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Cover photo: Modes of Transportation in Metro Manila

CONTENTS

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*On leave

**On study leave

THE JEEPNEY SYSTEM*

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INTRODUCTION

Among all the impersonal and standardized modes of transportation that serve cities around the world today, there are still a few that are unique and operate unlike any others. The jeepneys of Manila undoubtedly fall in the latter category, although even they are continuously in danger of being phased out.

An examination of this mode may be of interest, not only because of the visual attractiveness of the vehicles and their dominant role in forming the character of one of the important cities in Asia, but also because the jeepney system has certain operational features that satisfy many universal intra-city transportation requirements better than most other available modes. Indeed, it is a ready-made, demand-activated mass transportation system — for which the search continues in the industrialized countries.

The following description and examination will not be encumbered by much statistical data — simply because it is not available in any kind of comprehensive form and also because jeepneys, particularly in the way they are operated in Manila today, do not lend themselves to a precise analysis. This is not in the nature of the beast, and, therefore, the information mostly comes from personal experience and observation and from interviews with local experts, ranging from administrative officials to users.

We are confronted here with a mode that expresses the individualistic values and national life styles of its drivers and patrons, and that functions in an almost completely open economic situation. As such it is at the extreme end of free enterprise transportation examples.

The jeepney is a child of World War II. During the Japanese occupation of the Philippines and the heavy fighting of its recapture, the pre-War transportation systems were wiped out for all practical purposes. This included streetcars, trolley buses, private automobiles registered in the Philippines in 1941; only 3,800 were operating in 1945. Manila was particularly hard hit.

Suddenly after the War, this vacuum could be, and was, filled by the fallout from the hasty return home of American forces. The massive accumulation of war material, including jeeps, was dumped in the Pacific area. The process itself did not reflect credit on the Americans and some local operators who were able to take advantage of a chaotic situation, but a new transportation mode was created, and Manila received a workable internal circulation system.

In the immediate post-War years, faced by a major transportation crisis, the newly organized Philippine Public Service Commission issued certificates of public convenience on an emergency basis to operators of trucks that were converted into buses and jeeps that became jeepneys. The pattern was established, transportation demands continued to grow at an accelerating pace, the public found the new modes — particularly the jeepneys — to its liking, and the certificates became quite permanent.

FORM AND FUNCTIONAL DESIGN

The Filipino sense of aesthetics could not accept the stark utilitarian appearance of the Army jeep, and, in addition, it had to be modified for urban passenger service which called for proper seating and entry/exit arrangements.

The form of the vehicle that was developed through the conversion process is a textbook example of functional design — unique and responsible to the local resource situation. These capabilities in craftmanship are a part of the national heritage; they were also sharpened during the second War years when improvisation was necessary to maintain a semblance of normalcy.

The typical jeepney has a front seat that holds the driver and two passengers. This is the most comfortable and desirable place in the vehicle. In the back, upholstered benches run along each side and their length varies from four to six seating positions. Space here is rather tight, but this is more of an economic necessity than deliberate design. The seating arrangement of the jeepney is said to be patterned after the pre-War "tartanilla", a horse-drawn light carriage used in Cebu. The total capacity of the vehicle is thus 10 to 14 passengers, and this is also the actual load during most of the day in Manila. During rush hours, there is a tendency for some more to squeeze in. In some instances, 10-passenger vehicles have been seen carrying 16 customers, some of them hanging on outside.

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*An excerpt from a report on "Transportation Systems: Metropolitan Manila" prepared by the author as United Nations Consultant on Transportation Systems at the Institute of Planning, University of the Philippines at Diliman, July and August 1971. The views and opinions expressed in this paper are those of the author and do not necessarily reflect those of the United Nations.

The roof is curved on all sides and has wide overhangs. This is a necessity to protect against the tropical sun and rains. The sides and the upper structure are built on intricate metal rod and tubing skeleton, covered by curved and fitted metal sheets. The side openings can be closed during rain by transparent plastic or flexible panels with imaginative cut-out designs. Tow rods run along the ceiling which are usefull for holding on while seated.

Entry and exit is from the back through a central opening equipped with a step and elaborate, mostly decorative, hand-holds. There are hooks from which to negotiate the in and out movements with surprising agility. Often, the driver only has to slow down the car to pick up a fare. A spare tire is often carried out on the driver side up front. In many cases this appears to be primarily a decorative device since the condition of some of these tires does not inspire confidence. It is common for the other non-essential equipment to have operational problems too; fuel gauge, windshield wipers, brakes, etc. The horns are usually in excellent condition and are personalized in tone and energy output, although they are not used as much as one would suspect.

The one feature of the jeepney that has made it world famous is, of course, its decorations. This has developed into a true folk art having a recognizable style and basic principles of design and organization, but allowing each anonymous artist a wide range of expression in color and ornamentation. The basic body color (red, blue, yellow, green, lilac, etc.) is embellished with swirling designs of exuberant hue and configuration. The ornaments may have been inspired by plant or animal forms, or they may have been borrowed from other sources. Whatever their origins may be, today there are stylized motifs which together, regardless of the flamboyancy of each detail, presents a unified aesthetic concept that enfolds the vehicle. Comparisons with baroque art are inevitable.

A Manila art critic describes these mobile artifacts as "purely visceral inventions by genuine folk artists with no pretensions about personal aesthetics nor the permanent value or significance of what they paint, whose only concern is how to go about decorating a given surface as best they can. Certainly the shapes are dictated by the general form of the vehicle itself as much as they are influenced by unconscious phantasms, images of things seen in the folk artist's environment."[1]

This paintwork is further adorned or corrupted, depending on one's point of view, by a whole array of additional embellishments: long antennas whose only purpose often is to support plastic streamer and tassels, decals of various shapes and purposes, whirling plastic cups, chrome strips and ornaments, crochetted fringes, shiny figurines of horses or jet airplanes in the center of the hood, oversize hub-cups, clever or sincere mottoes and names painted on, and anything else that the driver or owner finds pleasing, even Christmas lights.

1. Emmanuel Torres, "The Jeepney as Folk Art," *Esso Silangan*, 12, No. 4 (July 1968).

The windshield and dash-board alone can be a subject of study as an expression of personality. Their purpose is not apparently to be just a medium for looking through or to accommodate instruments, but rather to serve as a display device for destination plates, official stickers, religious statuettes, paper or string ornaments, artificial or dried flowers, baby pictures, cartoons, images of saints (principally St. Christopher regardless of his doubtful official standing), metal pendants forming a curtain across the top of the windshield, small electric fans, loudspeakers of an added radio or cartridge player, and most importantly, the change box.

The decorations are a joint effort by the owner who supplies the major adornments according to his taste and means and the driver who usually operates the same vehicle day after day and adds his own personal touches, often in very generous amounts. The reason for all this is certainly not only aesthetic but has also an economic justification in the struggle to attract passengers.

In all this visual profusion, the line description on the outside is not difficult to read since care is taken to make it prominent. It usually consists of three items: the two points or major streets that represent the ends of the run and the central node through which the vehicle passes. These names are painted on both sides and on the front below the windshield. Any other route information can only be obtained through actual experience or communication with the driver. Sometimes, more precise route descriptions are shown on a detachable metal sign clipped to the windshield which, however, can be changed by the driver while the trip is in progress.

THE JEEPNEY AND OTHER TRANSPORT SYSTEMS

The public transportation system of Manila consists basically of bus and jeepney line networks. They both run on all major streets in almost complete overlap and there are only a few sections of the city where one or the other predominates. It is also interesting to note that in Manila, unlike some other cities, the acceptance and use of both systems is completely equal, i.e., one does not have a higher social status than the other, and the fares are completely comparable.[2] Specific choices by passengers are quite personal, with the only difference being that jeepneys are recognized as faster, but buses as more comfortable on longer journeys. During peak hours, when all vehicles are overcrowded, such fine differentiation is not made.

Another consideration is the fact that when a jeepney has an accident or breaks down, which is not a rare occurence, the passengers are on their own, while under a similar situation with a bus there may be a following unit of the same company that will pick up the riders without the payment of an additional fare.

2. In Caracas and other Latin American cities buses are very definitely at the lower end of the preference scale. See W. Kudlick, "Carros por Puesto: The Jitney System of Caracas, Venezuela" (Paper presented at the *Highway Research Board* annual meeting, January 1968).

Because of this direct competition, the jeepney industry and its associations have a completely negative attitude toward the corresponding bus organizations. This feeling is fully reciprocated, and there is no cooperation between these two major components of the mass transit system, both consisting of privately operated business ventures. Each side makes proposals regularly that the other should be eliminated.

There are regular taxis, of course, with a much bigger rate structure. A typical distance may cost P6 in a taxi, and only P0.30 in a jeepney or bus.[3]

An additional available public mode is auto calesas: jeeps that operate as licensed public vehicles, best described as shared taxis. They are usually painted red, have approximately 4 seats in back in an arrangement similar to jeepneys, and are usually not decorated at all. Their operational authority is rather broad geographically (typically: Manila and suburbs); they wait at certain known points, assemble a load of passengers going in the same direction, agree upon a fare which is reasonably fixed in accordance with jeepney rates, and deliver the passengers to their destination. Often they will also operate in a manner similar to jeepneys or taxis and thus generate additional competition.

At suburban nodes and in outlaying towns and villages, local distribution is accomplished by motorcycles with side cars, called tricycles in the Philippines. They can carry only two passengers (preferably thin ones), and the vehicles are decorated in the jeepney style, except that they carry even more ornamentation in a unit weight basis. They are not allowed on the major streets in the central city. In a very few places, bicycles are used in place of the motorcycles, but these are disappearing fast.

A few mini-buses have appeared, but they are primarily used by hotels and other business establishments.

And finally, there are still some light, two-wheeled horse carriages (calesas) operating in a few sectors. This service carries a premium rate and is regarded as somewhat prestigious anachronism. A "caretela" is a slightly larger and less stylish vehicle, used primarily for private business purposes, but it is rarely seen nowadays in central Manila.

OPERATION AND EFFICIENCY

Jeepney service is currently established and operated in the following way: An operator (owner of one or several vehicles) applies to the Public Service Commission (PSC) for a certificate of public convenience. A filing fee is paid, submitted together with a description of the proposed route, number of vehicles to be used, schedule of trips, rates and the qualifications of the operator (citizenship, financial status, legal documents). A hearing is scheduled and advertised in newspapers. At the hearing, objections are heard, and they usually come from competitors on the same or affected lines. The most common arguments involve the necessity of the service, the citizenship of the actual owner[4] and the fares that will be charged although they set approximately 2.5 centavos a kilometer for every passenger with a minimum of 15 centavos.

There is no particular master plan or defined criteria under which the PSC awards a certificate, but each case is examined on its own merits, i.e., the need for service on the proposed line. If additional service with more vehicles is considered necessary on an existing route, operators already on that line are given preference.

The ownership structure is very splintered, ranging from a few owner-drivers to persons or corporations operating over a hundred jeepneys. Drivers are hired by the owners, and in this process one of the great problems affecting the service are created. Almost invariably the driver is engaged under the so-called boundary system, which is illegal but at the present time un-stoppable, because it is a private agreement between the operator and the driver. It is voluntary under the prevailing economic restraints, it is exploitative, and it is also implicitly accepted by everybody concerned, except in official documents.

Under the boundary system the driver, in effect, rents the vehicle from the operator for a time period and pays a fixed fee (P15 to P20 per day, usually P16.50). The driver also pays for gasoline and oil himself; although the owner is responsible for the maintenance and operational quality of the vehicle.

Insurance can be purchased by the operator, but it is not legally required either for equipment, driver of passengers and thus is not often available. A major problem with respect to insurance is that the local companies providing this service have lost the confidence of the jeepney industry, caused by their extreme slowness in settling claims and the presence of many insurance operations that tend to disappear from the business scene after a few years.

The driver, after obtaining the vehicle, is therefore on his own and keeps as much of the fares as he can make beyond the boundary, gasoline, and other running expenses. Consequently, fierce competition for passengers exists, traffic regulations that tend to impede movement are ignored, skillfull and fast driving is required and all shortcuts are taken that appear profitable to the driver. He really cannot be blamed for all this but only admired for his ability to scrape out a living under conditions that seem to conspire against him.

But there are also abuses that are more serious. Pedestrians on the street are in a very dangerous situation and minor accidents are frequent. "Trip cutting" is very common which describes the practice of not traveling the whole distance but demanding additional compensa-

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3. In summer of 1971, U.S. $1 was exchanged for P6.30 under the free-floating official rate.

4. Chinese are rumored to control much of the business life in Manila, including transportation, although they are barred by citizenship laws to do so. "Dummy" arrangements are possible.

tion for the completion of the journey or turning back to pick up new passengers.

Likewise, drivers can also be persuaded to deviate from the established routes for the convenience of individual passengers, and they will by-pass congested points as a matter of course to achieve maximum speed. For these reasons, official maps of routes provide only a general guide to the public, and each regular passenger must plot his path by experience and trial.

The PSC can order operators to dismiss unsatisfactory drivers or to levy lines or even to cancel certificates. These powers are not apparently very effective.

Finally, this brings us to the so-called tong system, or plain extortion. This is obviously a difficult subject to discuss since no documentation is available, and it is not even mentioned in most official reports. Yet, nobody denies its existence, it is public knowledge, it can even be observed on the street if one knows what to look for, and, according to the jeepney industry spokesmen, it is the most serious problem facing the industry. The tong system is extremely complex, and it appears to be well organized through syndicates. Reliable sources report that payments are made by operators at one level, while drivers make their contributions on the street to be able to cross each particular turf and to by-pass a long series of traffic regulations at many spots. All these payments add to about P3 to P4 per day each driver. He has no choice but to regard this amount as a regular operating expense and he knows how to live with it.

It is ironic to note that jeepney associations, as concerned as they are with this situation, do not hope to see an end to the tong system but endeavor through formal negotiations to lessen the bite and to decrease the number of directions in which payments have to be made.

Another direct danger facing the jeepney driver is the individual arrest for traffic infractions. The loss of license would have the most serious economic consequences for him, and the payment on the street which prevents this calamity has gone up recently from P3 to P10.

The final take-home income for the driver per day is in the P15 to P20 range, the average being P18, although some can go as high as P27. The legal minimum daily wage is P8 in the Philippines, but it is known that saleslgirls are paid as low as P3 per day, and, therefore, the jeepney driver can be regarded as getting a reasonably adequate compensation for hard work, allowing him to maintain a family within the modest living-style range.

As a matter of fact, the jeepney industry of the Philippines has considerable internal economic strength, both for operators and drivers, to be able to survive strikes and to absorb, if necessary, some additional increases in expenses without having to request higher fares.

In its own free-wheeling fashion, the jeepney industry, is capable of coping with the environment within which it has to operate. Much credit for this belongs to the associations and federations which have been mentioned previously and which act as the prime national organizing elements of the entire system.

They are not unions, since unionization has failed several times already, but have more of a fraternal-social basis. Indeed, they resemble very much medieval guilds. The membership consists of drivers but it also includes some of the smaller operators, and the leaders of the organization maintain that they have the implicit support of the larger owners too because they represent the interests of the entire industry.

Provincial federations are consolidated into a national organization which is the principal activity and policy making center. There are, however, several other parallel and similar groups which are regarded as splinter factions from the main organization which represents about 30 percent of the drivers.

The main responsibility of the association concerned, of course, is the welfare of its members. It has called several strikes recently which have had considerable impact occasionally, and it is fighting against gasoline price increases. One of its prime activities is to arbitrate between drivers and operators, and it has been quite successful in keeping its internal disputes within the family: no cases have gone to court which is regarded as an expensive waste. The association stresses the mutual symbiotic dependence of the two components on each other, and takes a rather tough attitude in convincing any contending party about the interests of the entire organization.

The association and its leaders have been attacked in the press for irresponsibility, particularly after they were joined by radical student groups. Recently, however, they have disavowed this support and have made statements regarding the counterproductivity of strikes. The highest levels of government are accessible to them.

The attitude of the association toward the boundary system is quite interesting. It maintains that this is the proper way to operate the system. Even though it gives no job security, the rather footloose labor force prefers it since it allows them to make more money than under a straight salary. It is illegal because of a Supreme Court interpretation of applicable labor provisions in the civil code as enacted by the Congress. The association is advocating a "partnership" interpretation of the same law between the drivers and the operators. The aspects of flexibility and free enterprise as represented by the boundary system appeals particularly to the industry, regardless of the lack of the stabilizing elements which are not yet particularly strong in any business or labor area in the Philippines.

One of the most remarkable features of the jeepneys is their ability to maintain high average speeds. That is, their total driving time for any given distance is not particularly inferior to that of private vehicles or taxis. The reasons are that most of the passengers during peak hours are loaded at the beginning points and let off on demand without much loss of velocity. Aggressive driving also account for time savings. Buses obviously have to stop regularly and for longer times.[5]

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5. In Manila buses are also operated by companies under franchises, and, since drivers are engaged most often under a percentage arrangement, they too find short-cuts of various kinds.

If any particular running time is slower than for a car, it is probably because the driver was endeavoring to entice riders into his vehicle.

For example, an eleven kilometer route through the very center of the city (South Harbor, through Quiapo, and along España Avenue), can be covered by a passenger car in 15 minutes at night, but requires 25 to 35 minutes any time of the day outside the rush hours. A bus will take at least 45 minutes for the same distance during off-hours and considerably over an hour during peak hours when regular automobile traffic may travel at the same speed.

As another example, a jeepney will need 30 minutes during the middle of the day to travel 7.5 kilometers (Ermita, via Harrison Avenue, to Makati) which is slower than for an automobile or a taxi only because the jeepney must remain on the busy and congested artery to accommodate passengers, while private cars can take short-cuts and by-pass routes of congested intersections.

Assuming a two-lane, one-way street with favorable traffic controls in that direction, used exclusively by jeepneys, a total capacity of 1,200 vehicles per hour can be maintained. With an average loading of 12 passengers per car, the total volume would be 14,400 passengers per hour or 7,200 passengers per hour per average lane. This figure is of quite respectable size and compares well with those of other mass transportation modes, particularly buses.

Approximate studies have been made in Manila that compare the relative capacities and advantages of bus and jeepney service.[6] The arguments are quite standard: buses can carry 4 to 5 times more passengers per unit, the performance of the drivers can be better controlled, and the vehicles tend to be better maintained. On the other hand, jeepneys provide a more rapid, flexible, and personalized service and can negotiate easier the narrow streets in the central area.

The specific study in 1961 compared the observed field results on speed and passenger load along major arteries in Manila for private cars, jeepneys, and buses. "Efficiency" of each mode was computed using the following equation:

$$S = \frac{P \times V}{D}$$

where S = efficiency
P = average number of passengers
V = speed in Kph
D = space occupied by the vehicle in square meters (calculated at 23.9m^2 for a bus and 6.66m^2 for a jeepney)

Regardless of the validity of the equation as a measure of efficiency, the results of these calculations indicated that in urban areas buses out-performed jeepneys by a ratio of about 1.3 to 1. In rural areas the relationship is about 2 to 1.

Since the sample was quite small, since in the meantime urban areas have become much more congested, and since the above calculations of course were only concerned with the utilization of street space, the question on overall efficiency is still open. The most important item here should be the service level that passengers receive, and the riding habits and preference of the public today indicate that the contest between buses and jeepneys is a draw.

The one thing that is clear, however, from the traffic today is that in the dense urban areas the bus and jeepney services are almost equally "efficient", while in rural areas the buses hold a very definite edge.

A complete cost/benefit analysis including all tangible and social aspects still remains to be done, but, until the national and the industry economic situation changes, the jeepneys have to be regarded as an eminently feasible mass transportation mode, particularly suitable for relatively short-range movements within a dense city situation.

A very dominant element of a cost/benefit calculation in an old industrialized country would be labor input (a driver for each vehicle). In the Philippines at the present time the relative importance of this cost is much less significant.

The ratio between the purchase price of the vehicle and the annual salary of a driver in the Philippines is about 1:0.36 (P15,000 for the vehicle and P5,400 per year for the driver) while the same ratio, in the United States, for example, would be 1:3 ($2,000 for a comparable vehicle and $6,000 per year at least for the driver). The same ratios also may explain why it is rather futile for a driver in the Philippines to aspire to become an owner through saving, and why a jeepney service in the United States would have to operate under a rather high fare structure.

At several times during the last decade, the Public Service Commission has contemplated or actually initiated a program of gradual phasing out of jeepneys. Since their franchise certificates are issued for five years, it would be theoretically possible to accomplish a full conversion within a five year period. The inducement for jeepney owners would be the granting of permits to operate one bus for every four jeepneys taken off the road.

This program has never been effective and is currently dead for political reasons and due to the refusal of the jeepney industry and the riding public to cooperate or to even take it seriously.

An interesting attempt to foster individual ownership of jeepneys has been started by major oil companies which have set up a trust fund in the amount of P4,500. The purpose of this fund is to give to drivers low interest loans which would be repaid to keep the capital working. Incredibly, the loans are only P50 each

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6. Irineo S. Ramos, "Relative Efficiency of Different Modes of Highway Transportation" (Paper presented at the *Second ECAFE Traffic Safety Study Week*, Manila, 1961).

which does not help much toward the purchase of a vehicle, and informed people do not expect that even these amounts will be repaid. Cooperative ventures have not been successful either. It has also been suggested that the oil companies had selfish reasons for encouraging jeepney operations.

The fact that jeepneys are usually stranded with all other vehicles in the Manila traffic jams does not defeat the validity of the above observations. They have to compete with all other motor cars on streets that are usually quite narrow since they were laid out during the Spanish era; that have minimal traffic signs and few lights which are in operation; that are in places so potholed that a moonlike landscape is created; that lack an adequate number of policemen or officers who will remain at their posts even when it rains; that are further congested at many important intersections by boys selling newspapers, snacks, cigarettes, or naughty magazines and by little children leading blind beggars; that experience serious flooding problems over large city districts or on streets that have zero gradients with clogged-up drainage inlets; that are further reduced in usuable width by uncollected piles of garbage or business activities and pedestrians spilling over the sidewalks; that are constricted by illegaly parked cars; and that are used by a driving public that tends to forget the famous Filipino courtesy when they are behind a wheel but remember only the equally well-known private initiative and independence.

Spokesmen for the jeepney industry also insist that the chronic congestion of Manila streets, the unsafe driving conditions, and the rampant competition is due, in no small measure, to the presence of many improperly registered or unlicensed vehicles for hire on the streets.

With regard to the point about driving courtesy, the traffic situation on Manila streets is actually not chaotic, although it appears as such to the casual observer. Indeed, it is a highly organized conflict situation (a game) that operates by its own implicit, sometimes subtle, but well understood rules scrupulously observed by the professionals, including certainly jeepney drivers.

These rules are not the official traffic regulations of the local government nor are they the traffic etiquette of Western countries. They stem from the Filipino attitude toward public space, including transitory occupation of street surface: it is free for taking; if there is an opponent, the challenge consists in faking him out of position; and the occupier possesses all rights to the space while he is in it. In crude American terms, this could be called a game of "chicken", but in Manila it means more than a simple dare, it goes on all the time, and everybody (except the confused tourist) plays. Under this attitude, the temporary abandonment of a disabled car in the middle of a busy street is perfectly understandable.

Social scientists have made some attempts to explore it, and it appears to be a deep-rooted attitude, characteristic of a rural Filipino society that has survived transplantation in the city.[7] It extends also to squatter occupation of open land, to sidewalk vendors, and even, it is said, to the use of public office by politicians. In this basic situation, legislation, such as traffic regulations, does not have much of a chance, unless there were a massive effort at enforcement by the police on the street which does not exist at the present time.

The actual moves of the game include such maneuvers as changing lanes instantaneously to take advantage of a carelessly left vacant space, edging into a traffic stream until somebody gives in and stops, squeezing between cars at lights ignoring lane markings, and helping a member of one's peer group to get ahead by blocking an outsider.

A pedestrian can always cross a street at any point, if he knows the rules, since his handicapped position is honored. Of course, it helps if he is also light-of-foot and brave.

Unfortunately, in instances where traffic volumes approach saturation levels and even minimal leeway for maneuvering disappears, the results of all this activity are completely blocked intersections and jammed up streets.

No precise and comprehensive counts and measures of jeepney use are currently available. They constitute only 5.4 percent of the total registered vehicle fleet of Manila, but, unlike other motor cars, they are almost in continuous movement during the day. Each operating jeepney could well accumulate 1,500 person-kilometers per day.

The only comprehensive data on jeepney use is provided by the Manila origin and destination survey of 1957-1958.[8] It shows that of all persons' trips in the city of Manila 69 percent were using jeepneys as the most dominant mode by far (see table 1). There was a considerable range in usage by zone or district, with the highest being 87 and 86 percent in Tondo and Sta. Cruz (low income areas in the center) and the lowest 32 percent in Ermita, the new central business-tourist-residence district.

In the suburbs as a whole, jeepneys dominated too: they carried 54 percent of total person trips. Here the variations were considerably greater than in the central city with jeepney use in the 80 and 90 percent range for the low income areas, with buses providing service almost exclusively in the new government and university sectors, and with private cars being the principal means in a few high income residential zones.

It is to be expected that today the relative use of jeepneys has decreased, but probably not to a greatly significant extent.

Another important feature of the Manila traffic pattern is the fact that of the 938,000 intrazonal trips per day in the metropolitan area (1957-58), 240,000 were related to the CBD, while another 93,000 had to touch CBD to change modes and 130,000 were through trips.

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7. Richard L. Stone, "Private Transitory Ownership of Public Property: The Driving Game," in *Modernization: Its Impact in the Philippines, IPC Papers No. 4*, ed. Walden F. Bello and Maria Clara Roldan (Quezon City: Ateneo de Manila University Press, 1967), pp. 53-63.

8. Another survey is currently underway, and data should be available in mid-1972.

Table 1. Mode of travel in the city of Manila, 1957-1958.

Municipality and Selected Zones	Auto Driver	Auto Passenger	Jeepney Passenger	Bus Passenger	Taxi Passenger	Others
MANILA	2	4	69	20	3	2
Tondo (part)	1	1	86	9	1	2
Sta. Cruz	2	1	87	7	2	1
Intramuros	1	–	83	14	2	–
Ermita	8	11	32	40	9	–
Pandacan	1	2	46	49	1	1
TOTAL SUBURBS	3	5	54	33	2	3
QUEZON CITY	3	7	24	64	2	–
Diliman	1	1	80	18	–	–
Government Center	3	2	6	86	3	–
Cubao-Quirino	1	4	13	80	2	–
PASAY CITY	6	11	53	26	1	3
OTHER SUBURBS	3	5	64	23	1	4
Caloocan (part)	2	3	85	9	1	–
Meycauayan (part)	1	–	94	3	1	1
Makati (part)	8	20	23	17	3	19

These conditions still prevail in a general sense (jeepneys constituted 42 percent of all vehicles entering and leaving the CBD), while there may have been a relative easing of the centralization trends due to the establishment of new industrial and commercial areas in the suburbs.

The traffic composition varies greatly on specific major streets in Manila; but there are a number of arteries where jeepneys represent the dominant vehicle type.

THE IMPORTANCE OF THE INDUSTRY

The importance of the jeepney in the Philippines is not only in the area of transportation; it is also the prime mover of an entire manufacturing and service subsection employing drivers and a sizeable work force producing the vehicles themselves and their ornamentation.

Because of very high import duties on motor cars which also affect utility vehicles such as jeeps, much equipment is brought into the Philippines in a "knocked-down" condition or as spare parts. The jeepney industry in particular has found an acceptable way of coping with these restraints. Only engines, differentials, axle assemblies, and similar parts are imported as separate items drawing heavily from military surplus and used material stock piles. There are many workshops in the suburbs of Manila and other cities that are skilled in the overhaul and assemblage of the imported parts and that can produce a completely finished vehicle. The chasis and the body are manufactured here, welded together and combined with the mechanical parts; the whole vehicle is finished and painted. In the larger shops, specialists for each detailed operation, in effect, constitute a highly organized assembly line that does not have to worry about annual retooling for model changes. The brand new vehicle retails for P12,000 to P20,000 depending on size; the most common price quoted is P15,000.

Repairs and maintenance, however, are a problem. Protective regular maintenance is not practiced, and consequently many breakdowns occur while en route. Regular inspections are required, but officials of the Land Transportation Commission, which is responsible for vehicle registration and road safety regulations, admit that the process is not too reliable. Generation of air pollution through faulty exhausts is a factor too, although it has not yet been recognized as such officially.

A sudden elimination of the jeepney system is inconceivable due to the social and economic disruption alone that it would cause within a large segment of the urban population.

It is also interesting to observe that jeepneys are often used during off-hours to transport peckages and freight of various kinds, particularly in the suburban and rural areas.

In 1960, there were 3,600 jeepney operators in the Manila region with a total fleet of 7,300 vehicles running on 2,000 franchised routes. There were also 76 bus operators with 2,600 vehicles on more than 400 routes. The total number of motor vehicles (including trailers and motorcyles) in the Greater Manila was 86,300 units,

of which 12,610 were public utility vehicles including 2,500 auto calesas.

In 1970, as shown in table 2, the numbers had grown to 278,179 vehicles all-together, with 14,917 jeepneys, 3,797 buses, and 4,382 auto calesas. Thus, during a decade the total vehicle count has grown by a factor of 3.2, jeepneys by 2.0, buses by 1.5, and auto calesas by 1.7, in other words regardless of the discouraging official attitude toward jeepneys, their relative increase outpaced that of buses.

Table 2. Vehicle registration in the Greater Manila Area, 1970. Region 4 of Land Transportation Commission.

	Cars	Trucks	Trailers	Motor Cycles	Total
Heavy	19,450				19,450
Light	48,573				48,573
Bantam	47,025				47,025
Jeeps	34,105				34,105
Taxis	7,440				7,440
Auto Calesas	4,382				4,382
National Government	5,442	22,111			27,553
Others	5,442	822			6,264
Regular Trucks		27,901			27,901
Service Trucks		23,299			23,299
For Hire		4,247			4,247
PUJ		14,917			14,917
PUB		3,797			3,797
Total	169,889	76,901	7,241	24,148	278,179

In the country as a whole, the number of vehicles registered are shown in table 3.

In addition to a simple lack of space on most streets, a major existing physical deficiency of the jeepney services in Manila is the almost complete absence of parking and waiting space at the terminal points. There are locations where large volumes of passengers and vehicles congregate to find each other, but it occurs on ordinary street crossings within the suburban areas. Often dozens of jeepneys will be parked at these major intersections, busy already with through traffic, assembling passenger loads. The inefficiency of operations, as well as the danger of accidents, is extremely high, and it appears that any enforcement of traffic regulations here is not practiced either because of the futility of it all or because of agreements reached among the involved parties.

Table 3. Vehicle registration in the Philippines, 1965 to 1970.

	All Cars	All Trucks	PUJ	PUB	Auto Calesas
1965	150,345	122,858	18,483	12,983	9,238
1966	175,170	135,462	22,543	14,218	9,828
1967	219,956	142,092	24,582	12,028	10,757
1968	248,328	164,889	31,137	14,327	11,111
1969	272,183	174,588	35,570	13,662	11,657
1970	279,172	179,445	32,536	12,546	10,747

Note: The official registration of vehicles is not absolutely representative of actual conditions, and occasional police checks do uncover considerable numbers of mis- or unregistered cars.

CONCLUDING OBSERVATIONS

The most striking element of the current total Manila urban transportation operation is, without doubt, the jeepney fleet. The vehicles are colorful, giving the city a unique character; they are ubiquitous and swarming, lending an air of vitality and speed; but they are also the backbone of the metropolitan community structure. There can be no question that at the present time they are the workhorses that carry the local transportation burden, and, if they were to be eliminated, as has been suggested sometimes, the Greater Manila area would grind to a halt unless massive replacement systems were to become available.

Since jeepneys are the most visible components of an apparently chaotic traffic situation, it is understandable that they bear the brunt of reform efforts contained in most transportation studies. It can be postulated, however, that they are not only presently indispensable, but that this type of vehicle represents intriguing possibilities in the formation of a truly efficient metropolitan transportation system.

The suggestions to curtail jeepney operations are particularly ironic in view of the efforts in industrialized countries, such as the United States, to develop a new mode of transportation generally referred to as "demand activated mass transit."

This would consist of individually controlled vehicles carrying more people than a taxi but less than a bus in order to achieve flexibility in routing and scheduling without sacrificing entirely the efficiencies of large-scale operations. Eight to a dozen passengers would appear to be appropriate. These vehicles should operate at a relatively rapid pace on the linehaul portion of the trip following established routes, but should assemble and discharge passengers as close to the individual origin and destination points as possible. The ideal would be a door-to-door service which, of course, is almost impossible to achieve, but a block-to-block access may be reasonable. These vehicles preferably should not require investments in exclusive or individualized channel construction; the hardware should not require new engineering or production efforts. Passengers should be able to get in and out quickly. The vehicles should be usable for other needs and functions during off-hours.

Any Manileño familiar with jeepneys will be able to recommend a transportation mode that easily satisfied these specifications for an advanced, progressive, and as-of-yet unavailable type of service in the industrialized countries. It should be noted that the major difficulty in instituting such a system in Europe or the United States is the high labor requirement. This is a condition that has relatively less critical dimensions in the Philippines and may indeed be desirable.

All investigators have noted that there are many problems associated with jeepney operations in Manila. These include deplorable driving habits and disregard for traffic regulations, lack of loading and unloading areas or their proper utilization, safety and insurance problems, abuses of labor practices, and many others. Yet, it is also apparent that these are not shortcomings of the system per se, but can always be traced back to management and operational control. We have here a rampant free-enterprise endeavor that engenders cut-throat competition for fares on part of drivers and operators alike. It would seem that proper policing, both on the street and the administrative factors, together with minimal physical improvements of channels, could go far in expediting the performance of jeepneys for the benefit of the riding public, the community at large, and the operators and drivers.

It can even be suggested that the illegal but widely practiced boundary system of operation (the splitting arrangement of gross income between driver and operator) is not evil as such, but, since it is responsive to actual needs and demands, could be made equitable for everybody concerned with appropriate management. Only gradually, with a general change in labor practices in the country, could a direct salary system for drivers be envisioned.

In many transportation studies the jeepneys have been singled out as the main cause of traffic congestion in Manila. This conclusion is based on fallacious and superficial reasoning. The causes of the serious movement difficulties are over-concentration of business, educational, and governmental activities in the center; a dispersal of residences requiring long commuting travel; and the capacity limitations of channels that have started to develop four centuries ago.

Indeed, the jeepneys are the devices that allowthe metropolitan area to function at all since they represent a transportation mode that has evolved in a unique response to the local traffic and developmental pattern. They are clearly not the causes of congestion, but they suffer from it. If there is any talk of banning certain types of vehicles from the congested areas, this should be directed toward private automobiles which carry one or two passengers each and not jeepneys which perform a public service. There is not an over-supply of them; there is a serious shortage, as attested by the long rows of commuters along major arteries during every rush hour desperately trying to flag down a vehicle with a free seat.

It is somewhat awkward to have to pinpoint the main sources of criticism of jeepneys, but the facts have to be faced. These negative reactions do not come from the riding public. The most vocal complaints and accusations come from owners of private cars who are inconvenienced by the general traffic situation and who also, of course, are in leading positions with access to official agencies and the mass media. It can also be surmised that many well-meaning government officials and local transportation administrators feel faintly embarrassed by the whole system because it does not resemble any of the standard modes in industrialized countries, and there is an air of improvisation and limited resources about it. There is no justification for this attitude: the jeepneys are truly a mode that works well and provides an exceptional service for a major sector within the transportation needs spectrum.

All the above is not to suggest that jeepney service can ever be the entire answer to the passenger movement problems of Manila. Clearly it cannot serve all the requirements of a great metropolitan area, but could be assigned a proper role in a total integrated system, for which a very careful and positive analysis is required.

After all, the jeepneys do provide a successful, albeit imperfect, service; a large investment in rolling stock has been made, and more important, an entire manufacturing and maintenance industry with an employment and facility structure exists. With a few modifications they answer the requirements of a modern demand-activated system; and, last but not least, they are a dominant and spectacular characteristics of Manila.

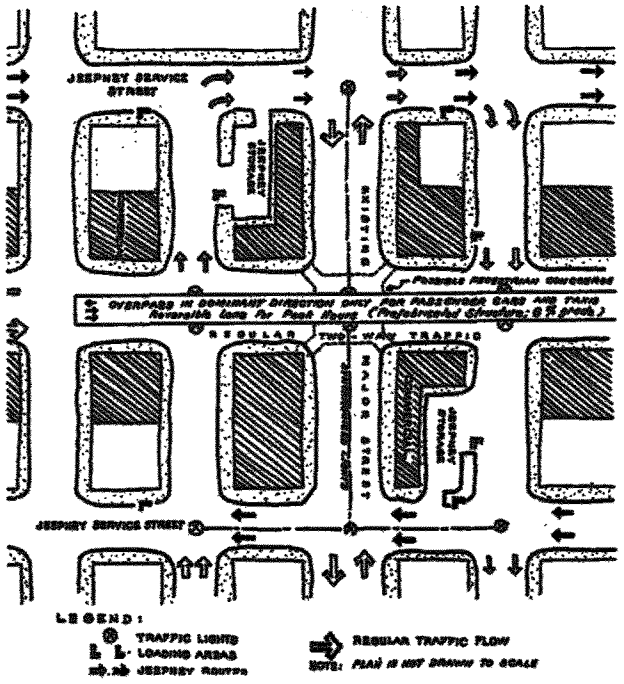

Fig. 1. Prototype Jeepney Node.

The sketch in figure 1, containing several possible suggestions, has been prepared to explore the capabilities of a jeepney-oriented mass transportation system.

The principal concept is to provide jeepney lines (and also bus lines) with an exclusive right-of-way within which most impediments to flow have been removed. These channels should not be the main arteries which are densely developed along both sides, but could be the two streets immediately next to them so that pedestrians are within easy access of the spines themselves. The two streets should be one-way, providing, in effect, a clockwise movement so that entry and exit can be done from the side oriented toward the central artery. On this street all other traffic, except service to properties on any given block, should be barred. Likewise parking should be prohibited entirely on the inside (loading) lane. Depending on the number of lanes required for jeepney flow and loading (two or three) and the width of the available street, parking on the other side, in most instances, will have to be eliminated also.

This is all that is actually needed as far as physical improvements are concerned, and, if the proper pair of service streets can be found, the system can be put into effect almost immediately. Of course, there will be a number of places where adjustments of various kinds would have to be made and short links may have to be cut through existing blocks. Progressively synchronized lights along these one-way streets would expedite movement. If all of this is achieved, there appears to be little justification for the designation of specific loading areas along the streets, and the jeepneys could continue to operate exactly as they do today.

More extensive improvements would be required at nodal points, i.e., major intersections. The sketch shows one such prototypical situation with one jeepney line running through and a cross-line terminating (or running back) at this location.

The major physical requirements would be the organization of the flow paths around the central intersection one block away which may involve some new street segments, curb realignments, and traffic channelization. Here specific loading zones probably will be required, but the most important improvement would be storage or parking lots (terminals) for jeepneys awaiting their return trip.

Another possible improvement at the node, which would represent a significant item of capital investment, may be an overpass accommodating the major traffic flow. The structure could be of prefabricated, modular, and removable type with reversible lanes according to rush hour flows.

All these improvements would have a negligible effect on the continued operation of the existing commercial and residential establishments.

Estimates indicate that under the above described design, the one-way jeepney streets (of two lanes), accounting for traffic lights and loading requirements, could carry 1,200 vehicles per hour. If each jeepney seats 12 passengers, the total volume would be 14,400 riders per hour per average lane.

A further variation, and perhaps a necessary one, on the operational patterns of the jeepney system would be to allow them, at the residential end of their run, to provide individualized pickup and delivery service, i.e., to leave the route and cruise on local streets assembling or distributing their passenger loads. But, in this case, rather strict geographic limits for each service would appear to be necessary.

THE NEED FOR A NATIONAL URBAN STRATEGY IN THE PHILIPPINES*

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The Philippine Government is currently committed to increasing the country's Gross National Product (GNP) from P27,783 million in 1969 to P36,308 million by 1974. These targets will require fixed investments averaging 19.7 percent of GNP over the four-year period. Agriculture is expected to increase output by 6.25 percent annually, maintaining its share of about 34 percent of Net Domestic Product. Industry will put in fixed capital formation totalling P8,114 million. The public sector will devote about P1,160 million annually in fixed capital formation. All these activities, it is hoped, will raise the optimum annual growth rate by 5.6 percent and increase per capita GNP from P779 to P841 between 1969 and 1974.[1]

The Philippine Four-Year Development Plan (FY 1971-74) seeks to solve the "dualistic nature" of the Philippine economy wherein a sluggish agricultural sector does not seem to effectively benefit from progress in the export and industrial sectors. Farmers, with their meagre incomes, are not able to provide the necessary market to support expansion in manufacturing. While the plan clearly sees this sectoral imbalance, however, it is strangely mute on the question of the spatial imbalance that characterizes Philippine development. Aside from a few notable sections in the plan, there is no mention of where geographically the expected investments that would raise economic development rates will occur. The Plan sees the problems of rapid population growth (expected to go down from 3.7 to 3.24 percent a year within the period) but is silent on the population movements or the pattern of human settlements its investment activities will generate. The most that the plan would say is that "regional development will be undertaken in order to reduce the income gaps in the different regions of the country."[2]

In the same plan, the ineffectiveness of regional development programs is openly admitted. Under the section on "regional industrialization", the Plan states:

> To achieve industrial dispersal, Congress created a number of development authorities. Only five of these authorities are fully operational . . . The others are merely paper organizations. The achievements of these existing regional development authorities have fallen far short of their objectives. They have not prepared adequate programs that can be synchronized with the overall economic development objectives of the country. This is due not only to lack of coordination between them and the national planning agencies, but also to the overlapping in the functions of these authorities. This obvious defect in the country's regional planning dictates the need for a revision of existing institutional arrangements.[3]

I submit, in this paper, that what is needed in the Philippines is more than mere "revision of existing institutional arrangements". The lack of coordination and general ineffectiveness of the country's regional development program is most likely due to something more basic — the need for an effective national urban strategy in the country that would integrate the spatial characteristics of development with the sectoral aspects and link the patterns of rural and urban settlements in the national territory to the overall economic and social activities that enhance development.

At present, there is, in the Philippines, an explicit statement on "basic policies which shall guide the country in its efforts to bring about social and economic development through environmental planning".[4] Passed on 9 November 1970, Joint Resolution Number 3 encouraged the establishment of a comprehensive system of Environmental Planning, the adoption and effectuation of a National Framework Plan, and the extension to local

*Paper read at the Southeast Asia Development Advisory Group (SEADAG) Urban Panel Seminar on "Planning for Urbanization Within National Development Planning in Southeast Asia", Manila, January 4-7, 1972. The paper is one of several published by the Asia Society — SEADAG on *Problems of Development in Southeast Asia.*

1. National Economic Council, *Four-Year Development Plan, FY 1971-74* (Manila, 1970), pp. 2-5, 10-11.

2. Ibid., p. 11. In the recently released *Four-Year Development Plan* (FY 1972-75), the National Economic Council included as one of its long term goals "regional industrialization and development". Even in this plan, however, the NEC puts in a caveat that "the unnatural imposition of regional industrial dispersal is uncalled for if this puts brake pressures on the overall pace of economic development. Emphasis on it serves merely to remind against 'development' policies that deviate from the natural path of maximal efficiency and balanced growth". The scenario for economic and social development reflected in the four-year plan first sees the development resource-based activities that render export products more competitive internationally. It is then hoped that opportunities in various regions of the country will be opened for "intermediate processes". Finally, regional linkages are foreseen which would "avoid the unnatural clustering of industry into select urban areas". For more on this plan, See Republic of the Philippines, National Economic Council, *Four-Year Development Plan* (FY 1972-75) (Manila, July 23, 1971).

3. Ibid., p. 115.

4. Congress of the Philippines, *Joint Resolution No. 3,* 7th Congress, 3rd special session, 9 November 1970.

governments of the responsibility for local planning (see appendix A for full text of the resolution). The National Framework Plan is a most noteworthy effort because it will take care of . . .

> translating into physical and spatial considerations the National Government's policies regarding such matters as population distribution, land capability, urbanization, housing, industrial, commercial and agricultural development, natural resources development, manpower and employment, transportation, pollution control and other factors necessary for the attainment of an effective environmental development of the entire country which, however, shall derive from applied planning principles and shall evolve methods and techniques based upon cumulative experiences, enhancing national goals.[5]

Here, then, is a formal statement of a national policy. It is not only an urban policy — it goes way beyond that and covers a comprehensive environmental planning policy. What more is needed?

Briefly, what is needed is an effective and workable national strategy. A policy statement, even a Joint Resolution "of the Senate and the House of Representatives of the Philippines in Congress assembled", does not constitute a strategy no more than specific legislation creating regional development authorities constitute adequate efforts toward regional development. There are paper organizations and paper policies — even the Philippine Constitution was once referred to as "a scrap of paper". What is needed in the Philippines is an integrated effort on the part of the public and private sectors to assess their activities in the light of their physical, environmental and spatial impacts on developments over the national landscape.

ELEMENTS OF A NATIONAL URBAN POLICY

The role of cities in development has been researched or at least talked about and while there are varying opinions and research results, the dominant view seems to indicate a positive relationship between organization and development. Economists have pointed to economies of scale and "agglomeration economies" as the source of development generators in cities. Public administration and political science theorists have cited "increased administrative capacity" and "political performance" as positive results of urbanization. Even demographers and geographers who do not usually look too kindly on the city in developing countries are interested in dynamic youth cohorts or growing central places and their implications for development.

An increasingly recognized approach to optimize the developmental role of cities is the formulation, adoption and effectuation of a national urban strategy. The basic elements of such an approach usually include the following:

1. Policies and programs dealing with city and metropolitan development;
2. Policies and programs influencing population growth and internal migration trends; and
3. Policies and programs of regional development, especially those that link rural and urban areas in the national system.

These three sets of elements are inextricably intertwined and inter-related. They are treated separately here only for conceptual convenience but should be seen as a systematic whole.

In the Philippines, government and private sector activities related to the elements mentioned above have been in existence for a long time. Certain attempts to organize and bring together such activities have also been carried out. However, up to the present, no effective system has been evolved for bringing the sets of activities together. The long range development plans have been mainly sectoral; fiscal plans have dealt more with public rather than private sector incomes and expenditures; and investment plans have been, in the words of the country's chief planner, "neutral with regard to regional economic development."[6] What little urban planning exists has been mainly fragmented and curative rather than comprehensive and forward-looking. There is a formal statement of urban goals and an explicit commitment to "a strategy for environmental planning,"[7] but little or no systematic attempt has been officially carried out to organize the activities within this strategy.

In this paper, we will try to map out the various elements in this strategy and define the factors that should be involved in a national urban strategy. Discussions will be based not only on aspects peculiar to the Philippines but on experiences in other countries that have tried to achieve development through a conscious use of an urban strategy as well.

CITY AND METROPOLITAN DEVELOPMENT

The Philippines is often cited as a country with an urban system characterized by primacy. The Greater Manila area, with a population of more than 3.5 million, accounts for a little less than 10 percent of the total population. The dominance exerted by the Manila area over the whole country is well known. Equally as widely known are the internal urban problems faced by the local government units that govern the metropolitan area.

Internal problems such as housing, slums, squatting, welfare, crime, education, utilities, etc., are being experienced in Philippine cities. They are most acute, however, in the nineteen urban centers that have a population of

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5. Ibid.

6. Gerardo P. Sicat, "Economics of Regional Development: Interaction of National and Regional Policies" (Paper delivered at a seminar on Planning for the Economic Development of the Iligan City-Lake Lanao Area, February 20, 1970).

7. Alejandro Melchor, "Urbanization in the Philippines" (Paper delivered at the Rehovot Conference on Urbanization and Development in Developing Countries, Rehovot, Israel, August 16-24, 1971), p. 7.

Table 1. Population of Cities and Towns of 100,000 or More Inhabitants, Philippines.

Cities and Towns	Year	Population
Angeles	1968	102,400
Bacolod	1968	156,900
Basilan*	1968	209,100
Batangas	1966	102,100
Butuan	1968	110,100
Cadiz	1968	118,200
Calbayog	1968	103,100
Caloocan	1968	194,600
Cebu	1968	332,100
Davao*	1968	337,000
General Santos	1968	114,000
Iloilo	1968	201,000
Iriga	1968	101,000
Manila	1968	1,499,000
Pasay	1968	174,100
Quezon City	1968	545,500
San Carlos	1968	165,200
Tarlac	1966	121,400
Zamboanga*	1968	176,800

Source: *United Nations Demographic Yearbook*, 1970.
*Includes rural hinterland.

100,000 or more (Table 1). Population size, high densities, and fiscal and administrative inadequacies in these urban centers have created tremendous problems.

Urban problems are most acute in the Metropolitan area where it is estimated that the population will reach 5.9 million by 1980. Policies are needed to face up to the familiar results of high density urban concentrations. Squatters and slum-dwellers make up about a third of Metropolitan Manila's population but "the National Government has been unable to develop a consistent and firm policy towards squatter encroachment on public and private property." Between 1962 and 1966, crime incidence increased by 20 percent in the Philippines and "the crisis seems limited to the Manila area by virtue of its characteristics as a primate city." [8] Crime incidence in Metropolitan Manila is sixty times higher than the rest of the country.

Characteristically, solutions advanced to cope with city problems seem only to make matters worse. Transport needs in Metropolitan Manila have been answered by the fact that 50 percent of all vehicles registered in the Philippines are concentrated in that area but this seems to have resulted, mainly, in gigantic traffic jams. Manila prides itself in being a communication center, with seven of the nine daily newspapers, six of the 13 commercial television stations, and 43 of the 200 radio stations concentrated in the area, but it has been said that "much of this mass media communication is really Manila talking to itself with a lot of sheer 'noise' . . . effective public opinion on national issues is Manila opinion." [9]

One perplexing fact is that while experience has proven that certain programs and approaches are not effective, government agencies persist in carrying them out. For example, it has been shown that the policy of relocating squatters to distant sites does not work because most of them leave these places the first chance they get but such a policy is still the main response of the government as seen in the Sapang Palay, Carmona, and San Pedro Tunasan schemes. Another program being proposed is industrial housing — the mass production of prefabs through the National Housing Corporation or of high rise tenements by the People's Homesite and Housing Corporation or the Bureau of Public Works or both. Experiences in most developing countries have shown that industrial housing is most expensive; it does not avail of the most important resource in the cities which is the skills and motivations of low income people to be housed. Furthermore, it fails to use local building materials and it usually generates social and other problems that

8. Ibid.

9. Ibid.,

are difficult to cope with. And yet, the Philippine Government still clings to this scheme.

Closely related to the question of what housing to provide low income people is an urban land policy. In Metropolitan Manila, the main item of expenditure in housing is not the cost of the building itself but land. At prevailing land prices which are sent spiralling by rampant speculation and the lack of any price controls, the land-building costs ratio may reach as much as 70:30. Low real estate tax-levels and negligible penalties and fines, coupled with ineffective administration of assessment, collection and record keeping and updating functions contribute to the unrealistic price of land. Rural land reform is a popular slogan in the Philippines but urban land reform is rarely mentioned or thought about. In fact there is a danger that success in the former may be achieved at the price of the latter as there has been a proposal to sell government land in Greater Manila to get capital for a Land Bank. At a time when governments in most parts of the world are buying urban land to make room for planned expansion, the Philippine Government is thinking of doing the opposite.

While the problems of Metropolitan Manila are more visible other cities suffer the same types of problems. A study in progress involving five intermediate cities shows the same types of problems occurring in Baguio, Cebu, Davao, Iligan and Iloilo.[10]

A most difficult aspect of city and metropolitan problems, of course, is inter-governmental relations. Such problems, usually involve national, provincial, city and other local government jurisdictions. It is quite easy to come up with a national policy stating certain goals. Implementation of such a policy, however, will mean specific activities allocated among levels of government and this usually means jealousies and conflicts.

Too doctrinaire an adherence to "local autonomy" and "decentralization" has usually meant local government resentment of central government controls and supervision. The transfer of the physical planning function to local governments in the Philippines and the emasculation of the National Planning Commission are often cited as detrimental effects of the local autonomy crusade. Fiscal relations between central, provincial and city governments have been strained by misunderstandings and charges of meddling in the past. Some local government units have changed city and municipal status a number of times because of changes in perceived advantages and disadvantages.

A particularly thorny problem is found in metropolitan-wide action for the performance of certain tasks that are seemingly most rationally carried out at a larger scale. The Metropolitan Water District in Greater Manila has changed jurisdictions several times, with no appreciable change in its performance. The metropolitanizing of police functions in Metropolitan Manila has also been full of troubles. So far, the restructuring of local government functions to cover a number of local government jurisdictions has been done mostly by imposition from above by the national government. Local politics and local sentiments have not brought about movements toward region-wide government structures and it is doubtful if such movements will flourish in the Philippines in the near future without imposition from the central government.

In other countries, numerous advantages have been found in the use of region-wide or multi-tiered metropolitan government structures. Such functions as comprehensive planning, water, transportation, environmental conservation, etc., have been found to be more difficultly performed when they cover wider area and governmental jurisdictions. Economies of scale, agglomeration economies, and availability of more and better trained personnel have been frequently cited as advantages to regional government. Metropolitan Toronto, for example, has improved the combined credit standing and borrowing capacity of all local units within its jurisdiction. The transportation system of Greater Stockholm has been so efficient that some coordinating structures used in its operation have been incorporated into the institutionalized reorganization of the general local government machinery itself. The Paris Region and the Greater London Council Region combine central, local and regional functions in an integrated system. The schemes mentioned above provide some evidence that urban policies integrating inter-governmental efforts are needed to cope with urban problems that do not respect legal jurisdictional boundaries and local sentiments.

There are several reasons why policies and programs to cope with internal city or metropolitan area problems in the Philippines have not been too successful in the past. First is the lack of a forward looking tradition of city planning. Only a few Philippine cities have "master plans" and these are little more than sketches for main thoroughfares and proposed land use. Most of these plans have not been formally approved by city authorities and are therefore treated as guides rather than binding commitments. Another important reason is the widespread adherence to local officials and some national government people to the doctrine of local autonomy. Championed mainly to enhance popular participation and political mobilization, local autonomy has succeeded grandly in making the Filipino one of the most politically aware citizens of any country in the world. At the same time, however, local autonomy has fed on local loyalties and particularistic sentiments which are responsible, say, for the lack of cooperation among local units that make up metropolitan areas or the almost feudal state of local government in places run with the help of private armies.

Finally, an important reason is failure on the part of the national government to provide the energy and leadership in facing up to city and metropolitan problems. As a centralized unitary government, the Philippine Government could, by legislative fiat, impose governmental structures and forms on local units. Time and again, it

10. A.A. Laquian, "Slums and Squatters in Six Philippine Cities" (A SEADAG-supported study in progress). The cities studied are Baguio, Cebu, Davao, Iligan, Iloilo and Manila.

has been said that local governments are creatures of the national government and they may be created, abolished, organized, reorganized or otherwise dealt with in whatever manner or form central government wishes. And yet, Congress and the Chief Executive have not availed of this prerogative when it comes to urban affairs. Little or no attempt has been done to rationalize the governmental system in Metropolitan Manila and even the national capital, Quezon City, is run like any ordinary chartered city. The central government has seen fit to delegate power and authority to the barrio through the much heralded Barrio Charter where resources are so meagre that the legal powers become meaningless, but it has not invested power and authority to a metropolitan or region-wide structure where there are enough resources to make operations viable. Fragmented into quarrelsome and conflicting local jurisdictions and denied central government resources by the convenient gesture of granting them "local autonomy", urban areas are unable to cope with problems which often emanate from sources beyond their jurisdictions. It is widely known that most urban problems are caused by rapid rural to urban migration over which local units have little or no control. And yet, central government policies and programs influencing such population movements are poorly coordinated and no central thrust or goal seems to be adhered to by agencies implementing them.

POLICIES AND PROGRAMS INFLUENCING INTERNAL MIGRATION

Rapid urban population growth in the Philippines is due to high natural growth rates (estimated at 3.5 percent a year) and increasing internal migration (about 10.8 percent of the population resided in a region other than the place of birth in 1957 and this went up to 12.6 percent in 1960).

The main streams of migration are rural-urban, rural-rural, and urban-rural. Urban-urban migration is not too high and is predominantly from smaller to larger urban places, except in Metropolitan Manila and Cebu where some suburbanization has begun to take place and in Mindanao where some migration from large urban places in the Visayas and Luzon to smaller urban areas is happening.

Rural-urban migration is highest in Metropolitan Manila, and in Cebu in Eastern Visayas. As previously mentioned, this has contributed heavily to city and metropolitan problems. Rural-rural migration is mainly responsible for the rapid population growth in southwestern and northeastern Mindanao where settlers from the Visayas and Luzon accepted the challenge of the government's resettlement program. As these "frontier places" have filled up, however, the pace of urbanization in Mindanao has picked up, both from intra-region migrations from rural to urban places and inter-regional rural-urban migration from Visayas and Luzon.

Dividing the Philippines into the ten regions used by the Bureau of Census and Statistics, Pascual sorted out the streams of inter-regional migration.[11] In table 2, we find that about two-fifth of the in-migrants to Manila between 1948 and 1960 came from the Visayan area. Another fifth came from provinces in Central Luzon. These flow trends are confirmed by intensive studies conducted by the author of slum and squatter communities in Manila where people from the Visayas also predominate.[12]

Another destination of migrants is Rizal province, which receives some of the people attracted to Manila. About half of the migrants to Rizal come from Manila, showing urban sprawl or suburbanization (some will call this "premature" suburbanization) trends. The heavy streams from the Visayas are evident in the fact that about two-fifth of migrants to Rizal come from this region. They are most dramatically shown, moreover, in the heavy migration to Mindanao where people from Bohol, Cebu, Leyte, and Samar in the Visayas have become predominant. Summing up, Pascual noted the main trends as follows:

> North of Manila, there is no well-defined stream from a definite regional source. South of Manila and as far down as Samar, the great stream is northward, the probable destination being the great metropolis or the neighboring region now coming under urbanization effects. South of Cebu, the stream is southward toward the as yet sparesely settled territories of Mindanao.[13]

Many explanations have been advanced for the inter-regional flows of population in the Philippines. In a study of regional economic growth between 1948 and 1966, Sicat pointed out that "regions with high in-migration rates are also relatively the ones with high regional growth elasticities in an absolute sense. So, as expected, the population moves into areas where economic opportunity appears to be high".[14] The importance of economic (mainly employment) motivation in internal migration are borne out by the author's study of migrant squatters and slum dwellers in six Philippine cities.[15]

The already unbalanced growth patterns in the Philippines threaten to become exacerbated by continuous internal migration trends. Our look at internal city and metropolitan area problems shows the strain on resources posed by excess urban populations. Attracting less attention but equally as important are the problems in rural areas where the best and most productive segments of the population have left. In this light, policies and pro-

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11. Elvira M. Pascual, *Population Redistribution in the Philippines* (Manila: University of the Philippines Population Institute, 1966), p. 38.

12. A.A. Laquian, *Slums are for People* (Honolulu: East-West Center Press, 1971).

13. Pascual, *Population Redistribution in the Philippines*, pp. 39 and 42.

14. Gerardo P. Sicat, "Regional Economic Growth in the Philippines, 1948-1966" (Part of a forthcoming book on Industrial Export Growth, Investment Incentives, and Philippine Economic Development).

15. See note 10 above.

Table 2. Streams of Migration Among Philippine Regions, 1948-1960.
(In thousands)

	Total	I	II	III	IV	V	VI	VII	VIII	IX	X
Philippines	19,138	2,538	1,054	406	2,552	1,490	1,454	3,416	4,300	714	1,214
I	1,892	—	182	46	412	204	198	294	476	46	34
II	566	110	128	48	182	42	8	22	8	8	10
III	752	36	130	146	410	8	2	2	10	8	—
IV	1,190	310	122	16	442	112	52	40	68	20	8
V	5,510	1,556	312	140	756	878	596	654	498	62	48
VI	908	148	12	—	18	138	460	20	98	8	6
VII	1,040	64	12	4	10	38	34	570	242	32	34
VIII	846	112	2	2	8	26	26	80	402	92	96
IX	4,678	118	106	2	200	30	70	1,440	1,752	316	644
X	1,756	74	48	2	114	14	8	294	746	122	334

Source: Elvira M. Pascual, *Population Redistribution in the Philippines* (Manila: UP Population Institute, 1966), Table H. pp. 94-96.

grams with enough sensitivity to trends of internal migration are needed. Such policies and programs may be divided into four main categories:

1. Those that encourage people to move to certain areas;
2. Those that discourage people from moving to, or staying in, certain areas;
3. Those that encourage people to stay where they are; and
4. Those that cope with problems arising from internal migration.

In the Philippines, a number of programs fall under these four broad headings. Ocampo has listed such programs and activities in table 3.[16]

An analysis of the programs will reveal a rural and an almost anti-urban bias. A "back to the land" philosophy is readily apparent in resettlement, colonization, agricultural production, rural credit and other schemes. Among programs and activities that encourage people to move to certain areas, as well as programs that encourage them to stay where they are, the preferred place is the rural area. People are discouraged from moving to or staying in cities, especially the poor who flock to slum and squatter communities. Programs and activities designed to cope with problems arising from internal migration are usually curative urban schemes such as housing, relocation, welfare, utilities, etc.

The irony of the situation, however, is that with all these efforts to discourage migration to cities, such streams have not abated. On the contrary, improvement in the lot of rural folks seem to encourage more city-ward migration as production efficiencies release marginal rural labor or relatively successful rural people yearn for something better which they hope to find in the cities. Increased agricultural productivity may have an increased effect on internal migration. Instead of holding people on the farm, the rice and roads scheme of the government may give the farmer his transportation fare for vehicles travelling through better roads which all lead to urban centers.

Aside from this unintended effects, the developmental thrust of programs and activities listed in table 3 is blunted by lack of coordination. Thus, gains in one particular set of activities may be lost by mistakes in another. Overlapping of functions, duplication of efforts and passing the buck are quite common among public agencies. In a case study prepared by this writer involving relocation of former squatters and slum dwellers, some 29 public and private agencies were active participants but they got so involved in "administrative politics" that their efforts came to naught.[17] There are indications that a well defined operational policy could have avoided coordination problems but in this particular case, this was the very item missing.

One approach which is increasingly mentioned as a part of a national urban strategy is population control. An argument often used by demographers is that rapid or "premature" urbanization is really a function of rapid population growth. The cities and the countryside are both increasing too fast, so that the excess population is becoming concentrated in urban centers. If birth

16. Romeo B. Ocampo, "Programs and Activities Influencing Rural-Urban Migration" (Paper in progress to form part of a study on Rural-Urban Migrants and Metropolitan Development sponsored by the International Development Research Centre and the International Association for Metropolitan Research and Development).

17. A.A. Laquian, *The City in Nation-Building* (Manila: School of Public Administration, University of the Philippines, 1966), chapter VII.

and fertility control, family planning and other policies are adopted, it is hoped that the pace of urbanization will slacken and the problems it creates may be solved.

In the Philippines, while formal statements have been made about the need for population control, well organized and coordinated programs have not been effectively launched. Aside from obvious difficulties in a country where about 85 percent of the people are Roman Catholics and the political repercussions of advocating such a policy openly, there are educational, hygienic, cultural and other problems facing a population control policy. If trends in other countries hold true in the Philippines, the time lag between introduction and adoption of such policies and the appreciation of their effects will be long. There is some evidence that the success of population control measures is often closely linked with general forces related to economic and social development themselves. Urbanism, for example, is usually related to decline in fertility. Thus population policies must be based on the fact that family planning and urbanism are supportive rather than causative and that economic and social development may not be dependent on lower production growth even though per capita GNP or income may show a rise by a change in the population value in the measure.

REGIONAL DEVELOPMENT

A common form for a national urban strategy is regional development. The national territory may be divid-

Table 3. Programs and Activities that Influence Migration.

Programs and Activities	I	II	III	IV	Agencies*
1. Frontier colonization and homesteads	x				BL, NARRA
2. Resettlement of former Huks	x				DND, EDCOR
3. Resettlement of urban squatters to rural areas	x	x		x	PHHC, DSW, DND, PAHRA, LTA
4. Industrial estates	x				PES, BOI, NEC
5. New towns	x	x		x	PES, PHHC, CITRUS, NEC
6. Highways and infrastructure development, irrigation	x				BPW, PBH, LG ISU
7. Relocation from disaster areas, military operation zones, stricken areas		x			DND, DSW, PNRC
8. Natural resource conservation, reforestation		x			DANR, BF
9. Administrative regionalization		x	x		GSRC, LGRC
10. Manpower training and development	x	x	x	x	BL, PACD, CITRUS
11. Intra-urban relocation and land tenure	x	x	x	x	PHHC, BL, DSW
12. Public housing	x	x	x	x	PHHC, BPW, LGs, SSS, DBP, GSIS, NHC
13. Welfare, health, and urban poor services				x	DSW, DH, LGs
14. Utilities and other urban services				x	LGs, NAWASA, BPW
15. Land reform		x	x		BL, CAR, LRC
16. Sites and service schemes for squatters	x		x	x	PHHC, CITRUS, LTA, DND
17. Cottage industries			x	x	NACIDA, ACA, DSW, PACD
18. Rural credit, price supports, cooperatives	x		x		CAO, ACA, RCA, RBs
19. Agricultural extension			x		BAE, CAP, BAI, PACD
20. Housing finance	x		x		PHHC, GSIS, SSS, HFC
21. Rural electrification	x		x		REA, NPC, SEC

*Full names of agencies appear in Appendix B.

ed into a number of regions. Regions may be defined around one or a cluster of urban areas. These urban areas may be regarded as the nuclei of development and national policies may be based on energizing these centers and linking them to their peripheries.

Regional development is an especially useful approach because a national urban strategy must be based on the realization that cities cannot be dealt with in isolation from their rural hinterlands. The potentials and problems of urbanization emanate from linkages between rural and urban sectors. Inner city and metropolitan problems, as previously stated, are rooted in rural underdevelopment. Internal migration serves as the link between rural and urban areas. A strategy of economic and social development that takes advantage of the resources arising from urbanization must consider the rural-urban characteristics of regions and the relationships of various regions with each other as they form the national system.

Table 4. Characteristics of 10 Regions of the Philippines 1960 Census (In Percent).

Regions	Population	Land Area	Percent Urban
PHILIPPINES	100.00	100.00	29.9
Reg. I Manila	4.20	.01	100.0
Reg. II Ilocos/Mt. Province	5.43	8.53	16.6
Reg. III Cagayan Val./Batanes	3.82	8.92	15.5
Reg. IV Central Luzon	13.63	7.92	21.7
Reg. V Southern Luzon/Islands	15.62	15.24	48.9
Reg. VI Bicol	8.72	5.92	21.3
Reg. VII Western Visayas	14.07	9.00	27.9
Reg. VIII Eastern Visayas	14.64	10.32	21.8
Reg. IX Southwestern Mindanao and Sulu	12.09	20.91	19.2
Reg. X Northeastern Mindanao	7.80	13.23	19.0

Source: Elvira M. Pascual, ***Population Redistribution in the Philippines*** (Manila: UP Population Institute, 1966), Tables 1 and 2, pp. 10, 11 and 15.

Note: Total Population of the Philippines, 1960: 27,087,685; Total Land Area: 297,413 square kilometers.

For census and other purposes, the Philippines has been traditionally divided into ten regions. Important characteristics of these regions are shown in table 4.

While the regions mentioned in table 4 may be adequate for statistical and other purposes, there may be a need to revise them for the formulation of plans and programs for regional and national development. In countries where regional development has become a feature of economic and social planning, well defined "regional accounts" are almost absolutely necessary, and the usefulness of such accounts depend on the care with which regional boundaries are defined.

There has been no lack of proposals on how regions in the Philippines can be defined. Wernstedt and Spencer divided the Philippines into 23 regions, using physiographic, language, ethnic, main crops, and other variables.[18] The system of regional offices and jurisdiction used by various government agencies also vary significantly. In translating policies to programs, there may be a need for using various definitions of regions in the Philippines.

For purposes of an economic and social development strategy that considers urbanization as a key variable, there are obvious changes that have to ge made in regional definitions in the country. Foremost among these is a more accurate delimitation of regions. A more careful study of geographic, economic, social and political elements is needed to properly delineate the regional areas that have urban and rural characteristics providing each one with a definite identity as far as development performance and potentials are concerned. The present regions, convenient as they are, seem inadequate for a national urban strategy. For example, the Bureau of the Census and Statistics continues to define Metropolitan Manila as composed of four cities and four towns when it should more realistically include 23 local units on the basis of contiguous urban development alone. This lack of a realistic definition of Metropolitan Manila also affects the status of the province of Rizal in any provincial comparisons. Worse, among certain government agencies, Re-

18. Frederick Wernstedt and J.E. Spencer, ***The Philippine Island World*** (Berkeley and Los Angeles: University of California Press, 1967), pp. 304-306.

gion I is variously defined as the City of Manila alone, Metropolitan Manila or even Manila and islands, lumping with the country's primary metropolis the underdeveloped islands of Palawan and others.

Another important item needed for an effective urban strategy is more accurate knowledge of the economic and social development performance of various regions in the country. This is a difficult and expensive task for even in technologically advanced countries, regional accounts have not been fully developed yet. However, a start is needed using whatever data are available. As an economic system matures and generates more data, shortcomings can be improved.

In what is probably the first attempt to measure the economic performance of various regions in the Philippines, Sicat used "proxy information" based on taxes and expenditures of local government units within the regions. In the absence of more detailed regional accounts, Sicat's analysis provides us with preliminary data on regional economic performance.[19]

Not surprisingly, Sicat found that in the period of 1948 to 1961, higher economic growth occurred in Metropolitan Manila and adjoining Rizal province. For every percent growth of GNP, Rizal's growth ranged from 2.2 to 2.8 percent while Metropolitan Manila grew by at least as much as the national growth rate. However, in view of the size of the Metropolitan Manila economy even a moderate growth in this region added significant contributions to GNP.[20]

In the period 1961 to 1966, regional growth seems to have been faster in Mindanao, Cagayan and Western Visayas although the growth of Manila and Rizal appears to have continued. This continued growth attests to the predominant role played by the Greater Manila area in Philippine economic development. Metropolitan Manila and Rizal account for about a fourth of GNP in Sicat's calculations while the Luzon island group with Manila as the center accounts for 59 percent of GNP. Metropolitan Manila's Gross Regional Product (GRP) is 2.4 times greater than Rizal province and six times that of the region with the lowest GRP, the Cagayan Valley. Significantly, the relative contribution of Mindanao to GNP is gradually rising while the relative contribution of the Visayas is falling.[21]

Finally, there is a need to define and coordinate the governmental policies and programs that can influence regional development in the Philippines. As the entity with large enough resources, powers and authority to affect the concentration or dispersal of economic and social activities, the government has a responsibility to understand and appreciate the impact of its actions. Otherwise, if these activities are poorly coordinated, a great deal of wasted efforts are expended.

In a recent work, Sicat has looked into the interactions between national development policies and regional development. He has argued that "development of one region depends critically on decisions and activities going on at . . . two levels of government (national and regional)."[22] He has also stated that "a necessary condition for successful regional development is national economic policy which is conducive to economic development."[23] This relationship is reciprocal, however, for a "sufficient condition" where "vigorous and sympathetic decisions at the regional level" are made is also needed.[24]

The most important national policies considered significant for regional development by Sicat center around industrialization, both of import dependent or realistically-price-directed varieties. Relevant policies include: (a) exchange rates policies; (b) transport and other infrastructure policies; (c) interest rate and lending policies; (d) wage policy; (e) industrial estate policy; and (f) tax policy.[25] With the use of these policies, the central government may favor development in some regions and discourage it in others. An exchange policy of "decontrol", for example, favors regions where agricultural and resource-oriented industries are located. Regions where heavy investments in transport and infrastructures are made or where industrial estates are located receive valuable developmental benefits. Preferential loans or interest rate policies for specific industries located in a region, tax subsidies or moratoriums as well as exemption from "unrealistic" minimum wage requirements may also stimulate growth in certain regions where favored industries are located.

As in the case of governmental programs and activities to influence migration, the availability of policies for industrialization in the Philippines has not meant that effective regional development activities have occurred. The industrial incentives administered by the Board of Investments (BOI), according to Sicat, have been "neutral" with respect to regional development.

> The BOI has tried its best to incorporate within its industrial priorities formula a positive weight so that industries proposed which are located outside the Metropolitan Manila area could get favored treatment. The results, insofar as our acquaintance with their attempt is concerned, show that the ranking industrial priorities are not affected at all.[26]

The results, again, are predictable. The Metropolitan Manila area has been greatly favored by industrial investments and the rest of the urban places and regions in the country have not benefited accordingly.

Between 1 July 1968 to 31 December 1969, the BOI approved investments in 161 plants totalling P2,974,770,000 employing an estimated 28,002 persons and paying an annual payroll of P80,394,000. The bulk of

19. See note 14 above.
20. Ibid.
21. Ibid.
22. See note 6 above.
23. Ibid.
24. Ibid.
25. Ibid.
26. Ibid.

these plants were located in Luzon – 49 in Southern Luzon and 27 in Manila and suburbs. About 48 were in Mindanao while a meager 12 plants were located in the Visayas. Of greater significance is the volume of total investments, which again favored Luzon and Mindanao. The average amount of investment per plant in these places is much higher than those in the Visayas, indicating that not only are there more projects located in these regions, such projects also tend to be larger and create more employment opportunities.[27]

In sum, the failure of attempts to disperse industrial investments to various parts of the Philippines may be explained by the fact that regional location is only one of the factors considered by BOI in deciding where to invest. As Sicat noted, the current rends in governmental policies tend to result in concentration in the Greater Manila area. In the future, perhaps, political and other pressures emanating from the essentially localistic and "pork barrel" political system in the Philippines will result in more dispersal, especially as industries preferred may become more public rather than private sector initiated, larger rather than smaller in scale, determined more by resource availability rather than markets, more labor intensive, or subject to government controlled resources (such as foreign exchange, credit, tax incentives, etc.). To be sure, there are many dangers inherent in increasing public sector participation in industrialization, vulnerable as government entities are to particularistic pressures. However, there may be trade-offs in the choices between such disadvantages and the benefits arising from increased manageability and susceptibility to planning.

It is apparent from the foregoing that the most crucial issue involved in a national urban policy is the choice between concentration or dispersal. In some countries, policies favoring dispersal have taken the form of introducing urban settlements in hinterland regions, accelerating growth in existing settlements or planning new cities from scratch. The large resources usually available in the public sector may be used to start national or regional capitals in virgin areas as in Brazilia, Chandigarh, Ciudad Guayana, or, closer to home, Trece Martires, Tagaytay and Palayan.

In the Philippines, investments in urban development in hinterland areas have been the result more of political, ethniccultural and other factors than a conscious policy of regional dispersal. The industrial settlements around Iligan City, for example, are as much due to the presence of a cheap source of power in Maria Cristina Falls as the unique political leverage held by a minority-dominated region that actively demands its "pork barrel" and other shares. A case study of the setting up of Trece Martires City reveals very clearly its roots in the peculiar flavor of Cavite politics.[28]

27. National Economic Council, *Four-Year Development Plan, FY 1971-74*, pp. 120-121.

28. Barbara Ann Lillie, "The Politics of Trece Martires City" (Unpublished Master's thesis, University of the Philippines College of Public Administration, 1969).

Perhaps, for once, the "responsiveness" of the Philippine policy to particularistic pressures has prevented the wastage of precious resources in grand schemes to set up prestige capitals and planned show-piece cities from scratch. Increasingly, studies are showing that investments in developing cities from scratch are generally higher than investments in places where urban settlements have already become viable. Creating a job in Cotabato may involve a higher total investments compared to creating a similar job in Cebu. The short term costs of such an investment, however, have to be weighed against the long term developmental implications, especially in the case of investments in the Greater Manila area where the immediate costs may be low and production pay-offs high but the long term costs in economic and con-economic terms may be extremely high indeed.

It is when we consider the non-economic costs and benefits involved in concentration or dispersal that a policy inclined toward the latter seem to become more rational. As we have seen in Metropolitan Manila and other million-size cities, continued concentration may increase social and other costs such as the loss of privacy and leisure, increase in inconveniences arising from too many people (traffic, noise, pollution, crime), increasing marginal costs for providing urban services, etc. Politically, there may be dangers of overconcentration of power in an urban based elite, increasing tendencies toward secessionism among minorities and other people residing in neglected hinterlands. As social scientists develop new techniques to gauge these other effects through "social indicators" and other measures, we may learn more about costs and benefits of urban policies and use this knowledge for national development planning.

By a national urban strategy, we mean the formulation, adoption, implementation and evaluation of a continually evolving set of programs and activities designed to optimize the role of urbanization in economic and social development.

CONCLUSION

As previously noted, the Philippines already has a national urban policy in the form of a formal statement of the country's desire to use and regulate urban growth for economic and social development. What is lacking is a national urban strategy that will translate development goals to reality.

By a national urban strategy, we mean more than the explicit statement, formal adoption and legislative enactment of documents embodying urban and national development goals. Neither do we have in mind a long range Plan document recommending ways and means of achieving sectoral targets, fiscal plans to regulate public sector income and expenditure, regional master plans, etc. These are crucial parts of a national urban strategy but they are not the strategy.

An urban strategy is not a product but a process. It involves the formulation, adoption, implementation, eva-

luation and study of a continually evolving set of programs and activities designed to optimize the role of urbanization in economic and social development. The programs and activities that make up such a strategy are flexible and dynamic. They should be responsive to the economic, social and political changes occurring in urban and rural sectors of the national system and reflective of the states of development or underdevelopment in all sectors.

Rodwin lists as institutional requirements of a national urban growth strategy four basic elements: (1) a stable government; (2) some intelligence mechanisms to analyze problems and suggest roles that the government should play; (3) some central power over the principal incentive and central mechanisms, including those affecting the allocation of capital; and (4) a relatively efficient civil service.[29] In greater or lesser degree, these requirements are already met in the Philippines. The government is stable, with normal transitions of power among contending groups since independence in 1946. Agencies like the Bureau of the Census and Statistics, Presidential Economic Staff, National Economic Council (especially the Office of Statistical Coordination and Standards), the Central Bank, and others, monitor developments and recommend policies. The NEC, PES and Board of Industries as well as financial institutions like the Central Bank, Philippine National Bank, Development Bank of the Philippines, etc., exert some control over incentives and control. And while there are charges of graft and corruption as well as other anomalies, the civil service seems relatively efficient.

It is in the lack of an effectively coordinated and coherent strategy of operations (the process) that efforts in the Philippines have failed so far. As already noted, there are many institutions existing that are already pursuing activities that lead toward a national urban growth policy. However, the interrelationships among these activities are poorly understood and ineffectively managed. This is particularly true in the case of spatial (regional) interrelationships.

29. Lloyd Rodwin, *Nations and Cities* (Boston: Houghton Mifflin, Co., 1970).

To bring about coordination and coherence, Rodwin recommends a central organization to take care of an urban growth strategy "either in the chief executive's office, or in a national planning agency, or in some national agency for public works and urban development."[30] This recommendation falls into the trap of believing that an institutional change would achieve desired results. In our view, it will be more fruitful to consider the various activities and functions that are involved in the operation of a national urban strategy. These will include:

1. Definition of the major urban-centered regions in the country, including identification of actual and potential growth centers, studies of migration and growth patterns, projections of demographic, economic and other growth trends, etc.
2. Recommendation of a national urban strategy to appropriate authorities, assistance in the adoption of such a strategy, regular monitoring of the progress in implementing such a strategy and constant adjustment of the elements of the strategy to suit changing conditions.
3. Assessment of government plans, programs and activities that influences urban growth (transportation, power networks, resource utilization, and development programs for agriculture, industry, manufacturing and other sectors) and linking these to the strategic activities and goals. This will include both central, regional and local government units.

The precise institutional structures needed to perform the activities mentioned above will depend very much on political, administrative and other conditions in the Philippines. In the past, institutional forms have been introduced and adopted in the country, with little or no regard for actual conditions. Such efforts, of course, have met with many failures. In the effective operation of an urban growth strategy what is to be done and how is more important than the institutional forms needed to carry out the task.

30. Ibid.

Appendix A

SEVENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES) S. Jt. R. No. 1
Third Special Session)

(JOINT RESOLUTION NO. 3)

JOINT RESOLUTION ESTABLISHING BASIC POLICIES WHICH SHALL GUIDE THE COUNTRY IN ITS EFFORTS TO BRING ABOUT SOCIAL AND ECONOMIC DEVELOPMENT THROUGH ENVIRONMENTAL PLANNING.

WHEREAS, House Joint Resolution No. 2, approved on August 4, 1969, seeks to promote the social and economic development of the country by adopting the following policies, among others:

1. The coordination of economic activities through national planning and maintaining conditions that will create a favorable climate for investment;
2. The implementation of industrial and agricultural pioneering development, dispersed through the different regions of the country and to this end, the establishment of required infrastructure, including security, transportation and communication facilities, and a supply of power throughout the country;
3. The development of agricultural lands through massive irrigation, water resources development, power utilization and land survey and classification;

4. The conservation and development of national resources and tourist attractions; and,
5. The conservation and development of cultural and historical heritage of the people;

WHEREAS, the formulation and implementation of an effective system of Environmental planning which will preserve, conserve, rehabilitate and develop human environment is one of the effective means that will contribute greatly towards the attainment of the foregoing declared policies;

WHEREAS, at present the significance of Environmental Planning as an important process that will hasten the social and economic development of the country without sacrifice to cultural aspiration of the Filipino has been given very little attention by the Government; Now, therefore be it

Resolved by the Senate and the House of Representatives of the Philippines in Congress assembled:

To promulgate the following policies that will guide the country in its efforts to bring about the national environmental development of the nation:

(a) The establishment of a comprehensive system of Environmental Planning which will promote the economic development of the country, ensure the social well-being of the people and encourage their cultural advancement; conserve, rehabilitate and develop the physical environment and natural resources of the nation to achieve the optimum degree of economy, utility, beauty, public health, safety, order, opportunity and satisfaction of the people;

(b) The adoption and effectuation of a National Framework Plan translating into physical and spatial considerations the National Government's policies regarding such matters as population distribution, land capability, urbanization, housing, industrial commercial and agricultural development, natural resources development, manpower and employment, transportation, pollution control and other factors necessary for the attainment of an effective environmental development of the entire country which, however, shall derive from applied planning principles and shall evolve methods and techniques based upon comulative experiences enhancing national goals; and shall uphold the dignity of the Filipino; and,

(c) The extension to local governments, singly or jointly, the responsibility for local planning that shall be within the context of teh National Framework Plan and the implementation of such plans formulated in a manner most beneficial to localities or groupings thereto.

Approved, November 9, 1970.

Appendix B

PHILIPPINE GOVERNMENT AGENCIES

ACA	Agricultural Credit Administration
BAE	Bureau of Agricultural Extension
BAI	Bureau of Animal Industry
BL	Bureau of Lands
BPH	Bureau of Public Highways
BPW	Bureau of Public Works
BOI	Board of Investments
CAO	Cooperatives Administration Office
CAR	Court of Agrarian Relations
CITRUS	Central Institute for the Training and Rehabilitation of Urban Squatters
DANR	Department of Agriculture and Natural Resources
DBP	Development Bank of the Philippines
DH	Department of Health
DND	Department of National Defense
DSW	Department of Social Welfare
EDCOR	Economic Development Corporation
GSIS	Government Service Insurance System
GSRC	Government Survey and Reorganization Commission
HFC	Home Financing Commission
ISU	Irrigation Service Unit
JLGRC	Joint Local Government Reform Commission
LGs	Local Governments (Provinces, Cities, Municipalities)
LTA	Land Tenure Administration
LRC	Land Reform Commission
NARRA	National Resettlement and Rehabilitation Administration
NEC	National Economic Council
NPC	National Planning Commission
NPC	National Power Corporation
NAWASA	National Waterworks and Sewerage Authority
PACD	Presidential Assistant on Community Development
PAHRA	Presidential Assistant on Housing and Resettlement Administration
PES	Presidential Economic Staff
PHHC	Peoples Homesite and Housing Corporation
PNRC	Philippine National Red Cross
REA	Rural Electrification Administration
SEC	Securities and Exchange Commission
SSS	Social Security System

MANILA BAY METROPOLITAN REGION: SOME TENTATIVE PRINCIPLES FOR STRATEGIC PLANNING

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At the risk of oversimplifying very complicated issues and inaccurately estimating the scale of the problems, the time seems to be ripe to put forward a few tentative principles for the future planning and development of the Manila Bay metropolitan region. The ideas behind these principles are the results of several years of living, working and travelling in the Manila area, of thinking, talking and listening to opinions about the situation and the future, and of reading the many reports and research studies prepared over the years. The synthesis of all these is expressed very briefly in the following few pages and in the diagrammatic map.

GROWTH PROBLEMS AND PROSPECTS OF THE REGION

Until recently, attention has been concentrated on the major urbanized areas in the near vicinity of Manila. Variably described as "Manila and Suburbs", "Greater Manila" and "Metropolitan Manila", this area with about 4 million people in 1970 does represent the heart of the problem at present. Geographically it is not yet a large area. The land area effected by urban development and the distances are still small in comparison with many other world metropolitan areas.

At the same time the change is occurring rapidly. The loosening of the urban structure is already well on the way with improved communications, changing travel habits and the expanded land desires of metropolitan residents and employers. The radius of action of the commuter is expanding and will continue to expand as transportation improves. Already San Pablo, Batangas and Angeles are in commuting range for some people. The web of interaction between the metropolitan core and key points in the surrounding region is strengthening as shown by the new north and south expressways, the oil pipe-line from Batangas to Bule, and the start of port construction at Mariveles. Two great corridors of development are opening up adjacent to the spinal cords of rail and road to the north and south. Secondary growth corridors to the east into the foothills of the Sierra Madre, and southwest into Cavite, are also beginning to develop.

The ports of Batangas, Olongapo, Mariveles and Cavite are becoming integral parts of the metropolitan transportation system. The railroad is beginning to come into its own again (in a small way) with the introduction of commuter trains.

Water supply sources are being explored in Laguna de Bay and Taal Lake. The problems of protecting these supplies, of waste disposal, and of conservation in general are leading to public discussion and increased awareness of the Manila Bay and the Laguna de Bay watersheds and drainage systems and their importance to the metropolitan community.

Recreational needs are receiving more attention. The hills and mountains of Bataan and the Sierra Madre, the coasts of Batangas and Cavite, the giant crater of Taal, the islands of Laguna de Bay, already in use to some extent, will become increasingly valuable as recreation areas.

Intensification of agriculture to supply the food and raw material needs of a rapidly growing urban population is likewise starting, especially in areas adjacent to main transport routes and assured of adequate water supply. The transition of traditional subsistence agriculture to intense commercial farming is an accelerating process.

The problems of ecological conservation are already great. They will worsen rapidly through urbanization, upland denudation, chemical interferences and waste disposal. Plan preparation for these things, and more, must be complemented by practical arrangements for implementation. At present no effective machinery exists for either.

The demands for action will increase. Higher living standards and increasing needs of the people now in the area alone will require much to be done. Increasing demands will be generated by the inevitable influx of population to the area. Already the Population Institute of the University of the Philippines has forecasted a possible population of 18 million in the year 2000 in the expanded metropolitan region including Rizal and Laguna and part of Bulacan.

All these factors point to the need to consider a much greater geographical area for the study of the growth and development of the Philippines' greatest urban concentration. Looking ahead it seems obvious that this area should encompass the provinces of Bataan, the southern part of Zambales, Pampanga, Bulacan, Rizal, Cavite and Batangas.

A great deal of attention and research can be, and in many places has been lavished on the definition of regions for planning and development. This is often a sterile exercise and in the Manila situation, it would be wasteful to spend much time and effort on it. The problems of planning and development administration in such an area remain to be resolved, but for the purpose of defining tentative principles of planning and development in the locational or spatial sense, the use of common sense seems to be justified in defining the Manila Bay Metropolitan Region as described above.

The areas presently developed and developing for urban purposes are shown on the map (see figure 1). In 1970 the total population in the Bay region was nearly 8.5 million with the greater part concentrated in metropolitan Manila. Two main directions of growth show up very clearly as do the strings of substantial urban areas on the main transportation routes. This basic urbanization pattern must be one of the main determinants of the future pattern. Already these urban areas represent a substantial investment which must be conserved and improved.

It seems quite possible that within the next thirty years the total population of the Bay Region will grow to 25 to 30 million or more. Such a population with its needs for employment, transport, utilities, education, recreation, etc., will require both a vastly greater geographical area of accommodation and very large investments in the supporting infrastructure. It is also obvious that this area will be located generally in accordance with the patterns of transport, employment, recreation and education. Of course there are many other locational factors such as micro-topography, land cost and social implications but these are matters for later, more detailed study.

The broad pattern of urban growth in the Manila Bay metropolitan region will be influenced by:

1. Land committed or which should be committed for other purposes. Lands for catchment areas which should be protected, permanent forest or areas for reforestation, national parks and sanctuaries, major installations and institutions.

2. Land physically unsuitable. Almost any land can be used for urban development at a cost. In general, however, restraints are imposed by steep slopes or unreachable heights, and by swamps and marshes of either fresh or salt water.

3. Utilities and services. While metropolitan Manila manage to grow despite deficiencies in water, sewerage, drainage, and garbage disposal systems, the feasibility of providing these services within reasonable periods will influence urban growth and location.

Major potential sources of water are the Laguna and the Taal Lakes. Together with the existing La Mesa and Angat storages these sources place the metropolitan region in an enviable position. The whole of the region within a 75–kilometer radius and more can be served from these sources. Sewering the whole area is also possible but there will be increasing problems in disposing effluents. Equally, drainage of the area is possible. Of course all these three systems involve considerable expenditures and the recently completed World Health Organization – National Waterworks and Sewerage Authority studies for the water supply and sewerage of the main urbanizing core of the region give some idea of the magnitudes of funding needed.

4. Transport. Transport is a major factor in the pattern of urban growth. There are two major transport corridors already developing in the region. These are the north corridor to San Fernando and Angeles City and the south corridor to Calamba and Batangas. Both are based on important road and rail routes with the northern and southern expressways and their extensions becoming increasingly significant. The recent introduction of a few commuter trains should foreshadow a major expansion of such services.

Three important but subsidiary directions of growth are also obvious. The urbanization of the Marikina Valley is leading quickly to expansion in the foothills of the Sierra Madre adjacent to the Laguna Lake. The Manila Bay environs in Cavite rising towards Tagaytay, and the Bataan shores of Manila Bay are the two others.

Improvement of existing railways and the possible restoration of the Marikina and Cavite railways or the introduction of new rail routes for fast high-volume commuter traffic will be essential in the future. Road, rail and perhaps water transport must be complementary parts of an integrated system. More and more, the major metropolitan areas of the world, including those that previously put their faith in gigantic expressway systems, are reverting to, and improving and installing extensive and integrated rail systems.

Several ports of the region, notably Manila, Subic, Mariveles, Cavite and Batangas and their interlocking land transport systems are major determinants of growth.

Within the Manila Bay region there are already several ports in existence and another under construction. All are capable of expansion physically and in terms of handling capacity. All are linked by more or less adequate roads. Rail connections are non-existent although rail routes to Cavite and Batangas once existed. A maritime country like the Philippines must expect to expand its seaport facilities both for conventional vessels and for a future system of air supported sea vehicles. Such expansion makes surface transport systems by improved road and perhaps by rail also a vital component of a strategic plan. The indicative framework of the necessary transport system is also shown on the map.

With increases in air passenger and cargo traffic, both domestic and international facilities must be enlarged in the region. At present all civilian traffic including private flights are accommodated at the Manila International Airport (MIA). Some military air services are also located there. Other military air services are Lipa, Floridablanca and Clark. Separation of international, domestic, military and private operations may become necessary. New locations may have to be found and they will be determined by the urban patterns of the future and by the

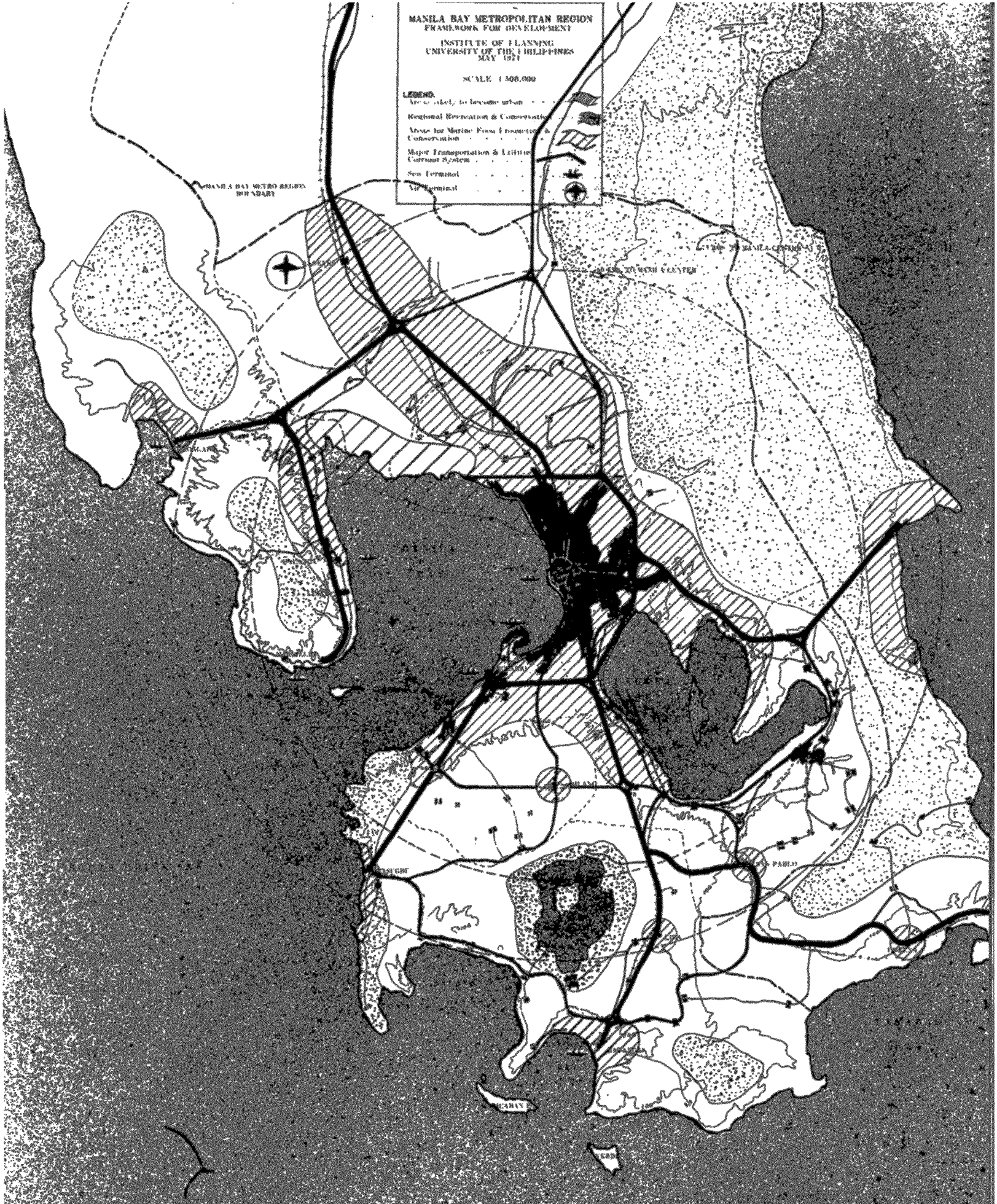

Fig. 1. Manila Bay Metropolitan Region Framework for Development.

surface transport linkages. With international airports starting to require eight thousand hectares of land; with needs for passenger and cargo satellites in or near downtown areas; with integrated high speed rail transport a probable necessity; and with the great future expansion of urban areas in the region, the possible locations for a new international airport are of necessity limited to the plains of the Pampanga area. In such case Clark becomes an obvious possibility. High speed rail service would put this location within 45 minutes (or even less depending on systems of transport) of downtown Manila, or of airport satellites located, for example, over the Tutuban rail yards or at Makati.

Concentration of military operations at Lipa and Floridablanca could release Clark. Domestic services might continue at the MIA or at an improved Sangley airport. These might provide for conventional aircraft as well as future VTOL's or air-ships. A new airport might then be required for private air services. A substantial industrial area may be a necessary component of an international airport. Free trade may well become more important in association with the international airport than with a sea port. The existing MIA and Nichols Air Base when converted to industrial, housing and commercial use under leasehold could represent a major source of government revenue for development.

Currently land prices are inordinately high. The ratios of land price in relation to distance from the core of the Bay region and to levels of income are far higher then in other great urban areas of nations with more highly developed economies. The very large growth of urbanization in the Bay region which must be anticipated and prepared for will bring the land problem into even greater prominence. Values, taxation, and tenure are components of this problem. A large part of the increments in land values will occur because of public investments in infrastructure and public auction in settlement and development. Logically a substantial part of the increment in values should revert to the public purse.

An urban population growth of 20 million will require the conversion each year of about one hundred thousand hectares of land now used for farming or grassland . The incremental value through urbanization is likely to be at least P50 per square meter. A tax of say P20 per square meter from this or less than half the increment would yield more than P600 million a year, which could then be devoted to developmental works for urbanization. It could well be a much higher sum. An urban land policy embodying provisions of this type should be an essential component of Bay region planning and development.

PATTERNS OF GROWTH

The Institute of Planning of the University of the Philippines report on "A Planning Strategy for Metropolitan Manila AD 2000" in 1968 discussed five patterns of growth. These were:

1. Urban Development and Renewal
2. Restricted Growth using a "Green Belt"
3. Development of New and Expended Towns
4. Simple Expansion
5. Integrated Regional Approach

The report concluded that the last was the only feasible approach and should embody a change from the current urban sprawl to a guided linear expansion along seven transportation corridors. In general these are the same as the five corridors of growth referred to earlier in this paper. However, "Planning Strategy 2000" confined consideration to an area roughly 30 kilometers in radius from downtown Manila.

The probability of 25 to 30 million people in the Bay region by the end of the century, with the inevitable loosening up of the urban structure and the accelerated land utilization that will result means that very large areas must be available and suitably prepared for urbanization within the next few years. When it is remembered that as much as three to five years is required to proceed from raw land to actual housing or industrial construction the urgency becomes obvious. It will be necessary to prepare for urban growth in the region of from five hundred thousand to one million people a year. Broad principles of a possible growth pattern are shown in figure 1.

Forward planning for the vital infrastructure to support such development is even more urgent. Lead times of at least five years are necessary for planning, assurance of finance and administration of the projects required.

MAJOR TRANSPORT LINKAGES AND URBANIZATION PATTERN

The map shows in simple diagrammatic form the possible major transport linkages. These would connect central Manila, seaports, airports, major industrial concentration, and regional recreation areas and intersect the main areas of urbanization. The system is dominantly radial but also embodies a subway link to complete the downtown rail ring and a major circumferential and north-south road about 20 kilometers from the downtown area. A complete transportation system would be more intensive within this frame.

The map also shows in broad indicative terms the likely pattern of urbanization that might be expected. Of course, within this broad pattern, much detail remains to be worked out not only in regard to zoning and subdivision and the like but also in priorities, phasing, financial programming and implementation procedures.

COORDINATION FOR PLANNING AND DEVELOPMENT

Preparations of the magnitude discussed above will be impossible without the collaboration, coordination and integration of plans, project studies and implementation processes on the part of government agencies, local governments and private enterprise.

Effective planning and planning management are essential. The private sector must be brought into partnership with government. An urbanization policy including an effective land-policy is essential. Infrastructural investment must play a leading role in guiding and encouraging development. The machinery of planning must be devised and fitted to the situation. New methods of funding will be needed.

All these need to be done as soon as possible. The problems are so great and complex that government action and participation will be essential. As is being accepted in many places, the determination of an overall strategy of development and the implementation of many parts of the strategy is beyond the capacity of local governments and private enterprise.

STRATEGIC COMPONENTS OF DEVELOPMENT COORDINATION

There are four main components of strategic planning and development, namely:

1. Future growth pattern of urbanization
2. Patterns of land and water conservation
3. Transportation system
4. Public utilities system

An effective machinery is needed to coordinate these four major elements in a strategic plan for the Manila Bay metropolitan region; to implement and assist in implementing some of its components; to guide the implementing and development efforts of others; and to review and continually adapt and expand the strategic plan. This must be done for periods of 25 to 30 years ahead. The process will be such that from the beginning specific projects can be identified and implemented within the increasingly improved regional framework.

TENTATIVE PRINCIPLES FOR STRATEGIC PLANNING

The following tentative principles can be offered for discussion and review:

1. Preparation for urbanization of the Manila Bay metropolitan region to accommodate upwards of 25 million people.
2. Strategic planning based on the provision of adequate infrastructure and the coordinating of the activities of agencies and authorities responsible for land planning and development, public utilities, transport, conservation and funding.
3. Organization of practical strategic planning as a state responsibility within the frame of the governmental structure and preferably without creation of a new body.
4. The magnitude and complexity of the tasks require cabinet level responsibility for strategic planning.

CONCLUSION

Strategic planning and development for a large metropolitan region cannot be wholly encompassed in a short paper such as this. The purpose of the paper will have been achieved, however, if it serves merely as a catalyst for thought, discussion and argument about the future of this great region. It will have been more than served if it results in definitive action.

CONTROL AND PLANNED DEVELOPMENT OF URBAN LAND: URBAN LAND USE CONTROL MEASURES*

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INTRODUCTION

Rapid economic development and phenomenal urbanization rates in practically all countries in every region of the world have been leading to an unprecented transformation of urban land. One facet of this transformation is quantitative. Huge quantities of additional land are being brought under urban uses by cities which are continually gaining population and expanding their productive and supporting infrastructure bases through the dynamics of development and population concentration. A large number of villages are becoming urban and several new urban areas in the shape of new towns or townships are being created. Quite often the additional urban land requirements are being met at the cost of valuable agricultural lands. In several countries, especially in Asia and Europe where total land resources are inadequate in relation to their present demographic pressures or current productivity levels or both, this aspect causes considerable concern. Even in countries, such as the United States, Canada and Australia, where man-land ratios are quite comfortable and resources are not as scarce as in the developing nations, the task of procuring and more than that, preparing the huge amounts of land needed for urban uses pose serious practical difficulties arising particularly out of prohibitive land values, the nature of land tenures and legal, political and organizational impediments.

The other and more important facet of this transformation is qualitative. Land under existing urban uses is providing inadequate while rising space standards and new activities are making their own competing demands on urban land. Advancing techonolgy, the expanding productive apparatus, widening and deepening urban infrastructure and diversifying economic bases do in fact necessitate nothing less than a drastic restructuring and realignment of the urban, and especially metropolitan, land use patterns consistent with modernization trends. In varying degrees in various cities of different countries and continents urban land use patterns are being altered very materially and substantially to accommodate the new techno-economic, physical and social changes.

With a few exceptions, only a fraction of the present urban land needs are being met and rather unsatisfactorily, especially if the provision of service and environmental qualities are taken into consideration. It is this fractional fulfillment of the urban land demand which largely explains the unabated spread of slums and squatter settlements, increasing over-crowding and congestion in city-core areas, haphazard sub-standard scatter and sprawl outside the urban limits and the steep rise in urban land values. The *de facto* or *de jure* expansion of the urban frontiers or the changes in existing land use patterns within the cities have been taking place in a manner which is far from being conducive to the creation of a better physical environment or to improvements in functional efficiency or levels of living or ecological equilibrium.

Unfortunately, the land uses are presently being determined or redetermined by numerous uncoordinated and even inconsistent piecemeal private and public decisions. These decision-makers are rarely concerned with the fact that establishing a use at a particular location rigidly commits for a very long time not just that piece of land but the whole community to it. If this commitment turns out to be wrong, its social and economic costs have to be borne by the community so long as it endures it and also when it decides to rectify the initial mistake. Land uses being highly interrelated in themselves and in relation to urban activities need to be allocated in right proportions and arranged and juxtaposed bearing in mind their multiple inter-linkages. *Ad hoc* land use decisions ignore this vital aspect and thus cause serious troubles and imbalances.

It is no wonder that the urban land situation is worsening as universally exemplified on the one hand by the vast haphazard sprawl at and around the city peripheries or gross under-utilization of land in several city-areas and on the other hand by intolerably high densi-

*Paper prepared for the United Nations Interregional Seminar on Urban Land Policies and Land Control Measures, Madrid, Spain, November 1-13, 1971. The views and opinions expressed in this paper are those of the author and do not necessarily reflect those of the United Nations.

ties, slums, blight, squatting and lack of community facilities. Incredible though it may sound, several of the new land use planning, zoning and urban renewal measures, being *ad hoc* and biased, frequently tend to solve fewer problems than they create. And what is worse, these changes have quite often adversely affected the poor and under-privileged portions of the urban community as for instance the colored immigrants in many urban renewal areas in the American cities or the poorest of the urban masses residing in slums and squatter settlements in the Asian, Middle eastern and African countries.

Another major factor responsible for the present critical situation is that the urban land problem has not so far been viewed in its broader social setting or in terms of the social consequences of private land use decisions. Except in a few centrally planned countries, land elsewhere, and especially urban land, has most often been treated as a peice of freehold over the use and dispensation of which the individual owner has virtually full command. It is true that this right is restricted by certain laws and rules which differ in intensity from country to country depending upon the country's constitutional and legal provisions, political principles, social values and administrative arrangements. Generally speaking, such restrictions do not travel far beyond considerations of "good neighborliness."

In most cities of developing countries, however, many requisite land control measures such as land use planning, zoning and sub-division regulations do not exist today. In practically all of them the few existing control measures, as for instance municipal building and health by-laws and highway regulations — leaving aside their obsolescence and inadequacy — are not seriously enforced. There are few instances where any serious or successful effort has been made to hold in check the fast-rising land values and land speculation. The lack or ineffective enforcement of the requisite land planning and control measures and an almost complete absence of measures to curb the high land values, reckless land conversions, subdivision and speculation unwittingly permit private land use decisions to push the physical environment towards the chaotic state in which most capitals, metropolises and large cities find themselves today.

The points made so far emphasize that urban land needs are nowhere being adequately met and this deficiency is bringing about distortions in urban land use patterns. Consequently, the already grave urban land situation is fast becoming all the more critical under the impact of rapid changes being unleashed by the techno-economic development processes. The dynamics of development and its interrelated goal of human welfare demand that urban land uses are planned, ordered, controlled and regulated in such a manner that they assist these growth processes, augment the quality of the urban physical environment and improve people's housing and living conditions. The more action is delayed, the greater will be the administrative-organizational difficulties and the higher the social costs of ultimately setting things right.

The implications of this new demand are many and far-reaching. One of the most relevant is that the values and attitudes towards the ownership and use of land should be socially-oriented and a wide range of urban land planning and control measures of varying severity accepted as technical and social imperatives. These control measures will have to be not merely neutral, negative or regulatory devices but will have to comprehend positive, promotional measures including active public intervention and involvement in land ownership and estate management on a hitherto unprecedented scale.

URBAN LAND CATEGORIES AND SOME OF THEIR MAJOR PROBLEMS

Urban land is neither a static entity nor a quantity fixed for all times to come. It is a developing phenomenon, a widening frontier. As cities and towns grow, they subsume their surrounding non-urban lands and thus the rural land of today becomes the urban land of tomorrow. And in this process, urban authorities inherit areas whose proper integration with the rest of the urban physical environment bristles with serious difficulties. These considerations make it necessary and desirable to define urban land to include the presently non-urban but potentially urban land.[1] Furthermore, urban land should be conceived not as a homogenous mass but a heterogenous structure comprising, as it does, lands of various descriptions, types or categories. The problems faced in each category may be different in nature or intensity or both and therefore their appropriate solutions might also vary.[2]

There cannot, of course, be one standard urban land classification that is valid for all purposes. The nature and the precise details of any classification would naturally depend upon its objective or purpose. For the purposes of this paper the following broad four-fold classification of urban land, borrowed from an official report, seems appropriate:

1. Developed Urban Land, i.e., land within the city limits which is developed and largely built upon. There may be some vacant plots within the compact built up area.
2. Undeveloped Urban Land, i.e., land within the city limits at any point of time which is not yet developed and built upon.
3. Land Within Urbanizable Limits, i.e., land presently agricultural or unurbanized but likely to get urbanized within the next 10 to 15 years.
4. Land Beyond the Urbanizable Limits. This would naturally be purely rural land and the greater its distance from the city limits the lesser would it be subject to the forces of rural urban interaction.[3]

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1. Government of India, Ministry of Health, *Report of the Committee on Urban Land Policy*, 1965.

2. Ibid.

3. Ibid.

This broad classification scheme has been accepted only to identify the problems faced in the different categories and "to devise measures which are not only appropriate in themselves but also in relation to other measures in other land categories."[4]

Having accepted the aforesaid classification, attention may now be focused to identify the major problems in these four land-categories. Taking up the developed urban land, i.e., compactly built up land within the formal city limits, the major problems in this category are more or less identical in the economically advanced and the developing countries. In the developed countries, speaking broadly, and not with reference to specific city situations, briefly these are: problems of "down-town" or city centers; congestion, obsolescence of the building stock and blight and slums (especially in the historically older parts of the cities); presence of undesirable or non-conforming uses, inadequate circulation and chaotic traffic; sub-standard provision of community facilities and excessively high and steeply rising land values.

As regards the developing countries, this list needs to be extended to include: high densities, sometimes intolerably high as in several Asian cities; lack or inadequacy of basic services such as water supply, sewerage and drainage; and the paradoxical co-existence of sizeable vacant or under-utilized land in certain areas. Needless to say that in the developing countries all these deficiencies are far more severe than in the developed ones.

Land in the second category, namely, undeveloped (occasionally agricultural) land within formal municipal limits, may differ in size very considerably from city to city. However, in a large number of cities of many developing countries of Asia, Africa, Latin America and the Middle East, land of this description is found extensively. In many cases land may be in this state because of natural handicaps when, for instance, it is marshy or low-lying or has topographical conditions which prohibits its utilization. Quite often, and this incidentally is more true of the developing countries, land may be undeveloped only because such areas have not yet been provided with road-links and necessary services such as water-supply, electricity and sewerage and drainage, etc. Irrespective of the state of development, appreciable building activity has been taking place on such land. The picture that obtains is one of widely scattered spot-development. In the developing countries the constructions are sub-standard and frequently unauthorized in spite of these areas being within municipal limits. Squatting is widespread. Unrestrained land sub-division of various kinds goes on and so also does land speculation.

The third category, namely, land within the urbanizable limits, has almost all the problems mentioned under the second category with the difference perhaps being one of degree only. The additional issues here are: premature conversion of agricultural land, ribbon development along the highways and the presence of manufacturing units which get located here to escape municipal laws, regulations and taxation. Land sub-division and speculation is no less intense in this zone than in the second category. The sprawling development which takes place here amounts to a pre-mature and haphazard extension of the urban area. Such developments generate unnecessary daily commuter traffic volumes and call for massive investments in roads, rails and mass transit facilities. In the case of land beyond urbanizable limits, some of these difficulties are also sometimes noticed.

URBAN LAND POLICY AND CONTROL MEASURES

Problems listed under the different urban land categories are neither exclusive nor isolated; these are rather highly interrelated. Most of them have their genesis in some common neglects, mistakes or failures of the past several decades; and through the interaction of these failures they have reinforced and perpetuated themselves. The greatest of the failures is undoubtedly the lack in the past, and paradoxically enough even in the present, of a systematic policy-perspective on this vital subject. This observation is generally true of both the developing and the developed countries.

To make this observation is not to deny that there have been in different parts of the world several commendable efforts to deal with various problems such as slum clearance and squatter relocation, housing of industrial workers, road-widening, establishment of planned neighborhoods and new towns, etc. However, desirable these efforts may be, they frequently tend to be *ad hoc* and without any long term policy framework. They could not be expected to tackle the vast multi-faceted urban land question in all its variety and complexity. No wonder then that new slums mushroom while old ones are eradicated, congested localities become further overcrowded while some new planned neighborhoods are constructed or the traffic situation worsens even though new roads are constructed and old ones widened.

Urban Land Use Planning

By far the most important instrument of an urban land policy is comprehensive land use planning. Land use plans, if prepared with a proper comprehension of time, space and the socio-economic situation, would ensure a socially optimum utilization of the land resource. The planning function envisaged here is not confined merely to the preparation of land use plans but also to their enforcement, implementation, and review and revision on a continuing basis. The enforcement or execution of such plans is achieved through zoning, sub-division and building regulations, development permits, licenses, public works programs and capital budgeting.

As is well known, an overwhelming majority of the cities and towns of most developing countries do not as yet have any land use planning activity whatsoever. Other necessary supplementary measures such as zoning and sub-division regulations, municipal building by-laws and

4- Ibid.

adequate licensing systems also do not exist. Even where they exist, they are not only far from being up-to-date but also rarely adequately enforced.

In the few largest cities of the developing countries for which some land use or "master plans" exist or are being prepared, the planning activity is governed by town planning laws largely based on western, especially the British, town planning legislation of the period from 1917 to 1947. The concepts of "plan", as being purely a land use plan with an accent on civic design, and of "planning area" as being confined to municipal limits, which these outdated laws represent, are unable to take care of many of the problems of urban land which includes land within the urbanizable limits and in the city-region.

The concept of "plan" is also inadequate because these plans do not emerge from or reflect the policies, priorities and programs of the national economic development plans. The exceptions to this are of course, the centrally planned countries. Generally speaking, however, the typical plan does not spell out the tools of plan enforcement and implementation as for instance zoning and subdivision regulations. Further, such plans do not give any priority ratings or phased programs for the development of areas or in respect to public works, and Capital budget and financial plans are seldom an integral part of these plans.

Commenting on the land planning situation, the regional report on urban land policies and land control measures for Africa states that there is still "a tendency to over-rate the importance of the 'plan' design and articulation, and fail to provide for a realistic and effective set of financial, organizational and legislative priorities to ensure rapid and rational implementation".[5] The Asian report on this subject also contains an identical assessment.[6] All these conceptual defects partly explain why many such plans are either not put into operation or do not go to the roots of many problems, as for instance, slums, squatting and traffic bottlenecks. They also explain to some extent why the urban peripheries are in such a state of disorderly sub-standard development in the developing countries of Africa, Asia and Latin America and why there are conurbations in the developed countries.

Another serious drawback of most prevailing planning laws is in regard to their procedural aspects. They generally provide detailed and complicated procedures for (1) the repetitive exercise of preparing outline plans and then the so-called comprehensive development plans; (2) public and individual notices, public objections, hearings, appeals and higher authorities at almost every step; and (3) application and issuance of development. Such procedures and provisions make these laws quite difficult, time consuming and impracticable in relation to the limited available technical, organizational and financial capacities of the public authorities. As the report on Africa very correctly observes:

> . . . the extensive and elaborate control provisions . . . and the detailed procedures of application and approval of land development . . . leave out of account the severe limitations on the ability of public and private development imposed by social and economic conditions in the country and in the urban areas concerned.[7]

Perhaps because of the procedural difficulties the plans quite often fail to pass through all the legislative and legal processes. Even where they succeed in getting legal sanction, they are not constantly reviewed and revised and consequently they soon become outdated. The report on Africa states that:

> There is little doubt in the minds of many that it is this singular inappropriateness of existing planning and control measures that lies behind many of the major urban land problems.[8]

In the developed countries the present position in this regard is not as disappointing as in the developing ones. In this group are quite a few countries, notably the United Kingdom, Norway, Sweden, France, Netherlands and the Soviet Union which have not only made valuable contributions to planning theory but also achieved appreciable results in planning practice. Barring such a few countries, the position in the others cannot, however, be considered as satisfactory because even here land policy and planning are not a necessary feature of urban development in all of them or in all of their urban areas. Thus, for instance in the United States, Canada, and Japan, a large number of cities have no comprehensive land use plans. Many have only zoning or subdivision regulations or both. In many developed countries land use planning is confined to formal city limits and even where metropolitan regional plans have been prepared their implementation has been found difficult because of inter-local jurisdictional conflicts.

Among the developed countries are the centrally planned economies of Europe which stand on a different footing. The overall position in many of them, notably the Soviet Union, Poland and Czechoslovakia, is better because (1) the planning of land and locations is an integral part of the national development planning effort; (2) most of the land is either in public ownership (as in the Soviet Union, and to a lesser extent Poland) or is far more thoroughly subjugated to public interests than elsewhere; (3) there are less inter-local jurisdictional difficulties and inter-agency coordination problems; and (4) plan-priorities and programs are matched by public investments.

The preceding general evaluation of the present status of land use planning legislation and practices makes an

5. Makarere Institute of Social Research, "Urban Land Policies and Land Control Measures in Africa" (Report prepared for the United Nations' Centre for Housing, Building and Planning, New York, 1970).

6. J.P. Sah, "Urban Land Policies and Control Measures in Asia and the Far East" (Report prepared for the United Nations' Centre for Housing, Building and Planning, New York, 1970).

7. Makarere Institute of Social Research.

8. Ibid.

eloquent case for some basic reforms towards making (1) planning concepts dynamic, broad-based and scientific; (2) planning methods and procedures simpler economical and workable; and (3) the planning function program- and action-oriented. Such changes are desirable in the developed but imperative in the developing countries whose constraints in regard to the availability of technical skills and trained manpower, investible resources and organizational capacities are indeed very severe. But as their urban problems are mounting up too fast they must act expeditiously in several directions with whatever resources they can mobilize and achieve maximum results with minimum inputs.

In this context there is considerable merit in the suggestion that the traditional town planning method of preparing detailed land use plans and more elaborate layouts or "town-planning schemes" ought to be abandoned. These exercises are time-consuming and make too heavy a demand on data and technical skills — which are in extreme short supply in most developing countries — and thus keep the benefits of the planning effort confined to a handful of cities. It is also doubted if the 20-25 year projections on which plan-recommendations are based could be relied upon in the face of rapid urban population growth and techno-economic change.

A better approach may be to prepare a broad flexible policy plan for an urban or metropolitan region outlining the physical and social setting of the area, its development perspective, goals and priorities. It may contain some ideas on the organization of the circulation system and public utility networks. Within the framework of this policy or structure plan, detailed work may be confined in a given period to those projects, schemes or areas which are of the highest priority and which can be managed with the available resources. This approach would be realistic and would produce better results. In fact, a good example of this planning practice is found in Hong Kong where plans are of two kinds, statutory and non-statutory. The former are legally enforceable whereas the latter are for the guidance of and adoption by government departments and subject to constant amendment as development proceeds. The "colony outline plan" presently being prepared, is envisaged as a non-statutory flexible policy plan giving broad proposals for future land uses and land development programs but not concerned with detailed design. It would provide a framework for a balanced approach to the planning of individual areas and preparation of zoning plans, outline development plans and layout plans.

Similarly in Sweden the planning law provides for four kinds of plans: (1) Regional Plans, (2) Master Plans, (3) District Plans, and (4) Subdivision Plans. Of these, the first two are comprehensive plans but advisory only. The latter two are detailed development plans which are legally binding. The existing legislation gives very generally worded directives on the substance and methods of comprehensive general planning, and more specific rules for detailed planning.[9]

The British Town and Country Planning Act of 1968 enunciates an approach of the type just indicated and merits serious consideration. It replaces the traditional "outline development plans" and "comprehensive development plans" by what are called "structure plans", "local plans" and "action area plans". A Structure Plan is a written statement formulating the local planning authorities' policies and general proposals concerning the development and use of land (including measures for improvement of physical environment and management of traffic) and stating the relationship of these proposals to similar proposals for neighboring areas. The structure plans indicate "action areas," i.e., any part of the planning area selected for the commencement during a prescribed period of comprehensive treatment, in accordance with a local plan, by development, redevelopment or improvement of the whole or part of the area selected. In formulating general policies and proposals in the structure plans, the local planning authorities are required to consider:

1. current policies with respect to their economic planning and development of the region as a whole;
2. the resources likely to be available for the carrying out of the proposals of the structure plan; and
3. such other matters as the Minister may direct them to take into account.[10]

Another recent piece of pragmatic planning legislation is Japan's City Planning Law of 1968. Emulating the French practice of defining zones of priority and deferred urban development, it envisages two types of planning areas, namely, "the urbanization promotion area" and the "urbanization control area". It enjoins upon the government and public authorities to take pertinent measures to promote effective use of land in the former area. Permission for the development of land here is not required for certain developments specified in the Act. On the other hand, no permission is to be given for certain types of constructions, specified in the Act, in the urbanization control area. These and some other provisions encourage development in the former area and simplify the procedure to facilitate this process.

Some other interesting features of this law are its requirements that city plans conform to national and regional plans and the States' programs concerning roads, rivers, railways, harbors, airports and other facilities. It envisages four types of "built up area development projects": (1) Land Readjustment Projects; (2) new residential built-up area development projects; (3) industrial estate development projects; and (4) built-up area renewal projects. In these and "planning facility areas" the prefecture or a designated city may establish a Land Fund

9. National Swedish Council for Building Research, "Urban Land Policies and Land Use Control Measures in Sweden" (Report prepared for the United Nations' Centre for Housing, Building and Planning, New York, 1970).

10. *Town and Country Planning Act of 1968* (chapter 72), Her Majesty's Stationary Office, London.

for purchasing land or acquiring it by exercising the right of preemption. The general tenor of the law is action-oriented. This Japanese legislation deserves a careful study.

ZONING, SUBDIVISION REGULATIONS AND BUILDING BY-LAWS

Reform of planning laws would not be complete without a reform of the related means of planning controls such as zoning and sub-division regulations and building by-laws. Whereas these control-instruments are necessary and useful, especially in preventing blight and non-conforming uses, they have so far been either too rigid or too lax, at least in actual practice. Where they are lax as for example, when there is liberal "spot-zoning" due to pulls and pressures from vested interests, they lose their purpose. On the contrary where they are rigid, say in regard to the standards they enforce, they can act like brakes on development and discriminate against the poorer sections of the community as may be witnessed from the following excerpt:

> In recent years many communities in the United States have amended their zoning regulations to require ***larger lot sizes*** for a variety of reasons. Predominant among them are no doubt the desire on the part of some communities to prevent developments for as long as possible. In other cases, it may be to prevent people of low and moderate income to seek location in their communities, and in still others the desire to raise development quality. [11]

Sometimes the building by-laws are anachronistic and inconsistent — with zoning and sub-division regulations. In such situations the building by-laws need to be suitably revised. It is also desirable to impart to them a measure of flexibility so that they do not obstruct the provision of sub-standard housing as an interim measure in selected city areas in the initial stages of a developing country's economic transition.

Needless to say, these control-measures should be formulated with objectivity taking fully into account the social and economic conditions of the people. In fact in many urban areas, particularly the small and medium-sized towns of the developing countries for which no land use plans exist or where their preparation may still take time, zoning and licensing could be used as a transitional measure to prevent major damage to the physical environment. Another reform may be to coordinate and combine, to the extent possible, zoning, sub-division regulations and building by-laws into one administrative process or permit so that an individual is not required to approach different agencies or the same agency separately for different purposes.

Areas of Congestion and Bad Layout

Land planning, zoning, licensing and subdivision regulations are measures of general application to all the urban land categories. There are some special problems, however, especially in the first category, which require a few additional measures. Important among these are: (1) areas of congestion and bad layouts; (2) slums and squatter settlements; (3) non-conforming uses; (4) low densities and land vacancy; and (5) urban peripheral sprawl. The last problem relates to the second category as defined previously.

In practically every city there are certain areas which developed earlier and some which came up much later. The historically old areas (as for instance, the wards of the "walled cities") invariably, and several newer areas not infrequently, are characterized by high residential densities, heavy congestion and generally poor, obsolete layouts made worse by the absence or inadequacy of the circulation system and services. And yet these areas are functionally and socially important and vibrant. But their poor physical condition now acts as a drag on their efficient functioning and expansion and the housing conditions of the large population residing here are extremely unsatisfactory. All such areas do need immediate reorganization to invigorate the urban economy and improve the living conditions of their residents.

The reorganization of these areas bristles with many thorny problems and treating them is like performing a delicate and complex operation. This perhaps is one reason why these areas are left out of most operational programs of urban development. In certain countries, notably Japan, South Korea and Taiwan, a method tried with some success is the "Land Readjustment Project." This method is in fact a German innovation known as 'Lex Adickes'. In these three countries, projects can be carried out either voluntarily by associations of a prescribed majority of the land-owners in the project areas or organized by the public authorities. The execution of projects is governed by some provisions of the city planning law or a separate statute. In both private and public execution, the procedure is practically the same.

Two interesting variations in land readjustment practices may be identified. One is found in some European countries, notably — Spain, France, Italy, and the Republic of Germany where the consolidation, development, and reparcellation is carried out by associations of land-owners in the designated areas. Such associations may act either as independent bodies or as a mixed company. Some very successful examples of this approach may be found in Spain and France.[12] The second variation is exemplified by Lebanon where public authorities, including the municipalities, have the right under the land acquisition law (Law No. 4 of 1964), to consolidate fragmented holdings for certain purposes which include the redivision of slums and blighted and congested areas for improvement and sanitation purposes, town expansion and physical planning. The law permits the formation of syndicates for the acquisition and development of land in certain areas pursuant to a decree from the council of ministers. The members of the pool include

11. Peter V. Ameto, "Urban Land Policies and Land Control Measures in the United States" (Report prepared for the United Nations' Centre for Housing, Building and Planning, New York, 1970).

12. Darin Drabkin, "Urban Land Policies and Land Use Control Measures in Europe" (Report prepared for the United Nations' Centre for Housing, Building and Planning, New York, 1970).

the land-owners, the state, and the municipalities concerned, When one of these pools is formed, the value of all the land involved is estimated and the owners are given shares whose value is equal to their land at that time. The state or the municipality takes 25 percent of the shares free of charge. After developing the area, according to the provision of the comprehensive plan, the land is sold at a public auction and the returns are distributed to the shareholders according to the share they hold, the government thus recovering the amount paid for improvements.[13]

One of the important advantages of land readjustment projects as practiced in Japan, South Korea, Taiwan and Lebanon is that it minimizes the compensation and development costs and causes less displacement of people that is the case in outright compulsory acquisition. The disadvantages of this method, however, are that it is difficult to enforce in the high density areas because of stiff resistance from tenants. Furthermore, it leads to the loss of ownership by the small plot holders who may be alloted new lots of such a size that new construction is not permissible. To alleviate or mitigate these disadvantages, it is necessary to provide some safeguards for the interests of the tenants, as for instance by giving them the first option to hire new accommodation in the same premises at concessional rents for a reasonable period. In situations where the bulk of the plots are already too small as in most congested areas, the Lebanese syndicate method may be more attractive to the land owners. In both cases, land readjustment projects may have better chances of success if the public authorities have alternative sites and residential and commercial accommodations to offer in exchange nearer to such project areas. It may be possible to create these alternative sites and accommodations by utilizing low density areas or vacant lands within the city limits or both.

Slums and Squatter Settlements

Generally, the experience the world over and in developing countries especially, has been that conventional land planning and zoning have hardly made any difference to slums and squatting. If anything, the situation in this regard has deteriorated over the years. The approach to the problem has long been to redevelop these areas. But even in an affluent country like the United States redevelopment of such areas has not been an easy job because of the scale of financial investment and the social composition of the slum population. In the developing countries it has almost been impossible.

Whereas the long term policy must be aimed at the elimination of the existing slums and squatter colonies and the prevention of their further growth, a practical measure in the short run is to improve and rehabilitate them by providing the missing basic services and community facilities such as protracted water supply, electricity, sewerage and drainage, tot lots, open spaces, primary schools, dispensaries and community centers. With this end in view, minimal improvements and rehabilitation programs causing the least disturbance may be prepared and public investments directed to improve their physical environment and services. Private investments in the repair and improvement of the housing stock may be encouraged through public measures, such as the provision of loan assistance, tax reliefs and even subsidies, where feasible.

The rationale of using these measures is borne out by the fact that even a developed country such as the U.K. recently introduced a new scheme to turn 'old houses into new homes'. Several developing countries with massive slum and squatter population now realize the impracticability of slum clearance to slum and squatter eradication and have shifted the emphasis of their policies and programs from slum clearance to slum and squatter rehabilitation as for instance in India's major cities of Calcutta, Bombay and Madras. In this context, Delhi's experiment with squatter relocation also deserves mention.

The Delhi Administration and the Delhi Development Authority have enforced a scheme of relocating the squatters on developed public land earmarked as "camping sites." These are planned layouts with necessary services and community facilities provided in accordance with Delhi's planning standards. Each relocated squatter family is alloted for a small monthly rent, a plot of 25 square yards on which a hut, shack or dwelling of any material or description may be constructed. The municipal building by-laws are relaxed to permit such constructions. The camping sites have provided a far superior physical environment and level of services than existed where these families originally squatted. The scheme also envisages the gradual transition of the relocatees to more spacious plots and better housing when their economic conditions improve. Many Latin American countries have been pursuing similar measures concerning their squatter problems for quite some time.

Non-Conforming Land Uses

The mere declaration in the land use or zoning plans of certain uses as "non-conforming" does not bring about their proper relocation and some positive measures are necessary to achieve the desired changes. At the outset, it should be remembered that many of the uses now considered non-conforming might have been established at a time when they were away from the compactly developed urban cores. Because of subsequent urban growth, these have now become incompatible with the surrounding development. Further, many of the non-conforming uses such as factories, work shops, service stations, etc., have been contributing to a country's economic development and fulfilling certain social needs. A measure of understanding and pragmatism is therefore necessary in dealing with non-conformance.

The very first step should be to survey and classify all the non-conforming uses and grade them on the basis of

13. United Nations Economic and Social Affairs Office in Beirut, "Urban Land Policies and Problems in Selected Countries in the Middle East". (Report prepared for the United Nations' Centre for Housing, Building and Planning, New York, 1970).

their degree of noxiousness, harm or nuisance. Appropriate time schedules should be developed to permit a shorter or longer period for shifting and relocation depending on the degree of noxiousness, hazard or nuisance. It is necessary that a range of alternative relocation sites be developed first, if necessary by the public authorities themselves, and the non-conforming uses then induced to shift to them. Their continuance at the present locations should thereafter be discouraged by prohibiting further expansion of such establishments, denying them additional water or power and by imposition of higher property tax rates. More effective measures, however, would provide incentives to such uses to shift to the new prescribed locations. Making developed plots available at the new sites at reasonable prices, provision of infra-structure and common service facilities to small industrial units and workshops, grants or loans to meet the cost of shifting and dislocation of production or business and of tax-reliefs are some of the positive practical measures to expedite the liquidation of non-conforming uses.

Low Densities and Land Vacancy

There are a number of cities in all the regions of the world where a sizeable proportion of land is under low densities and vacant plots. And yet, paradoxically enough, the bulk of the population in these cities live in relatively small compact areas under conditions of extreme congestion, over-crowding and insanitation. The problems of low densities and land vacancies are very serious in many countries. Thus, for instance, on the peripheries of the great metropolitan areas of many South American countries the number of empty sub-divided plots exceeds, in several cases, the number of build-on plots. It is estimated, for example, that in the metropolitan area of Buenos Aires there are three empty plots to every one constructed upon.[14] Similarly in Kingston and other cities of Jamaica urban development, barring a few central blocks, is at a very low density and vacant land and unutilized open spaces appear everywhere.[15] In several urban areas of Africa, Asia, the Middle and the Far East also low densities co-exist with incredibly high densities in certain parts of the cities.

Low densities and land vacancy are an intolerable social anomaly and inequity. They represent gross under-utilization and waste of land resources. The social costs of low densities and land-vacancies are very high because these lead to an unwarranted extension of the urban physical space and services networks which increased the cost of commutation and makes the urban public utilities and other services inefficient and costly. They diminish the supply of land and thus exert a pressure on urban land values and provide the most fertile ground for land sub-division and speculation. The worst sufferers of all these disadvantages are, of course, the poorer groups of the urban communtiy.

It hardly needs to be emphasized that very effective techniques are required to deal with this problem. In several countries, quite a few good measures have in fact been tried with varying degrees of success. In many countries of Africa, the urban tax on land is levied only upon 'site' or 'unimproved land'. In some, it is at a uniform rate but in most others there exists a dual rating system inclusive of a 'site' rate and an 'improvement' rate. More generally, the site rate is set at a higher level than the one for improvements.

"In a number of cases the incidence of and exemptions from the taxes on land and improvements have been so constructed as to materially aid the process of development by imposing exceptionally high or 'penal' rate on unimproved land either uniformally or discriminately with respect to given areas of the city. This has further been coupled with rebates or exemptions on certain types of development which act in much the same manner as tax saving inducements given to an industrialist."[16] It may be further observed that in cities which do not have such a dual rating system there appear to be many open lots in or near the center and throughout the city. The effectiveness of this tax devise is however, considerably impaired by improper and outdated valuations, widespread tax evasions and the inefficiency of the tax administration generally.[17]

Another interesting tax-device is the South Korean 'Special Measures Law Concerning Check on Speculation of Real Property' introduced in 1967. This measure includes a tax on unoccupied or vacant land which has been defined not only as a piece of land without a fixed structure on it but also a building lot whose area exceeds ten times the size of any fixed structure on it. This measure is coupled with a Tax on Unearned Increments in land values levied at the time of transfer of the property. Whereas the former tax discourages land from being under-utilized, the latter mops up a proportion of the unearned increments on transfers induced by the former levy. It is too early to comment on the success of this program.[18]

Other measures bolder than taxation have also been tried in some countries. Thus for instance, the Taiwanese Law on Equalization of Land Rights, requires every landlord owning land in excess of the maximum prescribed area, to sell of his own accord his excess land within two years of the enforcement of the law. If the owner defaults, the local authority may compulsorily purchase the land and after readjustment sell it to persons who need land for bona fide construction. This right of com-

14. J.E. Hardoy, R.O. Basaldua and O.A. Moreno, "Urban Land Policies and Urban Land Control Measures in South America" (Report prepared for the United Nations' Centre for Housing, Building and Planning, New York, 1970).

15. J.E. Hardoy, "Urban Land Policies and Land Use Control Measures in Jamaica" (Report prepared for the United Nations' Centre for Housing Building and Planning, New York, 1970).

16. Makarere Institute of Social Research.

17. Ibid.

18. J.P. Sah, "Urban Land Policies and Control Measures in Asia and the Far East".

pulsory purchase of land beyond the prescribed ceiling is supplemented by tax measures. Two main taxes on urban land are levied under the country's Land Law, namely, the Land Value Tax and the Land Value Increment Tax. The basis of assessment of the former is the "unimproved value" of land. The tax is levied annually and at a progressive rate. Under Article 173 of the Land Law, vacant land not duly used within a prescribed time limit can be subjected to a Vacant Land Tax of not less than three or more than ten times the Land Value Tax. Interestingly enough, the land value tax is levied on the absentee landlords at double the ordinary rate. The Land Value Increment Tax mops up a part of the unearned increase in land values at the time of transfer or every ten years, whichever is earlier. Two major drawbacks of these well thought-out coordinated measures are: firstly, that these are legally applicable only within city limits which cover a very small part of an urban complex; and secondly, that their enforcement and administration is very ineffective.[19]

By far the boldest measures in this respect have been undertaken in Cuba where the Revolutionary government enacted a series of laws as a part of urban reform legislation.[20] Law No. 218 of 1959 established the compulsory sale of all vacant urban and suburban lots. Its objectives were to control and limit activities of urban speculators and subdividers and to establish simultaneously the basis for an orderly urban growth. Another law, No. 691 of the same year supplemented the earlier law by introducing regulations governing prices of unbuilt urban and suburban lots and the procedure for their enforced sale. The legal price of all vacant lots could not exceed $4 a square meter. This maximum price is understood to have been the result of a study of several subdivisions.

Section 5 of the law provides that any Cuban citizen could request, through the National Planning Board, the enforced sale of a vacant urban lot at the established prices on the undertaking to start a house, industry or office within the next six months and to finish it within 18 months. However, the owner of the lot could exercise his priority right to build on the same lot within a certain time according to certain stipulations. Section 6 stipulates the imposition of an aggregated tax of 5 percent per year on all vacant lots. Owners of one or two adjoining vacant lots up to a total surface of 1500 square meters were exempted from the tax for a period of five years.

The law also curbs the activities of the subdividers and speculators. The promoters of new subdivisions have to justify their costs before the Institute for the Promotion of Insured Mortgages (Fomentode Hipotecas Aseguades) and accept the responsibility of building the required services. It is understood that these measures have succeeded in stabilizing urban land prices and bringing all speculative transactions under control. They have also, to some extent, encouraged better land utilization than was the case before the enactment of these laws.

Irrespective of the theoretical soundness of the measures like the ones briefly cited above, their success depends on how well they are enforced and administered. Another important lesson of these international experiments is that an element of compulsion or coercion is necessary to deal with land vacancy and low densities. It would, however, be wrong to solely depend upon coercion because it may induce land transfers and subdivisions but not necessarily the desired subsequent development and construction. It is, therefore, necessary to back such measures by programs to provide technical and financial assistance to private bona fide builders.

More important than this is the role that urban development and public housing authorities can directly play in this regard. The general tendency of these agencies has been to leap-frog the low density or privately owned vacant areas and establish new neighborhoods or housing colonies either on government land or at some distance from the core areas. The argument for doing so is that the acquisition of private land nearer to compact core areas is troublesome and the land costs in outlying areas are lower. Needless to say, the social and economic costs of such location decisions are far more than the small economies initially achieved by low land prices. Public authorities would, therefore, do better if they select at the outset vacant lots and low density areas in or around the core areas and build on them to desired densities rather than go far off to the urban peripheries. In the developing countries, where private individuals or developers are unable to undertake large projects of the nature required in this situation, public authorities are better equipped to do so both financially and legally.

Urban Peripheral Sprawl

Land in the urban peripheries may be undeveloped land within the municipal boundaries or land outside the urbanizable limits. The problems in these two land categories as mentioned earlier are basically ones of haphazard pre-mature sprawl, sub-standard development (mostly unauthorized) and land conversions, subdivisions and speculation. Two important measures to deal with the problems of urban peripheries are firstly to delimit the 'urbanizable limits' and, secondly, to classify the entire land up to the urbanizable limits into 'areas of priority urban development' and 'areas of deferred urban development' following the practice of the French and the Japanese. The urbanizable limits as well as these development areas would, of course, be subject to review and revision periodically.

The next major step should be the extension of the formal municipal limits to cover the entire area within the urbanizable limits. This is suggested because the absence of civic controls in the areas outside formal municipal limits is very largely responsible for the type of development which occurs on the peripheries. Where such an extension is not feasible for political, economic and other reasons (as may possibly happen in the metropo-

19. Ibid.

20. J.E. Hardoy, "Urban Land Policies and Land Use Control Measures in Jamaica".

litan areas comprising multi-local government jurisdictions), the major urban local government unit may be given the extraterritorial right of limited supervision of the other local government units to plan and prescribe zoning regulations and other development controls in the area outside its own territorial jurisdiction. Alternatively, a regional planning organization may be bestowed with such powers prevailing over all the government units concerned.

In a majority of cases most of the areas in these land categories would be classed as "deferred urban development zones". Land uses in such zones may be frozen by not permitting conversions, new construction or any material alterations to existing building structures. In this context it may be useful to recall that in one or two states in India peripheral control acts are used for this purpose. Under the Chandigarh Periphery Control Act, for instance, an area within five miles on all sides of the Chandigarh boundary has been declared a "controlled area" where development is guided and sanctioned on the basis of a periphery land use plan. No change in the present use of land is permitted within 300 feet along roads and railways and in the potential area of town development.[21]

With a view to discouraging land conversion, sub-divisions and speculation, all land transfers in these areas should be made subject to prior permission from the municipality or the public authority responsible for enforcing planning, zoning, and other control measures. The municipality or the public authority concerned should be given the right of pre-emption or first purchase of the land for which a transfer application is made by the owner. The power to exercise this right would not only discourage speculative land transactions but also enable the municipal government or the public authority concerned to build up land reserves for future urban development purposes. Besides gaining land ownership through pre-emption, they could usefully pursue an active policy of buying land like any private party. Where the public authority concerned does not exercise its pre-emption right, the land transfer should be subject to stiff taxation. Land subdivisions should also be generally prohibited.

In the absence of adequate controls, the urban peripheries are highly susceptible to ribbon development along the highways and location of industrial units of various descriptions. To prevent these undesirable developments, special highway Acts and proper industrial licensing should be developed and enforced. The industrial units located outside the municipal jurisdiction should be subjected to all the regulations and the same level of taxation as obtaining within the municipal limits. This suggestion emanates from the fact that many industrial units come to the urban peripheries to escape by-laws and taxation.

Land in the zones of "priority urban development" should be properly developed and provided the requisite infrastructure such as roads, electricity, water supply, sewerage and drainage. The desired development in these zones undertaken by private persons should be encouraged. Technical advice, loan assistance and tax reliefs may prove useful instruments to accelerate the pace of development here. Perhaps the land readjustment method of Japan, South Korea or Lebanon discussed earlier may have far greater chances of success in areas of priority urban development than in the congested core areas. Where private initiative is wanting, the public housing and development authorities should take upon themselves the task of development and construction. This is necessary to prevent premature sprawl and spot development.

Urban Land Taxation

Besides the measures already discussed there are a few others which are significant and applicable to all land categories. The first of these is taxation. This instrument can be very usefully wielded to further the objectives of urban land policy. Thus, for instance, tax reliefs and incentives can help encourage the type of housing and density pattern desired or accelerate development in the priority zones or the shift of non-conforming uses to the designated areas. On the other hand, stiff or 'penal' tax-rates may discourage land-vacancy and land speculation. Besides their traditional use for purely revenue purposes, land and property taxes can be designed to mop up unearned increases in land values and to curb their excessive rise.

There is no denying that urban land is already being subjected to taxation in every country. Municipal property taxes are, of course, universal. Certain countries, as for example, France, Spain, West Germany in Europe and Afghanistan in Asia impose a Land Transfer or Land Transaction Tax collected at the time of transfer of the ownership of land. In Spain and West Germany, the rate of this tax is 7 and 7.4 percent of the real value of the land whereas in France it is only 1.25 per cent.[22] South Korea has recently introduced taxation measures to fight land speculation by discouraging land vacancy and mopping up unearned increases in land values. Irrespective of their individual merits, most taxes on real estate cannot be considered as oriented to subserve non-revenue objectives also, e.g. the provision of better land-utilization; nor have they succeeded in restraining the rise in land values. The weeknesses of tax-administration, from assessment to collection, further reduces their revenue and non-revenue potential. This is more particularly true of most developing countries.

The success of taxation as an instrument of an urban land policy would, however, depend on its being related to land use plans and policies governing land development and land values and being flexible or differential when applied to different land categories. However, this is seldom the case at present. In this context, two nota-

21. Government of India, Ministry of Health, *Paper on Urban Land Policy 1960-61.*

22. Darin Drabkin, "Urban Land Policies and Land Use Control Measures in Europe".

ble departures, Hawaii and China (Taiwan) are particularly interesting. The Hawaiian Land Use Law affects taxation policy since the State Department of Taxation considers the legally constituted land use for tax purposes, not the existing land use pattern. "This policy helps to stimulate the best use of land according to planning considerations which conform with the land use district theory, it would appear to have great potential for stimulating a consistent uniform growth of the island's base."[23]

The Republic of China has articulated its urban land taxation theory in the country's land laws. In these laws, land taxation — comprising a Land Value Tax and a Land Value Increment Tax — has been conceived as an autonomous as well as a coordinating, cross-checking device of a multi-dimensional integrated land policy directed to achieving a ceiling on urban land ownership, discouraging land under-utilization and vacancy, penalizing under-assessment of land values for taxation and capturing unearned increases in land values for the community. The difficulty in this approach is that the weakness of the tax administration severely limits the impact which such well conceived taxes are capable of making.[24]

Land Values

The fantastically high and continuously rising land values in all the major cities of the world are some of the most serious impediments in the way of urban development and housing activity. They underlie the distortions in urban land use and density patterns, premature land conversions and irrational subdivision. Land planning and urban development of a scale required to meet the needs of the existing situation will not at all be feasible unless land values are appreciably lowered and their further rise held in check.

In spite of the wide recognition of this crucial point, the problem of land values has nowhere been effectively tackled excepting in some centrally planned countries and a few elsewhere. Mention was made earlier of the experiences of Cube where the Revolutionary Government introduced a series of urban reform laws and the measures included the fixation of a legally enforceable maximum unit price for vacant land. Urban land values are reported to have been stabilized since then.

Another interesting development in this regard related to Japan where the government has enforced since July 1969 a new law to control the rising tendency of urban land values. This law establishes a "guide-post system of urban land prices," e.g., a system of officially determining and announcing periodically the reasonable prices for selected "standard" tracts of land. The announced prices, it is hoped, would serve as the standard for deciding the prices in private land transactions and provide a unified basis for the determination of the prices of land to be purchased for public uses.[25] Even though it is premature to comment upon the efficacy of this measure, it is doubtful that it will make a material difference to the price situation because land prices are high not because market information is lacking but for other reasons.

Solutions to the problem of high land values will be found only if root causes are analyzed. Important among them, besides general inflationary trends, are the shortage of developed buildable land and built-up accommodations for residential, commercial, industrial and various other purposes. At any point in time, the pressure of the large and growing demand for built-up space in the form of dwellings, shops, office buildings, etc., falls on the very limited unoccupied building premises. This results in a sharp increase in property rents. To the extent that amortization rates or the rates of return determine the quantum of an investment, the high property rents also lead to commensurate increase in the land prices. The conclusions that follow from this analysis are: firstly, that the supply of developed land and also of housing and other building stocks should be substantially augmented to reduce the pressure of demand on rents; and, secondly, that governments should evolve and enforce urban rent policies regulating private and public rent charges. The latter conclusion gains significance because the achievement of the former may be a long drawn out process in most countries and the situation should not be allowed to deteriorate in the interregnum.

DIRECT GOVERNMENT INTERVENTION IN THE LAND MARKET

In spite of their necessity and usefulness, land planning, zoning, licensing, taxation and similar measures are at best preventive, precautionary or regulatory devices. They may, under propitious circumstances, prevent the deterioration of the urban land situation but they cannot ensure that the desired development will positively take place. These measures do not tackle the roots of the basic malady, namely, the non-availability or severe shortage of developed urban land at the right places and for reasonable prices. It is, in fact, this singular failure of the profit-motivated private land market which largely explains the deficiencies of the urban land use patterns as well as the excesses of land values and speculation. As long as this failure persists even the best enforcement of all land planning, control and taxation measures would do no more than scratch the surface.

To concede the point just made is to accept the case for a radical alteration in the conditions and motivations of the land market. This radical alteration can be brought about only by substantially augmenting the supply of developed and serviced land and releasing it to the general public and the public authorities at prices/rents

23. Peter W. Ameto, "Urban Land Policies and Land Control Measures in the United States".

24. J.P. Seh, "Urban Land Policies and Control Measures in Asia and the Far East".

25. Ibid.

within their reach. The implications of this suggestion are far-reaching. The first obvious implication is that the task of active and positive intervention in the land market can be undertaken only by the government or other viable public authorities. This is so because such intervention, to be effective, has to be on a scale to match the private land market transactions. Besides being armed with police and revenue powers and the right of eminent domain, public authorities alone have in most countries the fiscal and organizational capacities to carry out such a stupendous enterprise. Above all, only public agencies can be expected and relied upon to carry out this activity for the larger social interest rather than for profit.

The case for direct public intervention in the form of the purchase and sale of land, or what may be likened to the Central Bank's "open market operations", and its salutary results are well vindicated by quite a few good precedents. Thus, for instance, in Sweden the city council of Stockholm had been building up land reserves through the purchase of land since the end of the 19th century and has found this policy extremely rewarding financially and from the point of view of planned development. Inspired by Stockholm's performance the government has now passed legislation which enables all municipalities to acquire land on a scale that will give them controlling influence over the land needed for social capital investment during the foreseable future of about 10 years. This power to buy or acquire land is further supported by the right of municipal investment in land which (conveyed under leasehold and built upon with State housing loans) has also been established. The provisions for ground rent and the annual charge paid by the leaseholder have been designated so that the municipalities may retain the greater part of the increased yield produced by increments in land values.[26]

As in Sweden the municipalities in the Netherlands also have a long tradition of land purchase, ownership and dispensation. The sizeable land reserve at the disposal of city governments enable them to keep land prices stable. It is no surprise that among most European countries the Netherlands and Belguim have shown the lowest rate of increase in urban land prices. "The low rate of land price increase in Netherlands may be a result of the active land acquisition policy of the municipalities which creates the peculiar land market situation whereby the municipalities are the biggest buyers and suppliers of land for construction."[27]

Hong Kong and Singapore are two Asian countries where practically all the land belong to the State and are given to the users on leasehold tenure only. The recent trends in lease policy have been to prefer shorter periods of the leases because it gives the State more frequent opportunity to capture the unearned increments in land values, if any, and to record the land uses according to plans. It is because of the State monopoly of land that in both these countries the government and the public authorities have been able to achieve appreciable results in the field of housing and urban development. Hong Kong and Singapore are also the two countries where the increase in land values has been the lowest among the countries in Asia and the Far East.

There are a few important pre-conditions to the success of direct public intervention in the land market. Important among these are: (1) the laws governing expropriation or compulsory acquisition of land (especially the procedure for acquisition and the principles of compensation) are consistent with this land policy; (2) the government or the public authorities already have or create the requisite organization for land acquisition and more than that for developing and servicing the land and estate management; and (3) the land programs are supported by active programs of construction and financial aid for this purpose.

CONCLUDING OBSERVATION

The various measures discussed in this paper are not exhaustive but illustrative. It is obvious that the measures really adopted would have to answer the needs of varying specific situations. The point that needs to be stressed, however, is that it would be futile and frustrating to enforce any one or two particular measures in some land category or the other. Such an attempt may, in fact, create anomalies and social inequities. The best course of action is first to formulate a comprehensive long term urban land policy and then evolve within its framework a set of coordinated measures applicable to various land categories and enforce them simultaneously. This would be an approach where each measure balances, cross-checks or reinforces the others and thus, minimizes the loopholes and mitigate the inequities.

26. National Swedish Council for Building Research.

27. Darin Drabkin, "Urban Land Policies and Land Use Control Measures in Europe".

REGIONAL DEVELOPMENT CENTERS

AURORA PAL-MONTAÑO

With the growing recognition of the importance of the regional approach in achieving national development, the Centers for Regional Development Studies of the University of the Philippines (U.P.) inevitably assume greater challenges and responsibilities. Now on their third year, these Centers for Regional Development Studies are sources of researches, in-service training and consultant advice on regional planning and development.

In this issue, this column focuses attention on the present activities and plans for the next two years of the Cebu Center for Regional Development Studies (CCRDS). Information is derived from an interview with the Center Director, Prof. G. S. Calabia and from his report on the Center's **Program of Activities, 1972-1974.** Like the Centers in the cities of Marawi, Davao, Iloilo and Baguio, the Cebu Center was established by the University of the Philippines' Council on Regional Development Studies (COREDES) in coordination with a regional university, in this case the University of San Carlos. Its current operation and maintenance, however, are now essentially the joint responsibility of the U.P. and its collaborating government departments, namely, the Department of Public Works and Communications (DPWC), the Presidential Advisory Council on Public Works and Community Development (PACPWCD) and the Presidential Arm on Community Development (PACD).

CEBU CENTER: ITS EDUCATIONAL ROLE

The Cebu Center serves Eastern Visayas region. This presently comprises some 10 provinces and 13 cities.* The Center sees its role in the region as primarily educational. Planning education precedes planning *per se.* While it is also concerned with developing plans for the region, it realizes that without local planning expertise to translate these plans into specific terms for local decision-making, the usefulness of these plans would be uncertain.

Planning education underlies the Center's program of activities for the Cebu Metro-Region for 1972-1974. Viewed as a process of upgrading local planning skills and creating appropriate local machineries that will insure the continuity of development efforts in the area, this is more specifically translated in terms of the program's three objectives:

1. to set into motion the initial stages of the planning process by crystallizing public and official interests in planning for the development of the area;
2. to outline specific development problem areas where the CCRDS may undertake joint development ventures with pertinent local institutions and development agencies; and
3. to convert the overall program activities into worthwhile educational experience for the participants.

PROGRAM OF ACTIVITIES FOR 1972-1974

The Center's program of activities for the next two years includes in-service training, seminar-workshops as well as research and consultative activities. The program is confined mainly to the Cebu Metro-Region which comprises Metropolitan Cebu and the municipalities throughout Cebu province. This is, however, done on an experimental basis. The program could later be adapted for the specific needs of Bohol, Leyte and the other Eastern Visayan provinces.

Three factors were considered in formulating the program. These include 1) the memoranda of agreement between the collaborating agencies to insure, among others, proper coordination in the planning and implementation of a well-integrated nation-wide infrastructure program; 2) the different regional interests and the interests of the collaborating agencies; and 3) the Center's manpower and capital resources and the region's general environment for planning and development.

In-service Training and Seminar-Workshops

In-service training and seminar-workshops will be sponsored either mainly by the Center or in collaboration with a government or private agency.

Orientation seminars. Orientation seminars for personnel and staff and for other persons involved in its various projects will be sponsored mainly by the Center.

*Under the proposed Reorganization Plan which divides the country into 11 regions, the present Eastern Visayas has been split into two regions, Eastern Visayas and Central Visayas. Eastern Visayas region comprises the provinces of Northern Samar, Eastern Samar, Western Samar, Leyte, Southern Leyte and Biliran, and the cities of Calbayog, Ormoc and Tacloban, with regional center at Tacloban City. On the other hand, Cebu and the provinces of Negros Oriental, Sequijor and Bohol, and the cities of Bais, Canlaon, Cebu, Danao, Dumaguete, Lapu-lapu, Mandaue, Tagbilaran and Toledo comprise the Central Visayas region, with regional center at Cebu City.

These seminars aim to provide persons coming from various disciplines with a common background on the concepts and problems of planning and development in general and of the Center's program of activities in particular.

Comprehensive planning and development seminar-workshops. Comprehensive planning and development seminar-workshops and related seminars on specific planning aspects for regional representatives of national government agencies as well as representatives of local governments and private groups involved in planning and development will be sponsored with the University of the Philippines' Institute of Planning.

Other seminars. Other seminars will be sponsored with other units of the U.P., principally with the other COREDES-member units like the Local Government Center (LGC), the Asian Labor Education Center (ALEC) and the Institute for Small Scale Industries (ISSI).

Research Projects

The Center plans to undertake and complete three major applied researches within the next two years. Chosen mainly for their relevance to development and for their possibilities as a basis for a common understanding and agreement among the Cebu Metro-Region's varied interests; these studies include 1) the Cebu Provincial-rural planning and development; 2) the Cebu Mettropolitan planning and development; and 3) the Mactan International Airport planning and development.

Cebu Provincial-Rural Planning and Development. A province-wide rural planning and development study program will include the following:

1. Provincial Government management study. This study will inquire into the province's organization and management, personnel and fiscal administration and legislations affecting the general provincial administration and the province's external government relations.

2. Provincial agricultural and agro-industrial survey. These survey is expected to generate information on types of farming, levels of farm production, marketing methods and practices, land tenure, utilization and capability, farm production, non-farm employment and employment possibilities.

3. Provincial natural resources and potentials survey. This study will inquire into the province's land resources such as area, utilization and capability; mineral resources and current output utilization; and fishing resources such as location of the best fishing grounds and potentials.

4. Provincial transportation and related infrastructural services survey. A provincial infrastructural survey would be necessary to generate information on existing transport and communication services, waterworks, electric power, etc.

5. Pilot rural development project. Considering the relative newness in introducing planning and development ideas in the region, a pilot rural development project is proposed as the main feature of the Cebu provincial-rural planning and development study program. The program itself will be based on findings of the four foregoing studies. If successful, the pilot project would be a demonstrative device to maintain local interest in planning and development.

Cebu Metropolitan Planning and Development. A mettropolitan planning and development study will include the following:

1. Urban squatters rehabilitation and resettlement study. A rehabilitation and resettlement study of urban squatters in the metropolitan area can be a basis for the development of a positive program to solve or minimize the squatters problem. This study would inquire into the area's squatters population, location, income, skills and employment sources and into the local governments' resouces for squatters rehabilitation and/or resettlement.

2. Cebu metropolitan transportation study. Metropolitan Cebu increasingly faces a transportation problem. For it to remain an efficient trading, commercial and industrial center, its transportation system needs to be improved. A metropolitan transportation study would provide the basis for updating and improving the transportation system. This study would inquire into the area's population, economic and employment situations, physical condition and land use as well as engineering data components on the transportation network.

3. Economic base, population and land use studies. Economic base, population and land use information are basic to most planning activities. Studies designed to generate these information in the area could strengthen the information base for planning work at the Center. An economic base study would be concerned with information on income, employment and related economic indicators; a population study with information on population size, composition and spatial distribution; and a land use study with information on physiographic features, land values, land use and attitudes about land use, structural and environmental quality, vacant land as well as water- and flood- prone areas.

Mactan International Airport Planning and Development. A planning and development study program of Mactan International Airport will include the following:

1. Mactan International Airport infrastructures and accessibility study. An infrastructures and accessibility study of Mactan International Airport can be a basis for formulating plans to improve the accessibility of the airport from the central city. Additionally, the study would also aim to analyze the airport's many features, among which would be its facilities, utilities and services, its adequacy for jets and its impact on community values. Information relevant to the study would include air travel trend in the region, site characteristics and related engineering considerations, community values, and site facilities, utilities and services.

2. Industrial estates feasibility study. This study is necessary to determine the Cebu Metro-Region's potentialities for tourism and as a possible area for industrial estates. It would inquire into the region's natural resources and potentials, labor skills, industry-mix, availa-

ble land for industries and services and, in so far as they relate to the proposed industrial estates, industrial market demands and potentials.

3. Tourism study. Because of its transitory nature, the development of tourism partly depends on an efficient and fast means of transportation which, for an island country like the Philippines, could be had through air travel . But while the development of the international airport is seen to contribute to the development of tourism in the region, this, in turn, would have important (development) implications on the Mactan International Airport and on the local economy. The importance of tourism in the region cannot be overemphasized. A tourism study can provide the basis for formulating plans for the development of the industry. The study would generate information on types and location of tourist spots, population and employment trends, available tourist facilities, tourist traffic and principal modes of transportation in the region.

Data and Information System. The development and maintenance of a data and information system, also called a "Planning Data Bank" is a long-range project of the Cebu Center. The project has a threefold objective, namely: 1) to provide timely, accurate and adequate data and information for planning and decision-making purposes in the region; 2) to foster wise use of available secondary data and information; and 3) to update the PACPWCD municipal and provincial atlases. Data to be collected will be those with general applicability for planning activities. These would include data on land and land use, population and selected general socio-economic indicators.

PROGRAM APPROACH AND IMPLEMENTATION

The most logical approach in implementing the program of the Center would be one which meaningfully integrates the efforts of various universities and agencies. As Prof. G. S. Calabia sees it, this would have to be "a joint development venture involving the active participation of universities, national agencies and local governments". This approach is considered practical because the universities which generally have the expertise and are less susceptible to political influence, do not have the financial resources and the implementing authority; the national government, while having both financial resources and the implementing authority may not have the expertise; and the local governments, while similarly lacking in expertise are enviably knowledgeable on local socio-political situation.

Along this line, involvement of civic and business organizations in the activities of the Center would also be encouraged. They could participate in the Center's seminar-workshops, avail of its research and consultative services, sit in the Advisory Board, or provide financial assistance for Center projects.

The resulting program for the Cebu Metro-Region allows for the involvement of agencies and institutions in projects which are directly relevant to their main interests. The Center Director would like to have it emphasized, however, that the project line-up is not final. The projects are presented simply as suggestions, and may be modified when necessary.

The foregoing approach in implementing the program of the Center are expected to result in the following:

1. Provide the extension process through which the universities' technical know-how find applicability in local planning and development efforts;
2. Enable individual project participants to know more about planning from a first-hand involvement in a planning activity;
3. Provide participating agencies and universities with the feedback necessary in evaluating and furthering their planning and development efforts; and
4. Increase the understanding of participating agencies and universities in the need for a cooperative coordination of development efforts in the region.

As of February 1972, two study groups have been formed. The first, to undertake the Cebu Metro-Region transportation planning study and the second, the provincial-rural planning and development study. The first group consists of representatives from the 4th Engineering Division of the DPWC, the Mactan International Airport office of the Civil Aeronautics Administration, the Cebu City Engineer's office and the Mandaue City administration. On the other hand, the second group is initially made up of selected personnel from the PACD's regional and provincial offices. The Center supervises both groups.

The Center has also started work in updating the PACPWCD's provincial and municipal atlases. In January 1972 it sent out PACPWCD questionnaires to PACD municipal development officers throughout Cebu; in February the returns started coming in. The Center will similarly administer the same questionnaires in the other Eastern Visayan provinces as soon as it avails of the necessary travel funds from the PACPWCD.

Meanwhile, the Center continues to exert an all-out effort to create planning and development awareness in the region and to draw the interest and participation of various sectors in its projects.

PLANNING NEWS

PETE N. PRADO AND GABRIEL Ma. J. LOPEZ

SEMINARS AND CONFERECES

First Regional Planning and Development Conference

The Institute of Planning together with the Presidential Economic Staff (PES), the Department of Public Works and Communications (DPWC), the Presidential Advisory Council on Public Works and Community Development (PACPWCD) and the Presidential Arm on Community Development (PACD), sponsored the First Regional Planning and Development Conference at the Hotel Enrico, Ermita, Manila on January 19-22, 1972.

Executive Secretary Alejandro A. Melchor delivering the keynote address.

Pursuant to Memorandum Circular No. 531 issued by the Office of the President, the Conference's aim was "to know and understand the grand national strategies on the total economic development of the country and to establish an effective structural complex for the purpose of integrating plan formulation and coordinating program implementation of the country's planning goals and economic development objectives".

The 53 conference participants, mostly personnel belonging to the national planning and economic development agencies and other functionally-related offices of the national and local governments, assessed the country's national economic goals and objectives; studied the roles played by political and administrative leaders in formulating policies relative to those goals and objectives, evaluated the present and proposed organizational structures implementing them; and looked into the various techniques and processes of harnessing the nation's human, natural, physical and fiscal resources for social and economic growth.

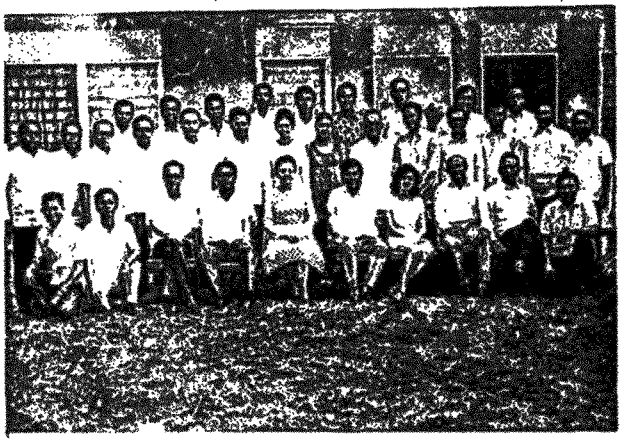
The conference participants also examined the national, physical and economic planning process at all levels of the government and the task of each governmental unit in comprehensive physical planning and economic development. At the same time the conference enabled officials and personnel of functionally-related agencies of the national and local governments, to jointly and actively participate in the discussion of the preparation, adoption and implementation of regional plans within the context of a national framework plan.

Prospero C. Morelos, acting coordinator and action officer of the PACPWCD, gave the general briefing on the objectives, mechanics and administrative aspects of the Conference. Chairman Armand Fabella of the Commission on Reorganization discussed the "Reorganization Plans for Regional and Local Development Planning". Dr. Jose M. Lawas, director of National Planning. NEC talked on "National Economic Planning and Regional Development". "Technique of Analysis for Private Enterprise Projects" was the topic discussed by Conrado Ramirez, a management consultant. Apolinario Orosa, director-general of the Presidential Economic Staff spoke on "Regional Planning, Monitoring and Integrated Development Planning". A panel discussion chairmanned by Dr. Leandro A. Viloria of the Institute of Planning, U.P., tackled the topic "Structure Organization for Regional Planning and Development."

In addition to these various lectures and discussions, there were work group sessions which had as their general theme "Formulation of Guidelines regarding the Regional Centers' Work Program".

First Seminar on Environmental Planning and Infrastructure Development

The Institute of Planning, University of the Philippines, in coordination with the Department of Public Works and Communications (DPWC), sponsored the First Seminar on Environmental Planning and Infrastructure Development last March 8-May 31, 1972. Designed primarily to train the prospective personnel of the proposed Programming and Planning Development Office (PPDO) in the DPWC, the seminar was attended by some thirty participants, mostly representatives from the various bureaus and offices of the said department.



Seminar participants with the training staff.

Emphasis of the seminar was on the development of the skills and capabilities of the participants in using specific techniques in environmental planning and project evaluation. It was also aimed at enchancing the participants' effectiveness in directing and integrating the work of their agencies in developing communities through proper planning and implementation of infrastructure projects.

An assortment of resource speakers was on hand to give lectures on the various aspects of environmental planning and project appraisal studies. Notable among them were Prof. Walter G. Faithfull, Prof. Zenon Nowakowski, Prof. Roque A. Magno, Prof. Federico B. Sllao, Dr. Benjamin V. Cariño, Prof. Cesar D. Marquez, Prof. Jose R. Valdecañas, Mr. Prospero Morelos, Prof. Gerardo S. Calabia, Miss Cynthia Dionisio, Mr. Harold P. Kurzman, Mr. William S. Matthey, Mr. Ossi J. Rahkonen, Mr. Erlind Andresen, Engr. Teodoro T. Encarnacion, Dr. Sixto K. Roxas III and Mr. Rosauro Paderon.

The IPUP training staff for the seminar was composed of Prof. Tito C. Firmalino, director of training; Dr. Benjamin V. Cariño, director of research; Mrs. Eloisa Litonjua, assistant professor; Mrs. Dolores Endriga, instructor; and Mrs. Natividad Ma. P. Reyes, research associate.

Group 1 presenting its report on "Researches for Planning" during the plenary session. In photo are Jesus Ingehiero (before lectern), PACD Region 5 assistant regional development director, group chairman, Romeo Paloma, Bureau of Public Highways district engineer, rapporteur, and Atty. Alex Umadhay, executive officer of the Iloilo Provincial Development Staff, plenary chairman.

Fourth Seminar-Workshop on Comprehensive Environmental Planning and Development

The Institute of Planning, jointly with the Presidential Arm on Community Development (PACD), the Department of Public Works and Communication (DPWC), the Presidential Advisory Council on Public Works and Community Development (PACPWCD) and the Iloilo Center for Regional Development Studies sponsored a seminar-workshop on comprehensive environmental planning and development in Iloilo City last April 12-May 18, 1972. Fifty-five participants, most of whom PACD and DPWC field personnel attended the seminar-workshop.

The fourth of a series, the six-week seminar workshop was designed to achieve a fourfold objective: 1) to improve the skills and capability of the participants in using specific planning techniques and methods through actual field work, workshops and practical exercise; 2) to enable the participants to understand more fully the social, economic, political and physical context in which planning and development in the country in general, as well as in the region in particular takes place; 3) to critically review the countraints, obstacles and specific opportunities for planning and plan implementation in the Philippines, focusing on financial potentialities, cultural factors, and on political and administrative problems; and 4) to enable the participants to contribute more effectively in directing and integrating the work of their respective agencies in the overall planning and development process.

Making up the seminar training staff were; Prof. Tito C. Firmalino, director of training, IPUP; Engr. Alfredo S. Golveo, director, Iloilo Center; Engr. Richard A. Alba, project coordinator, PACPWCD; Miss Eden L. Songco, senior CD analyst, PACD; Mr. Mariano U. Griño, research associate, Iloilo Center; Miss Jennie R. Sacapaño, research assistant, Iloilo Center; and Mrs. Natividad Ma. P. Reyes, research associate, IPUP.

Transportation Conference in Japan

The Manila Bay Region Planning (MBRP) Team held a conference in Japan with its collaborating Japanese Team last January 31-February 3, 1972 in connection with their joint project, the Metro-Manila transport study.

The Manila team was represented by Prof. Jose R. Valdecañas, team leader, Dr. Sigurd Grava, UNDP consultant to the Manila team, Mr. Antonio I. Gloco and Mr. Jose T. Virtucio; the Japanese team was composed of Prof. Inouye, team leader, Mr. Yoda, Mr. Ida, Mr. Iriayoshi and others.

The Metro-Manila Transport Study was started in July 1971 and is expected to be completed by the third quarter of the calendar year 1972. According to the project's Terms of Reference, the study consists of two parts. The first part consists of basic studies to be undertaken by the Japanese team, on the basis of which proposals for a general arterial routes and mass transportation plan through 1987, and specific transport investment projects with a program of implementation will be made. The second part, which is the primary responsibility of the MBRP team, consists of Origin-destination (O-D) survey supplemented with a home interview survey and the study on non-traffic components, viz., land uses, population distribution and employment plans.

In the conference recently held in Japan, the two teams discussed the input data and concepts used in the analysis of the non-traffic components, the Inception Report containing six alternative generalized pattern of land use-transport plans with an identification of the proposed major expressways and mass transit lines, the travel characteristics in the Metro Manila as obtained from the O-D survey, and the framework of the final report which is scheduled for completion on October 1972. Such matters as project priorities, and the problems and difficulties thus far encountered by both teams with regard to their respective project responsibilities were also threshed out.

Prof. Valdecañas described the conference as very fruitful, but at the same time the Manila team leader stressed that the Japan Conference did not in any way mean the end of mutual consultation and discussion between the two teams. On the contrary, continuous feedback regarding the progress of their respective responsibilities was considered by the delegates of both teams to be essential for the thorough rationalization of the transport study.

Metropolitan Mayors' Coordinating Council

To help solve the major porblems affecting Metropolitan Manila, thirteen metropolitan mayors and their representatives organized the Metropolitan Mayors' Coordinating Council (MMCC) during a conference sponsored by the Philippine Press institute at the Antipolo Hotel, on February 18-19, 1972. Prof. Fred Silao, IPUP faculty member, was appointed executive secretary of the Council.

Involved in this coordinated and cooperative venture are the cities of Manila, Quezon, Caloocan and Pasay, and the municipalities of Las Piñas, Makati, Malabon, Mandaluyong, Marikina, Navotas, Parañaque, Pasig and San Juan. Among the major problems the Council expects to tackle are water supply, garbage collection and disposal, pollution, peace and order, slums and squatting, flood control, and transportation and traffic.

IP FACULTY AND STAFF

Viloria Observes Planning and Development Trends Abroad

Through a United Nations travel grant, Dean Leandro A. Viloria of the Institute of Planning went on an observation tour of the United Kingdom and three Latin American countries (Mexico, Brazil and Argentina) from February 5 to March 31, 1972. Dean Viloria's main concern in this observation tour was to assess and gain familiarity with current developments in environmental planning education and practice in other countries of the world, through conferences with government officials, academicians and university personnel, and with private professionals and practitioners.

In his tour of Latin American countries, the Dean noted two significant trends. First, there is the apparent search by the governments of these countries for a more comprehensive approach to environmental planning. This trend is made evident in the increasing participation of such social scientists as sociologists, economists, public administrators and political scientists in the planning process, and in the establishment of new institutions for planning and development. Notable among such institutions are the Institute Politechnique Nacional, a UNESCO aided urban planning body in Mexico, the Center for Development Planning in Brazil, and the Center for Urban and Regional Planning in Argentina, a planning body privately funded by the Torcuato Di Tella.

The second trend which Dean Viloria observed in Latin America is the attempt of Latin American states at a collaborative effort in approaching regional planning and development. This is reflected in the establishment of the Organization of American States (OAS) in Lima, Peru. The OAS is a pool of non-political experts involved in planning and development, and essentially provides technical assistance in urban and regional planning to Latin American states.

In Great Britain, Dean Viloria also noted the growing emphasis on a comprehensive approach to development as planning, traditionally associated with engineering, architecture and surveying, has become increasingly oriented to the social sicences. Moreover, research is also receiving more attention as can be seen in the growing

number of research grants awarded by the Center for Environmental Studies, the University of Birmingham Center for Urban and Regional Studies, and the British Social Science Research Council. These institutions also provide assistance to students from developing countries to undergo training in planning and development in British colleges and universities.

Seen against the present situation in the Philippines, these developments abroad may suggest the need to intensify the country's training efforts for environmental planning. Dean Viloria feels that such intensification may be accomplished in two ways: 1) by instituting a doctoral program in Environmental Planning at the University of the Philippines' Institute of Planning which shall be research oriented and focused on Philippine planning conditions and problems; and 2) by holding more short but comprehensive regional planning and development seminar-workshops throughout the country.

Calabia at East-West Center Workshop

Professor Gerardo S. Calabia, IPUP faculty member and acting director of the Cebu Center for Regional Development Studies, read a paper on "University of the Philippines' Linkages for Community and Regional Development" at a Technology and Development Institute (TDI) Participant Workshop held at the East-West Center in Honolulu, Hawaii, from January 10-14, 1972. Prof. Calabia's paper dealt on the University's initial experiences with its joint Centers for Regional Development Studies in the cities of Marawi, Davao, Iloilo, Cebu and Baguio.

Focused on the theme "The Responsibility of the University to the Community", the TDI workshop brought together TDI academic grantees, staff members and senior fellows, and a few Asian professors and scholars who were invited to participate. The objectives of the workshop were to create an awareness among participants of the responsibility and role of the university in community and regional development; and to study the problems and obstacles to development in selected Asian countries.

Along with Prof. Calabia, the other Asian mentors invited to the workshop were Prof. Supermoko of the Faculty of Economics, Universities Gadja Mada in Indonesia; Prof. Yod-Intra of Chienmai University in Thailand; and Prof. Kim Gyung Chang of the College of Engineering, Yeungnam University in Korea.

Velmonte on Colombo Plan Fellowship

Prof. Lita S. Velmonte, IP faculty member, left March 26, 1972 for Australia on a Colombo Plan Fellowship. Prof. Velmonte will pursue a doctoral program in urban sociology at the University of Sydney.

Three Undergo Training in Japan

Currently undergoing training on Comprehensive Regional Development Planning at the United Nations Center for Regional Development in Nagoya, Japan, are Evangeline Esperanza, IPUP research associate, Ramon Barbon and Exsuan Dagbusan. Barbon and Dagbusan are instructors at the Mindanao State University in Marawi City. The training program started February 14, 1972 and will last until June 16, 1972.

IP GRADUATES

Twenty-two conferred degree

Twenty-two students from the Institute of Planning were conferred the Master in Environmental Planning (MEP) degree during the University commencement exercises on April 23, 1972. The graduates include: Alonto, Abdullah D.; Aveguetero, Victoriano O.; Barbon, Ramon M.; Corotan, Fe N.; Corton, Filomeno L.; Cruz, Rufino S.; Dagbusan, Exsuan T.; Golveo, Alfredo S. Jr., Griño, Mariano U., Kimpo, Eva A.; Lucman, Alexander M.; Magno, Corazon P.; Mascareñas, Benjamin N.; Mendoza, Rosendo T.; Narciso, Encarnacion G.; Pedrosa, Eduardo C.; Rabago, Jose R.; Ramiscal, Erwin F.; Raralio, Pedro M. Jr.; Sungwian, Gasemnetra; Tañamor, Eugenio; and Virgilio R. Ybanes.

Except for seven who were self-supporting, the other fifteen graduates had pursued the MEP program through scholarship grants from various sources.

Some MEP'70 graduates.

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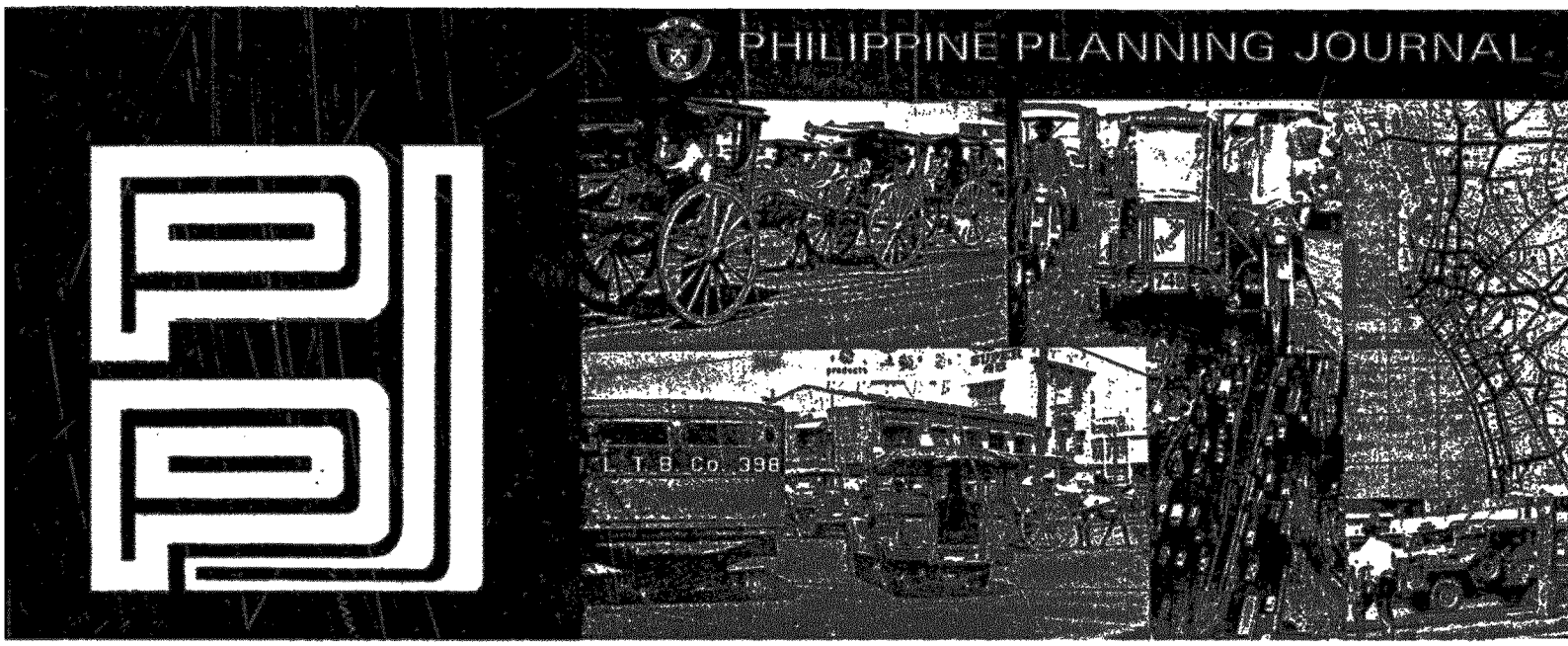
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