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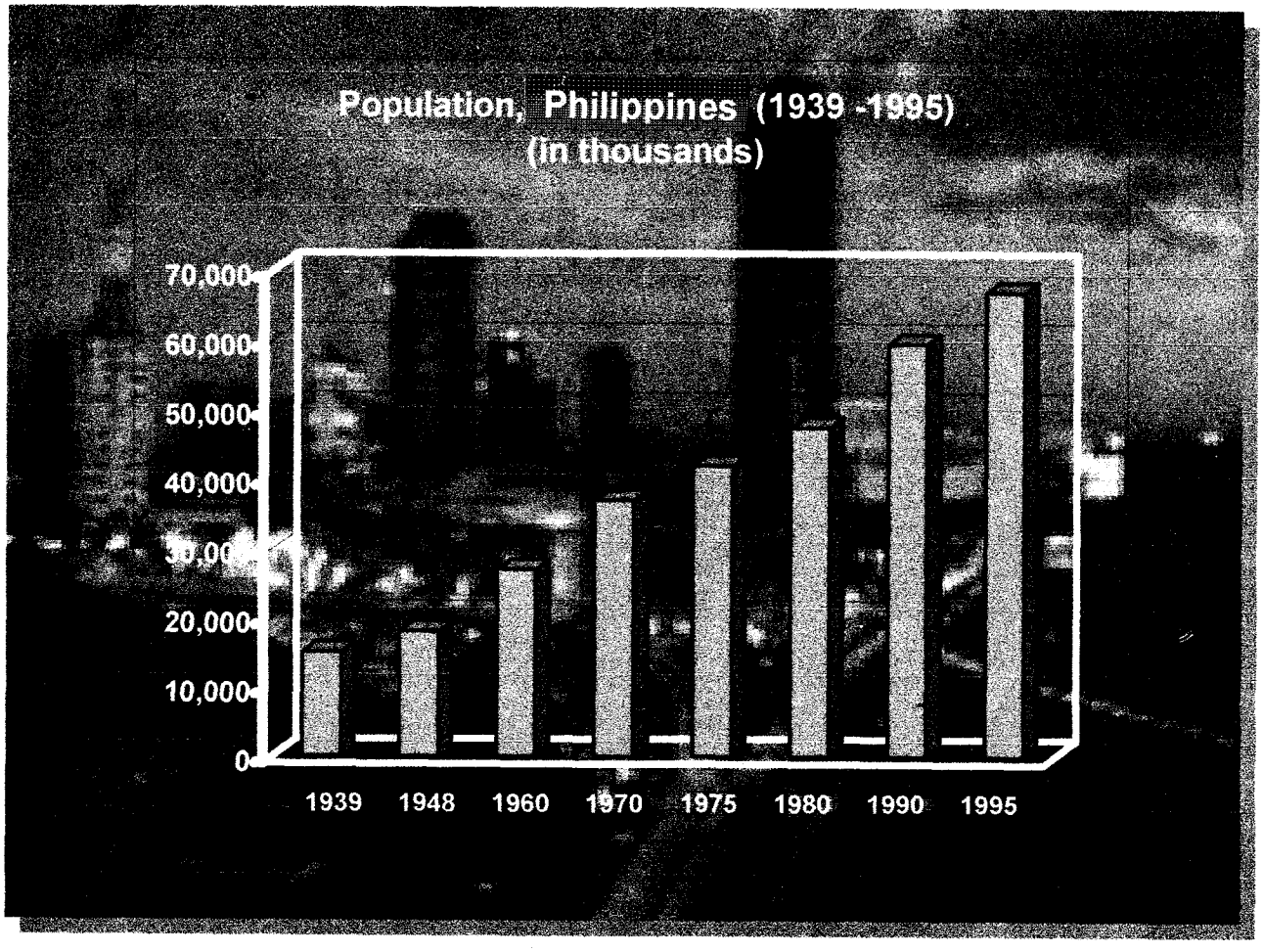

National Urban Policy Issues

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EDITOR'S NOTE

The articles in this issue are key input studies to the preparation of the National Urban Policy for the Philippines.

The first article by Dr. Benjamin V. Cariño examines how implicit and explicit socioeconomic policies affect the pattern and rate of change of long-term spatial development in the Philippines.

The second article by Dr. Norman R. Ramos establishes key issues affecting urban land demand and supply in the Philippines, and projects the demand for urban land under alternative economic growth scenarios.

The third article by Dr. Arturo G. Corpuz looks at the potential impacts of population growth and migration on market and labor supply potentials. The methodology was specifically applied to the Clark Economic Zone Sub-Zone.

Finally, the fourth article, also by Dr. Ramos, analyzes the fiscal aspects of urbanization focusing on "what needs to be done" to promote fiduciary responsibility in Philippine cities.

The articles synthesize the long experiences of the authors in dealing with the various issues and problems of urbanization on both policy and project levels.

The authors would like to acknowledge the financial support given by the United Nations Development Programme (UNDP) through the National Economic and Development Authority (NEDA). This valuable financial support enabled the authors to conduct and complete all required work and analyses.

N.R. Ramos

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BENJAMIN V. CARIÑO

BACKGROUND AND OBJECTIVES

The formulation of a national urban policy must necessarily address a number of challenges that confront the country's long-term spatial development. For instance, although the country has experienced fairly rapid economic growth in recent years, such growth has largely concentrated in the national capital region (NCR) and its periphery. Related spatial development challenges include the uneven distribution of the population, the rapid rate of urbanization, the concentration of economic activities in a few urban centers, and the wide socioeconomic disparities between urban and rural areas. These challenges are influenced not only by plans, programs and policies that are explicitly aimed at promoting a desired pattern of spatial development, they are also shaped by national economic and social policies, which may not be supportive of long-term spatial development objectives.

This study aims to document the possible spatial effects of both "explicit" and "implicit" social and economic policies. Such documentation would lead to the identification of points of conflict and compatibility among such policies. Thus, it would help avoid mutually obstructive policies and at the same time enhance the possibilities of mutually supportive ones.

Specifically, the objectives of this study are the following:

a. Identify explicit national and regional policies on the spatial distribution of population and economic activities;

b. Identify key national sectoral policies on trade, agriculture, environment, and other policies that may have important but implicit effects on the distribution of population and patterns of urbanization;

c. Assess the possible individual spatial effects of the aforementioned policies, identifying points of conflict and compatibility between the explicit and implicit policies; and

d. Recommend policies to reduce conflicts and to enhance complementarities among policies.

SCOPE AND ORGANIZATION

Some working definitions of key concepts used in this study may help establish the exact boundaries of the topic (see Robinson 1986). Explicit policies intentionally aim at a desired result or a spatial pattern. Whether or not such desired result is achieved is beyond the present scope of this study. Implicit policies, on the other hand, are unarticulated, unintended, and perhaps unperceived policies." (Robinson 1986:170). Such policies may, however, have greater impact on spatial patterns. It is important to note that the two types of policies constitute a continuum rather than a dichotomy. Implicit policies gradually shade into explicit, and policies having explicit effects in one area could create implicit impacts in another.

This study is organized as follows. The first section will note the important links between migration, urbanization and development. Indeed, although fertility rates have been found to differ between urban and rural areas, a major and growing component of urbanization is rural-to-urban migration. The next section will document explicit policies (including spatial development plans and programs) that have been recently adopted by the Philippine government, and which have obviously been designed to promote a more "decentralized" spatial pattern. Such a documentation will be brief as these plans and programs have already been described in another NEDA document (NEDA 1995) and are

contained in existing national, sectoral and regional plans. The third section will present a classification of implicit policies and assess how and why they affect patterns of urban growth. The final section will discuss overall policy recommendations and conclusions.

MIGRATION, URBANIZATION AND DEVELOPMENT

As shown in Table 1, the share of urban population to total population has continuously increased, a phenomenon that has been attributed to rural-to-urban migration. Urbanward migration has been traced to income and welfare disparities between urban and rural areas. In the words of Desmond (1971:77), "individuals, firms and other decision-makers wishing to maximize income tend to settle in physical locations which they believe to offer the greatest opportunities toward the achievement of this objective."

Urban-rural disparities in terms of various measures of welfare are an almost universal phenomenon, and urban-rural income ratios of eight or ten are common in developing nations (Renaud 1981). In the Philippines, the socioeconomic disparities between the urbanized regions, and the predominantly rural-agricultural regions have been well documented. As shown in Table 2, the disparities between the NCR (covering Metro Manila) and the rest of the country in the magnitude of the Gross Regional Domestic Product (GRDP) both in absolute and percentage terms are wide. The evidence presented reveals that from 1990 to 1994, the GRDP for the NCR constituted well over 30 percent of the total for all regions in the country. It is also noteworthy that the discrepancies do not seem to be decreasing, reflecting the relative ineffectiveness of development efforts aimed at rectifying the imbalance. The tendency of individuals and firms to maximize income by locating in the NCR and other large urban areas in the country is similarly well documented (see Carino 1979; Flieger 1976; INTERMET/IDRC 1974; Pernia 1978).

The pervasive rural-urban imbalance is based, in turn, on another well established but less obvious economic fact: that urban-industrial productivity per worker is almost always higher than rural-agricultural productivity per worker. Several factors have been noted to account for these differences in productivity. These include the modern technologies employed in the urban-industrial production processes; the higher levels of education of persons in urban areas; the diminishing returns to labor applied to a fixed amount of agricultural land; and urban agglomeration economies (Robinson 1986).

Beyond these factors, scholars have also observed that the numerous public sector services which are often more available in urban than in rural areas provide further external benefits to the urban industrial sector and its productivity (Robinson 1986; Lo and Salih 1986). Social and economic policies, therefore, can best be viewed as influencing the urbanization process by affecting differentially the capital infrastructure in the urban and rural areas, and hence the relative worker productivity, and also by affecting directly the relative well-being of persons in urban and rural areas because of the pattern of available services.

Table 1
Urban-Rural Distribution of the Population
Philippines, 1948-1990

Census Year	Total Population (Million)	Overall Growth Rate	Urban Population			Rural Population		
			Population (Million)	Percent To Total	Growth Rate	Population (Million)	Percent To Total	Growth Rate
1948	19.23	-	5.83	30.32	-	13.40	69.88	-
1960	27.09	2.89	8.07	29.79	3.74	19.57	70.21	3.57
1970	36.64	3.01	12.07	32.94	4.10	24.57	67.06	2.58
1975	42.07	2.80	14.04	33.37	3.06	28.03	66.63	2.62
1980	48.20	2.75	17.94	37.22	5.02	30.26	62.76	1.48
1990	60.68	2.33	12.64	48.85	31.04	5.14	51.15	0.58

Source: NEDA. Long-Term National Spatial Development Vision and Strategy, 1995

Table 2
GROSS REGIONAL DOMESTIC PRODUCT: 1990-1994
(In Million Pesos, At Current Prices)

Region/Year	1990		1991		1992		1993		1994	
Philippines	1,077	100.00	1,248	100.00	1,351	100.00	1,474	100.00	1,637	100.00
NCR Metro Manila	346,	32.21	409	32.83	437	32.58	480	32.58	544	32.24
CAR Cordillera	19	1.83	23,	1.90	26	1.77	26	1.77	31	1.86
I Ilocos Region	30	2.87	36,	2.91	41	2.80	41	2.80	49	2.91
II Cagayan Valley	22	2.11	25	2.02	29	1.98	29	1.98	33	2.01
III Central Luzon	93	8.65	106	8.55	127	8.66	127	8.66	142	8.43
IV Southern Tagalog	156	14.51	188	15.10	219	14.87	219	14.87	252	14.98
V Bicol Region	32	3.06	36	2.90	44	3.02	44	3.02	50	3.00
VI Western Visayas	75	7.00	85	6.84	105	7.14	105	7.14	119	7.09
VII Central Visayas	70	6.55	82	6.64	95	6.51	95	6.51	109	6.50
VIII Eastern Visayas	28	2.64	32	2.57	38	2.59	38	2.59	44	2.61
IX Western Mindanao	31	2.91	35	2.82	43	2.93	43	2.93	50	2.99
X Northern Mindanao	55	5.11	62	5.03	75	5.14	75	5.14	89	5.27
XI Southern Mindanao	74	6.92	82	6.61	97	6.61	97	6.61	112	6.66
XII Central Mindanao	39	3.63	40	3.28	50	3.42	50	3.42	58	3.44

Source: Economic and Social Statistics Office,
National Statistical Coordination Board*
REGIONAL ACCOUNTS OF THE PHILIPPINES

EXPLICIT POLICIES

As noted earlier, the Philippine government has adopted a number of plans and programs which are explicitly aimed at promoting a more decentralized spatial development and, to some extent, rectifying the imbalance between Metro Manila and the other regions of the country. Noteworthy are the following (see NEDA 1995):

National and Regional Physical Framework Plans

Physical framework plans have been formulated both at the national and regional levels. These framework plans provide long-term guidelines for the spatial development of the various regions as well as of the country as a whole and thus would influence the pattern of urban growth. In particular, they serve as a basis for the efficient allocation of land for such purposes as production, protection and conservation, settlement development and infrastructure. For the various regions of the country, the main strategy adopted is countryside agro-industrial development in which the rural-agricultural sector is expected to propel the growth of the other sectors of the economy.

Sectoral Master Plans

Particular sectors have formulated master plans that delineate certain areas for specific purposes. For this reason, they are likewise expected to make an impact on the patterns of urbanization and spatial development of the country. These include, among others: a) a Forestry Master Plan which defines the National Integrated Protected Areas System (NIPAS) to enhance the preservation of the country's natural resources; b) the Tourism Master Plan which delineates priority areas for tourism development especially those outside Metro Manila; c) the Network of Agricultural Areas (NPAA) and Key Production Areas (KPA) of the Department of Agriculture which are designed to support the food sufficiency objective of the country and supply the raw materials requirements of industries.

Industrial Dispersal and Urbanization Strategy

This strategy has been aimed at facilitating the development of the countryside. The industrial dispersal component of the strategy envisions the transformation of selected areas into attractive and viable

centers of industry and addresses the physical and economic factors that constrain the growth and development of regions outside Metro Manila. In recent years, the main vehicle for dispersing industrial development to the rural areas is a Regional Agro-Industrial Center (RAIC) for each region. The RAIC shall become the convergence point for public and private investments and is expected to trigger rural industrialization and economic expansion.

Also relevant to the industrial dispersal strategy is the establishment of growth networks and Economic Zones (ECOZONES). The growth networks may take the form of "Corridors" or "Quadrangles" which are neighboring provinces or regions that share with one another comparative advantages and strengths thereby optimizing the utilization of resources and the development of the network. ECOZONES are, in many ways, formal variants of the growth network and are expected to further hasten the development of urban centers and rural settlements around them. As provided for in the Special Economic Zone Act of 1995, selected areas in the country are to be transformed into highly developed agro-industrial, commercial, tourist, banking and financial centers where highly trained workers and efficient services will be available to commercial enterprises. Two such ECOZONES are now in place in Subic and Clark.

The urbanization component of the strategy basically entails the development of key urban centers in the country that will lead to the nation's integration in the world economy. The BIMP-EAGA concept typifies this strategy where the cities of Davao, Zamboanga, Cagayan de Oro and General Santos are to become investment and trading centers for the crossborder economic cooperation. The BIMP-EAGA is also designed to further enhance the growth of other urban areas in Mindanao, and thus provide greater opportunities for the economic advancement of the island's rural population.

Rural Development Programs

Programs in rural and agricultural development, although designed to achieve other social and economic objectives, are also aimed at encouraging people to stay in the rural areas. The basic assumption behind these programs is that people are "pushed" to the cities by severe problems of rural poverty, unemployment and low agricultural productivity. Improvement of rural conditions would, therefore, encourage people to stay in the rural areas and consequently ease the population movement to urban areas.

In this connection, a major initiative of the government is the Comprehensive Agrarian Reform Program (CARP). A "keep them in the rural areas" philosophy is readily apparent in the CARP. Under the program, "the welfare of the landless farmers and farmworkers will receive the highest consideration to promote social justice and to move the nation toward sound rural development and industrialization" (Republic Act No. 6657). Previous programs in rural resettlement, colonization, rural credit and related schemes also had a rural and an almost anti-urban bias (Laquian 1972). The Local Government Code (LGC) and the Social Reform Agenda (SRA), to the extent that they enhance "people empowerment" in rural areas, may also have the effect of discouraging urbanward migration.

IMPLICIT POLICIES

Implicit urbanization policies are programs or pronouncements that have the effect (largely unintended) of encouraging urban growth. They arise from some exercise of government power such as legislation and enforcement of laws, taxation, regulation and controls, spending and provision of services. In the context of the urban growth phenomenon, implicit policies may overlap with the concept of "urban bias" observed in less developed countries. Many authors have forcefully argued for the importance of this concept (see, for instance, Lipton 1977; Todaro and Stilkind 1981; Linn 1982). As noted in another study, two general sorts of urban bias have implicitly pro-urbanization effects (Robinson 1986:173):

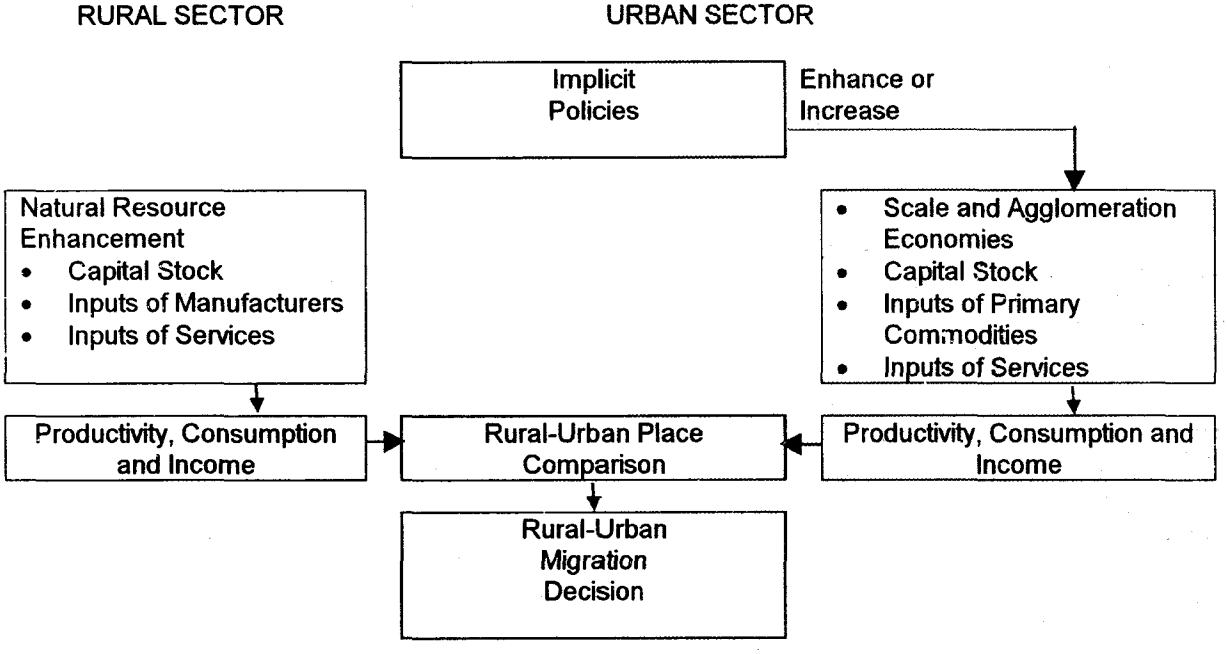
a. National economic policies which have the effect of changing relative prices, including wages, so as to shift the intersectoral terms of trade against agriculture, thus widening socioeconomic disparities between urban and rural areas;

b. Policies regarding the placement and availability of public services which discriminate in favor of urban households and productive enterprises.

As adapted from Robinson (1986), Figure 1 presents a broad framework that defines the place of implicit policies in the context of processes that impact on rural-urban socioeconomic disparities and the consequent decision to migrate. The framework envisions a rural-urban migration process (a major component of urban population growth) as being the result of perceived disparities between urban and rural areas in terms of productivity, consumption and income.

Implicit policies affect these disparities by: a) increasing the flow of technology capital and other product inputs to the urban-industrial sector; b) disproportionately providing urban areas with public sector consumption services; c) disproportionately providing public sector with inputs for human capital formation services to urban areas; and d) enhancing scale and agglomeration economies.

Figure 1
EFFECTS OF IMPLICIT POLICIES
ON FACTORS INFLUENCING RURAL-TO-URBAN MIGRATION



Source: Adapted from Robinson (1986)

The above processes will be illustrated through a discussion of a number of economic and social policies of the government that appear to have the unintended effect of enhancing urban growth and thus unsupportive of the "decentralized" and more "balanced" spatial development objective of the country. As noted in the following sections, the unintended effects are at times produced by the absence of effective mechanisms to achieve the expressed intent of the policies.

Quite a few studies have been undertaken on various aspects of these policies. A more recent study of the Asian Development Bank (1990) provides a good overview of the major findings and conclusions of such studies.

Trade Policies

The Philippine government has made structural adjustments of trade policies with the adoption of the Tariff Reform Program (TRP) in 1981 and a complimentary Import Liberalization Program (ILP) with a view towards "leveling-off" subsidy and assistance to various sectors of the economy. Despite these adjustments, however, scholars and policy makers alike have made the observation that past trade regimes in the country had a strong bias against agricultural, export-oriented, labor-intensive industries, in favor of import-substituting industries producing finished products (see Tan, 1979; Medalla, 1986). While the reforms generally lowered the level of protection for various sectors of the economy, the structure of the protection remained unchanged, i.e., the agricultural sector and exportables remained penalized, while the manufacturing sector and importables continued to have higher protection (ADB 1990). When viewed in the context of the economic structure of the various regions of the country, the overall effect of such a trade policy is to penalize the less developed rural regions and thus further encourage rural-to-urban migration.

Trade policies could likewise have an impact on the location of investments since it is but natural those resources would get allocated in the most profitable, productive and protected areas. The evidence presented in Table 3 reveals that private investments are highest in regions that are least dependent on agriculture. These are the NCR, Regions III and IV, and Region VII that is centered on Cebu, the second largest urban center in the country.

Table 3
REGIONAL DISTRIBUTION OF PRIVATE INVESTMENTS

Region	1988		1989		1990		1991		1992		1993		1994		1995	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	9	3.6	14	3.6	14	1.8	6	1.2	6	1.5	8	2	8	1	4	1
2	0	0.6	7	0.6	5	0.65	1	0.2	2	0.5	1	0.25	4	0.5	5	1.3
3	57	8.9	92	8.9	95	12.3	72	14.6	51	13	58	15	91	12.5	63	16.4
4	108	9.7	202	19.7	180	23.4	162	33	126	32	115	29.6	229	31.4	110	28.7
5	6	0.39	4	0.39	10	1.3	5	1	6	1.5	4	1	11	1.5	9	2.3
6	55	5.3	55	5.3	16	2	15	3	10	2.5	24	6	17	2.3	11	2.8
7	52	6.7	69	6.7	55	7	52	10	31	9.4	35	9	71	9.7	30	7.8
8	3	0.48	5	0.48	4	0.5	4	0.8	2	0.5	7	1.8	10	1.3	5	1.3
9	6	0.97	10	0.97	8	1	4	0.8	3	0.7	3	0.7	10	1.3	4	1
10	15	2.2	23	2.2	10	1.3	17	3.4	11	2.8	15	3.8	21	2.8	18	4.6
11	21	2.2	23	2.2	24	3	28	5.7	27	6.9	26	6.7	45	6	20	5.2
12	4	0.87	9	0.87	4	0.5			1	0.2			4	0.5		
ARMM									1	0.2	3	0.7			2	0.5
CAR							5	1	4	1			4	0.5	3	0.7
NCR	306	47.9	491	47.9	322	42	97	19.7	91	23.3	78	20	158	21.7	81	21
TOTAL	647	99.81	1023	99.81	767	96.7	490	93.4	390	96	388	96.55	728	93	383	94.6

* Percent total is not equal to 100% because there are projects whose locations are not indicated.

Source: Board of Investments.

Table 4
EMPLOYMENT GENERATION OF PRIVATE INVESTMENTS

Region	Employment Generation							
	1988	**I989**	**1990**	**1991**	**1992**	**I993**	**1994**	**1995**
1	1,113	2,260	3,911	1,031	655	11,460	9.396	172
2		338	311	163	91	51	626	750
3	9,769	11,818	14,724	8,832	6,277	5,486	14,662	15,466
4	23,610	41,235	30,228	20,975	15,475	19,758	52,177	17,297
5	357	847	268	680	1,063	1,478	561	602
6	3,893	3,891	1,905	2,847	358	4,142	1,155	1,340
7	6,327	8,200	5,371	6,231	3,010	3,305	15,216	3,427
8	175	358	207	778	192	601	1,636	318
9	1,455	828	837	218	60	218	1,090	570
10	13,071	3,427	4,136	1,105	5,767	5,795	3,013	2,003
11	2,488	2,742	2,883	5,366	5,304	2,715	4,842	1,769
12	0	868	200		51	0	0	0
ARMM					60	755		488
CAR				1,427	586	0	113	155
NCR	64,633	74,415	45,993	12,108	8,273	12,384	23,157	8,763
TOTAL	128,052	153,490	113,290	63,223	49,856	39,106	145,513	79,776

Consequently, the number of jobs created by private investments had also been largest in the same regions (Table 4). Many have observed that the General Agreement on Tariff and Trade (GATT), which further expands trade by reducing trade barriers and refining trade rules, may have the same bias, although such bias could possibly be offset by "safety nets" in the form of direct subsidies to rural areas and small farmers.

Incentives for Industrial Dispersal

Industrial dispersal is technically an explicit policy aimed at dispersing development in the countryside. This policy has largely failed to achieve its objectives, however, as the incentive packages for industries to locate outside large urban areas have obviously been insufficient. The incentives, in other words, have had the implicit effect of economic concentration, rather than deconcentration.

As previously indicated, the Philippines has long adopted a policy of industrial dispersal carried out mainly through the establishment of industrial estates in selected growth centers of the country. Two types of industrial estates were contemplated: the regional industrial estate (RIC) and the export processing zone (EPZ). As a mechanism for implementation, the National Industrial Estate Program (NIEP) formally came into being in I977 and later incorporated in the *Philippine Development Plan, I978-I982* (Manalo, I990).

Under the NIEP, industrial estates were envisioned to be established in lagging and depressed regions that could serve as alternative growth centers for people in the cities as well as catchment areas for rural-urban migrants. To achieve this objective, incentive packages under the amended Export Incentives Act of I973, and the I979 Investment Promotions Act for Less Developed Regions were adopted.

These incentives took the forms of tax exemptions and tax credits, double deductions of local raw materials, employment of foreign nationals, etc. In 1981, the Board of Investments amended the original Investment Act of 1967 to include regional dispersal of industries as one of the criteria in the preparation of the Investment Priorities Plan and in the evaluation of projects.

The 1981 Omnibus Investment Code (OIC) granted two forms of incentives to encourage industries to locate in less industrialized areas of the country. These are: (a) for a registered enterprise, a tax credit equivalent to 100 percent of major and necessary infrastructure cost; and (b) for export firms, a reduction in income tax equivalent to direct labor cost, provided such deductions do not exceed 25 percent of total export revenues (see ADB, 1990). Industrial dispersal was likewise encouraged through the establishment of industrial estates and export processing zones.

As noted earlier, however, these incentive packages seem to have been relatively ineffective in bringing about the dispersal of industries. Evidence elsewhere shows the relatively low occupancy rates of industrial estates in the country. In 1989, average occupancy rates was only 46 per cent for EPZs and even a much lower 36 per cent for IEs (ADB, 1990).

More recently, the main vehicle for dispersing development to the rural areas and at the same time achieve industrialization was the Regional Industrial Center (RIC) Program which was conceived and officially adopted in 1989. In recognition of the important linkage between agriculture and industry, the program was renamed the Regional Agro-industrial Growth Center (RGC) Program in 1993. Beyond the dispersal of development, the RGC Program has likewise been envisioned to help ease the problem of overcrowding in the NCR in that the identified regional agro-industrial centers would serve as "counter-magnets" to the massive flow of rural-to-urban migrants to Metro Manila.

In terms of strategy, the RGC is location-specific; i.e. it focuses on one location in each of the country's 14 regions and invests it with the range of infrastructure needed by industries to establish operations there on a competitive basis. This strategy is of course based on the realization that the greatest need for industry to locate in the rural areas is infrastructure. The program likewise involves the cooperation between the government and the private sector, with government providing off-site infrastructure utilities components and the private sector responsible for on-site development.

It is still early to assess the impact of the RAICs. To date however, the incentives for industrial dispersal seem to be inadequate to compensate for the pull of so-called "agglomeration economies" (Louis Berger International, 1986). The tendency for firms to maximize profit or minimize cost would lead them to locate in an area that would enhance the achievement of such objective. In a sample study of 100 firms, Herrin and Pernia (1986) discovered that out of 34 factors that can influence location, only 7 factors are considered decisive by the firms surveyed. These can be grouped into location factors (e.g., access, transport, power, etc.), information and communication, and physical plant requirements. Most BOI incentives do not address themselves to these factors. It is not, therefore, surprising that the industrial dispersal program has been generally unsuccessful.

Credit and Loan Policies

In addition to tax-related incentives for industrial dispersal, there had been several credit and loan programs that have been instituted especially for industries desiring to locate outside Metro Manila. The more prominent ones include the Industrial Guarantee and Loan Fund (IGLF), and the *Small and Medium Scale Lending Program* (SMILE) of the Development Bank of the Philippines (DBP).

There is a gap, however, between the intent and the actual implementation of the policies. Experiences with these various loan programs reveal that they have benefited the urban areas more than the rural communities. Evidence available shows that while the number of IGLF loans are fairly evenly distributed, the allocation in terms of the magnitude of the loans is overwhelmingly in favor of the NCR. In the light of these data, the inescapable conclusion is that credit and loan policies have, in fact, enhanced the growth of urban areas in the country.

Monetary and Banking Policies

The effects of monetary policies should ideally be "neutral" across geographic space, i.e., such effects should more or less be felt evenly in all regions of the country. However, whenever other socio-economic policies of the government are biased for certain areas or sectors of the economy, monetary policies would tend to reinforce such bias (as observed in ADB, 1990). At the same time, however, such monetary policies as credit allocation across regions would have a definite impact on the pattern of regional development.

The low interest rate policy adopted by the Philippine government from 1950 to 1980 facilitated the establishment of capital-intensive, import-substituting industries. Understandably, such industries located mostly in the NCR where government, basic services and infrastructure facilities are concentrated. Despite the low interest rate policy, banking facilities proliferated as business continued to be profitable due to the wide gap between deposit and lending rates that were then set administratively by the Central Bank. Not surprisingly, these banking facilities grew mostly in the NCR, obviously induced by the concentration of economic and industrial activities in the area. As observed by the ADB (1990), it is in this sense that monetary and banking policies tend to magnify the disparities that exist between the NCR and the rest of the country.

Such a phenomenon is not left unnoticed. It has, in fact, been the reason why some measures have been adopted by the government to try and redress the effects of monetary and banking policies on the unbalanced growth and development of the country's regions outside of the NCR. Such measures include the establishment of the rural banking system in 1950, a move apparently designed to counteract the bias of commercial and thrift banks to locate in the NCR. The rural banks were meant to be small and catering mostly to farmers. Various subsidies were granted by the government (e.g., tax exemptions, lower reserve requirement ratio, lower rediscounting rates, etc.) to encourage potential investors to engage in rural banking.

The government likewise instituted special credit programs with a view towards increasing the magnitude of funds flowing to rural areas and to the agricultural sector. Many financial agencies, including donor countries and multilateral agencies, were involved in these credit programs which formed part of the government scheme to rechannel resources to the country's rural areas. These programs were complemented with other measures, notably the Central Bank's policy of encouraging "branching" outside the NCR which started in 1972 (ADB, 1990). The various incentives instituted by the Central Bank in support of the branching policy in a sense raised the cost of opening up new branches within the NCR.

Additional reforms had been adopted in recent years. On the whole, however, available evidence suggests that these measures hardly produced any significant effect in so far as increasing the flow of resources to the rural areas of the country is concerned. For the period 1978 to 1985, the number of bank offices in the regions outside of the NCR grew only by 18 percent as compared to a much higher 41 percent for the NCR (see ADB, 1990).

Urban Coping Mechanisms

Urban growth problems such as housing, squatting, utilities and welfare are being experienced in Philippine cities. They are most acute, however, in large urban areas and especially in Metro Manila where it is estimated that the population will reach close to 10 million by the year 2000. Various coping mechanisms have, therefore, been formulated to respond to these problems.

A major example of such coping mechanisms is the Urban Development and Housing Act (UDHA) of 1992 which aims to "uplift the conditions of the underprivileged and homeless citizens in urban areas . . .by making available to them decent housing at affordable cost, basic services and employment opportunities." A few have observed that such a coping mechanism could make matters worse in that the improvement of public services and conditions in urban areas could further attract rural-to-urban migrants. The implicit effect of programs formulated to cope with urban problems could be to accelerate the growth of urban areas.

CONCLUDING OBSERVATIONS

A major thesis of this study is that national economic and social policies play an important role in influencing patterns of urbanization and urban growth. A critical issue that has surfaced in the analysis is the seeming inconsistency between spatial development objectives, on one hand, and national socioeconomic policies, on the other. Spatial policy pronouncements are clearly biased for the more depressed rural areas in the country. Indeed, one of the main objectives of spatial development is to redress the socioeconomic imbalance between urban and rural areas in the country. As noted in this study, however, trade, industrial, monetary and credit policies of the government have been biased for urban areas and the industrial sector. These national socioeconomic policies, therefore, may hamper, if not negate, the current objective of spatial development policy, and the explicit policies aimed at achieving such objectives. Thus, if the government is really intent in promoting a decentralized spatial development, it must support reforms aimed at gradually eliminating policies that are biased against the less developed rural areas of the country.

Beyond the unintended effects of national socioeconomic policies, developmental thrusts have often been blunted by lack of coordination among numerous agencies mandated to implement such policies. Consequently, gains in one particular set of activities may be offset by mistakes in another. Overlapping of functions and duplication of efforts are quite common among agencies performing related functions. Institutional reforms are, therefore, likewise necessary in the achievement of urban policy objectives.

Moreover, one approach that is increasingly mentioned as an important component of urban policy is population control. The argument often cited by demographers is that rapid urbanization is really a function of rapid population growth. The urban areas and the countryside are both increasing too fast, so that the excess population is becoming concentrated in urban areas. If population control and other family planning policies are adopted, it is hoped that the pace of urbanization would slacken and will help resolve the problems associated with urban growth. In short, urban policy must form part of an overall development that will not only effect a more rationale distribution of population, but also to reduce population growth as quickly as possible.

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URBAN LAND DEVELOPMENT TRENDS IN THE PHILIPPINES [1]

NORMAN R. RAMOS

BACKGROUND

In both Western and developing countries, thinking about urban centers has substantially changed. From opposition to the development of cities and towns in the 1960s and 1970s, a gradual recognition of the crucial and positive contribution which cities make towards national development has come about during the eighties and the nineties.

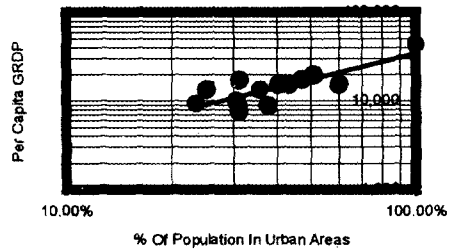
In the developing countries like the Philippines, planners have come to recognize the connections between the inevitable process of rapid urbanization and national economic growth. In fact, it is now widely acknowledged that the future economic growth of developing countries is contingent on the efficient functioning of urban areas. Urban areas are, however, the focus of environmental and poverty problems. Thus, the need for better management of the growth of urban areas is critical for individuals, communities and governments

National economic growth in most developing countries is becoming more and more dependent on the ability of urban centers to perform key production and trade functions within the macro and regional economies and to lead the national development effort. Production activities tend to be concentrated in urban centers.

The National Capital Region (NCR) of the Philippines accounts for about one-third of the country's Gross Domestic Product (GDP) generated by more than thirteen percent of the country's population. The highly urbanized regions combined - NCR, Regions 3, 4, 7 - account for more than sixty percent of the country's GDP. These four regions accounted for nearly thirty percent of the total increase in GDP from 1990 to 1993.

Figure 1 shows a highly positive relationship between the level of urbanization (measured by the percentage of the population living in urban areas) of a region in the Philippines and its development level as measured by real (1985=100) per capita Gross Regional Development Product (GRDP). [2]

Figure 1. Urbanization and Economic Development Philippines, By Region: 1990



Land is the most valuable tangible resource of urban areas. It is the foundation for all urban economic activities. It supports manufacturing, commerce, trade and other urban-based economic activities. It provides housing sites for the poor, the middle class, and the wealthy. It is the city government's primary tax base. Mobilizing and managing urban land resources is a key requirement for the development of a self-sustaining system of finance in urban areas. This paper broadly examines the following issues:

1. The status of the urban land market in terms of the pace and density of development, and the resulting price structure.
2. The demand for urban land under alternative population and economic growth scenarios.
3. The policy environment that: a) shapes the development pace and pattern of urban sprawl and the "in-fill" development of urbanized areas, and b) promotes the resulting price structure.

Table 1
Distribution of Households by Tenure Occupancy of Lot and Housing Unit, Philippines, All Urban Areas, NCR: 1980 and 1990

Households	Owned	Rented	Occupied Rent-Free	1980 Total HHs	Owned	Rented	Occupied Rent-Free	1990 Total HHs
Land								
Philippines	4,297,542	1,747,876	857,626	6,903,044	5,115,994	838,887	3,510,741	9,465,622
All Urban Areas	1,274,688	495,150	302,656	2,072,494	2,384,607	575,293	1,297,244	4,257,144
NCR	293,552	95,255	78,629	467,436	553,817	153,335	257,506	964,658
Housing Units								
Philippines	6,903,044	1,067,683	636,460	8,607,187	9,466,890	916,457	1,022,883	11,406,230
All Urban Areas	2,072,494	835,837	310,776	3,219,107	4,257,677	856,625	488,750	5,603,052
NCR	467,436	521,275	114,852	1,103,563	964,658	468,717	136,213	1,569,588
Percentage Distribution								
Land								
Philippines	62.26%	25.32%	12.42%	100.00%	54.05%	8.86%	37.09%	100.00%
All Urban Areas	61.51%	23.89%	14.60%	100.00%	56.01%	13.51%	30.47%	100.00%
NCR	62.80%	20.38%	16.82%	100.00%	57.41%	15.90%	26.69%	100.00%
Housing Units								
Philippines	80.20%	12.40%	7.39%	100.00%	83.00%	8.03%	8.97%	100.00%
All Urban Areas	64.38%	25.96%	9.65%	100.00%	75.99%	15.29%	8.72%	100.00%
NCR	42.36%	47.24%	10.41%	100.00%	61.46%	29.86%	8.68%	100.00%

Source of Basic Data: National Statistics Office (NSO) On-Line Computerized Database

The analysis made use of available secondary data to quantitatively establish the demand and supply of urban land; and the trends and determinants of the urban land price structure. Available policy documents and relevant legislation were reviewed and correlated with the observed movements in the urban land market. The equity as well as allocative impact of these policies was commented on in the study.

URBAN LAND DEVELOPMENT IN THE PHILIPPINE CONTEXT

There is mounting evidence of a land crisis in the major urban centers of the Philippines. A large proportion of residents have no formal access to land, land ownership is highly skewed in favor of big developers and speculating landowners, and access to credit is almost impossible for the low income families.

The findings with regard to the distribution of households by tenure occupancy of lots and housing units of the 1990 Census of Population and Housing shown in Table 1 provide evidence as to the magnitude of the crisis.

Nearly half of NCR households do not own the lot they are occupying. Forty percent of the NCR households do not own the houses they are living in. Improvements with regard to housing ownership happened during the past decade (1980 to 1990), but the number of those with no access to land is still daunting, particularly in the urban areas, especially the NCR.

Real estate transactions in the major urban centers all over the country indicate that land bottlenecks around major urban centers are created by large developers who tie up large areas of rural or semi-urban land.

Shortages of infrastructure tied in with political resistance to cost recovery policies are worsening Poor property rights and defective land registration systems abet fraudulent land speculation, and even prevent the timely development of available land.

LGUs and national government agencies still continue to respond with irrelevant approaches and political patchwork solutions using regulations and standards whose costs far exceed benefits.

Without a redirection of land policies, the crisis will be severe in the coming years with:

⇒ escalating land prices in and around major urban centers;

⇒ declining affordability of housing;

⇒ growing separation of workplace and home;

⇒ high costs of retrofitting infrastructure once settlement densities have increased; and

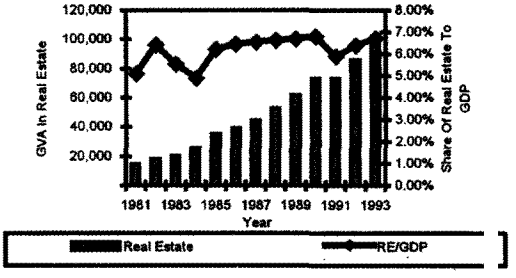
⇒ increasing social and political tensions and urban violence.

THE PHILIPPINE URBAN LAND MARKET

The Philippine land market as mirrored by Gross Value Added (GVA) in ownership of dwellings and real estate is a key component of the Philippine economy. It currently contributes P100 billion a year to the economy, and accounts for 6 to 7% of the country's GDP. The historical growth of the land market is shown in Figure 2.

As an asset, real estate is even more important, accounting for 40 to 45% (based on 1992 Flow of Funds Capital Accounts Matrix) of all financial investments made. It is a major motivation for household savings (80 to 85% of all financial investments). In addition, it affects inflation, financial holdings, labor mobility, as well government budgets through taxes.

Figure 2
Contribution of the Land Market to the Philippine Economy: 1981 - 1993 (GVA In Million Pesos, Share to GDP in Percent)



Source of Basic Data: 1994 *Philippine Statistical Yearbook*

Urban Land Use Trends

Land allocation in urban centers is predominantly for residential purposes as shown by the available 1991 land use data for the NCR presented in Table 3.

Table 3
Land Use Pattern in the National Capital Region: 1991

Type	% Of Total	Estimated Land Area (Has.)
Residential	65	41,405
Commercial	3	1,911
Industrial	4	2,548
Institutional	5	3,185
Utilities	1	637
Open Space	8	5,096
Agricultural	9	5,733
Cemetery/Memorial Parks	1	637
Recreation/Parks/Sports	1	637
Rivers/Waterways	3	1,911
Total	**100**	**63,700**

Source: NCR Regional Development Plan (1993-1998)

Residential lands account for 65% of the total land area. This proportion is higher by 20% over that of 1980. The construction of residential dwellings has been characterized by the growing emergence of medium density townhouses and condominiums, notably in areas along or close to EDSA, and in the denser parts of Quezon City, Makati, San Juan, Mandaluyong, and Pasig. Land values in these areas are high.

Commercial developments, accounting for 3% of land use, have spread along EDSA, from Monumento to Baclaran, the lateral of which is at Ortigas. Commercial complexes have also started to mushroom in Parañaque, Muntinlupa, Las Piñas, Pasig and Marikina. Development of more commercial centers in the region is expected over the next few years.

Industrial lands account for 4% of the total Metro Manila area. Industries are scattered throughout the region, at the east, south and north towards the main highways, at Marikina, Las Piñas, Muntinlupa, Taguig, Valenzuela and Novaliches.

Institutional lands, which include military facilities, government offices, hospitals and educational institutions, account for about 5% of the total land area.[3]

The land use pattern in Metro-Manila and the other major urban centers is marked by the following trends:

⇒ Increased density and size of squatter housing areas in city centers where lands are either government project areas or privately owned.

⇒ Development of medium-scale residential subdivisions for upper and upper-middle income markets even along the fringe areas; low cost housing projects have started moving to towns outside Metro Manila, Metro Cebu, Metro Davao, Iloilo, Naga, Baguio, Dagupan, and other major urban centers in the country.

⇒ Conversion of agricultural areas to urban uses.

⇒ In-filling of the urban areas with light to medium density housing.[4]

A number of factors account for this growth pattern in the major urban areas. These include:

⇒ The rapidly rising prices and speculative level in real estate in the urban land markets. This is being felt even in the smaller southern and northern cities like Naga in Camarines Sur and Dagupan in Pangasinan.

⇒ The rapid tempo of urbanization of the cities and municipalities adjoining these major urban centers.[5] For example, Pili and Calabanga near Naga City are rapidly urbanizing; so are Mangaldan and Calasiao near Dagupan City. The same patterns are happening in the other urban centers in the Visayas and Mindanao.

⇒ The relatively small-sized industrial and development estate lots placed on the market within these urban centers.

⇒ The private sector's willingness to build new industrial plants outside the NCR and even in areas outside major urban centers. For example, San Miguel Corporation (SMC) decided to build its newest production complex in Santa Cruz, Davao del Sur - a town 50 kms. south of the Metro Davao area.

⇒ The increasing levels of congestion and pollution in Metro Manila.

⇒ The rising tax burden and cost of doing business in Metro Manila.

Demand/Supply Analysis

In general, the future demand for a given urban land use was estimated by using either of two approaches:

1) Applying a growth rate calculated from historical data to base demand figures; or

2) Utilizing targets / projections that have already been made by certain government and private institutions.

In cases where targets or projections were not available to permit direct calculations, projections were made based on indicative estimates from available secondary and primary sources.

Land For Housing

The very high rate of rural-urban migration plus the scarcity of inexpensive land and the apparent lack of incentive for the private sector to venture into low-cost housing has contributed to an increasing backlog in the housing sector.

Table 4
Projected Housing Demand, Philippines: Year 2000 [6]

		Low	Medium	High
1	No. of Housing Units Available in 1990	11,018,208	11,018,208	11,018,208
2	Less: Dilapidated/Condemned Units/Units of Weak Materials	4,091,589	4,091,589	4,091,589
3	Equals: No. of Units Fit for Dwelling in 1990	6,926,619	6,926,619	6,926,619
4	Projected Year 2000 Population	77,291,811	78,414,808	79,009,807
5	Divided by: Mean No. of Occupants/Unit	5.50	5.50	5.50
6	Equals: Projected Demand for Dwelling Units By Year 2000	14,062,577	14,266,897	14,375,152
7	**Additional Housing Units**			
	Required by Year 2000 (6-3)	**7,135,958**	**7,340,278**	**7,448,533**
8	Floor Area/Unit (Sq. m.)			
	Socialized Housing Standard [7]	40	40	40
	Median Standard	70	70	70
	High-End Housing Standard [8]	150	150	150
9	Gross Floor Area Requirement (Sq. m.)			
	Socialized Housing Standard	285,438,330	293,611,116	297,941,310
	Median Standard	499,517,078	513,819,454	521,397,293
	High-End Housing Standard	1,070,393,739	1,101,041,686	1,117,279,913
10	Floor Area Ratio (FAR) [9]	2.0	2.0	2.0
11	**Required Additional Land Area (Has.)**			
	Socialized Housing Standard	14,272	14,681	14,897
	Median Standard	24,976	25,691	26,070
	High-End Housing Standard	53,520	55,052	55,864

The calculations indicate that on the average, about 700,000 to 750,000 additional housing units are required annually all over the country (or an annual growth rate of 7.3 to 7.6% depending on the population growth assumption used). This estimated demand does not include provisions for replacements nor does it reflect the clamor for home ownership and security of tenure among "urban renters".

Between 1970 and 1980, the number of housing units grew annually by 3.4% (240,098 units/year).[10] From 1980 to 1990, the number of units constructed per year increased slightly to 251,738, but the annual percentage increase declined to 2.6%.

The required additional land area will range from 14,000 to 56,000 hectares by the Year 2000 depending on the standards adopted.

Whether the growth of the supply of housing can be continuously realized over the long-term to balance out effective demand will depend on the following:

⇒ The fixed supply of land which, even with reallocation of use and higher density of use, imposes a constraint on the expansion of housing within the major urban centers like the NCR.

⇒ The intense price pressure on the limited supply of land in the major urban centers like the NCR which makes higher value residential units affordable only to the upper 10% of the population.

In summary, demand for residential units within the major urban centers of the country will be constrained by low incomes relative to real estate prices, and will be effectively confined to the upper income classes. The demand for middle to low income families will be met by projects on the periphery of these major urban centers.[11]

Land For Commercial/Business Purposes

Beyond housing, an expanding economy will also be faced with increasing demand for space that would accommodate commercial and business endeavors.

As shown in Table 5, the demand for commercial and business land could easily double by the Year 2000 to reach 4,500 to 6,000 hectares depending on the population growth scenario.

The government's thrust toward economic liberalization and deregulation signifies increasing openness to and integration with the international community. It is highly probable that in the next 5 to 10 years, the NCR and the major urban centers like Metro Cebu and Metro Davao would become international business centers.

The increase in population and income in the major urban centers will mean an increase in the number as well as the expansion of commercial establishments operating in these areas catering to all levels (ABCD) of society.

Table 5
Projected Demand For Commercial And Business Land, Philippines: 1990 - 2000

	Item	Actual 1990	2000		
			Low	Medium	High
1	Population	60,559,116	77,291,811	78,414,808	79,009,807
2	Employment Ratio[12]	0.593	0.599	0.599	0.599
3	Estimated Employment	35,896,719	46,278,858	46,951,258	47,307,517
4	Office Employment Ratio[13]	0.104	0.109	0.109	0.109
5	Estimated Office Employment	3,733,259	5,044,396	5,117,687	5,156,519
6	Space Requirement/Employee (Sq. M.)[14]	20	20	20	20
6	Estimated Office Requirement (Sq. M.)	74,665,175	100,887,911	102,353,743	103,130,386
7	Floor Area Ratio (FAR)	4	4	4	4
8	**Estimated Land Requirement For Offices (Has.)**	1,867	2,522	2,559	2,578
9	Per Capita Retail Space Requirement (Sq. M.) [15]	0.25	0.50	0.50	0.50
10	Retail Space Requirement (Sq. M.)	15,139,779	38,645,905	39,207,404	39,504,903
11	Floor Area Ratio (FAR)	2	2	2	2
12	**Estimated Land Requirements For Commercial Establishments (Has.)**	757	1,932	1,960	1,975
12	**Estimated Demand for Business/Commercial Land (Has.) (8+12)**	2,624	4,454	4,519	4,554

Another source of potential demand for commercial land is the required tourist facilities to cater to international and domestic tourists as well as multinational officers and employees.

The demand for hotel facilities [16] is expected to increase by 10% annually, but such an increase will probably be translated to improved average occupancy rates (75% to better than 80%).[17] Up to the Year 2000, it is expected that the existing hotel facilities as well as those under construction will be enough to meet requirements.

The number of existing golf courses and other recreational tourist facilities as well as those in the detailed planning and construction stage will probably be sufficient up to the Year 2000, but will require upgrading to international standards.

Industrial Land

Expansion in economic activity led by the manufacturing sector is expected to drive up demand for industrial estates in and around the major urban centers of the country.

The Philippine industrial estate industry is in a very competitive position, and has been very successful in drawing foreign and domestic investors given the attractive incentive package and the right investment climate in the country today.

Foreign investors are finding other neighboring Asian countries unattractive as industrial location sites because of such serious problems as the infrastructure bottlenecks in Thailand arising from economic over-expansion; the labor shortage in Malaysia; the lack of adequate

infrastructure in Vietnam; and the withdrawal of certain incentives to foreign investors in China.

Philippine industrial estates are benefiting from a wave of investments from Japan, Korea, Taiwan, Europe and the United States. Investors are lured because of the first-class infrastructure and amenities available in these estates.

Assuming that the Philippine government is firmly committed to encourage foreign investments into the country, industrial estates can boost the drive of the Philippines to newly industrialized country (NIC) status.

Table 6 presents the projected industrial employment and the corresponding demand for industrial land by the Year 2000 under three different economic growth scenarios.[18]

Industrial employment will range from 3.6 to 3.8 million, and the equivalent demand for industrial land will range from about 4,800 to 5,100 hectares by Year 2000.

Table 6
Projected Demand for Industrial Land, Philippines: Year 2000

Item	Actual 1994	Year 2000 Low	Year 2000 Medium	Year 2000 High
Gross Value Added In Manufacturing In Million Pesos At 1985 Prices [19]	187,634	272,580	280,088	287,767
Employment In Manufacturing ('000) [20]	2,578	3,567	3,664	3,762
Employment Per Hectare [21]	750	750	750	750
Industrial Land Requirement (Has.)		4,756	4,885	5,017

Trends In Urban Land Prices

The surging demand for urban land has resulted in a very bullish trend in the real estate industry in the major urban centers of the country.

Between 1986 and 1993, the Implicit Price Index for Real Estate for the whole Philippines (1985=100) averaged an annual increase of about 10%. In the NCR, the average weighted asking price for real estate increased by 11 to 32% between 1990 and 1993.[22] In the CALABARZON area, prices increased by 25 to 32% during the same period.[23] In 1994, price increases in the NCR ranged from 33% to 150%.[24] In major urban centers outside of the NCR like Metro Cebu, Bacolod, Iloilo, Naga, Davao, and Cagayan de Oro, the prices of downtown properties range from P20,000 to P50,000 per sq. m. while properties along the highway in the urban fringes are valued at P2,000 to P5,000 per sq. m.[25]

Lower mortgage rates, improving income, higher economic growth rates, and rising foreign interest all augur well for the continuance of the robust property demand.

The price performance of the real estate industry in the Philippines did not depreciate even during the 1989-90 crisis period [26] indicating that land values do not yet reflect significant speculative levels.

While the economic growth and expansion of the NCR and the other major urban centers can be met with a more intensive approach to land use and conversion of land uses, the capacities of existing and planned infrastructure would pose as constraints. The intensification of land use cannot but lead to more congestion and decreasing attractiveness of these urban centers. The impact of such congestion on land values in Metro Manila is shown in Figure 3.

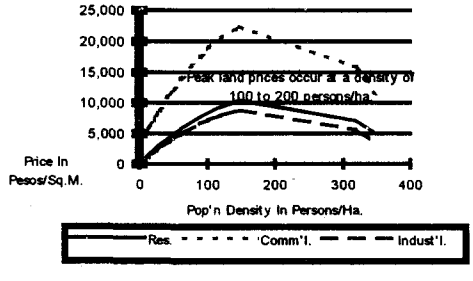
Depending on the prevailing land use, congestion as measured by population density substantially affects land values in Metro Manila.[27] Available data indicate that population density explains 50% of land price movement in residential areas; 43% in commercial areas; and 22% in industrial areas.[28]

As shown in Figure 3, with rapidly rising population densities alongside inadequate urban infrastructure, urban decay will set in and property values will go down.

At 1990 levels, peak land prices in Metro Manila could occur at a population density range of 150 to 200 persons per hectare. The present density of Metro Manila is 124 persons per hectare, indicating that if the current congestion trends do not get reversed, land prices could get negatively affected over the long term. In fact, the downward portion of the curves covers severely congested places like Manila (417 persons/Ha.), Navotas (719 persons/Ha.), and Pasay (264 persons/Ha.).

Based on Figure 3, once the severe congestion and infrastructure deficiencies are relieved, Metro Manila land prices can easily double.

Figure 3
Land Prices and Population Density in Metro Manila Cities and Municipalities at 1990 Price Levels



Source of Basic Data: June-July 1993 *Real Estate Monitor* and 1994 *Philippine Statistical Yearbook*

THE REQUIRED POLICY ENVIRONMENT

Over the next 15 to 20 years, urbanized areas in the Philippines are likely to double in size with an area equivalent to the 32,400 hectare total area (urban and non-urban) of all the cities in the Philippines today.

While land is the key ingredient in urban growth, the Philippines has poor data on the operation of its land markets and relies on inadequate and outdated mechanisms to create or support the development of suitable land for urban growth.

The endemic lack of data is aggravated by the multitude of perceptions of land in any Philippine community. To the ***real estate developers***, it is an avenue for ***investment/speculation***; to the ***businessmen and economic planners***, it is a ***commercial good*** subject to conventional market forces; to the ***settlers*** (pioneers) and ethnic groups, it is a ***natural birthright***; and to the ***government***, it is a natural ***possession of the state***. An understanding of behavioral forces should therefore be a dominant factor in analyzing land markets in the Philippines.

If urban economies are to be the engines of growth for Philippine economic development, it follows that the key objectives of land policies should be to enhance the potential for ***new urban employment***, ***levels of labor productivity***, and ***income***. The enhancement of income potential in the country's urban centers is particularly important as calls on income through taxation or user charges will be the key to providing adequate levels of urbanized land. To achieve these aims, it is critical that the distortions in land markets and land management be reduced or eliminated, taking into careful consideration the aforementioned behavioral aspects of land tenure and investment.

New land policy directions focused on improving the supply of urbanized land are urgently needed in the Philippines. These include:

1) ***Increasing the supply of urbanized land.*** Local land development strategies based on the coordination and synchronization of governmental enabling actions with private sector investment moves. Among the area-specific techniques that can be used in Philippine cities are: a) land pooling/readjustment, b) land sharing, c) use of existing vacant lands, and d) guided land development. These measures could improve access of low-income groups to existing and new urban land. Initially, an incremental approach to tenure regularization, a selective use of low infrastructure and/or planning standards may be applied, particularly to informal (squatter) settlements to avoid heavy calls on limited public sector resources.

2) ***Providing basic infrastructure to guide urban development.*** A very effective tool to guide urban development is the location of infrastructure, particularly roads. Even in the absence of effective comprehensive spatial plans, enforceable zoning regulations, and plentiful capital funds, a spatially selective and properly phased application of limited infrastructure resources based on broad and simple structure plans which indicate the broad magnitudes and directions of urban growth, including infrastructure networks could cost-effectively direct urban development.

3) ***Improving the funding of infrastructure.*** Financial strategies need to identify mechanisms for efficiently recovering capital costs of infrastructure from both classes of beneficiary (consumers and landowners) within the service area. Borrowings need to be extensively used to finance infrastructure projects for both financial management and equity considerations. Among the effective financial handles that can be applied singly or in combination to recover costs include: a) consumption fees, b) connection charges, and c) betterment (special) levies (assessments).[29] These tools can be used to reliably capture income streams produced by the capital projects.

4) ***Providing efficient systems of property rights and registration.*** With formal and informal land markets commonplace in all Philippine localities, better policies are needed to bring law and administration into line with fact and reality. The existing land titling and registration system in the Philippines already recognizes tenure choices, i.e., use rights, occupancy certificates, condominium tenure, etc., but the recording and record-keeping systems still remain weak in terms of staff, operating procedures, fidelity of records, computer resources and other required resources. The weak transaction system has led to a profusion of "toll gates" of illegal monetary recompense; illegitimate land titles; and delayed implementation of urban development projects.

5) ***Providing land information.*** Land information needs include: a) land administration; b) natural resource, topographic, and environmental information; c) engineering and infrastructure; and, d) socio-economic, financial and demographic information. The collection, organization, mapping, analysis, and dissemination of this information should be through a local ***land information network*** involving the interrelated and coordinated efforts of: a) the local development planning and infrastructure group (City Planning and City Engineering); b) the fiscal

cadastral bodies (Assessment and Treasury), and, c) the land registration agency. Available technologies that the land information network may use include digital mapping of satellite imageries (for strategic planning) and aerial photographs (for infrastructure planning, O & M and management control).

6) ***Promulgating and enforcing appropriate land-use regulations.*** Land use regulations should: a) eliminate unwanted spill-over effects when one land use imposes costs on adjoining properties or upon the wider community; b) promote efficiency in the use of land; and, c) improve the distributional impacts of land development. Regulations should, however, be carefully related to the administrative and financial capacity to enforce them, and should be applied parallel with more positive policies that support the desired urban land development. Otherwise, regulations will be unenforceable.

7) ***Mitigating environmental impacts by preventive as well as remedial actions.*** The external environmental costs of urban development need to be considered when urban development is being planned, rather than ignored or remedied at higher costs after the event. For example, policies and actions are needed to guide new urban development away from hazardous areas such as flood or landslide-prone land, areas of community importance such as water supply sources, and areas of ecological importance such as residual natural vegetation like parks. City governments should liaise with national government bodies on policy questions such as energy and resource pricing which impact on the environmental quality of cities.

THE REQUIRED INSTITUTIONAL SUPPORT

The thrust of the recommended policies is simply to promote the spirit and the law of the 1992 Local Government Code, and make much more use of the informal and formal private sector. Local governments will serve as promoters and enablers of land development by the private sector.

Operationally, such a partnership involves:

1. funding joint approaches to land development;

2. secondment of private sector professionals;

3. privatization of certain functions of land management; and

4. co-funding of infrastructure and service programs with local community groups.

Local governments will need more support from central government through secondment to establish better management systems, quality standards, inspectorates and systems of financial rewards and penalties.

Planning schools could support LGUs by providing training that emphasizes the new role of LGUs in land markets, application of land information systems, and monitoring/evaluating the overall impacts of land development on socio-economic objectives. Planning curricula should shift the role of local planners from being primarily regulatory to one of leverage, involving advice, promotion, and coordination.

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ENDNOTES

[1] This paper was based on a Technical Input Paper on Urban Land Demand and Supply prepared by the author for the UNDP and the NEDA in December 1995 as part of the required studies for the preparation of the National Urban Policy. The author wishes to acknowledge the financial support extended by the UNDP to the study.

[2] Derived from the following regression equation:
LN PCY =10.43 + 0.96 LN URB
(0.20)
R^2 = 0.65 S.E.E = 0.27
where: LN PCY = natural log of Per Capita GRDP at 1985 Prices; LN URB = natural log of the % of the regional population living in urban areas; and the no. in parentheses is the standard error of the regression coefficient.
The equation and its coefficients are significant at the 95% confidence level.

[3] This will be further reduced by 604 has. as Fort Bonifacio and Villamor Airbase gets converted to residential areas (214 has.), mixed development/CBD (200 has.), sports and recreation (69 has.), NAIA Terminal III (30 has.), and other non-institutional uses (91 has.). Of the total 633 has. to be converted, only 29 has. will be devoted to institutional uses - schools (24 has.) and a hospital (5 has.).

[4] Thus, high-end light to medium density housing is being built inside golf courses and in every available vacant land near schools and commercial centers.

[5] Between 1980 and 1990, the urban population grew annually by 5.08% as against only 0.29% of the rural population for an overall urbanization tempo of 4.79%. Most of the increase in urban population went to the NCR, and the urban centers of Region IV and Region III.

[6] Source of Basic Data: NSO On-Line Computerized Database.

[7] NHA walk-up apartments have floor areas ranging from 427 to 33 sq. m.

[8] Average floor area of condominium units in the Makati and Ortigas areas is 120 sq. m.

[9] Mean of the 3.0 socialized housing standard set in the Bonifacio area and 1.0 for high-end residences. In 1990, nearly 40% of the occupied dwelling places in urban areas like the NCR were duplexes and other forms of multi-unit residential places.

[10] The 1970 figure was taken from the **1982 *Philippine Statistical Yearbook*** while the 1980 figure came from the **1987 *Philippine Statistical Yearbook***.

[11] Since 1990, most of the new and pending subdivision projects processed by the HLURB are located on the fringe areas of Metro Manila. Data gathered by the Center for Research and Communication (CRC) show that 60% of those who are able to acquire housing in these so-called low cost housing projects are overseas contract workers (OCWs) indicating that for all intents and purposes only middle and upper middle income earners can afford these housing units intended for low income classes.

[12] Based on 1990 labor statistics and projected using the trend between 1980 and 1990.

[13] Based on 1990 labor statistics and projected using the trend between 1980 and 1990.

[14] Time saver standards place the space requirements at 10 to 30 sq. m. per employee.

[15] Existing data indicate a 0.25 sq. m. per capita supply in Metro Manila as compared to 0.06 sq. m. in Jakarta and 0.38 sq. m. in Kuala Lumpur. Given the rate of commercial developments in the key urban centers all over the country, a doubling of the commercial space supply by Year 2000 is not far off.

[16] Estimated at 1,150,000 room-nights by the U.P. A.I.T. for Metro Manila alone.

[17] As gathered from discussions with a Tourism Specialist from the U.P. A.I.T.

[18] **Low Economic Growth Scenario**: 6.0% per annum between 1994 and 2000, **Medium Economic Growth Scenario**: 6.5%, and **High Economic Growth Scenario**: 7.0%.

[19] Projected using the following regression equation:

LN MFGGVA = -0.88 + 0.96 LN GDP
(0.07)

R^2 = 0.96 S.E.E = 0.02

where: LN MFGGVA = natural log of the GVA of the Manufacturing sector at 1985 Prices;
LN GDP = natural log of GDP at 1985 Prices; and
the no. in parentheses is the standard error of the regression coefficient.
The equation and its coefficients are significant at the 95% confidence level.

[20] Projected using the following regression equation:

LN MFGEMP = -4.11 + 0.98 LN MFGGVA
(0.16)

R^2 = 0.82 S.E.E = 0.05

where: LN MFGEMP = natural log of Employment in the Manufacturing sector.
LN MFGGVA = natural log of the GVA of the Manufacturing sector at 1985 Prices; and the number in parentheses is the standard error of the regression coefficient.
The equation and its coefficients are significant at the 95% confidence level.

[21] Based on available data from operating industrial estates in the country.

[22] From the June-July 1993 ***Real Estate Monitor***.

[23] From the June-July 1993 ***Real Estate Monitor***.

[24] From market surveys conducted by Asian Appraisal and Econotec, Inc.

[25] From ***Buy and Sell***, August 30, 1995.

[26] In fact, real estate prices increased by nearly 18% in 1990 from the 1989 level.

[27] This trend will probably hold true for the other urban centers but could not just be observed statistically because none has reached their respective thresholds.

[28] The figures represent the coefficient of determination (R^2) of parabolic curves fitted on 1990 land price data for Metro Manila cities and municipalities. The equations are as follows:

Residential Area : $LP=111.07\ DEN-0.28\ DEN^2$ $R^2=0.50$
Commercial Area: $LP=3,256.07+206.94\ DEN-0.53\ DEN^2$ $R^2=0.43$
Industrial Area : $LP=95.69\ DEN-0.24\ DEN^2$ $R^2=0.22$
where: LP is Ave. land price in P/sq. m. and DEN is population density/Ha.

[29] All of these tools are provided for in the 1992 Local Government Code (LGC). For example, up to 60% of the cost of any local infrastructure can be recovered from property beneficiaries through special assessments.

IMPLICATION OF POPULATION GROWTH AND MOVEMENT IN CENTRAL LUZON ON THE MARKET AND LABOR SUPPLY POTENTIALS OF THE CLARK ECONOMIC ZONE SUB-ZONE (CSEZ-SZ)

ARTURO G. CORPUZ

The study describes and analyzes the levels, growth rates, and movements of population in Central Luzon from 1960 to 1990. The focus of analysis is the local (municipal) level as an aid towards determining the market and productivity development potentials of the CSEZ-SZ from a regional perspective.

METHODOLOGY

Measurements of the location, distribution, and shape of the population of the provinces of Central Luzon were derived using ***centrography***. This is a field of study dealing with statistical analysis of spatially-defined attributes.[1] Four sets of census data (1960, 1970, 1980, and 1990) were used; for each census year, centers of population of each city or municipality, defined by the location of the central business district or poblacion, were weighted by corresponding population data. These were then used to derive statistical means and moments to define population centers, average and standard distances, and ellipses of density as centrographic measures of location (center of population), dispersion (average radius or average distance and standard radius or standard distance), and shape (theta or angle of declination, and standard distances about the principal and minor axes), respectively.

Location

A point (X-bar, Y-bar) that marks the centroidal location of the population under study describes the location of population. If population grows symmetrically, then its location should not change. Changes in location, therefore, indicate asymmetrical movements, the net effect of which results in the observed change.

Dispersion/Concentration

Dispersion can be measured by either average or standard distance, where a greater distance means a more dispersed population. Average or standard distance is a measure of the spatial deviation of the population from the centroidal location. Average distance measures the arithmetic mean deviation while standard distance represents one standard deviation of the location of population; both measured from its center. (Standard distance is identical to Radius of Gyration in mechanics.)

Shape

The shape of population distribution is measured by ellipses of density, which, conceptually, have the limits of a straight line and a circle. An infinite number of elliptical shapes is possible between these two extremes, defined by standard distances about the principal (Disx') and minor (Disy') axes. The principal axis is defined by the angle theta, measured counterclockwise from the horizontal, rotating around the center of population. A more circular ellipse indicates a more even distribution while a thinner ellipse indicates greater directional skewness.

POPULATION LEVELS

The total population of Central Luzon, broken down by province and by city and municipality, are presented in Table 1. The data were taken from the various population censuses conducted during the period under study.

Provincial Population

According to the 1990 census, the six provinces of Central Luzon had a total population of about 6.2 million, making Region III the second most populous region in the country outside Metro Manila.[2] As of 1990, Central Luzon contained ten percent of the country's population.

Among the six provinces, Pampanga had the largest population with approximately 1.53 million, representing 24.7 percent of the total regional population. Bulacan was a close second with 1.51 million (24.3 percent), followed by Nueva Ecija with 1.31 million (21.2 percent), Tarlac with 0.86 million (13.9 percent), Zambales with 0.56 million (9.1 percent), and finally by Bataan, with 0.43 million (6.9 percent).

City and Municipal Population

The largest concentration of population in Central Luzon is in Angeles City, which had a 1990 census population of 237,000. Although second only to Metro Manila in Luzon, Angeles City's population is less than three percent of the Metro Manila population.

The largest cities/municipalities in Central Luzon, those with population that exceeded 100,000 in 1990, are the following:

City/Province	Population In 1990
(a) Angeles City, Pampanga	237,000
(b) Tarlac, Tarlac	209,000
(c) Olongapo, Zambales	193,000
(d) Cabanatuan, Nueva Ecija	173,000
(e) San Fernando, Pampanga	157,000
(f) San Jose del Monte, Bulacan	142,000
(g) Malolos, Bulacan	125,000
(h) Meycauayan, Bulacan	124,000
(i) Mabalacat, Pampanga	121,000
(j) Concepcion, Tarlac	103,000

Of these, only Angeles City may be considered within the sphere of direct influence of the CSEZ-SZ.

The other municipalities within the immediate area of influence as far as the CSEZ-SZ is concerned are Mabalacat (121,000), Porac (68,000), Bamban (36,000), and Capas (61,000). Together with Angeles City, they have a total population of 523,000, representing 8.4 percent of the total population of Central Luzon.

POPULATION GROWTH RATES

In general, throughout the 1960-1990 period, ***Bataan*** and ***Bulacan*** towns grew ***fastest***; ***Pampanga*** and ***Zambales*** towns experienced ***average*** growth; while ***Tarlac*** and ***Nueva Ecija*** towns grew ***slower*** than the rest.

From 1980 to 1990, the total population of Central Luzon grew by 29 percent. Cities and municipalities at the periphery of Metro Manila experienced the fastest growth. Towns around the cities of Angeles and Olongapo also grew faster than most other towns.

Marilao and Guiguinto grew the fastest at 61 to 60 percent, respectively, more than double the average for the entire region. Morong also grew very rapidly (61 percent) because of the UN Refugee Center that was established there. The other towns that were among the fastest growing were San Jose del Monte (57 percent), Sta. Maria (56 percent), Subic (55 percent), and Mabalacat (50 percent). San Jose del Monte, it should be noted, grew rapidly because of squatter resettlement sites built within its boundaries.

CSEZ towns grew faster than average. Compared to the 29 percent growth experienced by Central Luzon during 1980-1990, Mabalacat grew by 50 percent, Bamban by 37 percent, Porac by 34 percent and Capas by 32 percent. Only Angeles City grew slower than the regional average, with a 25 percent growth rate. Mabalacat was the fastest growing town in Pampanga; likewise, Bamban and Capas registered the highest growth rates in Tarlac.

POPULATION DISTRIBUTION

Centrographic measures derived for Central Luzon, by province, and using individual city/municipal centers as centroidal approximations of the location of population, confirm population trends derived earlier as well as reveal specific population characteristics relevant to CSEZ-SZ. (See Table 2)

Location

a. The centroidal location of ***Central Luzon***'s population (X-bar, Y-bar in Table 2) is located in ***northeastern Pampanga***, approximately 12 kilometers east of Angeles

City. This center has been drifting steadily southward, towards Metro Manila, moving about 6.8 kilometers from 1960 to 1990. In general, this suggests that the region remains very much oriented towards Metro Manila.

b. The movements of population from 1960 to 1990 among the provinces of Central Luzon vary.

Bulacan is consistent with the regional trend, with its centrographic center (near Plaridel) ***moving consistently towards Metro Manila*** along a line that approximates the direction of the north Expressway corridor of Bulacan's economy and demographic movements.

Bataan's center has hovered in the Balanga area. It moved significantly southward from 1960 to 1980, presumably as a result of the establishment of the Mariveles Export Processing Zone. It remained essentially in the ***same place*** from 1980 to 1990, with a ***slight shift towards the west***, following the establishment of the Refugee Center in Morong.

Zambales displayed the ***largest movement*** of centrographic center. Its center was positioned close to Cabangan in 1960; by 1990 its center had moved about 10 kilometers southeast, about 7 kilometers east of the San Felipe Poblacion. Considering the constraints posed by the Zambales mountains, this movement may be explained by the fast growth experienced in the Olongapo and Subic area.

The population centers of ***Tarlac*** and ***Nueva Ecija*** were relatively ***stable*** compared to the rest of Central Luzon. They remained in essentially the same place during the period from 1960 to 1990: Tarlac's center about 6 kilometers directly north of Tarlac, Tarlac close to the North Road (MacArthur Highway); Nueva Ecija's center was located about 9 kilometers north of Cabanatuan near Talavera. This pattern suggests that economic influences on both Tarlac and Nueva Ecija were not disproportionately biased towards any direction. Unlike Bulacan, or even Central Luzon as a whole, the populations of Tarlac and Nueva Ecija were not pulled towards the south.

The behavior of ***Pampanga***'s centrographic center differed from the pattern observed for the rest of the region. It shows a slight but clear northward movement, ***away from Metro Manila***. Its 1960 center was located close to San Fernando and its 1970, 1980 and 1990 centers successively moved northwest towards Angeles City. This suggests that the economic influence of the Clark Air Base facility, dominated the province. It also suggests that the Angeles area was a legitimate regional center, able to wield sufficient influence to draw surrounding towns its economic sphere of direct influence inspite of the strong overall pull of Metro Manila.

Concentration/Dispersion

Centrographic measures of dispersion (both Average and Standard Radii) are shown in Tables 3 and 4. The Average Radius is the arithmetic mean of the distances from the centrographic center of all cities/municipalities while the Standard Radius is the geometric mean, or the spatial equivalent of one standard deviation. Either the Average Radius or the Standard Radius may be used as an indicator of the relative concentration/dispersion of the region's Standard Radii.

a. The dispersion of population in Central Luzon has been relatively constant, showing a very slight and negligible tendency to concentrate from 1960-1990 (46.41 to 46.35 kilometers). This suggests that the distribution of population in the region is stable and that as a whole, additional population has been distributed proportionately according to the existing or previous distribution. The region, it could be concluded, has experienced neither a trend to concentrate nor one of dispersion. (See Figures 1 and 2)

b. Bataan is the second most concentrated province, with a Standard Radius of 15.11 kilometers in 1960, which rose to 17.05 in 1990. This approximately 2-kilometer increase is the largest among Central Luzon provinces. It is the only province that shows a clear change, whether towards concentration or dispersion, in Standard Radius of the other provinces.

c. The Standard Radii of Bulacan, Nueva Ecija, Pampanga, Tarlac, and Zambales remained more or less the same throughout the 1960-1990 period, indicating no clear trend towards concentration or dispersion.

d. Pampanga is the most concentrated province in terms of population distribution. Its Standard Radius showed a very slight increase during the 1960-1990 period, from 13.51 in 19660 to 13.69 in 1990.

e. Zambales is the most dispersed province. Its Standard Radius ranged from 37.23 to 38.04 during the 1960-1990 period, almost three times the level of dispersion of Pampanga.

MARKET AND LABOR SUPPLY IMPLICATIONS

The potential market and productive labor force of the towns where the CSEZ-SZ is located is significant. The populations of Angeles, Mabalacat, Porac, Bamban, and Capas totaled 523,000 in 1990, representing 8.4 percent of the total regional population. More than half of this population was located in Angeles City, which is the second largest urban center in Luzon, next to Metro Manila.

The disruption caused by the eruption of Mt. Pinatubo and the closure of the US military base in Clark may have led to a decline in the regional population, particularly in the CSEZ-SZ towns, but the CSEZ-EZ area, in recent history is close to the largest concentration of population and economic activity in Central Luzon.

CSEZ-SZ towns were among the fastest growing in the region and within their respective provinces. CSEZ-SZ is located in the only area within Central Luzon that has shown a pattern of spatial growth that is not directed towards Metro Manila. From 1960 to 1990, Pampanga's growth was visibly oriented away from Metro Manila, towards the Angeles/Clark Air base area. This suggests that if the future economic performance of Angeles can approximate its pre-Pinatubo/US military base condition, then it could continue to become a major regional center.

Table 1
Population and Population Growth Rates
Central Luzon Cities/Municipalities, 1960-1990

Town, City, Province	Population				Annual Growth Rate			
	1960	1970	1980	1990	60-70	70-80	80-90	1960-90
Abucay	12,900	18,140	22,692	26,708	0.41	0.25	0.18	1.07
Bagac	6,889	9,268	13,109	18,241	0.35	**0.41**	**0.39**	**1.65**
Balanga	18,143	28,484	39,132	51,512	**0.57**	**0.37**	**0.32**	**1.84**
Dinalupihan	21,249	30,509	41,415	58,172	**0.44**	**0.36**	**0.40**	**1.74**
Hermosa	12,550	19,501	25,672	34,633	**0.55**	0.32	**0.35**	**1.76**
Limay	7,126	12,912	24,281	32,629	**0.81**	**0.88**	**0.34**	**3.58**
Mariveles	9,067	16,157	48,594	60,761	**0.78**	**2.01**	0.25	**5.70**
Morong	5,734	6,738	10,637	17,155	0.18	**0.58**	**0.61**	**1.99**
Orani	17,618	25,740	33,083	43,494	**0.46**	0.29	**0.31**	**1.47**
Orion	14,672	19,672	28,049	35,263	0.34	**0.43**	0.26	1.40
Pilar	9,667	14,087	18,549	25,244	**0.46**	0.32	**0.36**	**1.61**
Samal	9,708	15,002	18,041	21,991	**0.55**	0.20	0.22	1.27

Town, City, Province	Population				Annual Growth Rate			
	1960	1970	1980	1990	60-70	70-80	80-90	1960-90
BATAAN	*145,323*	*216,210*	*323,254*	*425,803*	***0.49***	***0.50***	***0.32***	***1.93***
Angat	15,051	19,798	24,844	34,494	0.32	0.25	**0.39**	1.29
Balagtas	10,280	17,109	28,654	42,658	**0.66**	**0.67**	**0.49**	**3.15**
Baliuag	37,409	52,133	70,555	89,719	0.39	**0.35**	0.27	1.40
Bocaue	22,417	33,953	49,693	67,243	**0.51**	**0.46**	**0.35**	**2.00**
Bulacan	18,395	26,750	34,920	48,770	**0.45**	0.31	**0.40**	**1.65**
Bustos	13,412	19,254	25,739	34,965	**0.44**	**0.34**	**0.36**	**1.61**
Calumpit	27,662	36,119	45,454	59,042	0.31	0.26	**0.30**	1.13
Guiguinto	10,629	16,075	27,751	44,532	**0.51**	**0.73**	**0.60**	**3.19**
Hagonoy	46,861	59,889	73,176	90,212	0.28	0.22	0.23	0.93
Malolos	48,968	73,996	95,699	125,178	**0.51**	0.29	**0.31**	**1.56**
Marilao	9,206	16,128	35,069	56,361	**0.75**	**1.17**	**0.61**	**5.12**
Meycauayan	32,234	50,977	83,579	123,982	**0.58**	**0.64**	**0.48**	**2.85**
Norzagaray	12,202	19,144	28,411	37,792	**0.57**	**0.48**	**0.33**	**2.10**
Obando	18,733	27,176	39,618	46,346	**0.45**	**0.46**	0.17	**1.47**
Pandi	10,283	15,884	22,679	32,648	**0.54**	**0.43**	**0.44**	**2.17**
Paombong	16,677	20,636	26,267	32,052	0.24	0.27	0.22	0.92
Plaridel	18,714	27,648	39,121	52,954	**0.48**	**0.41**	**0.35**	1.83
Pulilan	20,436	28,923	38,110	48,199	0.42	0.32	0.26	1.36
San Ildefonso	26,140	34,559	44,931	59,598	0.32	0.30	**0.33**	1.28
SJ del Monte	9,329	18,704	90,732	142,047	**1.00**	**3.85**	**0.57**	**14.23**
San Miguel	43,195	58,712	75,493	95,431	0.36	0.29	0.26	1.21
San Rafael	19,772	28,039	36,803	49,528	0.42	0.31	**0.35**	**1.50**
Sta. Maria	26,341	36,369	58,748	91,468	0.38	**0.62**	**0.56**	**2.47**
BULACAN	*514,346*	*737,975*	*1,096,046*	*1,505,219*	***0.43***	***0.49***	***0.37***	***1.93***
Aliaga	18,759	24,449	32,349	40,425	0.30	0.32	0.25	1.15
Bongabon	20,854	25,434	32,451	39,616	0.22	0.28	0.22	0.90
Cabanatuan	69,580	99,890	138,298	173,065	**0.44**	**0.38**	0.25	**1.49**
Cabiao	21,561	28,260	37,922	48,850	0.31	**0.34**	**0.29**	1.27
Carranglan	10,100	15,536	19,891	26,064	**0.54**	0.28	**0.31**	**1.58**
Cuyapo	30,634	34,793	39,654	43,103	0.14	0.14	0.09	0.41
Gabaldon	9,907	13,865	17,169	21,744	0.40	0.24	0.27	1.19
Gapan	32,514	45,426	60,014	70,489	0.40	0.32	0.17	1.17
GenMNatividad	9,539	13,827	17,388	21,984	**0.45**	0.26	0.26	1.30
Gen Tinio	14,925	19,353	23,406	29,491	0.30	0.21	0.26	0.98
Guimba	38,148	50,261	58,847	73,363	0.32	0.17	0.25	0.92
Jaen	20,438	28,712	39,064	47,346	0.40	**0.36**	0.21	1.32
Laur	11,165	14,085	17,729	21,464	0.26	0.26	0.21	0.92
Licab	8,371	12,193	14,543	17,202	**0.46**	0.19	0.18	1.05
Llanera	8,873	12,985	18,652	23,285	**0.46**	**0.44**	0.25	**1.62**
Lupao	15,482	20,005	23,050	27,481	0.29	0.15	0.19	0.78

Town, City, Province	Population				Annual Growth Rate			
	1960	1970	1980	1990	60-70	70-80	80-90	1960-90
Muñoz	27,622	35,723	43,211	50,356	0.29	0.21	0.17	0.82
Nampicuan	6,084	6,639	7,597	8,426	0.09	0.14	0.11	0.38
Palayan City	-	8,382	14,959	20,393		**0.78**	**0.36**	
Pantabangan	8,169	12,998	13,916	18,341	**0.59**	0.07	**0.32**	1.25
Peñaranda	10,768	14,226	16,753	20,500	0.32	0.18	0.22	0.90
Quezon	10,953	15,842	20,846	25,574	**0.45**	0.32	0.23	1.33
Rizal	19,447	25,919	31,407	38,970	0.33	0.21	0.24	1.00
San Antonio	25,668	33,862	42,969	51,815	0.32	0.27	0.21	1.02
San Isidro	16,514	22,128	28,550	34,349	0.34	0.29	0.20	1.08
San Jose	38,078	70,314	64,254	82,836	**0.85**	(0.09)	**0.29**	1.18
San Leonardo	18,635	25,995	34,706	39,740	0.39	**0.34**	0.15	1.13
Sta. Rosa	15,989	22,554	32,424	40,439	0.41	**0.44**	0.25	**1.53**
Sto. Domingo	16,983	22,828	29,013	35,864	0.34	0.27	0.24	1.11
Talavera	28,603	44,512	62,225	77,256	**0.56**	**0.40**	0.24	**1.70**
Talugtog	8,808	10,702	11,734	14,036	0.22	0.10	0.20	0.59
Zaragoza	15,191	19,596	24,418	28,743	0.29	0.25	0.18	0.89
NUEVA ECIJA	*08,362*	*851,294*	*1,069,409*	*1,312,610*	*0.40*	*0.26*	*0.23*	*1.16*
Angeles	75,900	134,544	188,834	236,685	**0.77**	**0.40**	0.25	**2.12**
Apalit	25,408	36,138	48,253	62,373	0.42	**0.34**	**0.29**	**1.45**
Arayat	32,976	45,840	56,742	73,189	0.39	0.24	**0.29**	1.22
Bacolor	29,634	40,212	50,942	67,259	0.36	0.27	**0.32**	1.27
Candaba	28,811	41,512	52,945	68,145	**0.44**	0.28	**0.29**	1.37
Floridablanca	28,655	39,830	51,648	66,146	0.39	0.30	0.28	1.31
Guagua	40,126	58,270	72,609	88,290	**0.45**	0.25	0.22	1.20
Lubao	44,129	61,608	77,502	99,705	0.40	0.26	**0.29**	1.26
Mabalacat	31,752	55,897	80,966	121,115	**0.76**	**0.45**	**0.50**	**2.81**
Macabebe	27,888	39,017	45,830	55,505	0.40	0.17	0.21	0.99
Magalang	18,626	26,342	34,840	43,940	0.41	0.32	0.26	1.36
Masantol	24,159	30,538	35,350	41,964	0.26	0.16	0.19	0.74
Mexico	29,449	41,145	53,491	69,441	0.40	0.30	0.30	1.36
Minalin	16,223	21,896	27,414	34,795	0.35	0.25	0.27	1.14
Porac	23,449	36,232	50,906	68,215	**0.55**	**0.41**	**0.34**	**1.91**
San Fernando	56,861	84,362	110,891	157,851	**0.48**	0.31	**0.42**	**1.78**
San Luis	14,873	20,205	25,701	31,920	0.36	0.27	0.24	1.15
San Simon	13,549	19,147	23,518	30,851	0.41	0.23	**0.31**	1.28
Sta. Ana	14,121	19,402	25,361	32,540	0.37	0.31	0.28	1.30
Sta. Rita	15,492	19,439	24,995	28,296	0.25	0.29	0.13	0.83
Sto. Tomas	12,097	18,907	24,951	33,309	**0.56**	0.32	**0.33**	**1.75**
Sexmoan	13,081	16,792	17,901	21,148	0.28	0.07	0.18	0.62
PAMPANGA	*617,259*	*907,275*	*1,181,590*	*1,532,682*	***0.47***	*0.30*	*0.30*	***1.48***
Anao	5,068	6,672	6,519	7,955	0.32	(0.02)	0.22	0.57

Town, City, Province	Population				Annual Growth Rate			
	1960	1970	1980	1990	60-70	70-80	80-90	1960-90
Bamban	13,527	18,474	26,072	35,639	0.37	**0.41**	**0.37**	**1.63**
Camiling	40,536	49,156	53,860	62,716	0.21	0.10	0.16	0.55
Capas	26,617	35,515	46,523	61,205	0.33	0.31	**0.32**	1.30
Concepcion	48,084	62,227	80,647	103,146	0.29	0.30	0.28	1.15
Gerona	32,429	41,831	50,433	59,486	0.29	0.21	0.18	0.83
La Paz	21,843	27,150	35,330	41,946	0.24	0.30	0.19	0.92
Mayantoc	10,228	13,558	17,135	21,170	0.33	0.26	0.24	1.07
Moncada	23,494	29,195	34,451	41,672	0.24	0.18	0.21	0.77
Paniqui	38,416	47,718	55,006	64,949	0.24	0.15	0.18	0.69
Pura	10,227	12,763	14,801	18,032	0.25	0.16	0.22	0.76
Ramos	7,531	9,649	11,215	13,566	0.28	0.16	0.21	0.80
San Clemete	5,337	6,073	7,117	8,873	0.14	0.17	0.25	0.66
San Jose				20,483				
San Manuel	8,956	10,683	13,491	17,261	0.19	0.26	0.28	0.93
Sta. Ignacia	15,512	20,775	25,224	30,470	0.34	0.21	0.21	0.96
Tarlac	98,285	135,128	175,691	208,722	0.37	0.30	0.19	1.12
Victoria	26,555	33,141	34,942	42,360	0.25	0.05	0.21	0.60
TARLAC	*432,645*	*559,708*	*688,457*	*859,651*	*0.29*	*0.23*	*0.25*	*0.99*
Botolan	16,417	23,848	27,125	35,604	0.45	0.14	0.31	1.17
Cabangan	7,484	10,113	11,636	15,337	0.35	0.15	0.32	1.05
Candelaria	9,799	12,376	15,686	18,539	0.26	0.27	0.18	0.89
Castillejos	10,049	14,807	19,154	26,753	0.47	0.29	0.40	1.66
Iba	14,555	19,521	22,791	29,221	0.34	0.17	0.28	1.01
Masinloc	15,258	22,736	27,735	32,375	0.49	0.22	0.17	1.12
Olongapo	45,330	107,785	156,430	193,327	1.38	0.45	0.24	3.26
Palauig	10,392	14,546	17,176	21,577	0.40	0.18	0.26	1.08
San Antonio	11,596	18,048	22,382	26,944	0.56	0.24	0.20	1.32
San Felipe	9,861	13,283	13,834	15,624	0.35	0.04	0.13	0.58
San Marcelino	13,914	17,801	24,964	36,598	0.28	0.40	0.47	1.63
San Narciso	14,993	17,622	19,119	22,891	0.18	0.08	0.20	0.53
Sta. Cruz	20,809	28,282	35,665	41,273	0.36	0.26	0.16	0.98
Subic	12,985	22,266	30,340	46,929	0.71	0.36	0.55	2.61
ZAMBALES	*213,442*	*343,034*	*444,037*	*562,992*	*0.61*	*0.29*	*0.27*	*1.64*
CENTRAL LUZON	**2,531,377**	**3,615,496**	**4,802,793**	**6,198,957**	**0.43**	**0.33**	**0.29**	**1.45**

Note: Population growth rates in bold exceeded Central Luzon average.
Source: NSO, 1960, 1970, 1980, 1990 Census of Population

Table 2
Central Luzon Centrographic Measures, 1960-1990

Year	X-bar	Y-bar	Theta (degrees)	Average Dist (km)	Standard Dist (km)	Standard Dist (km)	Standard Dist (km)
Central Luzon							
1960	103.77	36.58	36.58	41.98	46.41	32.05	33.57
1970	103.56	36.86	36.86	41.95	46.57	32.83	33.03
1980	104.33	36.71	36.71	41.67	46.53	32.44	33.36
1990	104.61	36.87	36.87	41.41	46.35	32.15	33.39
Bataan							
1960	84.06	50.68	30.59	13.09	15.11	8.75	12.32
1970	84.35	50.26	28.36	13.16	15.26	8.38	12.75
1980	84.06	47.24	25.58	14.97	16.92	9.05	14.30
1990	83.80	47.57	26.83	15.17	17.05	9.38	14.24
Bulacan							
1960	124.48	69.72	35.92	14.05	15.67	12.05	10.02
1970	124.84	69.31	35.87	13.88	15.50	11.74	10.12
1980	126.23	68.24	37.39	13.80	15.34	11.24	10.44
1990	126.68	67.83	37.67	13.57	15.11	10.96	10.40
Nueva Ecija							
1960	127.66	142.95	34.26	21.88	24.31	15.49	18.73
1970	128.35	143.29	33.48	21.65	24.06	15.54	18.37
1980	128.46	142.01	33.58	30.95	23.57	15.27	17.95
1990	128.72	142.07	33.40	20.89	23.52	15.37	17.80
Pampanga							
1960	99.74	86.79	40.84	12.40	13.51	9.13	9.96
1970	99.36	87.48	40.56	12.61	13.62	8.92	10.28
1980	99.11	87.95	40.61	12.71	13.65	8.81	10.43
1990	99.05	88.22	40.56	12.73	13.69	8.74	10.53
Tarlac							
1960	90.47	141.62	30.52	16.38	18.23	8.64	16.05
1970	90.51	141.18	30.23	16.17	18.09	8.57	15.93
1980	90.66	140.29	29.61	16.02	18.10	8.49	15.98
1990	90.13	140.04	31.35	16.50	18.54	9.10	16.15
Zambales							
1960	37.82	100.35	22.97	33.85	37.74	5.42	37.34
1970	40.77	95.03	23.96	33.81	37.93	5.28	37.56
1980	42.00	93.03	24.08	33.70	38.04	5.13	37.69
1990	42.40	91.98	24.29	32.74	37.23	5.04	36.88

Notes: **X-bar and Y-bar are measured from an arbitrary grid on a 1:250,000 map of Central Luzon; where x=12 at 120°30'; y=0 at 14°15'; and 1 unit=6,875 meters.**

Table 3
Standard Distance, Central Luzon Provinces, 1960-1990 (km)

Province and Region	1960	1970	1980	1990
Bataan	15.11	15.26	16.92	17.05
Bulacan	15.67	15.50	15.34	15.11
Nueva Ecija	24.31	24.06	23.57	23.52
Pampanga	13.51	13.62	13.65	13.69
Tarlac	18.23	18.09	18.10	18.54
Zambales	37.74	37.93	38.04	37.23
Central Luzon	46.41	46.57	46.53	46.35

Table 4
Average Distance, Central Luzon Provinces, 1960-1990 (km)

Province and Region	1960	1970	1980	1990
Bataan	13.09	13.16	14.97	15.17
Bulacan	14.05	13.88	13.80	13.57
Nueva Ecija	21.88	21.65	20.95	20.89
Pampanga	12.40	12.61	12.71	12.73
Tarlac	16.38	16.17	16.02	16.50
Zambales	33.85	33.18	33.70	32.74
Central Luzon	**41.98**	**41.95**	**41.67**	**41.41**

Figure 1
Standard Distance
Central Luzon Provinces, 1960-1990

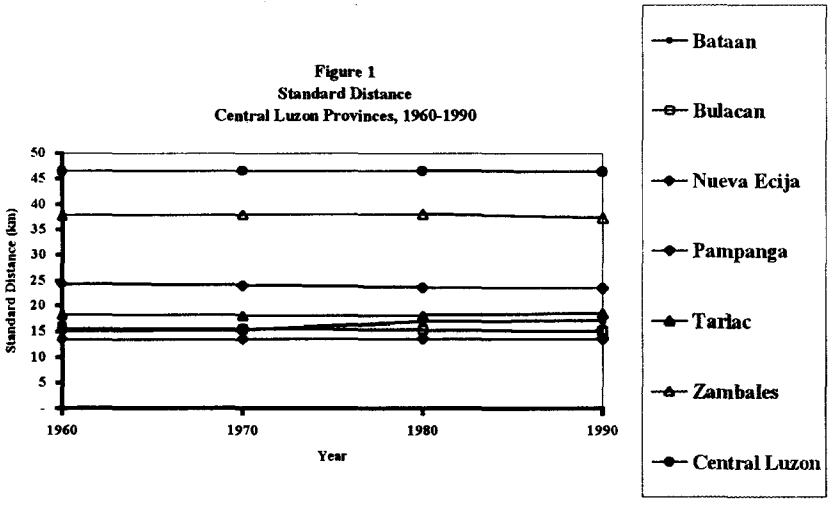
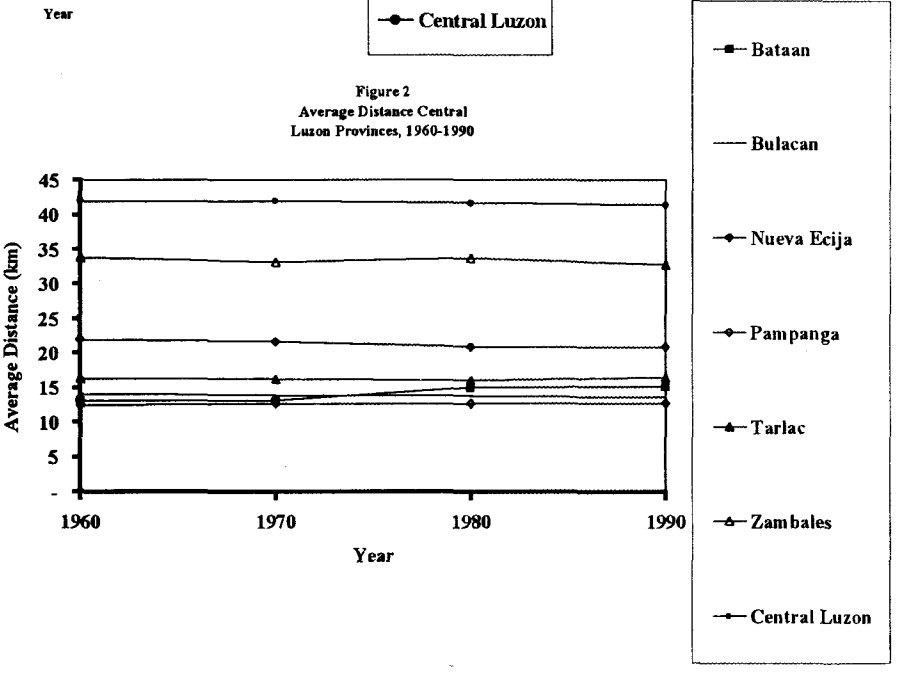


Figure 2
Average Distance Central Luzon Provinces, 1960-1990



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ENDNOTES

[1] For a comprehensive discussion and survey of centrography and its application, respectively, see: B. G. Jones, D. M. Manson, Y. Jin, and A. G. Corpuz, "The Evolution of Urban Form," Cornell Institute for Social and Economic Research, Cornell University, 1989.

[2] Region IV was first with 8.3 million.

FISCAL MANAGEMENT DIMENSIONS OF URBANIZATION IN THE PHILIPPINES [1]

NORMAN R. RAMOS

BACKGROUND

Urban growth has taken on national significance in the Philippines. There is a general concern about the rapid growth of large cities like the metropolitan areas and the need for policies to manage more effectively urban growth and its related problems of congestion, pollution, slum settlements, and inadequate services and facilities.

Analyses of Philippine urban development issues clearly indicate the significant advantages of urbanization. Highly urbanized areas enjoy agglomeration effects that lead to higher productivity than in the rest of the country. Their more cosmopolitan populations and better educational systems make for a greater potential to develop human resources. Urbanization generates an increase in taxable capacity from which additional public sector resources can be mobilized. There are also economies of scale that can be gained from the large infrastructure investments already made in these urban areas.

The environmental and poverty problems associated with urbanization in the Philippines are a result of an ***inefficient*** and ***inequitable*** way to manage and finance urban growth. In this particular paper, the central question that will be analyzed is how to finance public services in the country's large and fast-growing urban areas, and in particular, how to capture the benefits of urbanization in order to increase the supply of services.

The key aspects discussed include:

1. The current magnitude, issues, and approaches to the urban fiscal problem in the Philippines;
2. Urbanization and the expenditure growth of city governments;
3. The revenue (taxes, user charges, external funds) constraints and opportunities for Philippine cities; and
4. The prospects for and the politics of urban fiscal reforms in Philippine cities.

The analyses focus on quantitatively and qualitatively establishing the sources of fiscal pressures on city governments and how these pressures (and perhaps fiscal dividends) are likely to play out; and what are the appropriate policies for responding to the fiscal challenges of urbanization. The analyses largely draw from available secondary data and documents as well as relevant, known innovative city experiences along lines of improved property taxation, cost recovery, and external fund mobilization.

FISCAL ASPECTS OF URBANIZATION

Local government budgets increase with urbanization since the associated high population densities generate externalities which need to be addressed through public regulation and public involvement in service provision; for example: urban transport and traffic management, infrastructure services, sanitation, public health, public safety, local housing, and even public service employment.

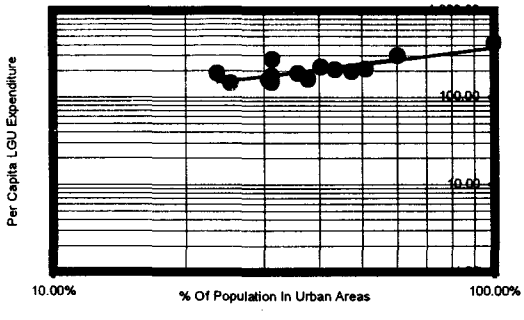
In the Philippines, a one percent increase in the percentage of the population living in urban areas is associated with a 0.63% increase in real per capita LGU expenditures.[2] The relationship between per capita LGU expenditure and the rate of urbanization for the different regions in the Philippines is shown in Figure 1.

The results suggest that Philippine LGUs have been able to raise per capita expenditures despite rapid increases in population, limited resource bases, and inflation. However, this favorable evaluation must be viewed with caution in the sense that the increase in real per capita expenditure was probably not sufficient to dent the existing deficit in services, and probably, even hold the absolute levels of public service constant. Thus, we see roads not being properly maintained, public markets and slaughterhouses in very unsanitary conditions, drainage systems clogged with debris, the solid waste system not able to cope with increasing demands, and various signs of unmet and even deteriorating local public services. What is very clear is that that urbanization will pressure Philippine LGU budgets by driving up expenditures.

On the revenue side, the indication is that urbanization has driven up revenues by at least a commensurate amount as shown in Figure 2.

A 0.69% increase in real per capita LGU revenue is attained for every percent increase in the urbanization rate in the various regions of the Philippines.[3]

Figure 1
Urbanization and Per Capita LGU Expenditures, Philippines, By Region: 1990



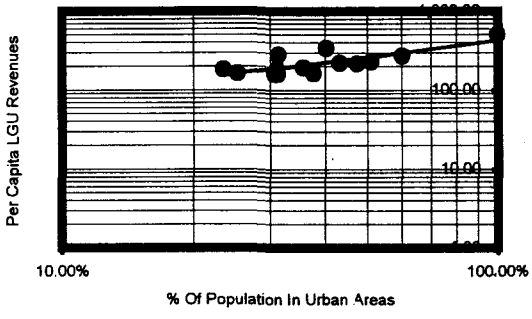
Source of Basic Data: 1994 *Philippine Statistical Yearbook* and 1990 *COA Annual Financial Report* (VOL. III)

More importantly, the analysis indicates that LGUs have been able to capture a significant proportion of the increase in the taxable economic base brought about by urbanization primarily through locally raised taxes.

A 0.77% increase in locally raised revenues is attained for every percent increase in the urbanization rate. The higher elasticity figure compared to that of total LGU revenue points to a trend toward more or less overall reliance on locally raised revenues in the various regions of the Philippines.[4]

On the whole, it would appear that changes in locally raised revenues determine the ability of an urban government to expand and improve the quality of its services.

Figure 2
Urbanization and Per Capita Total LGU Revenues, Philippines, By Region: 1990



Source of Basic Data: 1994 *Philippine Statistical Yearbook* and 1990 *COA Annual Financial Report* (VOL. III)

URBANIZATION AND CITY EXPENDITURE PATTERNS

Urbanization is associated with increases in LGU expenditures. Philippine cities are rising to the challenges of urbanization and the 1992 Local Government Code (LGC). Between 1989 and 1994, the total expenditures of Philippine cities increased annually by 34.8% in nominal terms and 23.9% after inflation.

Such increases were the result of the following factors:

1) Changes in the "***expenditure needs***" of city constituents, e.g., need for more housing and services;

2) ***Income effects***, e.g., rising standards of living and greater expectations from city constituents with regard to city services and facilities. The income effects are further heightened by ***demonstration effects*** as the Filipinos, particularly the urban dwellers, get exposed more and more to developed country standards arising from the increasing thrust toward the globalization of the Philippine economy.

3) ***Inflation,*** which averages about 10%. Inflation drives up urban government spending because it increases the cost of materials and supplies, and eventually, increases the salaries of government employees.

4) ***Diseconomies of agglomeration***, e.g., traffic congestion and tremendous pressures brought about by unplanned "mega-developments" which city governments have to increasingly deal with at high incremental costs. Dealing with these largely external costs are critical to keep the cost of doing business in the cities competitive; and

5) ***Public Service Employment*** when urban governments are viewed as local employers of last resort. While the number of regular plantilla positions in many urban governments are moderate, the figures do not reflect the vast amount of part-time casual workers who work for various programs of the city governments.

In per capita terms, total city expenditures quadrupled from P331 in 1989 to P1,308 in 1994 for a nominal annual growth rate of 31.6% and a real annual growth rate of 21.1%. (See Table 1).

Except for labor and employment welfare, every sectoral concern registered hefty increases during the period, highlighting the concern of city governments to make their localities productive and better places to live in. Housing and community development registered the biggest increase.

The drop in labor and employment welfare expenditure can probably be viewed in a positive light; that with the rapid growth in employment opportunities, cities found it better to allocate less money for this particular concern in favor of more pressing needs.

The 54.64% annual increase in per capita expenditure for Other Purposes (largely, debt service payments) highlights the increasing use of cities of credit financing to fund capital improvement projects.

The quality of urban expenditure has also improved as shown in Table 2. Cities are now allocating a greater proportion of their budgets on capital outlays while keeping almost the same proportion for maintenance and other operating expenses. Cities are now spending nearly one-third of their budgets on capital outlays as against 15.3% for provinces and 16.5% for municipalities.[5]

CITY REVENUE CONSTRAINTS AND OPPORTUNITIES

The budget pressures of urbanization have caused city governments to increase revenues commensurately. A detailed trend analyses of the key city revenue sources are shown in Table 3.

Table 1
Per Capita City Government Expenditure:
1989 and 1994

Sector	1989	1994	Annual Growth Rate
General Public Services	140	466	27.18%
Education & Manpower Development	29	120	32.98%
Health/Nutrition/Pop'n Services	32	104	26.42%
Labor & Employment Welfare	4	2	-11.47%
Housing & Community Development	7	107	70.64%
Other Social Services	9	27	23.90%
Economic Services	95	361	30.51%
Other Purposes	14	121	54.64%
GRAND TOTAL	**331**	**1,308**	**31.65%**

Source of Basic Data: 1989 and 1994 *COA Annual Financial Report* (VOL.III)

Table 2
Distribution of City Government Expenditure, By Expenditure Item:
1989 and 1994

Expenditure Item	1989	1994	Change
Personal Services (PS) [6]	49.56%	34.70%	-14.86%
Maintenance & Other Operating Expenses (MOOE)	38.53%	33.89%	-4.64%
Capital Outlay (CO)	11.91%	31.41%	19.50%
GRAND TOTAL	**100.00%**	**100.00%**	

Source of Basic Data: 1989 and 1994 *COA Annual Financial Report* (VOL.III)

Table 3
Trends in City Revenue Sources, in Thousand Pesos, Philippines:
1989 and 1994

Revenue Source	1989	% Distribution	1994	% Distribution	Annual Growth Rate
Real Property Taxes	1,125,300	22.94%	3,321,259	14.90%	24.17%
Business Taxes & Licenses	709,494	14.47%	2,960,785	13.28%	33.07%
All Other Taxes & Fees	866,927	17.68%	3,162,301	14.19%	29.54%
Receipts From Economic Enterprises	331,813	6.77%	576,167	2.59%	11.67%
Local Sources	3,033,534	61.85%	10,020,512	44.96%	27.00%
Internal Revenue Allotment	1,541,501	31.43%	10,510,915	47.16%	46.80%
Grants & Aids	308,590	6.29%	88,117	0.40%	-22.17%
Borrowings	20,847	0.43%	1,668,719	7.49%	140.25%
External Sources	1,870,938	38.15%	12,267,751	55.04%	45.66%
GRAND TOTAL	**4,904,472**	**100.00%**	**22,288,263**	**100.00%**	**35.36%**

Source of Basic Data: 1989 and 1994 *COA Annual Financial Report* (VOL.III)

City revenues posted a 35.4% annual increase between 1989 and 1994. Local revenues[7] increased by 27% yearly during the period with bigger cities (those with revenues in the P50 to P100 million range) posting much higher rates of growth (50 to 60% annually).

A very positive development with a critical implication to the overall development of cities is the ***increasing use of credit finance*** by cities to finance capital improvement projects. From just about P21 million in 1989, new city borrowings reached P1.7 billion by 1994. It is expected that over the next five years, the borrowings (either through direct bank borrowings or through bond flotation) of cities will considerably increase as they embark on massive infrastructure programs.

The biggest component of city government revenues remains to be the Internal Revenue Allotment (IRA) from the central government. The following analysis, however, indicates that cities are raising revenues quite efficiently, and that the IRA is spent for appropriate items.

The efficiency of city governments in raising revenues can be judged based on the following four criteria:[8]

1) The cost of providing local services should be recovered to the extent possible, from charges on the beneficiaries;

2) Services whose costs cannot be recovered from charges can be financed from general taxes;

3) Social services, whose benefits generally spill over to produce national benefits, should be financed by grants from the national government; and

4) Borrowing is an effective and equitable way of raising capital investment finance.

These four efficiency criteria suggest that general urban services should be financed by local taxes; public utilities and services should be self-financing; and social services should be supported by national government grants.

Table 4 relates broad categories of city expenditure with revenue sources. The results indicate that before the advent of the 1992 LGC, urban governments have generally avoided politically risky tax increases, and supported their general urban services with central government grants. By 1994, city spending and revenue have closely matched the efficiency criteria. Central government grants are generally used to support social programs like health, nutrition, population, education, etc. whose benefits spill over to the other parts of the country.

Table 4
Comparison of Major City Public Spending and Revenue Shares, By Major Categories, Philippines: 1989 and 1990

Spending & Associated Revenue Category (Percentage Of Total Spending)	1989	1994
Expenditure for General Urban Services	67.32%	35.45%
Local Tax Revenue	43.90%	45.43%
Expenditure and Debt Service for Public Utilities & Services	3.79%	3.48%
User Charges and Borrowings	8.43%	10.80%
Expenditure for Social Services	28.89%	51.10%
Grants Received	65.01%	50.98%

Source of Basic Data: 1989 and 1994 *COA Annual Financial Report* (VOL.III)

Taxes

The level of tax revenues of an urban government is determined by: 1) the size of the economic base of the city; 2) the statutory tax rate for each tax; and 3) the collection efficiency. The economic base is probably the most important influence as it defines the limits to the city's taxable capacity.

Property Taxes

Despite the respectable Real Property Tax (RPT) growth rates achieved by cities, the true potential has just been barely tapped. Between 1989 and 1994,[9] the assessed values of properties in cities only increased by a measly 1.4% per annum from P205 billion in 1989 to P220 billion in 1994. Collection efficiency just improved from 58.2% in 1989 to 66.3% in 1994. Collection costs remain high averaging P0.25[10] per peso collected as compared to 2 to 3% in advanced countries.

Business Taxes And Licenses

Business taxes and licenses are a key city revenue source because urban areas are centers of various economically productive activities. Despite the high growth rate achieved by cities during the past five years, barely half of the potential collection has been tapped because of the pervasive under-declaration of local business income.[11]

User Charges

In contrast to urban taxes, user charges for services show a direct link between the quantity of services provided and the revenues generated to finance the provision of these services. Urbanization creates a demand for city services and at the same time, a capacity to pay for these services.

Data for Philippine cities indicate that cities do not generate enough revenues from user charges to cover full costs. As shown in Table 5, cities generate on the average only P0.80 of revenues for every peso spent for the operation of city utilities and services.

This performance is a big improvement from the 1988 situation wherein cities on the average only earned P0.33 for every peso spent on similar city enterprises.[12] However, considering that similar enterprises operated by the private sector earn P1.40[13] for every peso spent, cities still have a long way to go before they can generate comparable surpluses.

Table 5
Cost Recovery Performance of City-Operated Enterprises, Philippines: 1994

Service Type	Operating Income in Thousand Pesos	Operating Expenses in Thousand Pesos	Cost Recovery (Col.2/ Col3)
Public Utilities	542,213	719,186	0.754
• Waterworks	24,434	57,374	0.426
• Electricity, Light & Power	187,209	199,682	0.938
• Telephone System	26	9,790	0.003
• Transportation System	993	32,464	0.031
• Markets	263,236	342,139	0.769
• Slaughterhouse	66,315	77,737	0.853
Toll Roads, Bridges, & Ferries	5,238	1,243	4.214
Cemeteries	8,976	2,217	4.049
Other Business Operations	19,695	3,400	5.793
GRAND TOTAL	**576,122**	**726,046**	**0.794**

Source of Basic Data: 1994 *COA Annual Financial Report* (VOL.III)

External Funds

Urbanization, the recovery of the Philippine economy, and the 1992 LGC have brought greater central government grant assistance as well as more credit financing to Philippine cities (See Table 3).

While the inflow of central government grants could lessen in the future as more localities become cities and as the share of cities get reduced in favor of provinces,[14] massive inflows of loans to city capital projects are expected to more than offset the decline in city IRAs.

PROSPECTS FOR AND POLITICS OF URBAN FISCAL REFORMS IN THE PHILIPPINES

City governments must generate a greater share of total revenues than they do at present if they are to play a more significant role in the economic development process..

The analysis of city expenditure patterns clearly shows that despite cost-reducing influences like technological changes and economies of scale, Philippine public expenditure requirements increase in absolute and per capita terms with urbanization.

On the revenue side, the growth in population and per capita incomes works to enlarge the revenue base of urban governments. The base has largely remained untapped mainly because of lagging revenue efforts.[15] As a result, revenues have not improved to the extent required to properly upgrade and even just maintain service levels. This situation will not significantly change unless reforms are made to bring revenue growth more in line with expenditure requirements.

The problem of an urban fiscal gap can be approached through: 1) increased local revenue efforts with or without increased revenue authority; 2) increased central government transfers; and 3) reduced local expenditure responsibility.

Approach No. 2 is not feasible given the budgetary deficit problem of the national government. Local expenditure responsibility can no longer be reduced without impairing the living standards and the economic productivity of Philippine cities. The only feasible approach is increased revenue effort.

Overall Framework for the Promotion of Fiduciary Responsibility

The key obstacles toward the improvement of financial management systems in the Philippines include:

⇒ ***Negative Inertia*** --- Efforts toward improvement of financial management systems are hampered by the fact that it involves going against more than 20 years of thoroughly entrenched negative inertia. Existing systems are largely iniquitous in that they do not recognize, much less reward, good fiscal performance nor penalize non-compliance;

⇒ ***Antiquated and Cumbersome Systems and Approaches*** --- The efficiency of existing systems, as well as any attempts at introducing improvements or innovations, is inhibited by the use of cumbersome and antiquated systems and forms that were dumped on the local finance officials with virtually no technical support. As a result, few officials have a strong conceptual grasp as to how interrelated systems, processes and forms are part of the overall financial management of local government, or significantly, how these can be utilized "intelligently" and to full effect;

⇒ ***Lack of Appreciation of Available Options and Key Concepts*** -- at the local level, there is a lack of systematic appreciation of what is involved in weighing the technical and political "trade-offs" for effective local financial management. Few, it would appear, are fully conversant in a process that requires a familiarity with the "push" and "pull" of these forces --- the technical and political --- on both the selection of tools and approaches and their

implementation under an overall financial management system. Additionally, there seems to be little understanding of the importance of dynamic self-sustaining systems and approaches that respond flexibly to everyday realities. In effect, local officials are not grounded in the key concepts behind approaches (such as user charges and cost recovery), thus the result is poorly implemented "improvements" that fail to improve the system;

⇒ ***Lack of Dialogue and Information Sharing*** – A notable impediment appears to be the continuing failure of local officials to share ideas, innovations and problems among themselves in the areas of revenue mobilization, budgeting, credit finance, and capital investment programming. In an environment characterized by a lack of an institutionalized system of internal dialogue (legislative-executive and intra-executive) at the local level, real opportunities and the potentials of synergy are foregone.

There can be no "magical" solutions as the history of Philippine fiscal reforms shows that major proposals rarely have a chance for adoption and implementation because:

1) policy-makers and citizens have a tendency to resist major changes in the economic environment;

2) most major fiscal reforms are associated with substantial unexpected losses among the high income classes while windfalls are likely to be spread over a larger number of less well-off people;

3) local politicians usually adopt a "culture of expediency" when it comes to politically risky fiscal reforms; and

4) major fiscal reforms get bogged down in a three-way debate over credit, turf, and operating procedures involving the Department of Finance (DOF), the Department of the Interior and Local Government (DILG) and the local governments.

Gradual and stepwise adjustments of the existing structure toward a more desirable state are perhaps the best that can be hoped for. The adjustments should however involve a package of cumulative and mutually consistent reforms so that no matter what time phasing is adopted, an improvement in the state of affairs will come about.

Cumulative And Mutually Consistent Fiscal Reform Package

At the ***city government level***, local fiscal reforms should aim at:

1) Increasing the amount of financial resources available to them; and

2) Improving local technical and administrative capabilities to manage such financial resources to service not only their routine administrative costs but also a wider range of service and capital improvement needs.

The three key areas of urban financial management that need to be strengthened include:

1) ***Fund Mobilization***;

2) ***Budgeting***; and

3) ***Cash Management***.

Improvements in these areas will firmly establish the fiscal integrity of urban governments. Funds need to be mobilized to finance urban development; sound budgeting practices need to be established to ensure optimum resource allocation; and prudent funds (cash) management tools need to be institutionalized so as to protect public funds.

Fund Mobilization

City governments need to:

1) Improve the collection of existing taxes;

2) Increase direct cost recovery; and

3) Responsibly access the local credit market.

City tax collection should focus on existing taxes through the adoption of the following fiscal reform measures:

1) Eliminating ***administrative inefficiencies*** to lower transaction costs;

2) Improving ***records management*** including the setting up of integrated tax rolls to facilitate the tracking of tax bills and performance monitoring of collectors;

3) Developing and applying ***"presumptive income levels"*** to help cities assess the gross annual receipts of business for business tax purposes;

4) Defining ***collection norms*** for treasury personnel including costs of managing and collecting various types of taxes;

5) Developing and applying ***performance incentives*** for tax collection; and

6) Institutionalizing a system that will regularly ***publicize*** city tax evasion enforcement activities.

Urban governments need to move toward linking payment to local government for the provision of services through user fees; for example, garbage collection fees for residences as well as business establishments. City governments need to focus on the following cost recovery reforms:

1) Determining, setting, and monitoring cost recovery oriented ***user fees*** for markets, slaughterhouses, and garbage collection; and

2) Developing the effective use of ***special levies*** to recover part of (up to 60%) the costs of local roads, drainage, and other local infrastructure projects.

Debt financing is required to support costly but long-life urban capital programs since: 1) it lightens the financial burden during the project year(s); and 2) it allows the payment of the cost to be shared by future users promoting "intergenerational equity". There is a large scope for utilizing loans in rapidly growing urban areas, where the economic base (and therefore the revenue base) and the demand for infrastructure and services is growing. To further encourage the use of credit financing, city governments need to:

1) Set up financial statements that are comparable to those used by financing institutions moving towards the direction of establishing ***balance sheet systems*** of fiscal management; and

2) Develop the capability to prepare cohesive ***investment proposals*** for bankable urban projects;

Budgeting

Given the limitation in resources and the diverse needs facing city governments, the annual budget should be an important instrument to highlight priority activities and investments, thus, assuring their full funding. Current city budgets are generated from a "procurement process" which is in effect ***no plan*** at all.

The ultimate objective should be for cities to develop and institutionalize a budget process that will enable people to vote on the package of services and investments for which they would be willing to pay in taxes, fees and charges, and would hold local officials accountable for the provision of these services and investments.

The city budgeting process needs to be effectively centered around the Local Finance Committee (LFC) to ensure coordination between planning, budgeting and treasury.

City LFCs need to be strengthened technically and organizationally for them to credibly determine and recommend to the City Chief Executive:

1) Appropriate ***size*** of the budget; and

2) ***Composition*** of the budget.

Cash Management

City cash management practices need to be improved to: (1) minimize wastage in procurement; and (2) ensure "timeliness" in fund disbursements. Specifically, cities should aim at:

1) Lowering the ***transaction costs*** for city procurements; and

2) Ensuring the ***matching*** of expenditure requirement with fund availability.

At the national level the following policy changes need to be effected to support the local city initiatives:

1) Maintain revenue sharing through the IRA at levels that would be achievable under central government budgetary constraints.

2) Reduce the fiscal imbalances at the provincial, city, municipal, and barangay levels.

3) Provide more flexibility to cities to determine real property and business tax rates.

4) Eliminate unfunded mandates and limitations on expenditures.

The ***institutional capability*** of city fiscal staffs can be developed by strengthening (1) the personnel and (2) the technical and administrative tools available to them.

National government support need to be extended for:

1) Training of Key Local Finance Staff. This can be cost-effectively facilitated through the development of ***instructional materials*** such as video, audio-visual materials, and self-help manuals disseminated through "sharing programs".[16] The materials will largely be based on "live experiences" utilizing the processes and results of past and ongoing technical assistance work for LGUs. Priority targets are the members of the LFC.

2) Automation. The efficiency of routine administrative work such as records management, payroll, etc. can be improved through the greater use of **computers**. There are available locally developed systems for the RPT, the Business Tax, Fees and Licenses that can be customized for individual cities and run on low cost microcomputer platforms. An alternative is to help cities explore the possibility of (1) contracting out their systems design and related computer-processing requirements to local private companies or (2) computer facility sharing among nearby cities.

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ENDNOTES

[1] This paper was based on a Technical Input Paper on The Fiscal Management Dimensions of Urbanization In The Philippines prepared by the author for the UNDP and the NEDA in December 1995 as part of the required studies for the preparation of the National Urban Policy. The author wishes to acknowledge the financial support extended by the UNDP to the study.

[2] Derived from the following regression equation:

LN PCE = 5.91 + 0.63 LN URB
(0.14)

$R^2 = 0.64$ S.E.E = 0.19

where: LN PCE = natural log of Per Capita LGU Expenditure;
LN URB = natural log of the % of the regional population living in urban areas; and
the no. in parentheses is the standard error of the regression coefficient.

The equation and its coefficients are significant at the 95% confidence level.

[3] Derived from the following regression equation:

LN PCR = 6.03 + 0.69 LN URB
(0.16)

$R^2 = 0.60$ S.E.E = 0.22

where: LN PCR = natural log of Per Capita LGU Revenue;
LN URB = natural log of the % of the regional population living in urban areas; and
the no. in parentheses is the standard error of the regression coefficient.

The equation and its coefficients are significant at the 95% confidence level.

[4] Derived from the following regression equation:

LN PCLR = 5.88 + 0.77 LN URB
(0.19)

$R^2 = 0.57$ S.E.E = 0.26

where: LN PLCR = natural log of Per Capita LGU Locally-raised Revenue;
LN URB = natural log of the % of the regional population living in urban areas; and
the no. in parentheses is the standard error of the regression coefficient.

The equation and its coefficients are significant at the 95% confidence level.

[5] Both provinces and municipalities spend more than 45% of their budgets on PS. Provinces spend 47.5% of their budgets on PS while municipalities spend 51.3% on PS.

[6] The lower proportion allotted to PS may not be completely true since LGUs generally charge non-plantilla personal services against MOOE. Nevertheless, the improvement is significant.

[7] The local revenue figure is understated since the COA revenue report on RPT collection does not include the SEF component earmarked for education, and the COA report does not include off-balance sheet sources of financing like the various variances of the BOT scheme.

[8] See World Bank. 1988.***World Development Report 1988***. Washington D. C., p. 159.

[9] Data were from the 1989 and 1994 ***COA Financial Report*** (Vol. III)

[10] Ratio of real property assessment services plus treasury services to total 1994 RPT collection.

[11] Based on work undertaken by the Consultant in Cebu City in 1994, the estimated degree of under-declaration of gross sales for local tax purposes ranged from 80 to 100%. See N. R. Ramos. 1994. ***Presumptive Business Income Estimates For Local Taxation In Philippine Cities: A Preliminary Study***. USAID/Philippines Contract No. 492-0388-C-00-2005-00. The study has been discussed and turned over to the BIR for pilot testing.

[12] See PADCO/DSUD. 1992. ***A Self-Sustaining System Of Financing For Cities*** (Vol. I). USAID/Philippines Contract No.492-0388-C-00-2005-00, p.2.14.

[13] Ibid.

[14] Four additional cities were created between 1992 and 1994. There is also a pending legislation that seeks to change the distribution of the IRA. The share of cities will be reduced in favor of provinces.

[15] The taxing authority of city governments has largely been strengthened by the 1992 LGC.

[16] The distant education program (Open University) of the University of the Philippines can be tapped to spearhead this component.

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