	2.11	
VI	1,456	77	594	782	3.69	1.86	1,537
VII	1,352	12	351	479	2.03	2.82	695
VIII	1,266	29	492	674	3.55	1.88	665
MINDANAO	5,026	126	2,150	3,063	5.79	1.64	
IX	1,062	20	398	632	5.55	1.68	790
X	1,160	23	586[a]	727	5.85	1.60	1,261
XI	1,310	37	584[a]	898	6.21	1.46	1,384
XII	1,494	46	584[a]	806	5.52	1.85	683

Source: [a] Old Regions X and XI allocated equally to new Regions X, XI and XII.

[1] Agricultural Census, 1971

[2] BAECON, 1972

[4] NEDA, National Accounts Office, 1972

Table 33 Farmland According to Soil Type,* 1975 (Thousand Hectares)

	1975[1] Farmland	Net[2] ABCD Land Available to Agri. 1975	M x X[3] Land in Farmland 1975	ABCD[4] Land	Unutilized ABCD Land 1975	Projected[6] Loss of ABCD Land to Urban 1975-2000
PHILIPPINES	8,802	7,514	2,004	6,798	716	1,043
LUZON	3,599	3,364	623	2,976	388	646
I	379	356	23	356	-	48
II	617	902	-	617	285	45
III	539	532	7	532	-	150
IV-A	1,110	1,213	-	1,110	103	350
V	954	361	593	361	-	53
VISAYAS	1,946	1,601	673	1,273	328	157
VI	783	400	383	400	-	64
VII	48	198	290	198	-	62
VIII	675	1,003	-	675	-	31
MINDANAO	3,257	2,549	708	2,540	-	240
IX	671	624	47	624	-	49
X	788	701	87	701	-	91
XI	955	492	463	492	-	55
XII	843	732	111	732	-	45

*For description of soil types, refer to Appendix 6.

[1]Farmland and area from 1971 Agriculture Census projected at 1960-1971 annual growth rate for regions where 1971 area is greater than 1960. For other regions, 1975 area = 1971 farmland area.

[2]ABCD land area according to Bureau of Soils Census 1975 less 1975 Urban area.

[3]1975 Farmland - Net ABCD Land Available to Agriculture

[4]Column (1) - Column (3)

[5]Column (2) - Column (4)

[6]Urban land requirements 2000 - urban land 1975

Source: "Natural Resource Base of the Regions," NEDA-UNDP/IBRD Regional Planning Assistance Project.

Table 34 Climate Type and Typhoon Frequency, By Region

	Climate Type[1]	Typhoon Frequency[2] (%)
LUZON		
I	1	20
II	3,4	30-40
III	1	10-20
IV	All types	20-30 to 0
V	2,4	20-30
VISAYAS		
VI	1,3	20
VII	3,4	10-20
VIII	2	31-40
MINDANAO		
IX	3,4	0
X	3	0
XI	4	0
XII	4	0

[1]Coroñas Classification described as follows:

Type 1 - Two pronounced seasons; dry from November to April; wet during the rest of the year

Type 2 - No dry season with a very pronounced maximum rainfall from November to January

Type 3 - Seasons not very pronounced; relatively dry from November to April and wet during the rest of the year

Type 4 - Rainfall more or less evenly distributed throughout the year

[2]Refers to percentage of typhoons within the grographical responsibility of the country that pass through a particular region.

Source: PAGASA

Table 35 Fishponds and Swamplands Available for Development, By Regions, 1974 (000 Has.)

Region	Total	Fishpond Area	Swamplands
PHILIPPINES	706.02	176.03	529.99
LUZON	237.33	84.08	153.25
I	18.23	10.48	7.75
II	16.88	.88	16.00
III	67.94	30.52	37.42
IV-A	85.86	30.68	55.18
V	48.42	11.52	36.90
VISAYAS	244.17	58.36	185.81
VI	75.72	43.23	32.45
VII	35.76	5.77	29.99
VIII	132.74	9.37	123.37
MINDANAO	224.48	33.55	190.93
IX	79.06	17.61	61.45
X	69.94	5.46	64.48
XI	29.91	5.40	24.50
XII	45.57	5.08	40.49

Source: Fisheries Statistics, 1974

Table 36 Distribution of Total Forest Areas, Commercial Forest Area, Area Under License and By Region, 1975

	Total[1] Forest (000 has)	Reg. Shares %	Commercial Forest (000 has)	Reg. Shares %	Area Under License (000 has)	Reg. Shares %	Exploitation[2] Intensity %
PHILIPPINES	17,029.7	100	8,162.4	100	9,627.2	100	100[a]
LUZON	8,131.2	48	3,732.6	46	3,297.3	34	88
I	1,250.6	7	417.7	5	90.6	1	22
II	2,625.3	15	1,375.8	17	1,435.4	15	100[a]
III	810.2	5	352.6	4	88.0	1	25
IV-A	2,889.0	17	1,407.6	17	1,393.9	14	99
V	556.7	4	178.9	3	287.4	3	100[a]
VISAYAS	2,586.7	15	902.9	11	994.7	10	100[a]
VI	703.2	4	135.8	2	232.7	2	100[a]
VII	690.6	4	107.3	1	155.7	2	100[a]
VIII	1,192.9	7	659.8	8	606.3	6	92
MINDANAO	6,311.8	37	3,626.9	43	5,335.2	56	100[a]
IX	1,010.8	6	560.5	7	695.5	7	100[a]
X	1,834.4	11	1,043.4	13	1,631.8	17	100[a]
XI	1,635.5	9	1,007.9	12	1,576.4	17	100[a]
XII	1,831.0	11	915.1	11	1,431.4	15	100[a]

[1]Includes Classified and Unclassified.

[2]Area under license as a percent of commercial forest area.

[a]Area under license can exceed commercial forest area since concessions are expressed in terms of blocks of land which may include unforested and/or alienable or disposable land.

Source: Bureau of Forest Development

Table 37 Reserves, Production and Rate of Depletion of Selected Minerals, 1975

Region	Reserves Inventory (in million metric tons)			Ore Mined Per Year (in million metric tons)			Number of Years Until Depletion		
	Copper (at 1% Cu)	Nickel (at 1% Ni)	Iron Ore (at 50% Fe)	Copper (at 1% Cu)	Nickel (at 1% Ni)	Iron Ore (at 50% Cu)	Copper (at 1% Cu)	Nickel (at 1% Ni)	Iron Ore (at 50% Cu)
PHILIPPINES	1,761.92	3,143.60	2,821.33	20.73		3.76	87	n.a.	750
LUZON	533.62	744.71	160.35	9.67	0.03	1.92	55	2,482	84
I	321.58		1.62	5.42		0.95	59		2
II	34.09		1.27		0.03				
III	26.80	109.38	3.72			0.18		3,287	21
IV-A	132.73	577.14	91.80			0.03	32		3,356
V	18.41	58.19	61.95			0.76	725		81
VISAYAS	1,117.01	7.44	12.81	10.44		0.65	107		20
VI	683.43		2.02	2.27			302		
VII	421.94			7.37			57		
VIII	11.63	7.44	10.79	0.80		0.65	15		17
MINDANAO	111.29	2,391.45	2,648.16	0.12	n.a.	0.12	927	n.a.	22,068
IX	4.17		11.42	0.03		0.12	158		10
X	26.41	2,020.61	277.13		n.a.				
XI	80.71	370.84	2,409.62	0.09			855		

Source: Bureau of Mines

Table 38 Agricultural Employment Potential of Farmland Expansion

Region	Agricultural Employment, 1975 (1)	Projected Agri Employment, 2000[1] (2)	Additional Employment in Agriculture[2] (3)=(2)-(1)	Labor Force Entrants (4)	Additional Agri Employment as % of Labor Force (5)=(3)÷(4)	Non-Agri Jobs Needed (6)=(4)-(3)
PHILIPPINES	7,454	10,840	3,386	18,487	18.3	15,101
LUZON	3,132	4,722	1,590	10,123	15.7	8,533
I	619	924	305	1,013	30.1	708
II	496	1,066	570	893	63.8	323
III	548	594	46	1,962	2.3	1,916
IV	-	-	-	3,095	0	3,095
IV-A	827	1,202	375	2,081	18.0	1,706
V	642	936	294	1,079	27.2	785
VISAYAS	2,045	2,665	620	2,841	21.8	2,221
VI	764	1,043	279	1,062	26.3	783
VII	674	802	128	1,109	11.5	981
VIII	607	820	213	670	31.8	457
MINDANAO	2,277	3,453	1,176	5,523	21.3	4,347
IX	467	769	302	1,099	27.5	797
X	621	797	176	1,440	12.2	1,264
XI	638	883	245	1,787	13.7	1,542
XII	551	1,004	453	1,197	37.8	744

[1]Average of low and high projections of agricultural employment projections shown in Appendix 5.

[2]This includes additional employment arising from farmland expansion: for some regions, expansion in fishing may be a significant source.

Source: NEDA RDS Regional Planning Studies Series

VII. Agriculture and Rural Development.

While industrial dispersal holds promise as a viable strategy for spatial equity, its impact on the regions will vary depending on the peculiar socio-economic characteristics of each region. As discussed in the preceding section, industrialization may be inappropriate for some regions at this point in time, while for others it remains as the only choice. With the exception of the MMA, the rural sector is still the preponderant segment of every regional economy. Unless adequate attention is devoted to its welfare, the regional growth process may never take off. Gains in the industrial or urban front may be nullified by continuous depression in the rural sector. Even worse, initial industrialization efforts may not be sustained unless a parallel initiative is mounted for the rural sectos.

Strategies are necessary for the lagging regions and provinces, in particular their rural areas, where only a massive infusion of capital can catalyze the currently slow process of growth. These assume greater importance if the prioritization scheme suggested earlier is adopted. The regional policy making process must design complementary approaches to the industrial dispersal program for the sake of the non-priority regions in order to avoid a deterioration in spatial disparities. The Integrated Rural Development Projects (IRDPs) show enormous potential as the policy response to this need of the depressed areas of the country. Their multisectoral project components appear awesome when one considers the scale of planned investments in physical construction. Hopefully the synergistic effects of these projects will propel the regions into a sustained process of growth that would narrow down spatial disparities.

While the IRDPs augur well for the goal of regional balance, a national

program with strong spatial implications may offset the potential gains which could be made towards this goal. Masagana 99, the rice production component of the food production program, aims for self-sufficiency. However the attainment of this objective may be at the expense of spatial equity. Intraregionally the same observation seems to be valid, with the program reaching only a selected segment of the farming sector.

In this section we will examine more closely the implications of rural development programs on the issue of spatial equity. More specifically the task is to verify whether the target groups affected by these programs belong to the rural poor, thereby alleviating poverty. If not, an attempt will be made to identify the factors, e.g., search for efficiency, resource constraints, etc. that lead to such a discrimination.

A. The Integrated Area Development Approach.

At present the Philippines is undertaking a number of integrated rural development projects (IRDPs) which are at different phases of development. (Table 39). The IRDPs are basically a response to the slow and ineffective strategy of implementing specific projects,[76/] which are often unrelated and uncoordinated such that their combined potential impact is weak. It is anticipated that the infusion of capital in a particular area through mutually linked and reinforcing projects will produce a synergistic effect of capable of stimulating the local economy into a process of sustained growth. Organizationally the IRDP approach hopes to build up an effective mechanism for interlink among agencies in project planning and implementation.

1. Policy Guidelines.

In the selection of priority projects for the integrated area development approach, the CCC-IRDP (now NCIAD) sets the following policy

guidleines:

1) areas with high tenancy rates.

2) relatively underdeveloped areas with development potentials in more than on sector of the economy.

3) areas with a large segment of the population falling under the lowest income bracket.

4) areas with potentials for acclerated development.

5) areas not covered by ongoing projects.

Essentially this set of criteria is biased towards poor and depressed areas.

Reviewing the list of ongoing projects, the guidelines provided by the CCC-IRDP appear to have been met satisfactorily so far. Regions II, V, VIII and XII fall on the lower end of the income spectrum among the regions. These are also the regions where the poor rural families are concentrated such that in Regions V and VIII outmigration rates have been high. Furthermore their underdeveloped state is an indication of the lack of public investments in these area. As an illustrative example, Samar is the more lagging section of an already underdeveloped area, Region VIII. It has a population growth rate of only 1.5 per cent due to outmigration; more than 90 per cent of its population is not covered by electricity, and,to top it all, it is located within the typhoon belt and always suffers serious damage inflicted by tropical depressions. Likewise Negros Oriental, Mindoro and Bohol are backward provinces but belong to relatively developed regions. For these depressed regions and provinces where the short term prospects for industrial location are unattractive, these IRDPs may offer the only viable alternative for creating employment opprotunities and raising rural income, thereby pursuing the holding strategy advocated in the Ranis Report and,more recently, in the agropolitan approach.[77/] For the Cagayan, Bicol,

Cotabato and Agusan River Basins, the enormous land and water resource potentials can serve as the focus for accelerating agricultural development in their respective coverage areas. Another important observation is that little emphasis is placed on the tenancy criterion since Regions V, VIII and XII have relatively low tenancy rates while two regions with high tenancy rates, Regions III and VI, do not have any IRDP projects. However the land reform program is being vigorously implemented and these latter regions are accorded priority.

2. Orientation of Project Investments.

Projects identified for the ongoing IRDP projects are multisectoral in character. (Table 40). Although the bulk of investments is devoted to physical construction of roads, irrigation systems and water control structures in support of agricultural activities, many projects are also related to such diverse sectors such as health and nutrition, social housing, fisheries, soil and forest resource conservation, and even assistance to cultural communities. Moreover, in the case of the river basin projects, water resources have multiple uses, e.g., for irrigation, electrification and flood control. In general the project components of the various IRDPs are intended to correct basic deficiencies in physical infrastructure supportive of economic activities and also to meet specific needs of the project area like control of schistomiasis which is endemic to Samar and Mindoro provinces and flood control in typhoon-frequented areas, Regions II, V and VIII.

As expected the thrust of most investments is laid on facilities and services needed for agricultural development. Agriculture is the main source of livelihood of the regions' population and, more importantly, farming is the main source of income of the rural poor. Approximately 90 per cent of

of the bottom 40 per cent of the national income profile resides in rural areas. (Table 41). Geographically speaking the rural population in the bottom 40 per cent is concentrated in Eastern Visayas, Central Mindanao and Bicol.[78/] Agricultural productivity in these regions is low because of the inadequacy of supporting agricultural services and the flood damages due to typhoons. By and large, therefore, investments in irrigation and flood control and other facilities will benefit the preponderant agricultural sector. This holds true for the other IRDPs as well.

The concentration of the IRDPs on lowland or conventional agriculture is understandable from the efficiency viewpoint since it is in lowland agriculture where the potential for raising productivity is higher. In addition lowland farms are the most physically accessible to extension agents as well as to other government services. Without disputing the present emphasis of the IRDPs on the conventional agricultural sector, it should be pointed out that there is another component of the agricultural sector whose current needs are even greater. These are the small marginal and landless farmers who constitute what may be collectively termed as the informal agricultural sector. These farmers are marginal in the sense that they are occupying lands whose productivity is less than that of the river valley basins; they are marginal in that, very often, their farming systems derived frm lowland practices are ill-suited to the conditions in the hillsides; they are marginal also in that their incomes are low and they rarely receive the assistance of extension agents or other government services; they are not marginal however in terms of numbers or in dependence on farming for their livelihood, as their remote location cuts them off from non-farm activities. They are already farming land outside the conventionally

conceived zones of agricultural land and their problems and even existence are often overlooked in the determination of agricultural policy.[79/]

The reason for highlighting the existence of the informal agricultural sector is that this sector will grow in relative importance in terms of the number of people and the land area involved. Even at present, a significant portion of farmlands in Regions V, VI, VII and XII is already in the hillsides, cultivated by those who have been pushed out of the fertile lowlands by population pressure. In the years to come, it is inevitable that the regions' land frontier will continue to shift onto hillsides and a major portion of the regions' farmlands will be on these lands.

It is to this informal agricultural sector that government policy should start paying more attention because a large part of the rural poor is found here. Although by no means are the problems of the conventional agricultural sector solved, agricultural and rural development policy in general will require a shift in emphasis at some point in time. This shift in policy direction may be guided at the national level but the impact on regional disparities will vary depending on the relative importance of the informal agricultural sector. The neglect of this sector will widen intra-regional inequities if the benefits of agricultural programs accrue solely to the conventional agricultural sector.

In the future, if the IRDPs are to continue playing a leading role in rural development, project planning must also consider the issues and problems relevant to the informal agricultural sector to promote a more balanced regional development pattern. While IRDPs can narrow down inter-regional disparities, conversely, they may also widen intraregional disparities if their projects are solely focused on conventional agriculture.

A case in point is the Bicol River Basin Development Project. Although it is impossible to alter the natural physical configuration of the basin, it should be stressed that the beneficiary provinces -Camarines Sur, Camarines Norte and Albay - are the rich areas of what is overall a depressed region. Because of the basin, it is in these provinces where fertile farmlands are found. On the other hand, in the poor provinces of the region - Sorsogon, Catanduanes and Masbate - agricultural lands are largely marginal and steeply sloping and consequently, have low productivity. It is not difficult to predict that the IRDP - The Bicol River Basin Development Project -,while raising the overall regional level of development, is not conducive to an equitable rural growth pattern within the region unless an effort is made to assist the informal agricultural sector.

Similarly rural non-agricultural activities will gain in importance due to the combined effects of population growth and agricultural resource constraints. With the fragmentation of farms, rural families will have to look for supplementary sources of income outside agriculture to augment farm income. Other rural families will become totally dependent on non-farm activities. It should be underscored, however, that the growth in non-farm activities is contingent to a large extent upon the development of the agricultural sector. In this regard the IRDPs , with their marked agricultural orientation, are crucial to an integrated rural development drive. Many of their projects serve multiple needs of rural areas and ar laying the groundwork for the emergence of non-agricultural endeavors,

3. A Recognition of Current Performance.

On the whole, the current performance of the IRDPs speaks well for regional development in the country since these projects answer the need

for location specific strategies for the lagging regions. The pivotal element in their growth path still lies in rural and agricultural development, due to a lack of comparative advantage for industrial location. Moreover these regions' resource potentials await intensive exploitation. However a future shift in direction is required for the IRDPS as well as rural development policy to take explicit account of the existence and needs of the informal agricultural sector and to set the stage for non-agricultural activities.

The efficacy of the integrated approach to rural development is recognized by the national government. In fact the National Development Plan 1978-82 advocates its retention and wider use and even goes to the extent of identifying additional projects. However this approach may be abused once regional groups join the "bandwagon" and demand the inclusion of their provinces as priority areas for IRDPs.* If the list currently found in the National Plan (Table 42) is an indication of things to come, then the government may find itself in the not too unfamiliar position of attempting to satisfy every project proponent. With the additional projects, the total project cost has already risen to more than ₱6.0 billion. Again issues related to national government financial capacity and dilution of resources may emerge and weaken the IRDPs' impact. If the bad experience of the regional development authorities is to be avoided, more selectivity and restraint in the use of the IRDP approach must be exercised in order to prepare a list of projects justifiable on valid grounds and technical criteria. Furthermore the IRDPs should be related to an overall strategy for

*As far as the experience of the author goes, a number of petitions have been received by NEDA from the regions and the provinces calling for the inclusion of certain areas in the IRDP priorities.

spatial equity whereby the sectoral program components are defined and the priority regions under each program are clearly specified. In view of the likelihood that the prioritization scheme proposed earlier for the regional dispersal of industries will exclude poor rural regions, the selection of areas for IRDPs must give preference to these regions in order to mitigate the tendency for regional income divergence. These preferences must be formally articulated through the CCC-IRDP policy guidelines in order to have a firm basis for evaluating proposals which are expected from the regions. Otherwise political pressures may again intrude excessively in the selection process.

B. The Food Production Program.

Although a national program, the ongoing food production drive has strong implications on the spatial equity issue. Started in May 1973, it is primarily aimed at self-sufficiency because perennial deficits in rice and corn have necessitated grain importations that have affected the country's balance of payments. Accordingly maximum production from the country's rice and corn lands is the basic objective. To attain this objective, priority is given to irrigated ricelands where double cropping is possible. Moreover the high yielding varieties (HYV) technology developed by the International Rice and Research Institute (IRRI) is basically adapted for irrigated areas.

1. The Rice Production Program.

Masagana 99, the rice production program, has various components, namely; seed procurement, agricultural extension services, fertilizer subsidy, credit, grain procurement and price support. It is being implemented on a nationwide scale; however, due to differences in cropping patterns

and availability of irrigation service, the importance of the program varies among regions. For example, in Region III, farms planted to rice account for about 90 per cent of total number of farms while in Region X, they comprise only about 15 per cent. In most regions rice farms are generally small, with at least one-half having an area less than three hectares.[80/]

Irrigation systems are unevenly distributed, with the regions in Luzon having almost three-fourths of the national irrigated area. (Refer back to Table 32). Consequently the rice yields in these regions are higher inasmuch as irrigated areas acount for almost one-half of total riceland area. (Table 43). On the average, yields in irrigated ricelands are approximately 50 per cent higher than those in rainfed areas. In terms of farm income, the gross margin for the former ranges from ₱3100 to ₱3800, depending on farm size, while for the latter, gross margin per hectare varies from ₱1500 to ₱2500, even if a second crop of rice or corn is planted.[81/] Obviously farmers of irrigated ricelands are much better off than most farmers. But what is more significant is that as the diminution of farm sizes is resorted to due to population pressure, these farmers need only a small area to attain a certain amount of income. In a study[82/] made to determine farm sizes needed for reaching the poverty threshold (assumed at ₱3000 per family) using different classes of land and availability of irrigation as dependent variables, an irrigated rice farmer needs less than a hectare to pass the poverty threshold. With the full use of family labor, he can achieve an income of twice this level. On the other hand, for non-irrigated rice farmers, the required farm sizes are definitely larger and,even with the full employment of family labor, some of them may not be able to overcome poverty unless productivity increases are attained or alternative sources of income

generated. (Table 44). Another significant finding is the precarious situation of the farmer on M lands,* who cannot achieve the target level of income because the labor available is only sufficient for a farm size of 1.7 hectares, compared to the required farm size of 2.7 hectares to reach the poverty threshold. In a very real sense, the farmer on marginal lands is trapped. He cannot through his own efforts, although working very hard, rise out of his poverty because of low labor and land productivity.[83/] The general nature of the problem is illustrated in Figure 1.

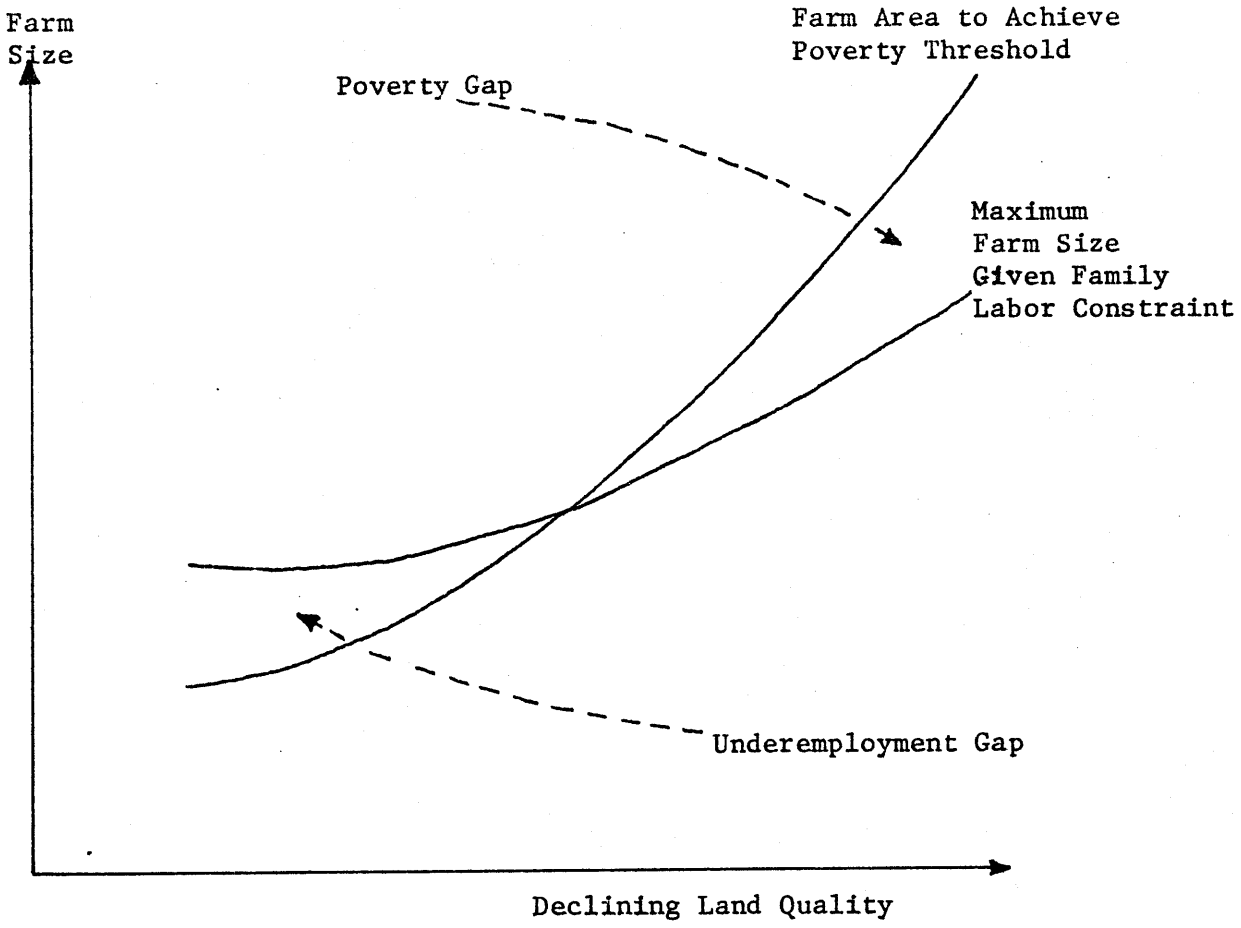
2. Impact on Productivity and Income in Rural Areas.

The advent of Masagana 99 further increases the potential for productivity improvements in irrigated areas. Because of its emphasis on irrigated ricelands, the regions that greatly benefit from the package of services offerred under the program are naturally those with large irrigated areas, Regions I, III and IV-A. In some cases as in Region VI, due to its importance as the major rice supplier for the Visayas, large tracts of rainfed ricelands are covered since irrigation service is still limited in this region. Essentially the regions that have been able to gain the most from the program are the traditional rice producers which have previously exhibited high yields. (Table 45).

Inevitably the Masagana 99 program will have favorable implications on agricultural growth and on the overall level of farm incomes in the major rice producing regions. For Regions III, VI and XI the program covers a substantial portion of total harvested area, but for others, only a small percentage of farms benefit. Also most of the beneficiaries of the program

*As was shown in the resource analysis, land with quality of this type will increasingly compose a large part of farmlands.

Figure 1: Relationships Between Land Quality, Farm Size and Farm Income and Employment



Source: G. Gwyer. "Agricultural Employment and Farm Incomes in Relation to Land Classes: A Regional Analysis."

already belong to the more economically advanced group of regions. With the further improvement in their agricultural productivity, it is very possible that a divergence in levels of regional development will occur.

Similarly, within the rice producing sector in a region, we will have farmers having access to high technology, credit and other services while the majority receive very little support from government programs. Consequently a dualistic situation may ensue, with a small group of modern farmers and a large group of poor traditional farmers existing side by side.

The extension of credit under Masagana 99 is particularly important for rice farmers who have just become leaseholders or amortizing owners and may have been cut off from their traditional source of credit - the landowner.* Land reform is of little significance without access to markets and credit.[84/] Without the necessary production inputs and services, the potential for raising productivity may not be realized. Land reform does not by itself lead to productivity increases.[85/] The Masagana 99 program is also significant for its organization of farmers into cooperatives. Although cooperatives development was conceived and started as part of the land reform scheme, the formation of cooperatives and small farmer groups accelerated when membership in such organizations was made a prerequisite for inclusion in Masagana 99.

The achievements made by the Masagana 99 program cannot be overemphasized. The attainment of self-sufficiency, the provision of numerous services to many rice farmers and the formation of cooperatives are by

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*P.D. No. 2, issued a few days after the declaration of martial law, declared the entire country a land reform area. It was followed by P.D. No. 27, emancipating all rice and corn farmers from tenancy. Since then the land reform program has been implemented on a full scale.

themselves noteworthy accomplishments. However the deleterious effects on spatial disparities of this nationally conceived effort cannot be ignored in the design of regional policy. In the years ahead, a rationalization of agricultural production, involving some changes within regions in cropping patterns and some shifts in production between regions, is expected.[86/] Interregional shifts in production will occur as regions realize their comparative advantages arising from basic climatic factors, location and resource endowments. With growing crop specialization among regions, more location and crop specific agricultural strategies will have to be evolved inasmuch as any nationally-based policy or program will tend to favor only a few regions and may adversely impact the goal of regional balance.

Concluding Remarks

In evaluating the success of the Masagana 99 program in attaining production objectives, several important features related to policy implementation stand out. Although essentially a national drive, the program encountered less political complications due to the commitment of the central government to an important goal - food self-sufficiency, which could override other regional aspirations. Hence it was the national government's decisions regarding the regional distribution of program area coverage, which in turn was affected largely by natural factors, e.g., presence of irrigation systems, that determined each region's degree of participation in the program. Regional pressures could therefore be resisted. In contrast, the IRDP approach, while currently showing promise as a complementary scheme to the industrial dispersal policy, is more vulnerable to political intrusion by virtue of its being a regional program. When political influence enters too much the decision-making process, its potential effectiveness

may be severely weakened. This is especially true since many resource allocation decisions, which are almost always subjected to political considerations , in support of policy implementation will have to be made.

In both the IRDPs and the Masagana 99 program, an important and large segment of the regional economy - the informal and traditional agricultural sectors - are virtually excluded from sharing in the benefits of these rural development efforts. Its interests are seldom represented in the political and planning processes because its poor power base renders it incapable of exerting pressures on decision-making. The likely outcome is a further deterioration in the distribution in income unless the political or planning processes assumes the responsibility of articulating the interests of this disadvantaged sector. This will be an initial step for the reorientation of rural development policies towards its needs. Without such an articulation, policies may be considered effective without realizing the adverse consequences on the informal agricultural sector.

Table 39 Listing of Integrated Rural Development Projects

Project Name	Regional Location
1. Cagayan Integrated Area Development Project	Region II
2. Mindoro Integrated Rural Development Project	Region IV-A
3. Bicol River Basin Development Project	Region V
4. Sorsogon Integrated Rural Development Project	Region V
5. Southern Negros Integrated Development Project	Region VII
6. Bohol Integrated Rural Development Project	Region VII
7. Samar Integrated Development Project	Region VIII
8. Cotabato-Agusan River Basin Development Project	Regions X, XI & XII.

Source: Cabinet Coordinating Committee on Integrated Rural Development Projects (now National Committee on Integrated Area Development)

Table 40 Project Components for Selected IRDP's

Bicol River Basin	Mindoro	Cagayan	Samar	Catabato-Aguson
1. Road Construction	1. Water Control	1. Rural Electrification	1. Irrigation	1. Irrigation
2. Municipal Ports Development	2. Road Construction & Improvement	2. Salinity Protection	2. Flood Control & Drainage	2. Watershed Management
3. Irrigation	3. Port Rehabilitation	3. Irrigation	3. Road Construction	3. Soil & Forest Resource Conservation
4. Groundwater Development	4. Seed Testing	4. Flood Control	4. Port Development	4. Small-scale Electrification
5. Flood Control	5. Pest Control	5. Road Construction	5. Construction of Rural Health Units & Barrio Health Stations	5. Flood Control
6. Waterworks	6. Schistosomiesis Control		6. Health Programs	
7. On-Farm Water Management	7. Health Education		7. Rehabilitation & Construction of Waterpoints	
8. Lake Fisheries Development	8. Margyan Assistance			
9. Farming Systems Development				
10. Land Transfer				
11. Land Classification				
12. Agri-business & Industrial Project				
13. Integrated Health, Nutrition & Population				
14. Use of Medicinal Plant				
15. Social Housing				

Source: Project Documents

Table 41 Rural Families Classified by Level and Main Source of Income, 1971

Main Source of Income	Families in lower 40 percent thousands	percent	Families in upper 60 percent thousands	percent	Total Families thousands	percent
Farming	1,756	64.8	1,208	31.2	2,964	45.1
Self-employed	1,409	52.0	852	22.1	2,261	34.4
Wage labor	347	12.8	356	9.1	703	10.7
Foresty & Fishing	165	6.1	117	3.0	282	4.3
Other Occupations	388	14.3	900	23.4	1,288	19.6
Self-employed	190	7.0	231	5.9	421	6.4
Wage labor	198	7.3	669	17.5	867	13.2
Other Sources	130	4.8	107	2.9	237	3.6
Agricultural rents	54	2.0	31	0.9	85	1.3
Other	76	2.8	76	2.0	152	2.3
Total Rural Families	2,439	90.0	2,332	60.5	4,771	72.6
Total Urban and Rural Families	2,710	100.0	3,862	100.0	6,572	100.0

Source: Based on BCS, Survey of Households Bulletin, No. 34 (1971) and No. 22 (1965) and on Philippine Statistical Survey of Households Bulletin, No. 14 (1961).

Table 42 Proposed Major Integrated Area Development Projects' Investment Requirements

Name of Projects	Estimated Cost (in million) Local (₱)	Forex ($)	TOTAL (₱)
1. Bohol Integrated Area Development	263.0	27.5	469.25
2. Cagayan Valley Integrated Area Development			
a. Municipal & Barangay Waterworks System	122.0	18.0	257.0
b. Water Resources, Storage & Impounding Reservoirs	102.0	14.0	207.0
c. Cagayan Estuary Salinity Protection	187.0	25.0	374.5
3. Bicol River Basin Development Program			
a. Rinconada Integrated Area Development	142.0	21.0	299.5
b. Quinali Integrated Area Development	90.0	13.5	191.25
c. Baliwag/San Vincente Integrated Area Development	60.0	12.0	150.0
d. Land Consolidation	15.0	3.0	37.5
e. Integrated Health, Nutrition and Population	15.0	5.0	52.5
f. Naga-Calabanga Integrated Area Development	68.0	14.0	173.0
g. Upgrading of the Camarines Sur Agricultural College	33.0	6.0	78.0
h. Bicol River Basin transport			
A. Roads	214.0	17.0	341.5
B. Ports	28.0	2.0	43.0
4. Pampanga Delta/Candaba Swamp Development Reservoir			
a. San Antonio Irrigation and Flood Balancing	27.0	3.0	49.5
b. Partial Reclamation and Irrigation Project in the Candaba Swamp	30.0	5.0	67.5
c. Groundwater Development	37.5	7.0	90.0
5. Samar Integrated Rural Development	439.0	56.0	859.0
6. Palawan Integrated Area Development	102.0	20.0	252.0
7. Lanao Integrated Development	330.0	36.0	600.0
8. Phil. Rural Infrastructure Project No. 1	225.0	17.0	352.5
9. Sab-A Basin Integrated Area Development	105.0	14.0	210.0
10. Ilocos Norte Rural Development	434.4	64.0	914.5
TOTAL	3,069.0	400.0	6,069.0

Table 43 Palay Harvested Area, Average Yields per Hectare, 1975
(in thousand hectares and metric tons per hectare)

	Total Harvested 1975		Lowland Irrigated 1975		Lowland Non-Irrigated 1975		Upland 1975	
	Area	Yield	Area	Yield	Area	Yield	Area	Yield
PHILIPPINES	3,539	1.54	1,412	2.00	1,674	1.40	453	0.89
LUZON	2,049	1.62	959	2.04	856	1.47	234	0.93
I	339	1.54	127	1.78	201	1.31	11	0.95
II	414	1.74	220	2.02	163	1.53	31	1.06
III	501	1.97	291	2.19	200	1.69	10	0.88
IV-A	447	1.54	177	2.03	157	1.37	113	1.02
V	348	1.60	144	1.71	135	1.40	69	0.71
VISAYAS	706	1.33	155	1.94	492	1.32	59	0.67
VI	439	1.54	90	2.01	314	1.48	35	0.65
VII	85	1.27	26	1.53	54	1.15	5	0.68
VIII	182	1.22	39	1.83	124	1.06	19	0.71
MINDANAO	784	1.46	298	1.97	326	1.26	160	0.92
IX	137	1.49	50	2.13	54	1.51	33	0.75
X	142	1.35	51	1.65	69	1.12	22	1.06
XI	180	1.68	96	2.10	76	1.29	8	0.87
XII	325	1.40	101	1.88	127	1.21	97	0.93

Source: Bureau of Agricultural Economics

Table 44 Land and Labor Productivity for Different Land Qualities

Land Category[1]	Land Productivity[3] (Pesos/Hectare) (1)	Labor Land Ratio[3] (Manyear/Ha) (2)	Labor Productivity (Pesos/Man) (3)	Full Family Employment Income[4] (Pesos) (4)	Needed Farm Size For: Reaching Poverty Threshold[5] (Ha) (5)	Needed Farm Size For: Full Employment of Family[4] (Ha) (6)
I	3,598	1.003	3,587	5,380	0.834	1.496
AI	796	0.498	1,598	2,397	3.769	3.012
BI	1,876	0.592	3,169	4,754	1.599	2.534
CI	1,200	0.620	1,935	2,902	2.500	2.419
DI	610	0.388	1,572	2,358	4.918	3.866
M	1,118	0.891	1,255	1,883	2.683	1.684
MC	746	0.665	1,122	1,683	4.021	2.256

[1] I - is irrigated farmland; AI, BI, CI, DI are non-irrigated areas of these land classes (for definition of land classes, A, B, C, D and M, refer to Appendix 6); and MC is cultivated M level.

[2] Land productivity coefficients estimated in G. Gwyer's study, "Agricultural Employment and Farm Incomes in Relation to Land Classes: A Regional Analysis," adjusted from 1971 to 1975 by cost of living index.

[3] Labor-land coefficients estimated in G. Gwyer's study.

[4] Assuming farm family can provide 1.5 manyears of labor supply.

[5] Poverty threshold is ₱3,000 per family

Table 45 Masagana 99 Area and Loans Approved for Phase V (1975) and Phase XI (1978)

Region	Phase V				Phase XI			
	Area		Amount of Loans		Area		Amount of Loans	
	Area (000 Has)	Percent	Amount (in ₱millions)	Percent	Area (000 Has)	Percent	Amount (in ₱millions)	Percent
PHILIPPINES	1,140	100.0	316.1	100.0	996.8	100.0	222.4	100.0
LUZON	767	87.3	191.3	60.5	688.2	69.0	141.6	63.7
I	161	14.1	27.3	8.6	161.5	16.2	11.8	5.3
II	70	6.1	4.6	1.5	89.0	8.9	25.7	11.6
III	336	29.5	105.4	33.3	265.6	26.6	61.7	27.7
IV-A	134	11.8	38.7	12.3	105.0	10.5	17.9	8.1
V	66	5.8	15.3	4.8	67.2	6.7	24.5	11.0
VISAYAS	210	18.4	54.6	17.3	145.2	14.6	25.6	11.5
VI	157	13.8	41.6	13.1	100.3	10.1	20.8	9.4
VII	17	1.5	5.7	1.8	9.4	1.0	2.0	0.9
VIII	36	3.1	7.4	2.3	35.5	3.6	2.8	1.2
MINDANAO	163	14.3	70.1	22.2	163.5	16.4	55.2	24.8
IX	36	3.1	16.9	5.3	21.0	3.1	7.1	3.2
X	29	2.6	11.9	3.8	31.1	3.1	11.2	5.0
XI	50	4.4	27.3	8.6	35.7	3.6	18.7	8.4
XII	48	4.2	14.1	4.5	65.7	6.6	18.2	8.2

Note: Details may not add up to totals because of rounding.

Source: Masagana 99 Program Summaries
Ministry of Agriculture

VIII. The Regional Allocation of Public Expenditures.

Together with financial incentives, public investments in infrastructure have been invariably used in many countries as an instrument for implementing regional policy. In the Philippines, infrastructure expenditures are borne almost entirely by the government sector. As such the level and the distribution of the public expenditure program can be utilized by the government to pursue its regional development objectives.

A. Impact on Regional Disparities.

The past regional distribution of infrastructure expenditures partly explains the currently existing spatial disparities in income and development. This allocation has favored the MMA, its neighboring regions, Regions III and IV-A, and Regions VI and XI. (Table 46). Perhaps it is not purely accidental that these regions also rank as the most economically developed. To a large extent, this pattern shows that the regional distribution of a country's infrastructure is closely geared to the regional distribution of economic activities. The concentration of past public investments in these areas reflects the country's need for rapid industrial growth in the 1950s and 1960s which, in turn, required the concentration of infrastructure development in a few regions that possessed the greatest potential for industrial location. (At that time the diversion of resources to backward regions might have had adverse effects on the overall growth of the national economy.) In a study[87/] made to determine the factors influencing the regional allocation of public expenditures in the Philippines, population level, urbanization, industrialization and commercialization were found to have strong explanatory significance. This finding seems to suggest that infrastructure expenditures were more a consequence of, rather than a

stimulus to, a region's economic growth. As the leading regions became more developed, their demand for more infrastructure facilities to meet the requirements and to offset the unfavorable externalities of economic growth rose correspondingly. And as these facilities were provided, concentration of economic activities continued, thereby reinforcing their dominance.

B. Role of Infrastructure in Regional Development.

The grave consequences of this past concentration of infrastructure investment on the degree of spatial disparities among regions are very apparent. Hence the goal of regional development is embodied in the national plan. As an initial step, we must verify the extent to which the public expenditure program can be used to promote regional development and narrow down spatial disparities. It should be stressed at the outset that, since the bulk of the regional structure of a country is more or less predetermined and a large portion of its marginal growth arises from development of existing activities, it would seem inevitable that the influence of infrastructure policy on regional development can only be a slow and long-term one.[88/] Thus it would be pointless at this period to evaluate if there has been any significant change in the geographical distribution of infrastructure investment since regional development was incorporated as an aim of national development and, more so, whether these investments have had any impact, favorable or otherwise. Nevertheless there are some indications of the future direction of public investments that are quite alarming insofar as the issue of spatial equity is concerned. The planned massive infrastructure build-up in the MMA largely financed by the national government (first mentioned in Chapter V) appears to run directly counter to the policy of decentralizing economic activities to the regions. Even in the

highway and portworks development program 1978-87 (Table 47) the metropolitan region will garner a large chunk of investments. Of course it cannot be claimed categorically that this favorable treatment of the MMA is entirely unjustified. After all this region, just like any other, is beset with its own problems. However, in view of the industrial dispersal policy, the need for restraint systems as a means of controlling the MMA's continued growth was emphasized in the preceding chapters. Since infrastructure provision has played a key role in the growth of the MMA, a redirection of infrastructure investment away from this areas is a primary component of restraint systems.

Problematic trade-offs between spatial equity and efficiency are involved in determining the role of the public expenditure program in regional development efforts. A dsipersion of infrastructure resources away from the MMA may retard, not only its own growth, but possibly that of the whole economy unless the other regions are able to offset the MMA's probable losses. Continued concentration, on the other hand, heightens regional disparities. The resolution of the equity versus efficiency issue sets the basis for the use of infrastructure in regional policy implementation. Again the planning and political processes shall pursue different objectives in this resolution. The former advocates concentrated dispersal in line with regional priorities for the industrial dispersal strategy and the IRDPs, while the latter prefers a wider distribution of investments. However, due to the political power of its present leadership, the MMA may overwhelm any preferences forwarded by both processes; in fact, this seems to be happening at present.

Another requirement for determining the role of infrastructure is an

assessment of existing deficiencies and how these deficiencies affect or are responsible for the prevailing regional situation which we deem necessary to modify. With such an assessment, the regional allocation of infrastructure investment can be better substantiated. Very often there is a tendency to use standards or norms, like roads per unit area or schoolrooms per thousand population,as a measure of regional disparities and subsequently as a basis for policy guidelines for resource allocation without fully realizing their inherent limitations. Moreover the provision of infrastructure is considered as a panacea for the underdeveloped regions. It should be recognized that, while the low level of infrastructure in some regions is indeed a serious bottleneck in their growth process, no amount of infrastructure will promote economic growth unless the necessary complementary preconditions also exist.[89/] In some cases there are deficiencies that have to be eliminated first before other things can work. For example, the inadequacy of the transport system and power in Region II and flood control in Samar(Region VIII) are impediments to any regional effort. It is therefore important to assess regional infrastructure needs relative to the development thrust of the regions in order to support proposals regarding the role of infrastructure in regional policy. Subsequently criteria for regional investment policy can be set.

Since it is not possible to implement all that needs to be done in a short time, priorities have to be established in order to provide the base for planned regional development and to reduce regional disparities. Similarly priorities between sectors or kinds of infrastucture as transport, power or housing are necessary. In no case will priorities between regions or sectors represent a total selection of one alternative over another but

rather the identification of a particular thrust in that region or sector consistent with regional development objectives.[90/]

Concluding Remarks

Undeniably it is clear that infrastructure development policy is only one, but an important one, of the components of regional policy. After realizing the adverse impact of past regional patterns of public expenditures, some decentralization of infrastructure investments appears to be warranted in support of spatial equity objectives. Accordingly there is a need to modify the criteria for investment decisions in order to take explicit account of equity objectives, thereby giving lagging regions a fair share of public investments. The IRDPs are a step towards this direction.

Since the large part (about 75 per cent) of public investments is made by the national government* coupled with the limited revenue raising powers of local governments, the extent to which the infrastructure expenditure program is used as an implementing instrument of regional policy is contingent upon the degree of commitment of the central power to the whole process of regional development. With this commitment the national expenditure program can further distributional objectives. This is why the planned infrastructure expansion in the MMA should raise serious concern. In addition to national government support, the delegation of substantive powers to the institutional mechanism at the regional level - the RDCs - is a prerequisite to determining the proper role of infrastructure in the regional development thrust. The RDC must be in a position to influence national decisions related to resource allocation.

*During the 1960s and early 1970s public investment averaged about 2 per cent of GNP. About 75 per cent was undertaken by the national government, 15 per cent by public authorities and 10 per cent by the local governments.[91/]

If the regional allocation procedure for the national infrastructure program ignores equity considerations, this may thwart any attempt at rectifying regional imbalances. This is especially important since the interaction between the planning and political processes often results in over-ambitious collections of programs and projects whose total financial requirements usually exceed national government capability. The national government may eventually decide by itself which regions should receive priority in the resource allocation process. Input from the regions is necessary in order to impress upon decision-makers the need for considering both spatial equity and efficiency objectives.

Table 46 Regional* Allocation of Infrastructure Expenditure (in percent)

Region	All Infrastructure		Portworks		Waterworks		Irrigation		Flood Control & Drainage		Buildings, Schools and Hospitals		Highways
	FY 1959-61	FY 1971-73	FY 1959-61	FY 1971-73	FY 1959-61	FY 1971-73	FY 1959-61	FY 1971-73	FY 1959-61	FY 1971-73	FY 1959-61	FY 1971-73	FY 1971-73
I	4.8	4.2	2.9	2.9	7.6	1.0	6.5	1.2	3.9	6.2	0.2	5.7	5.5
II	4.4	6.3	1.1	0.1	2.5	.9	13.8	4.2	3.5	1.8	0.7	2.7	18.3
III	7.0	27.8	0.2	1.1	5.4	2.9	15.8	58.0	43.2	37.6	1.2	10.9	9.3
IV	49.6	28.3	70.2	63.4	48.4	89.3	10.6	5.6	18.1	29.5	68.9	49.6	16.7
V	4.3	7.2	3.7	4.5	1.5	1.9	19.7	1.2	10.9	4.7	-	3.9	13.6
VI	7.1	1.8	2.9	1.8	4.9	0.4	17.8	2.0	4.6	3.7	3.5	7.1	0.3
VII	1.9	2.9	4.2	2.4	2.0	0.2	0.0	0.0	3.3	1.5	-	3.6	7.7
VIII	5.9	8.8	4.6	9.0	10.1	0.6	6.5	4.0	0.4	4.8	0.4	14.4	16.9
IX	1.6	2.2	3.1	2.9	1.3	0.3	1.7	3.2	0	2.7	-	0.4	0.9
X	2.3	8.9	3.9	7.8	3.6	2.0	0.1	11.8	1.8	3.3	0.0	0.8	8.8
XI	11.1	1.6	3.1	4.0	12.2	0.5	7.9	8.8	10.1	4.3	24.9	0.9	2.0
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

*Based on regional classification in 1974. The present Region XII was formed by combining 2 provinces from Region X and 3 provinces from Region XI.

Table 47 Regional Distribution of Planned Highway and Portworks Expenditures, 1978-82

	Highways	Portworks
PHILIPPINES	100.0	100.0
LUZON	30.7	27.6
I	3.4	2.2
II	3.2	1.8
III	1.2	1.3
IV*	19.7	10.6
IV-A		9.4
V	3.2	2.3
VISAYAS	16.2	9.9
VI	7.8	2.9
VII	6.2	2.7
VIII	2.2	4.3
MINDANAO	8.1	16.3
IX	2.1	3.2
X	1.9	4.8
XI	1.2	4.5
XII	2.9	3.8
Interregional or Nationwide	45.0	46.2

* For highways, Regions IV and IV-A are combined.

Source of Basic Data: Five-Year Philippine Development Plan, 1978-82

PART IV

On the basis of the evaluation exercise, Part IV presents the major findings and conclusions of this study. It highlights the consequences of the interaction between the planning and political processes, in terms of the trade-offs between the spatial equity and efficiency objectives of regional policies. Recommendations are subsequently advanced for consideration in regional policy making.

IX. Results of the Study.

In the evaluation of policies, the main concern has been focused on interregional disparities and,to a lesser extent, on intraregional and personal income inequities. The overall strategy for spatial equity provides a framework by which the elimination of interregional disparities is achieved through the formulation of an internally consistent policy mix and the prioritization of the regions under each sectoral component of this package. While the first task is easily implementable from a technical perspective, the latter element of this strategy will require the interaction of the planning and political processes in deciding on regional disparities.

A. Major Findings and Conclusions.

1. We have seen the tendency for equal participation in nationwide centrally generated programs, since the dominance of the political process in policy making has been very much in evidence. Hence the selection of regional priorities for the overall strategy for spatial equity is indeed a difficult task. The political process attempts to pursue decentralization and attain spatial equity objectives through equal treatment for all regions. However, even assuming that these are achieved, a considerable loss in efficiency is the likely adverse consequence. The planning process, on the other hand, is making concessions in a bid to gain political acceptability for its proposed policies and programs. Unfortunately these concessions often jeopardize effective implementation. These observations are confirmed in the past experience of the regional development authorities, which were potentially powerful instruments for regional development because of the joining of planning to effective power. Regrettably political opportunism led to the indiscriminate proliferation of these public bodies, leading to

a dilution of resources, corruption and mismanagement, which eventually incapacitated their operations.

In a similar vein, the nationwide industrial estate program is also reflective of the concessions of policy makers to political pressures which call for equal regional participation in practically every program. The present features of this program offer the least political complications, disregarding the preference of the planning process for limited participation on the basis of comparative advantage and other technical criteria. Because of the ambitious plan of establishing at least one industrial estate in every region, the same problems which haunted the regional development authorities may be experienced. Moreover, due to the strict efficiency requirements for industrial promotion in a region, the construction of an industrial estate in a region with a poor potential for industrial location may just redound to a wasteful and inefficient use of scarce resources, which is the direct opposite of this approach's stated objective. The implementation of the industrial dispersal policy can be more effective by concentrating resources for industrial estate development to a few regions with definite comparative advantage as evidenced from their present industrial base, a well-developed infrastructure and emerging external economies. It is also possible that, once resource constraints are met, a quasi-prioritization process has to be made anyway, but if this is influenced more by political rather than technical factors, then inefficiencies will not be avoided.

Both the regional development authorities and the nationwide industrial estate program are centrally generated programs of the national government. Because of their prospects for enhancing regional growth as well as prestige,

the opportunities for political intervention look irresistible, not only during the design of the programs but especially in implementation stages. These programs are viewed in isolation by the regions, thereby reinforcing aspirations for extracting maximum share in each program.

2. One of the major causes of the problem of interregional inequity has been the strict adherence to efficiency requirements when there is an overriding national objective. This is confirmed in the past regional allocation of public expenditures in resource allocation in view of the country's need for rapid industrial growth. The concentration of public investments in these areas contributed to present interregional disparities. (Of course this should not be misconstrued to mean that the status of the MMA as the national capital did not also influence decisions.) More recently, in pursuit of the national objective of food self-sufficiency, priority in the Masagana 99 coverage was given to productive ricelands located in more developed regions. These areas had previously been beneficiaries of irrigation investments because of their complementary role to the major urban cneters, particularly the MMA. In both of these instances, benefitting regions already fall on the upper portion of the regional income spectrum.

Whenever a national objective clearly dominates any regional goal, it is relatively easy to overcome poltical pressures originating from the regions, regardless of the motivations behind such pressures. Besides, the MMA was and still is the most politically powerful, thus it was naturally favored in the national decision making set-up. In the rice production program, natural factors such as the limited availability of irrigation systems in effect excluded certain regions, thereby making the task of establishing regional priorities in program coverage less problematic. In essence,

therefore, spatial equity objectives can be relegated to an oblivious position if there is a particular national objective that is based on tight efficiency conditions.

3. An essential component of the overall strategy for spatial equity is the Integrated Rural Development Program (IRDP), which appears to be the exception to the mutual exclusivity between equity and efficiency. These two objectives are likely to be achieved simultaneously since preference has been given to depressed regions or provinces. In addition the diversion of resources to these areas does not sacrifice efficiency in resource allocation inasmuch as multisectoral investments are complementary and designed to create a synergistic impact on the regional growth process. In most cases, investments are concentrated in resource-rich sections of the regions, e.g., the river basins.

So far the IRDPs have not been exposed very much to political pressures, despite their being potentially attractive sources of funds, simply because policy guidleines specifying the priority to be accorded to poor areas have been closely followed. Moreover the institutional mechanism for the implementation of this program has been given considerable decision-amking powers, ranging from planning to actual physical construction. The program is also supervised at the national level by a select group of cabinet ministers. These obvious manifestations of central government support could have discouraged initially political intervention. However, with the apparent success of this regional development program, there seems to be a trend towards widening its coverage, perhaps a reflection of political intrusion which could eventually dilute its effectiveness.

4. Despite the organizational reforms undertaken to strengthen the

RDCs, the balance of power is still lopsidedly in favor of a few regions which enjoy preferential treatment, arising from their strategic political importance and/or direct access to the central power. Greater delegation of substantive powers and the allocation of more resources provide the source of strength to these regions. In contrast, the other regions still have inadequate executive powers due to the slow pace of the institutional decentralization program. This deficiency inhibits their ability to influence national and regional decisions especially those related to resource allocation, notwithstanding the introduction of the RBS, the RDF and RIP. For example, if the RDC cannot require compliance to its decisions by line agencies, then it may be difficult to ensure that agency regional budgets are directed towards RDC plan priorities. With limited powers, most regions are further disadvantaged vis-a-vis the special regions.

In view of the unequal status, the tendency for all regions aiming for participation in every development program grows even stronger in an attempt to improve the chances for acquiring resources from at least some programs. This however may result in an inefficient allocation of resources, not only at the interregional scale but also at the intraregional level since regions fail to specialize in sectors where they have an edge. Likewise, due to the limited powers of the regional planning bodies, the influence of local politicians becomes potentially powerful and capable of undermining the effectiveness of the policy making process. The technical component of policy is greatly weakened and its intended impact may never materialize.

The adverse consequences of an uneven distribution of power among the regions are magnified during the implementation stage. Public investments

like the IRDPs and the industrial estates are mere components of the national expenditure program. Inasmuch as public expenditure decision-making is done within a political or institutional context, areas enjoying more support from the national government are able to extract more resources. On the other hand, most of the RDCs, even if their claims are validated in regional plans, may not necessarily receive adequate attention and resources from the national government.

The essence of a decentralization program is the commitment of the national government to the development of strong subnational organizations which are in a position to determine their own set of priorities and identify alternative courses of action directed towards these priorities. A prerequisite however is the devolution of decision-making to the regional level and control over resources given to the RDC as a body and to sectoral regional agencies. In view of the increased responsibilities of the RDCs and the regional line offices, the provision of more executive powers commensurate with these new roles and the development of additional technical capability are necessary. With the formation of strong regional institutions, the prospects for effectively pursuing economic decntralization become more attractive.

5. At the intraregional level, almost all policies strive basically for efficiency in order to facilitate the regional growth process. Disparities within the regions are likely to worsen unless regional policies and programs induce more spread effects. At present, due to the stringent locational demands of industries, a wider dispersion is precluded, with industrial dispersal measures showing an urban bias. In fact, even the small industries which are being promoted for the mobilization of the rural

sector are still found in urban areas because of the availability of physical facilities and services and other inherent advantages of urban locations. Besides the low level of rural incomes militates against the emergence of more locally-based manufacturing activities.

The rural development programs, the IRDPs and Masagana 99, attempt to raise productivity and income levels in rural areas. In general, however, these programs benefit the more productive segment of the agricultural sector. A large portion of the poor population, the informal and traditional agricultural sector, is not reached by these development efforts. Consequently the current rural development programs, while capable of raising overall regional incomes and setting the stage for off-farm-based fields of endeavor, may fail to uplift the conditions of the rural poor.

B. Recommendations.

1. On the Overall Strategy for Spatial Equity.

In the overall strategy for spatial equity, the industrial dispersal policy shall assume the leading role, with the IRDPs providing a complementary scheme. In view of the continuing convergence of industries towards the MMA despite some initial decentralization measures, the implementation of the industrial dispersal policy must be phased so that, in the short term, it is used not so much as a strategy for accelerating the growth rate of the lagging regions, but mainly as a strategy for controlling the growth of the MMA. Accordingly short term priorities need to be established. These in turn will affect the nationwide industrial estate program in terms of scheduling of actual construction and exploring the possibility of industrial areas or zones.

Analysis suggests that an interregional framework, using a region's

agricultural resource potential and its comparative advantage for industrial location, is appropriate as a basis for determining regional priorities. The results of this analysis show that, as an initial step toward the regional dispersal of industries, the present industrializing regions, Regions I, VI, VII, X and XI, should be given priority inasmuch as these regions are best suited to act as countermagnets to the MMA. It is in these regions where the existing industrial centers are located and where the scope for agricultural expansion is restricted. Therefore these regions already have an initial advantage for further industrial expansion in the form of a broadening manufacturing and services base, available supporting infrastructure and a semblance of emerging agglomeration economies. From an efficiency point of view, the promotion of existing industrial locations in these areas can counteract the MMA's dominance. Corollarily a key element in industrial dispersal is the imposition of restraint systems in the MMA to ensure that industrial growth in the priority regions will be at the expense of the MMA rather than the non-priority regions. In addition, the diffusion of growth from the proposed industrial estates to their peripheries should be effected possibly through the composition of an industrial mix with greater linkages to the local economy, i.e., labor supply, raw materials, etc. and to other industries in the regions, i.e., through interindustry complementation.

Meanwhile the non-priority regions must be given preference in the selection of IRDPs since they are poor and predominantly rural areas. This is being followed at present with most of the identified sites located in depressed regions. Moreover the marked agricultural orientation of projects fits into the patterns of sectoral priorities since, in many cases, land and labor productivities are low largely as a result of inadequate services

and facilities. With the elimination of existing deficiencies in basic rural infrastructure, especially in irrigation and transport, the lagging regions may subsequently benefit from the package of services offerred under the national rice production program, which currently favor the more agriculturally developed regions with available irrigation service. Present priorities in Masagana 99 reflect production maximization and efficiency goals because of the drive for self-sufficiency. However, once the status of the country's self-sufficiency is relatively stable, spatial equity objectives can be considered explicitly in program design, with the program being used as a means of aiding agriculture in lagging regions. As farm production increases in response to intensification measures, the transportation element of the IRDPs becomes critical in linking production areas to regional and external markets.

When the regions reach a certain level of agricultural development, the prospects for industrialization are improved immensely. With the rise in farm incomes, small rural-based industries may emerge and become viable. With an expanded transport system, there may even be possibilities for interregional complementation whereby agricultural products of one region are processed in another region which has been chosen as priority area in the industrial dispersal program. Complementation can be a way of diffusing the impact of industrial dispersal to areas than the actual location of manufacturing plants and industrial estates. Hence, with the IRDPs supporting industrial dispersal policy, the short-term tendency for regional income divergence is attenuated. Poor regions are gradually prepared for eventual industrialization and more active participation in the regional dispersal of industries.

Phasing and prioritization constitute attempts at achieving efficiency and spatial equity objectives simultaneously because they aim for a moderate degree of equity in the short run in exchange for some efficiency gains. The significance of prioritizing regions in the industrial dispersal program and exploring alternatives to full scale industrial estate development becomes more evident when the problem of resources is confronted. If an efficient allocation of resources through infrastructure provision is truly the main concern, then an implementation strategy that could lead to a dilution of resources, e.g., establishing one industrial estate in every region, must be avoided. Furthermore, since selected sites for industrial estates require different levels of investments for conversion into suitable locations for industry, planned physical development of the sites must be regulated accordingly.

Phasing seeks to identify areas with the greatest potential for industrial production in the short term. It is likely to encounter much opposition inasmuch as some regions are necessarily excluded, at least temporarily. Moreover the industrial dispersal policy is viewed in isolation rather than as a component of a broader strategy for spatial equity with different sectoral components. Therefore it is imperative that the package of sectoral policies and programs that compose the overall strategy for spatial equity be presented for evaluation instead of taking each individual component on its own merit. Clear policy implementation guidelines need to be set at the national level specifying regional priorities under each sectoral program in order to attain an efficient allocation of resources, lessen political pressures for equal participation in each program and allow some form of regional specialization.

2. On Further Strengthening the Regional Planning and Implementation System.

It has been noted that, due to the pervasive influence of politics in the formulation and implementation of national and regional policies, the tendency has been towards equal regional participation in centrally generated programs. Although the national government has conducted studies or has set technical criteria to determine the extent of each region's participation, these studies or criteria are conveniently ignored or modified in concession to political pressures. In effect, it is the political process that largely decides the regional allocation of a program and its resources. Given such a result, two possibilities exist, viz; 1) equal participation of the regions which, if implemented, would usually lead to a dilution of resources, and 2) if resource constraints are obviously faced in implementation, the regions close to the national government power receive priority. In any event, the probable ultimate outcome is inefficiency in resource allocation. In addition this type of situation also impedes regional specialization since every region seeks involvement in almost every program. Therefore adverse consequences on interregional and intraregional resource allocation are likely to occur.

The recent institutional improvements like the RBS, the RDF and the RIP, aim to provide flexibility and ensure efficiency in resource allocation. More specifically the purpose is to "appropriate" to the regions some amount of resources, the use of which is at their discretion according to regional plan priorities. In this manner, uncertainty is reduced and the region is expected to be more selective in its choice of programs and projects since it is aware of the most probable level of resources at its disposal. Moreover a more efficient allocation is anticipated to be achieved because, even

assuming that the interregional distribution of national government resources is determined primarily by the political process, the region can still direct whatever resources has been allocated to it to uses which are legitimized by the planning process. An implicit assumption in this entire scheme is that the interaction between the technocracy and the political leadership at the RDC level has reached a compromise set of priorities reflective of the regional situation's real needs. Therefore the presence of a strong RDC set-up or regional planning machinery is an essential requirement.

The main bottleneck that presently lies in the path of this ideal decentralized resource allocation model is that the requirement for a strong regional planning set-up is only partially met. While the institutional improvements have strengthened the RDC, the decentralization of central government function has proceeded sluggishly and the additional demands on the regional offices have not been matched with the corresponding technical expertise.

With the planning exercises behind them, the RDCs are moving towards plan implementation, hence the recent organizational reforms. However the ability to influence resource allocation through the new systems has been constrained by the lack of substantive and executive powers delegated to the RDCs which has, in turn, impeded the proper matching of resources to programs and projects needed by the region. Functions related to implementation like project planning are still centralized at the national office and many projects included in regional plans have been identified by the head offices. On the other hand, the technical capability for these functions at the regional level has not yet been fully developed simply because these

implementation-related tasks have just been added to the regional offices' duties. Therefore, to facilitate decentralization of more national government functions, the required capability at the regional level must first be achieved in order to justify demands for more power and assure a smooth turnover of responsibilities.

Aside from decentralization and manpower development, the devolution of greater authority to the RDC as a body must be effected. At present, the RDC does not have its own financial resources and therefore has to influence by persuasion the line agencies which have the regional budgets. To be truly effective, the RDC must have greater authority over these line agencies and, even over local governments, to ensure compliance with its decisions and the allocation of resources according to its priorities. In this way, it can recommend a system of priorities for the allocation of budgetary resources for programs and projects of national government agencies and subsequently monitor compliance.

All these proposals are directed at further strengthening the RDC in view of additional demands arising from the movement from plan formulation to plan implementation. Vested with additional powers, the RDC can impose its own priorities and ascertain that these are adequately reflected and supported in regional budgets of line agencies. Furthermore an improved planning and implementation capability in the RDC technical staff and regional line agencies will solidify the technical element of plans and investment programs. Sectoral thrusts of the regions can be determined on the basis of more objective criteria as opposed to the present tendency for involvement in all programs. With the formation of a potent RDC machinery, it becomes less vulnerable to political pressures and the danger for the

diversion of funds to "pork barrel" projects is decreased. A more amicable relationship between national government agencies and local elective officials at the regional level may be developed when benefits from programs and projects truly improve local conditions. Eventually the efficiency at which resources are used at the regional level will create positive impact on future allocations from the central government inasmuch as claims on resources are legitimately supported by actual performace. This resource allocation scheme is tantamount to actually allocating monies on a regional basis and it provides an essential component to the decentralization program.

Appendix 1. Pertinent Excerpts from the Philippine Development Plans.

A. National Development Plan FY 1974-77.

1. In view of the glaring growth imbalance among regions, more emphasis is now being given to regional development and industrialization, thus in addition to the correction of policies which artificially favor a few selected areas, the integrated approach to regional development is being utilized. This approach calls for an integration of physical development with economic, social, administrative and financial aspects of development into a common plan for a given area...

2. In order to disperse the gains of development and avoid the formation of enclaves in the Metropolitan Manila area and other urban centers, regional development efforts are now being intensified...

3. Special attention in this regard will be directed to the development of the Muslim areas... the recent upsurge of dissidence in Muslim Mindanao has underscored the need for intensive implementation of regional dispersal policies with a view towards spreading the benefits of economic growth to the different regions particularly the Muslim areas...

B. National Development Plan FY 1978-82.

The new Plan contains a whole chapter entitled "Regional Development Framework". In the other chpaters, starting from the national goals and policies to the economic, social and infrastructure sectors, the regional dimension is very evident. Some relevant excerpts are:

1. The basic objective of the current thrust in the development of regions is to effect equity of opportunity for each region to exploit its full potential with respect to its demographic, economic, social, political and environmental resources. The intent here is to make the development of depressed and lagging regions grow at rates faster than the relatively more developed regions in order to lessen regional inequalities without unduly hindering the growth of the latter regions nor slowing total national development...Regional planning and development should be viewed both as goals of national development and also as major instruments by which the ultimate aims of promoting social equity, increasing per capita income and effecting a more equitable income distribution are being achieved and harmonized.

2. A number of regions in the country lag behind the more developed ones in terms of growth, employment and provision of basic services to their growing populations. These depressed regions especially the rural areas became the seat of discontent in the past.

3. The state will promote regional balance in economic opportunities. Infrastructure support, appropriate incentives and selective administrative prescriptions will be provided to encourage the location of new industries and other development activities in different regions taking into account resource availability, as well as the existing and potential size of the market.

Appendix 2 Salient Features of Letter of Instruction No. 22

A. Functions of the Regional Development Council (RDC)

1. Conduct a comprehensive and detailed survey of the resources and potentialities of the region which will serve as the basis for the preparation of long-range and annual plans for the region within the guidelines set by NEDA.

2. Translate the national economic goals into more specific regional objectives which shall be reflected in the plans and programs of action prepared for the region.

3. Develop a research program involving continuing studies on the social, economic and cultural development of the region.

4. Consider and adopt an annual regional economic report for transmittal to NEDA.

5. Extend planning and other related forms of technical assistance to local governments, local planning boards, and sectoral departments of the national government existing in the region and private entities.

6. Coordinate all planning activities of sectoral departments and local planning boards.

7. Make the necessary changes, amendments and revisions in the regional plans to improve and update them.

B. Organization

The Regional Development Council is divided into three basic components, viz: 1) the Council Proper, 2) the Executive Committee and 3) the Technical Staff. The RDC Council Proper is composed of the governors of the provinces and the mayors of the chartered cities comprising the region, the regional directors of the Bureaus of Agricultural Extension and Plant Industry of the Department of Agriculture; the regional directors of the Bureau of Public Highways and Bureau of Public Works under the Department of Public Works, Transportation and Communication; the regional directors of the Departments of Labor, Education and Culture, Health, Social Welfare, and Local Government and Community Development; the general managers of the regional and sub-regional development authorities existing in the region if any, and the NEDA Regional Executive Director. The Chairman of the Council Proper is elected among the elective members while the NEDA Regional Executive Director automatically becomes the Vice-Chairman. (Presently the RDC Chairman is appointed by the President upon the recommendation of the NEDA.)

Since the Philippines adopted the parliamentary system of government in 1978, the government departments have been called ministries.

The Executive Committee of the RDC is composed of the regional directors of the Bureau of Public Works, the Bureau of Agricultural Extension, the Bureau of Plant Industry, the Department of Local Government and Community Development, the two representatives for the elective members of the Council Proper, the general managers of the regional or sub-regional development authorities, and the NEDA Regional Executive Director who shall be the Chairman of the committee.

Among the important functions of the Executive Committee are:]) review and recommend for adoption of the RDC regional plans, programs, policies and guidelines, and 2) review a-nual regional economic reports prepared by the Technical Staff for the consideration of the Council.

The Technical Staff is composed of the NEDA personnel in the region. It is headed by the NEDA Regional Executive Director. There are two divisions of the NEDA Regional Office, viz: 1) the Plan Formulation Division, and 2) the Program Coordination Division.

The Plan Formulation Division has the following functions, among others; 1) the formulation of regional plan, programs and policies, 2) conduct a comprehensive and detailed survey of the resources and potentialities of the region, and 3) conduct research on social, economic and cultural development of the region. On the other hand, the following are some of the functions of the Program Cooordination Division: 1) preparation of annual regional economic reports for submission to NEDA central office, 2) coordination for the RDC of all planning and programming activities of local government, local planning boards and sectoral departments of the national government existing in the region, and 3) extend planning and other related forms of technical assistance to the local governments, local planning boards and sectoral departments of the national government and private entities.

Appendix 3 Actual Regional Land Disposition, 1975

	Total Land Area A	Farmland 1975 Total[1] B	Urban[2] Land 1975 C	Forest[3] Land 1975 D	Residual[4] Openlands 1975 E
PHILIPPINES	30,000	8,802	816	12,786	7,596
LUZON	14,139	3,599	590	6,121	3,829
I	2,157	357	42	827	909
II	3,640	617	15	2,093	915
III	1,828	539	200	484	605
IV*	4,751	1,110	300	2,398	943
V	1,763	954	33	319	457
VISAYAS	5,660	1,946	130	1,603	1,981
VI	2,022	783	56	340	843
VII	1,495	488	48	279	680
VIII	2,143	675	26	984	458
MINDANAO	10,201	3,257	96	5,062	1,786
IX	1,869	671	17	778	403
X	2,833	788	29	1,502	514
XI	3,158	955	25	1,666	512
XII	2,341	843	25	1,116	357

*Includes MMA

[1]Farmland area from 1971 Agriculture Census projected at 1960-1971 annual growth rates for regions where 1971 area is greater than 1960 area; otherwise, 1975 area = 1971 farmland area.

[2]Human Settlements Commission

[3]According to Bureau of Forest Development

[4]Calculated as E = A - (B + C + D)

Appendix 4 Projected Regional Land Disposition, 2000[1] (Thousand Hectares)

	Total Land Area	Land Available to Agriculture 2000 Total	ABCD Land	MX Land	Urban[2] Land 2000	Forest Land 2000
PHILIPPINES	30,000	15,351	6,471	8,880	1,859	12,790
LUZON	14,139	7,003	2,718	4,285	1,236	5,900
I	2,157	1,039	308	731	90	1,028
II	3,640	1,766	857	909	60	1,814
III	1,829	807	382	425	350	617
IV+IVA	4,751	1,988	863	1,125	650	2,113
V	1,763	1,403	308	1,095	86	274
VISAYAS	5,660	3,111	1,444	1,667	287	2,262
VI	2,022	1,281	336	945	120	621
VII	1,495	775	136	639	110	610
VIII	2,143	1,055	972	83	57	1,031
MINDANAO	10,201	5,237	2,309	2,928	336	4,628
IX	1,869	1,144	575	569	66	659
X	2,833	1,123	610	513	120	1,590
XI	3,158	1,550	437	1,113	80	1,528
XII	2,341	1,420	687	733	70	851

[1]The methodology used in constructing this Appendix is that land not needed for forest or urban use is potentially available to agriculture as long as it is of ABCD or M or X quality. It is assumed that urban land will used up on additional use one million hectares of ABCD land, which will come from present agricultural land. To compensate for this, it is expected that agricultural land area will expand into M category. Presently, only in Regions II, IV and VIIII are there unutilized ABCD land totalling 285,103 and 320 thousand hectares, erspectively.

[2]Human Settlements Commission

[3]According to Natural Resources, Perspective Year 2000, NEDA Sub-committee on Natural Resources, December 14, 1976. Excludes 960,000 hectares for forest range/grazing land. Area totals regionalized using BFD "Necessary Land Balance Rate" which are disaggregated to the provincial level.

Appendix 5 Employment Potential in Agriculture by Region

	Employment in Agriculture 1975[1]	Additional Employment Opportunities in Agriculture due to Additional Land				Agricultural Employ-Potential 2000		Annual Growth Rate Percent	
		Irri-gation[2]	ABCD[3]	MX (H)[4]	MX (L)[5]	H	L	H	L
PHILIPPINES	7,454	625	(164)	3,721	2,129	11,636	10,044	1.80	1.20
LUZON	3,132	315	(129)	1,703	1,103	5,021	4,421	1.91	1.39
I	619	46	(24)	332	233	973	874	1.83	1.39
II	496	102	120	417	279	1,135	997	3.37	2.83
III	548	30	(75)	106	76	609	578	0.42	0.21
IV-A	827	87	(124)	487	337	1,277	1,127	1.75	1.25
V	642	50	(27)	362	180	1,027	845	1.90	1.11
VISAYAS	2,045	87	86	688	203	2,906	2,421	1.42	0.68
VI	764	39	(32)	361	182	1,132	953	1.59	0.89
VII	674	17	(31)	262	22	922	682	1.26	0.05
VIII	607	31	149	65	0	852	787	1.37	1.04
MINDANAO	2,277	223	(122)	1,329	823	3,707	3,201	1.97	1.37
IX	467	28	(25)	378	223	848	690	2.41	1.57
X	621	65	(46)	201	113	841	753	1.22	0.77
XI	638	69	(28)	254	154	933	833	1.53	1.07
XII	551	61	(23)	496	333	1,085	922	2.75	2.08

[1]Average of February and August 1975, NCSO Household Surveys of Employment. Includes persons 10 years old and above employed in agriculture and at work.

[2]Calculated on the basis of NIA irrigated area figures adjusted by NEDA-RDS 1975 workshops, assuming additional employment of one manyear for every two hectares of cultivated land which becomes irrigated in accordance with estimated labor/land ratios. This is also the ratio used in the 1974 ILO Mission Report "Sharing in Development," p. 461.

[3]Calculated on the basis of one manyear of employment gained for every two hectares of non-irrigated ABCD land brought into agriculture, as per estimated Labor/Land ratios for this category of land. Conversely, for every hectare of ABCD land lost to urban use it is assumed that 0.5 manyear of employment in agriculture is lost.

[4]MX(H) is the additional employment capacity of agriculture due to the incorporation of non-pasture MX lands on the high assumption regarding the availability of these lands, i.e. assuming that the 1971 Agriculture Census Coverage extended to these lands. The non-pasture MX land availability calculated in proportion to the present disposition of MX lands in public forest lands as between pasture leases and permits and cultivated. For consistency, the coefficient of 0.8 for M lands as estimated was applied to calculate the employment potential.

[5]MX(L) is the additional employment capacity of agriculture due to the incorporation of non-pasture MX lands on the low assumption regarding the availability of these lands, i.e. extend to these lands. The non-pasture MX land availability calculated in proportion to the present distribution of MX lands in public forest lands as between pasture leases and permits and cultivated. For consistency, the coefficient of 0.665 for MC lands as estimated was applied to calculate the employment potential.

Appendix 6 Description of Soil Types

Class A: This contains very good land which can be cultivated quite safely, requiring only simple but good management practices. It is level or nearly level. The soils are dep, dark, usually fertile or can be made fertile under good management. These are usually alluvial soils which can be silty or sandy. Erosion is no problem, and special conservation practices are not needed except those to maintain the productive capacity of the soil. All kinds of crops common in the locality can be grown in this land class.

Class B. This can be termed as good land which can be cultivated safely with good farming practices. Some types are located on slopes and need erosion control measures. Other types belonging to this class are slightly wet and will need organic matter to retain moisture and plant food.

Class C. This land class has more limited uses than the previously class. It can be described as moderately good land, subject to exacting cultivation, careful management, and intensive conservation.

Either the land is on slopes up to 15 per cent and the soil is moderately deep and erosion occurs or will occur if unprotected, or the land is too sandy and deficient in plant food and soil moisture, so that conservation measures are needed, or the land is too wet for planting, and a drainage system is called for.

Class D. This land is good enough for occasional cultivation under careful management, but because of some features it cannot be used for regular cultivation. A large part is too steep for regular cultivation and this may cause soil erosion. The area may be too dry or too sandy, such that growing crops is possible only at certain times of the year.

The land may be better for grazing, and where rainfall is adequate, for forest land.

Class L. Class L consists of level to nearly level land but too wet or stony for cultivation. It is best suited to pasture or forest with good soil management.

Class M. Class M land is not suited for cultivation of any kind, limited somewhat to grazing or forestry use by features such as shallow soil or steep slopes.

Class N. This is steeper and rougher than Class M, and is more suited for forestry than grazing. It includes rough hills and mountains.

Class X. This consists of mangrove swamps, fresh marshes, and other permanently wet areas.

Class Y. This land is fit for wildlife or recreation purposes. These are either eroded, arid, rough, steep or stony, including rocky foothills, rough mountain lands, bare rocks and coastal sand dunes.

The different soil classifications may also be described according to purpose, thus:

Soil Type	Purpose
A, B, C, D	Cropland cultivation
D, L, M, N	Pasture or Forestry
X	Fishpond
Y	Recreation and Wildlife

Source: Bureau of Soils

FOOTNOTES

1. Chenery, Hollis, Ahluwahlia, Montek, et. al., "Redistribuiton with Growth", Cambridge, England, Oxford University Press, 1974. p. 55

2. The theoretical foundations surrounding this issue have been expounded upon in the works of such authors as Perroux, Hirschman, Myrdal, just to name a few. For a comprehensive review, see Harry Brooksfield's book, Interdependent Development.

3. This is based on the Hecksher-Ohlin version of comparative cost doctrine.

4. Williamson, Jeffrey. "Regional Income Inequality and the Process of National Development" in J. Friedmann and W. Alonso (eds), Regional Policy: Readings in Theory and Applications. Cambridge, MIT Press, 1975, Chapter 29 P. 160.

5. See for example "Economics of Urban Size" by W. Alonso in Papers and Proceedings, Regional Science Association, 26. 1971.

6. This has been confirmed by the experience of many countries, both developed and less developed, e.g., Japan, Philippines, Italy.

7. Misra, R.P. "Target Groups and Regional Development : Case for a More Comprehensive Social Policy" (mimeographed) p. 1.

8. Organization of Economic Cooperation and Development (OECD) "Reappraisal of Regional Policies in OECD Countries", Paris, OECD, 1974 P. 49

9. Even in national economic policy the issue between presonal equity and efficiency has been a major source of controversy. An attempt at resolving this issue is seen in "Redistribution with Growth" by Chenery, et al.

10. See for example Mera, Koichi. "Income Distribution and Regional Development" and Hansen, Niles "Public Policy and Regional Economic Development".

11. Sicat, Gerardo P. "Local Government and the Development Planning Process" in NEDA Development Digest, August 1975, Manila, Philippines p. 20.

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14. ibid.

15. Mangahas, Mahar. "Income Inequality in the Philippines: A Decomposition

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16. Robles, E.G. "The Philippines in the 19th Century", Manila, Malaya Books, 1969. p. 22.

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19. ibid. p. 40.

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22. ibid p. 17.

23. Sicat and Power, op. cit. p. 50.

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25. Sicat and Power, op. cit. p. 106.

26. Pernia, Ernesto. "Urbanization, Population Growth and Economic Development in the Philippines." Connecticut, Greenwood Press, 1977 p. 142.

27. ibid p. 123.

28. ibid p. 129.

29. Cheetham, Russell. "The Philippines: Priorities and Prospects for Development." World Bank Country Report, Washington, D.C., World Bank, 1976. p. 51.

30. See for example "Lacquian, Aprodicio. "Will Regional Authorities Really Work ?", The Local Government Bulletin. vol. 1. No. 3. November 1966.

31. Prado, Richard. "The Politico-Administrative Context and the Implementation of Regional Policies: An Inquiry into Some Interconnections. (The Philippines: A Case Study). Master's thesis, Institute of Social Studies, The Hague, Netherlands, February 1978, p.50.

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35. Prado, R. op. cit. p. 53.

36. Sicat and Power, op. cit. p. 68.

37. Prado, R. op. cit. p. 62.

38. Prantilla, E.B. op.cit.

39. Regional Development Projects, Supplement to the Four-Year National Development Plan FY 1974-77. NEDA Philippines, 1973. p. 10.

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44. Prado, R. op. cit. p.82.

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47. Prado, R. op. cit. p. 81.

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