

# PHILIPPINE PLANNING JOURNAL

(Vol. VI, No. 2, April 1975)

**Board of Editors:** 

Gerardo S. Calabia Benjamin V. Cariño Cynthia D. Turingan Zenaida C. de Guzman Nelia S. Custodio

**Issue Editor:** 

Gerardo S. Calabia

**Managing Editor:** 

Adrienne A. Agpalza

**Editorial Assistant:** 

Ernesto M. Serote

Art and Photo Editor:

Marcelino T. Mañozca

Official journal of the Institute of Environmental Planning, University of the Philippines System. Published semi-annually in October and April. Views and opinions expressed in signed articles are those of the authors and do not necessarily reflect those of the UP-IEP. Address all communications to the MANAGING EDITOR, Philippine Planning Journal, Institute of Environmental Planning, University of the Philippines System, Diliman, Quezon City 3004. Telephone Nos. 97-16-37 and 97-60-61 local 248, 292 and 638. Subscription Rates: Domestic: P6.00 Foreign : US\$4.00

# **Table of Contents**

1 Education for Planners: The Graduate Program of the Institute of Environmental Planning

Benjamin V. Cariño

11 A Survey of the Graduates of the Master in Environmental Planning Course: 1968 to 1975

Asteya M. Santiago

27 Social Indicators and Standards for Housing

Tapan K. Majumdar

35 Transport and Energy Conservation: The Issue on Public vs. Private Transportation

Teodoro T. Encarnacion

- 44 Book Review
- 46 Book Notes
- 48 Planning News

.

### IN THIS ISSUE . . .

A prospective planner gains entry into the only planning Institute in the country by passing a competitive examination.

Then at the end of his affair with the Institute, he goes through another examination, this time the more rigorous and exacting comprehensive examination, both written and oral.

Of course, examinations are not all that it takes to make planners. The IEP curriculum is continually being evaluated and revised to make it more relevant to the country's needs. (See lead article.)

And one thing is certain: the IEP graduate is one of the most in-demand professionals in the country today, as Prof. Santiago's survey unravels.

Two other burning issues of the day, housing standards and energy conservation, are discussed by two experts on the subjects -- all in this issue of the JOUR-NAL.



## EDUCATION FOR PLANNERS

# The Graduate Program

# of the Institute

# of Environmental Planning

## BENJAMIN V. CARIÑO

#### Introduction

Although the need to plan for larger human settlements has long been recognized in the Philippines<sup>1</sup> the urgency for urban and regional planning has not received much attention until fairly recently. Indeed, planning as practiced in the past has been mainly characterized by an overemphasis on the formulation of national goals and targets which are expressed largely in aggregative terms and give little explicit consideration to the spatial and locational relationships inherent in the development process. Previous national socio-economic plans, for example, are often clear in defining the sectoral components of investment requirements (in terms, for instance, of the percentage contribution of such sectors of the economy as agriculture, commerce and industry, etc. to the GNP) but generally silent on where, geographically, such investments should be made in order to maximize the achievement of predetermined goals. It is only under the current Four-Year Development Plan (FY 1974-77),<sup>2</sup> with the adoption of the so-called "integrated area approach", where the spatial dimension of investment requirements is given explicit consideration.

<sup>&</sup>lt;sup>1</sup>The Spanish colonial administrators, for instance, had prepared a master plan for the City of Manila as early as 1750. Daniel H. Burnham, the noted American city planner, was also commissioned in 1905 to prepare another master plan for Manila. Shortly after the Japanese occupation of the country, one of the new agencies created was the National Urban Planning Commission the main function of which was the reconstruction of the cities and towns destroyed during the war period.

<sup>&</sup>lt;sup>2</sup>National Economic and Development Authority (Manila: 1972). See particularly Regional Development Projects: Supplement to the Four-Year Development Plan FY 1974-77, National Economic and Development Authority (Manila, 1973).

Quite a few scholars have attributed the lack of emphasis on urban and regional planning in the past to the essentially agrarian character of the Philippine economy. <sup>3</sup> It is pointed out, for instance, that as late as 1960 less than 30 percent of the country's population were classified as urban dwellers.<sup>4</sup> The latest census figures also show that a majority of the total labor force of the country still depend on farming as a primary source of livelihood.

Most scholars are agreed on the fact, however, that urban areas will grow surely and rapidly. In the Philippines, as elsewhere, the urban population is increasing at a much faster rate (in excess of four percent) than the country as a whole, and this has been attributed to massive rural-to-urban migration of people. 5 For instance, the number of cities and towns having a population of 100,000 or more increased from six in 1948 to 19 in 1970. Moreover, the percentage of the population classified as urban rose from 26.4 percent in 1948 to 32 percent in 1970.<sup>6</sup> This rapid growth of urban areas has in fact been cited as also the main reason behind such urban difficulties as inadequate government services, unemployment and low incomes, the congestion and slums, and the generally less comfortable and satisfactory physical conditions in urban areas, particularly the urban core.

<sup>3</sup>See, for example, Leandro A. Viloria, "Regional Physical Planning Within the Framework of Overall Development: The Philippine Case, " (typescript), p. 5.

<sup>4</sup>From the Philippine Census of Population, 1960.

<sup>5</sup>Quite a number of studies have been made on the phenomenon of rural-to-urban migration in the Philippines. See, for instance, Aprodicio A. Laquian, "Coping with Internal Migration in the Philippines," *Solidarity*, Vol. VIII, No. 1 (July, 1973); Romeo B. Ocampo, "Governmental and Non-Governmental Programs Influencing Migration in the Philippines, "Report A-3, U.P. Intermet Project, 1972 (typescript); Elvira M. Pascual, *Population Redistribution in the Philippines* (Manila: Population Institute, University of the Philippines, 1966); Imelda A. Zosa, "Movers and Migrants of Bicol," a report prepared for the Cooperative Regional Development Project, National Development Research Center, University of the Philippines, (1973); and Benjamin V. Cariño, "Managing Migration Streams and Population Redistribution: Alternative Strategies and Research Needs," a paper prepared for the 'Experts' Meeting on Philippine Population Research, held at the Population Center Foundation Building from 10-12 October, 1974.

<sup>6</sup>The figures cited here are taken from the Philippine Census of Population for 1948 and 1970.

It is in the light of this situation that the growing interest in urban and regional planning as a means by which solutions to physical, social and economic problems may be achieved, becomes of fundamental significance. In recent years, it has been increasingly recognized that urban and regional planning can play a major role in improving patterns of urban and rural settlements as well as the spatial organization of human environment; in enhancing people participation in the planning and decision-making processes; in adapting national policies to regionally differentiated conditions; in harmonizing priorities with local resources and aspirations; and in making opportunities more tangible and accessible to the population in all parts of the country.

Much more importantly, urban and regional planning has been conceived as a tool for dealing with the dualistic nature of the Philippine economy, i. e., to reduce socio-economic disparities and inequalities among regions which have resulted from self-reinforcing patterns of economic growth and which tend to concentrate resources in certain regions, and in the hands of a select few in the society. 7 The approach is thus expected to rectify a weakness in the planning system of the country which has been characterized in the past by the unfettered pursuit of higher GNP's and income levels even with the explicit realization that this would bring about greater concentration of wealth. Urban and regional planning as an approach to development may thus be seen as a response of the government to the problem of redistributing the fruits of development among regions and, hopefully, among groups of people.<sup>8</sup>

Success in this regard would depend upon the availability of qualified urban and regional plan-

<sup>7</sup>This is discussed more lengthily in Benjamin V. Cariño, "Development and Technical Problems in Integrative Regional Planning: The Bicol Case" a paper presented at the SEADAG Seminar on "Imperatives and Models for Integrative Area Planning and the Rural Poor" held at the Hyatt Hotel, Manila, Philippines, August 18-20, 1975.

<sup>8</sup>It may be useful to point out here that the redistribution of development benefits among regions may not necessarily lead to redistribution of the same distinction between "place prosperity" and "people prosperity" i. e., investments in development projects in a given region may not necessarily result in the enrichment of that region, since the multiplier effects of the development projects may take place elsewhere.

ners. In the words of one author, "... the ultimate success of any plan for development may be attributed to the vision and capabilities of the people who have conceived it. Indeed, human resources development is at once a cause and an effect of economic development."  $^9$ 

The establishment of the Institute of Environmental Planning (formerly Institute of Planning) of the University of the Philippines was largely a product of the increasing recognition of urban and regional problems and trends, and of the realization that planning is important in either assisting or redirecting these trends. It is also a response to the need for capable urban and regional planners whose training and experience are appropriate to the conditions existing in developing countries like the Philippines.

In this paper, the experience of the Institute of Environmental Planning in instituting and developing an educational system for planners, including the reforms and revisions which were subsequently introduced will be traced and examined. In the process, the rationale and the philosophy of the system, as well as its strengths and weaknesses in responding to the need for the creation of a pool of qualified planners will be highlighted. Areas for future reforms and curricular revisions will then be laid out as the Institute enters its second decade of operation.

#### The Establishment of the Institute

As the urgency for urban and regional planning was not felt until recently, genuine interest in the establishment of a center for urban and regional planning is also of recent origin in the Philippines.<sup>10</sup> The first attempt at the creation of a center for urban and regional planning may actually be associated with those who were concerned mostly with the housing problem, which is perhaps a reflection of the fact that urban problems are clearly manifested in the area of housing. In particular, the ideas of Morris Juppenlatz, a U.N. housing expert who was assigned to the Philippines from 1962 to 1966, found expression in a bill which would establish a National Urban Planning, Housing and Financina Authority. Introduced in 1964 in the now defunct Philippine Congress, the bill envisioned the creation within the proposed Authority of a Philippine Center for Urban Studies. As conceived, the Center would perform research and training functions in urban and regional development, and was to be affiliated with the University of the Philippines. Unfortunately, however, the Philippine Congress failed to enact this bill.

In the early sixties, the staff of the then Institute (now College) of Public Administration of the University of the Philippines expressed specific interest in the establishment of a center for urban studies. Such an interest was a natural outgrowth of the Institute's basic functions of teaching, research, in-service training and consulting services. Moreover, the Director of the Institute at that time, Carlos P. Ramos, was very much concerned with government affairs and metropolitan problems in view of his previous experience as management consultant to the City of Manila.

The idea of establishing a center for urban studies became even more attractive when in 1963 the same Institute received a grant from the Ford Foundation to undertake a research project on the problems and operations of local governments and their role in national development.<sup>11</sup> In March of the same year, Carlos P. Romulo, then president of the University of the Philippines, wrote to the Chairman of the National Economic Council (now the National Economic and Development Authority) requesting U.N. assistance for the establishment of a center for urban and regional planning within the University's Institute of Public Administration. This led to the assignment of two Australian planners, Prof. Dennis Winston of Sydney University and later W.G. Faithfull under the United Nations Technical Assistance Board (UNTAB) program, who were given the task of assisting the Philippine Govern-

<sup>&</sup>lt;sup>9</sup>Leandro A. Viloria, "Education for Planning: The Special Circumstances in Low Income Countries," *Philippine Planning Journal*, Volume 1, No. 2 (April 1970), p. 1.

<sup>&</sup>lt;sup>10</sup>For a more lengthy discussion on the historical development of the Institute, see Leandro A. Viloria, "Establishing an Educational System for Urban and Regional Planners in the Philippines," a paper prepared for a Meeting of Project Managers in the Housing, Building and Planning Field in Asia and the Middle East held in Singapore in February, 1969 (typescript).

<sup>&</sup>lt;sup>11</sup>It may be mentioned here, parenthetically, that this research project eventually led to the creation of the Local Government Center (LGC) of the College of Public Administration, University of the Philippines. Presently the LGC continues to perform research, training and consultancy functions on matters pertaining to the operations of local governments.

ment in drafting a proposal for a United Nations Special Fund assistance for the establishment of such a center.

In the meantime, the Philippine Congress approved Republic Act 4341 in its 1965 session. This Act declared the national policy of strengthening and assisting government agencies and private organizations in the formulation of comprehensive plans and in the solution of their development problems. The Act also specifically authorized the University of the Philippines to establish an Institute of Planning,<sup>12</sup> so as to make "available a pool of capable professional urban and regional planners to assist in the achievement of this policy." <sup>13</sup>

Accordingly, the Board of Regents of the University of the Philippines established the Institute of Planning (now the Institute of Environmental Planning) in October 1965 and gave it the following functions and responsibilities:

- Conducting graduate training courses for persons with suitable basic qualifications to produce professional planners capable of assuming senior positions in all sectors of the community;
- Conducting short training courses, seminars and workshops in planning for interested groups coming from government and the private sector;
- Conducting research which would contribute to the increase of knowledge or the solution of problems concerning comprehensive development with particular emphasis on patterns of settlement and environmental planning;
- Preparing and publishing informational and educational materials, texts, and training aids oriented to local needs;
- 5. Providing consultant advice and techni-

<sup>12</sup>The change of designation from a center for urban affairs to an Institute of Planning is significant since the latter rightly implies that the Institute is concerned with the development problems of both urban and rural areas. Early this year, by a resolution of the Board of Regents, the Institute was renamed the Institute of Environmental Planning. It is pointed out that the new name is more descriptive of the title of the degree the Master of Environmental Planning degree) which the Institute was offering at that time.

<sup>13</sup>Section 2 of Republic Act 4341.

cal assistance to requesting agencies and organizations;

 Establishing a reference service of central repository of documents, books, journals, reports, plans, research data, bibliographies and other reading materials for the use of students, public officials and other authorized persons.

As a means of strengthening its capability in carrying out its assigned task, staff members of the Institute began to leave for abroad in early 1966 for advanced training in urban and regional planning under the Colombo Plan fellowship program. This year also marked the assignment of a UN Resident Representative in the country who showed much interest in the field of urban and regional planning. For this reason, the request for UN assistance to the Institute was revived later in the year and sometime in 1967. the United Nations Development Program (UNDP) assigned an expert to aid once again the Philippine Government in formulating an acceptable draft of request for UN assistance. In a meeting of the UN Special Fund Executive Board in June 1968, the UNDP Institute of Planning project was approved. The project provided for assistance to the Institute in the form of fellowships, expert service and equipment. Phase I of this program of assistance covered the period from 1968 to 1972 and Phase II, which started in 1972, is due to terminate in December 1975. The Institute hopes to extend this program of assistance for another four years.

#### The Graduate Education Program

#### The Original MEP Curriculum

Initially, the teaching function of the Institute was performed within the regular academic program of the College of Public Administration where faculty members of the Institute handled for the college graduate courses dealing with planning concepts and techniques. However, with the return of some staff members from graduate training abroad late in 1967 and early in 1968, the full-fledged graduate education program was started in the school year 1968-69.

As stated earlier, the original graduate education program of the Institute led to the degree of Master in Environmental Planning (MEP). Consistent with the mandate of the Institute, this program has been conceived to create a pool of professional planners whose training and experience will fit the needs and demands of a developing country like the Philippines. Implicit in this statement of purpose is the assumption that education obtained from planning schools in western countries may not be totally appropriate and suitable to the problems and needs of less developed countries like the Philippines.

Offered on a trimestral basis, the MEP program itself consisted of thirty-six (36) units of course work of which thirty (30) units were Environmental Planning courses and six (6) units were elective courses. Elective subjects may be taken in other colleges and units of the University offering courses relevant to Environmental Planning. The program offered both a full-time one-year course and a part-time twoyear course. The full-time program consisted of three trimesters of course work, while the part-time course required six trimesters to finish.

The MEP courses and their brief descriptions are the following:

Environmental Planning 201: INTRODUC-TION TO ENVIRONMENTAL PLANNING. Theories and concepts in environmental planning, particularly in developing countries.

Credit: 3 units

Environmental Planning 208: STUDIO WORK I.

Credit: 3 units

Environmental Planning 209: STUDIO WORK II.

Credit: 3 units

Environmental Planning 229: SOCIAL ASPECTS OF ENVIRONMENTAL PLANNING. Social institutions and social changes which affect environmental planning.

Environmental Planning 239: ECONOMIC ASPECTS OF ENVIRONMENTAL PLAN-NING. Influence of economic forces on the development of human settlements. Selected economic theories and concepts for environmental planning.

Credit: 3 units

Environmental Planning 256: PHYSICAL ASPECTS OF ENVIRONMENTAL PLAN-NING. Ecological, engineering and esthetic aspects of environmental planning and design. Credit: 3 units

Environmental Planning 286: RESOURCE ALLOCATION IN ENVIRONMENTAL PLAN-NING. Concepts and techniques for optimal allocation of resources in plan preparation, implementation, review and modification.

Credit: 3 units

Environmental Planning 289: POLITICS AND ENVIRONMENTAL PLANNING. Environmental Planning and the political administrative processes.

Credit: 3 units

Environmental Planning 290: SEMINAR ON PHILIPPINE ENVIRONMENTAL PLAN-NING.

Credit: 3 units

Environmental Planning 291: SPECIAL PROBLEMS.

Credit: 3 units

Environmental Planning 292: SUPER-VISED ENVIRONMENTAL PLANNING PRACTICE. Internship of 240 hours in an appropriate agency for students with no experience in planning.

Credit: 3 units

Environmental Planning 298: RESEARCH METHODS. Basic research and survey methods in environmental planning.

Credit: 3 units

Environmental Planning 299: ADVANCED RESEARCH METHODS. Communication and decision-making models; quantitative methods in spatial analysis as applied to environmental planning.

Credit: 3 units

The curriculum described above was meant to stress the comprehensive nature of planning and covered all phases of the planning activity. It was also supposed to have outlined a course of study " which is not confined to a single aspect of the planning process (economic, social or physical) nor to a single level of planning administration but to a more comprehensive and integrated study of planning covering not only the physical, social and economic aspects, but also as it is carried on in the various levels of government: national, regional, and local." <sup>14</sup>

Although graduates of universities, colleges and schools of recognized standing who held bachelor's degrees in planning-related fields are all eligible for admission,<sup>15</sup> the MEP program as designed had been primarily intended for people who are already in the government service and who, in one way or another, are engaged in some planning activity. In this connection, no less than the Office of the President of the Philippines, through Memorandum Circular No. 156 dated February 9, 1968, had authorized and urged all government agéncies and government-owned or controlled corporations to utilize savings from any item or items of their appropriation to cover the fees, transportation and other necessary expenses of officials and employees who have the basic qualifications to undergo training in the Institute.

In order to be eligible for the MEP degree the students must have a weighted average of "2" in all courses taken in the MEP curriculum, as well as pass a comprehensive examination (both written and oral). Failure to pass the comprehensive examination for the second time shall bar the student permanently from obtaining the degree.

#### Curricular Revisons and the MURP Program

As early as 1971, a number of questions were already being raised in regard to the adequacy of the MEP curriculum for training prospective planners of the country. This concern may be traced to a trend which started in the school-year 1969-70, namely: the changing composition of the student population towards an increasing proportion of fresh graduates and self-supporting students. As the MEP program has been primarily designed for students who already have some experience in planning, a need to strengthen the program in order to cope with this new trend was felt.

To remedy the situation, a new course on Supervised Environmental Planning Practice The increasing proportion of fresh graduates and self-supporting students enrolling in the Institute gave rise to the need to strengthen the program.

(E.P. 292) involving an internship of 240 hours in an appropriate agency was instituted. Students who have inadequate background and experience in planning were asked to take this course as an additional requirement for graduation. Moreover, more selective admission requirements which gave priority to students with "experience in planning and acceptable related fields" <sup>16</sup> were also adopted.

Despite these improvements, the MEP curriculum was still found inadequate by many. For this reason, a faculty committee within the Institute was formed early in 1974 with a view to introducing changes and improvements in the MEP curriculum. Within a month's time, the committee came out with a draft proposal which recommended a full revision of the MEP program and the institution of a new Master in Urban and Regional Planning degree (MURP).

#### Rationale for the Change

Several reasons were cited by the Committee for the need to fully revise the MEP curriculum. It was felt, first of all, that an internship program was not sufficient to provide scope for the needs of fresh college graduates with various academic backgrounds who may not wish to practice in a government office but to engage in research and teaching. As mentioned earlier, while a majority of the Institute's students in the early years were mostly architects and engineers who were already working in the government, there has been an increase in recent years in the proportion of fresh graduates with backgrounds in the social sciences.

<sup>&</sup>lt;sup>14</sup>From an official brochure of the Institute on its graduate education program.

<sup>15</sup>As defined, "planning related fields" include architecture, business administration, economics, engineering, geography, law, public administration, the social sciences, statistics, surveying and environmental health.

<sup>&</sup>lt;sup>16</sup>From an official brochure of the Institute of Environmental Planning. As it was difficult to operationalize experience in planning and acceptable related fields," meaning of this criterion was actually left to the interpretation of a duly constituted admissions committee.

The revised program seeks to answer the great demand for urban and regional planners arising from the government's regional approach to national development.

and the second second

At the same time, the Committee took cognizance of the fact that the main thrust of the present administration's: program of development is urban and regional planning. The Philippine government has in fact officially adopted the regional approach to development with the delineation of the country into twelve administrative regions, and the organization of the Regional Development Councils which are to govern these regions.<sup>17</sup> This development has given rise to a great and urgent demand for urban and regional planners. The revised program seeks to answer this demand by shifting its offerings from environmental planning to urban and regional planning in order to ensure that the needed human resources will be available.

The Committee also made the observation that the MEP curriculum is not sufficiently substantial and analytical. A gap has been felt to exist between the training received by the students and the actual demands of planning practice. The validity of this observation is corroborated by a report of a U.N. Mission which recently surveyed the progress and accomplishments of UNDP-assisted projects in the Philippines. Such a report called attention to the fact that the improvement of the Institute's academic program will require a re-structuring of the MEP curriculum in order to provide field options to students, and an extension from oneyear to a two-year program.

Much more importantly, the committee noted that while the MEP curriculum has been precisely aimed at a "comprehensive" understanding of the planning process, the very structure of the curriculum is not contributory to comprehensiveness. It will be recalled that the MEP program required the student to take up independent courses on the various aspects (social, economic, physical, etc.) of planning. This has given rise to a system in which planning and development phenomena are treated and understood not in their totality, but only partially and "aspectually." 18 The effect of such an aspectual approach has in fact been the creation of inferiority and superiority complexes among staffs and students depending upon their "disciplinary" backgrounds. Sociology graduates, for instance, would tend to have an attitude of superiority over the other students as far as the social aspects course was concerned. In turn, and because of the very structure of the curriculum and the courses, faculty members have found it constantly difficult to break away from their narrow fields of specialization.

In view of the foregoing considerations, the draft proposal of the committee for a new MURP program was formally presented to the faculty of the Institute for consideration and approval in a faculty seminar held at the University of the Philippines at Los Baños (UPLB) on September 14-15, 1975. In that seminar, the proposal underwent further changes and revisions. Following a few more discussions and consultations with the faculty of other related units and after several levels of decision-making in the University, the new program was finally approved by the Board of Regents in its May 1975 meeting.

#### Major Features

Designed to deal with the weaknesses of the MEP curriculum, the MURP program has the following major features:

 Rather than approaching the subject of planning aspectually, the new curriculum is more problem-oriented, and focuses on the analysis and understanding of development issues and problems (regardless of whether they are social, economic, physical, etc.) as well as on the improvement of the students' working knowledge of planning theories and techniques which aid in the understanding of such issues and problems.

<sup>&</sup>lt;sup>17</sup>For a good discussion of the regional delineation scheme of the country, see Raul P. de Guzman, et, al., "An Evaluation of the Regional Delineation Scheme of the Philippines," a report prepared for the Bicol Regional Development Project of the National Development Research Center, University of the Philippines, 1973. This project was funded through a grant from the International Development Research Center of Ottawa, Canada.

<sup>&</sup>lt;sup>18</sup>The term was first used by Raymond Apthorpe in a short critique of the MEP curriculum which was written for a faculty seminar of the Institute held at the Antipolo Hotel on May 30 to June 1, 1973.

- 2. The new program entails a shift from the trimestral to the semestral system in view of the observation made that the trimestral system does not provide enough time for students to adequately fulfill course requirements. Along with the greater number of courses required for the completion of the degree, the shift to the semestral system has lengthened the curriculum from a one-year to a two-year program.
- 3. Unlike the MEP curriculum, the new program provides the students with some options. First of all, the student is given an option between a thesis (Plan A) and a non-thesis (Plan B) program. Although a sharp distinction between the two programs is difficult to make, the provision of this option has been aimed at satisfying the needs of both the student who may wish to go into planning practice either in the government or the private sector, and the student who may desire to go into research and teaching. Furthermore, the student is also given a chance to specialize in some field of planning activity following the completion of a number of core subjects.

Under Plan A, the student is required to complete thirty (30) units of formal courses and six (6) units for thesis writing. Of the thirty units of formal courses, eighteen shall be in the following core subjects:

Planning 201: FUNDAMENTALS AND PRACTICE OF PLANNING. Theories and concepts in urban and regional planning. Credit: 3 units.

Planning 205: DYNAMICS OF URBAN-RURAL DEVELOPMENT. Planning and development of human settlements. Credit: 3 units

Planning 221: LAND USE PLANNING. Policies, land-use planning and control measures for land development. Credit: 3 units.

Planning 225: INSTRUMENTS FOR PLAN IMPLEMENTATION. Economic, fiscal, legal and other tools for plan implementation. Credit: 3 units.

Planning 297: TECHNIQUES AND STRA-TEGIES FOR URBAN AND REGIONAL PLANNING. Strategies and methods for analysis of urban and regional systems. Credit: 3 units.

Planning 299: RESEARCH METHODS IN PLANNING. Major research methods and concepts applicable to planning. Credit: 3 units.

In addition to these core subjects, the student will also be required to complete six (6) units (three of which shall be a workshop course) in one of the following fields of specialization: 1) Planning for Housing; 2) Transportation Planning; 3) Planning Infrastructure Support; and 4) Regional Location Theory. The remaining six (6) units shall consist of electives in planning.

To qualify for graduation, the student must pass a final oral examination of the thesis (which, preferably, should be related to his field of specialization) and a written examination on the entire field of urban and regional planning. The oral examination on the thesis shall be conducted by a duly constituted committee which should include at least one member from another unit of the University or from outside the University.

Under Plan B, no master's thesis is required. Instead, the student is required to complete forty-two (42) graduate units distributed as follows: eighteen units of core subjects under the Plan A program; nine (9) units in one of the fields of specialization enumerated above; six (6) units of electives in planning and other related social sciences; and, in lieu of the thesis, an additional nine (9) units to be chosen from among the following, with Planning Law and Administration as a required course:

Planning 223: PLANNING LAW AND ADMINISTRATION. Planning legislation and organization. Credit: 3 units

Planning 281: SPECIAL PROBLEMS IN URBAN PLANNING | Credit: 3 units.

Planning 285: SPECIAL PROBLEMS IN REGIONAL PLANNING I. Credit: 3 units.

Planning 282: SPECIAL PROBLEMS IN URBAN PLANNING II. Credit: 3 units.

Planning 286: SPECIAL PROBLEMS IN REGIONAL PLANNING II. Credit: 3 units.

To be entitled to the degree, Plan B students must pass a written and an oral comprehensive examination to be administered by a duly constituted faculty committee.

#### Towards a Ph.D. Program

With the very enthusiastic response of students to the new MURP program, the Institute now looks forward to expanding its graduate program and has taken the initiative in developing a curriculum for a doctoral degree. Hopefully, this degree will be offered on a consortium basis with other units of the University. The degree to be granted could be one in Public Policy which, as presently envisioned, would be a thoroughly interdisciplinary social science program in Philippine development planning studies and would thus need to be a cooperative venture among such units of the University as the College of Public Administration, the School of Economics, the Institute of Social Work and Community Development, the College of Engineering, the College of Architecture and such other related units.

As conceived, the Ph.D. curriculum would essentially consist of common core subjects which every doctoral student would be required to pass. The teaching of these core subjects shall be a joint effort of all cooperating units in the University. The doctoral candidate would then proceed, by means of a doctoral dissertation and additional courses as necessary, to specialize in any one of a number of fields as may be offered by the participating units, with urban and regional planning as one of the major areas of specialization to be offered by the Institute. Clearly, the institution and implementation of this program would require considerable concerted action at the outset which no one unit alone could provide.

The Institute itself has to strengthen its faculty resources, among other things, to be able to contribute effectively to the achievement of this objective. In addition to the recruitment of new faculty, the Institute will thus have to continue with its program of faculty development through a system of continuing education either through advanced training or formal course work. It is for this reason that the Institute is now seeking the extension of its UNDP assistance program which would include fellowships to enable faculty members to pursue advanced degrees. Related to the ongoing preparation for the doctoral degree is of course the continuing review of the current MURP program with a view to further improving its structure and contents.

#### An Observation on the Teaching Process

If one is to judge the importance of the graduate offering of the Institute on the basis of the demand for its graduates, then clearly, this is one instance of a university graduate program that is relevant to the development needs and problems of the country today. Many graduates of the Institute now hold key positions in such government agencies and institutions as the National Economic and Development Authority (NEDA), the Planning and Project Development Office (PPDO) of the Department of Public Works, Transportation and Communications (DPWTC), the Development Academy of the Philippines (DAP) and in various regional and local planning boards and offices.

However, the fact that the graduates of the Institute have been very well placed in government offices is all the more reason for the faculty and staff of the Institute to ensure that the Institute's programs are truly attuned to the development and planning needs of the country. And it seems clear that the path lies not only in the redesigning of curricula but also in the effectiveness of the teaching process itself. In this connection, there is one problem that characterizes the teaching process which, by its very nature, is at times difficult to recognize and overcome. It may be apt to conclude this short paper with a brief discussion of this problem in the hope that much more conscious. efforts will be exerted in dealing with it, and so to enhance further the relevance of the educational system for planners in the Philippines.

This problem has to do with the observation that the teaching process is, to a large extent, still Western-oriented. Such a problem is particularly significant for the planning field since it is directly concerned with the formulation of policies which are designed to deal with the development problems of the country. Indeed, it is of paramount importance that planning education must produce professionals whose training and experience are appropriate to the needs of the country.

While a well-designed curriculum will no doubt contribute towards this end, in the ultimate analysis it is the specific contents, focus and direction of courses, and the materials used in them that make for a truly Filipino education. In the field of planning, the problem often stems from the use of Western experience as point of departure. This may be attributed partly to the dearth of local materials, and partly to the essentially Western education of many faculty members. Thus, emphasis is sometimes placed upon theories, models and concepts which are derived from characteristics which are salient to Western and more advanced countries. These models and theories suggest the analysis of development factors which, although major in the Western systems, may only be of marginal importance in developing societies like the Philippines.

Courses must, therefore, be consciously oriented to national culture and needs through a meticulous selection of reading materials, greater emphasis on local problems and issues and a sharper focus on specific constraints and obstacles in the practice of the planning profession in the Philippines. It has been observed by many graduates of the MEP program, for instance, that the curriculum is not "practical" enough in that certain planning models which are taken up in class often require data which are not available in the Philippines. The same observation can conceivably be made of the MURP curriculum if not enough care is taken in designing the courses.

Should foreign models and concepts be introduced in planning courses (as it is sometimes inevitable), painstaking effort must be made at pointing out the weaknesses of such models and concepts when applied and related to Philippine conditions. It has been suggested. in this regard, that due to the poor quality and dearth of planning data in the Philippines, as well as the inadequacy of financial resources, planning instruction should perhaps place greater stress on the preparation of broad outline and framework plans, rather than on the formulation of detailed and precise plans which require years of surveys and research and which are sometimes overtaken by events and no sooner terminated.

At the same time, planning must not overly stress the technical activity which is utlimately concerned with the production of "plans." Overemphasis on this aspect could likewise remove the planning activity far from reality, and the awareness of the student of pressing development problems and issues, as well as of the specific obstacles and opportunities for planning and development in the country, is similarly not enhanced.



### <u>A SURVEY</u>

The Graduates of the Master in Environmental Planning Course: 1968–1975\*

### ASTEYA M. SANTIAGO

#### Introduction

In June 1968, the Institute of Planning, now Institute of Environmental Planning of the University of the Philippines inaugurated its oneyear masteral program in Environmental Planning. Its first enrollees were two civil engineers who later on were joined by 19 others; all of them received their diploma in April 1969.<sup>1</sup> Since then, 86 other students have graduated from the program making a total of 107 graduates.

In January 1975, with the shift from the one-year Master in Environmental Planning

program to a two-year graduate course in Urban and Regional Planning almost certain,<sup>2</sup> the Institute, being the only academic institution offering a degree in planning in the whole country, decided it was opportune to take a survey of the graduates it has had so far. The objective was to find out where the graduates were presently employed (geograhically and sectorally, i.e., with the government or with the private sector) and to determine whether they were making use of their graduate training in planning in their jobs. More importantly, it looked into the actual contribution they were making in this particular field.

The survey which was the first of its kind undertaken by the Institute in the seven years of its program sought information on the nature of the tasks and functions performed by the graduates in their respective jobs and requested some feedback on how useful and relevant their degree is to the work they are presently engaged in. Related to this, the graduates were requested to offer some suggestions on how the graduate program could be made more

<sup>&</sup>lt;sup>1</sup>As early as the second semester of academic year 1967-1968, the Institute offered elective courses under the auspices of the College of Public Administration, U.P., prior to the introduction of the full program in the academic year 1968-1969. The first two enrollees took the elective courses first while the 19 others enrolled under the Master in Environmental Planning program.

<sup>&</sup>lt;sup>\*</sup>The author wishes to acknowledge the assistance extended by Mrs. Delia Alcalde and Miss Llena Buenvenida in the formulation of the questionnaire and in the organization of the data gathered.

<sup>&</sup>lt;sup>2</sup>For a detailed write-up on the shift in the graduate program of the Institute, refer to the article of Dr. Benjamin V. Cariño appearing in this same issue of the *Journal*.

relevant to the work that planners are undertaking so as to make their contribution to national development efforts more substantial and meaningful.

#### The Survey

The survey sought to cover the 107 graduates of the Institute as of January 1975 when the survey was undertaken. Only 104 questionnaires were actually delivered as the whereabouts of the three other graduates could not be traced.: Of the 104 respondents, 69 (66%) sent back their completed replies.

The questionnaire included 30 questions falling under the following broad headings: Personal Data and Information; Occupation: Recent, Past, and Present, including Work Plans for the Future; Fellowships, Seminars and other Post-MEP Training undergone; and Personal Observations on the Program.

The results of the survey are summarized in this paper in the hope that they would be useful not only in assessing the actual contribution being made by the professional planners but also in orienting the proposed new program to the felt needs and demands of the profession.

#### **Profile of the Graduates**

Based on a detailed examination of the characteristics of all the graduates of the Institute, a general profile of the typical graduate of each year was constructed. From these, some general characteristics of all the graduates were also put together. For this purpose, the 38 other students graduating in June 1975 were included. Furthermore, the profile covered all the 107 graduates and not only the 69 respondents since the needed information was available from the students' records on file in the Institute. This, it was thought, would present a more accurate composite portrait of the graduates of the Institute.

#### Sex of the Graduates

The Institute graduates were predominantly male. Of the total number of 145 graduates, 109 (68%) were males; 36 (31%) were females. The proportion of the female graduates to the male graduates ranged from one female to 12 males, at one extreme, to 20 females to 27

males, at the other, excluding the year when there were no female graduates at all. This was in the academic year 1969-1970 when all four graduates were males. The reason, it seems, for this lopsided proportion is that those attracted to the course were those with backgrounds in architecture and engineering, two professions which are basically male dominated. It was only in the later years of the program, more specifically during the academic years 1974 and 1975, when majority of the enrollees in the Institute came from the social sciences did the females begin to increase their proportion. They constituted 29% and 44% of the graduates of 1974 and 1975 respectively, compared to their being consistently under 20% of each class during the first five years of the program. Table 1 shows the proportion of females to the male graduates both in absolute numbers and in percentage.

#### Table 1

#### PROPORTION OF MALE TO FEMALE GRADUATES (in absolute number and in percentage)

Academic Year	N	/lale	F	Female	
	No.	Percent	No.	Percent	
1968 - 1969	18	85.71	3	14.29	21
1969 - 1970	4	100.00	0		4
1970 - 1971	20	83.33	4	16.67	24
1971 - 1972	14	82.35	3	17.65	17
1972 - 1973	12	92.31	1	7.69	13
1973 - 1974	14	73.68	5	26.32	19
1974 - 1975	27	57.44	20	42.55	47
TOTAL	109	75.17	36	24.83	145

#### Age Group of the Graduates

The graduates of the later years of the program were relatively younger than those of the earlier years of the Institute. Majority of the first graduates belonged to the age group 30 and above. For instance, of the 21 graduates during the first year of the program, 13 (64.28%) belonged to this age group. In the second year of the program, 100 percent (all four) of the graduates were in this age category. The proportion was reduced the next year but it still exceeded 50 percent (54 % or 13 out of 24 graduates).

Since the academic year 1971-1972 the enrollment has grown younger. Of the 17 graduates of the year, 11 (64.64%) were aged 29 and younger. This trend continued in the next three years of the program when eight out of 13 (61%), 15 out of 19 (79%), and 28 out of 47 (60%) were below 30 years of age. On the whole, the graduates of the Institute are relatively young. Of the total 145 graduates, more than half, 81 to be exact, were in the age category 29 and younger at the time of their graduation. Only seven of the total graduates were in the age group 50 and above; three in 1969, two in 1972 and one each in 1973 and 1974. It was only in 1974 when the Institute had a graduate belonging to the age level of 65 and above. He is so far the oldest graduate of the Institute. The youngest was aged 21.<sup>3</sup>

The difference between the average age of graduates during the early years of the program and that of the latter part is due to the fact that the first enrollees of the course were mostly government scholars sent by their respective agencies to pursue the program.<sup>4</sup>

The government officials and employees chosen were usually those already occupying middle level and comparatively high responsible positions. People in these positions would usually be in the age group 30 and above. Thus, for instance, of the first batch of 21 enrollees in the program, 18 (86%) were sent by different government and private offices.<sup>5</sup> Many of them were already holding responsible positions. These included the Vice-Chairman and

<sup>3</sup>It should be noted that, with very few exceptions, the youngest age for any Filipino to enter graduate school is 20. School age is seven, although some children manage to enter school at little less than seven years. Primary school takes six years to complete (in private schools, it is seven years). Secondary school consists of four years, and an average bachelor's degree is four years.

<sup>4</sup>Encouragement for government officials and employees to enroll in the program came from the issuance of a Memorandum Circular by the Office of the President of the Republic. This Circular urged all departments, agencies and subdivisions of the government, including government-owned and controlled corporations to sponsor qualified officers and employees to pursue the graduate and in-service training programs of the Institute. Their participation in the program was considered official business and as such, the expenses incurred by them were paid for by their respective agencies.

The Memorandum Circular dated February 9, 1968, was signed by then Executive Secretary Rafael Salas. It allowed expenses incurred by the government officials in their studies to be taken from available funds of the office or from their savings. The "scholarship" was quite generous, allowing for monthly stipends and book allowances. Executive Director of the Board of Technical Surveys and Maps. <sup>6</sup> Other enrollees were the Chief of the Technical Plans and Schedules Division, Office of the Secretary of the Department of Agriculture and Natural Resources and the urban and regional planner of the then central physical planning agency, the National Planning Commission. <sup>7</sup>

#### Marital Status of the Graduates

The difference in characteristics that existed between the graduates during the early years of the program and those who came during the second half also applies to their marital status. There appears to be a direct correlation between age group and marital status of the graduates. This was to be expected because the older the students were, the more likely that they would be married. Thus, there were relatively more married students during the first three years of the program than there were during the last four years.

In the first year of the program, more than half of the graduates (60%) were married. Those who enrolled in the second year of the program were all married and again, more than half of the graduates (58%) of the third year of the program were married. The trend started to change in 1971-1972 when the unmarried persons exceeded the number of the married (7 out of 13). This trend was reinforced in the next two years of the program when majority (57%) of the graduates belonged to the unmar-ried group: 11 out of 19 and 27 out of 47 in the academic years 1974 and 1975, respectively. The shift in this particular characteristic of the graduates is explained by the fact that since more and more younger people were aetting into the program, it is to be expected that most of them would be unmarried, having

<sup>6</sup>The Board of Technical Surveys and Maps (BTSM) was an agency of the government in charge of the coordination of different surveying and mapping activities of the government and the setting of standards for surveying and map making. Under the Integrated Reorganization Plan adopted by Presidential Decree No. 1 (September 22, 1972) the BTSM was abolished and its functions and applicable appropriations were transferred to the Bureau of Coast and Geodetic Survey.

<sup>7</sup>The National Planning Commission was also abolished in 1972 and its various functions redistributed to the Department of Public Works, Transportation and Communications and the Department of Local Government and Community Development. (Integrated Reorganization Plan, Lawin Publishing House, Inc., Manila, Philippines, 1973).

<sup>&</sup>lt;sup>5</sup>Only two of the 18 were sent by a private association. Both were sponsored by the World War II Veterans Association. All the others were sent by some of the major departments of the government.

#### AGE GROUPING OF MEP GRADUATES

	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	9 50 - 54	55 · 59	60 - 64	65 and above	Total
1968 - 1969	1	7	2	4	2	2		2	1		21
1969 - 1970				2	1	1					4
1970 - 1971	5	6	6	3	2	2					24
1971 - 1972	4	7	1	1	1	1	1	1			17
1972 - 1973	4	4		3		1	1				13
1973 - 1974	7	8		2	1					1	19
1974 - 1975	12	16	5	8	3	3					47
TOTAL	33	48	14	23	10	10	2	3	1	1	145

obtained their undergraduate degrees usually a year or two before actual entry into the graduate course.

On the whole however, the graduates of the Institute are equally divided between the married and the unmarried, as Table 3 will show.

#### Means of Support of the Graduates

In general, there is an equal proportion of graduates who were self-supporting and those who were on one form of fellowship grant or another.

In table 4, it will be seen that in four of the seven years of the program of the Institute there were more graduates who were supported by some form of fellowship. Only in three years of the program were there more self supporting students. This could be explained by the fact that as already mentioned, many of the first enrollees of the Institute were sent by their respective offices as scholars of their agencies.

During the first year of the program, 18 of the 21 enrollees were supported by the government agencies concerned. In the succeeding years, those who completed the program not as self-supporting students were on different kinds of fellowships, most of which were private grants. For instance, of those on fellowship in the academic year 1971, eight were Ford Foundation grantees.<sup>8</sup> Two had study privileges as children of American and Philippine veterans, and three were sponsored by the Fund for Assistance to Private Education (FAPE).<sup>9</sup>

In the fourth year of the program, again a different group came in, this time with more students who were on their own. Of the eight who were on fellowship, five were sent by the agencies where they were then employed, two were

#### Table 3

#### MARITAL STATUS OF MEP GRADUTES

	SI	NGLE	MA	MARRIED		
	No.	Percent	No.	Percent		
1968 - 1969	8	38.10	13	61.90	21	
1969 - 1970	0		4	100.00	4	
1970 - 1971	10	41.67	14	58.33	24	
1971 - 1972	9	52.94	8	47.06	17	
1972 • 1973	7	53.84	6	46.16	13	
1973 - 1974	11	57.89	8	42.11	19	
1974 - 1975	27	57.44	20	42.55	47	
	72	49.66	73	50.34	145	

<sup>9</sup>The FAPE is a private organization which offers fellowhip grants to deserving faculty members of private colleges and universities in the Philippines. Applications for these grants are coursed through the colleges and universities concerned.

<sup>&</sup>lt;sup>8</sup>Six were on a combined Ford Foundation - Mindanao State University Fellowship and two were on a combined Ford Foundation-Central Philippine University Fellowship.

	ON FELLOWSHIP/GRANTS Government Foreign							Oyerall Total of							
	Self-	Supporting		tional		ocal	Pri	ivate*		ernment	0	thers*	* Ti	otal	Graduates
1968 - 1969	3	14.28	14	66.0	2	9.5					2	9.5	18	85.72	21
1969 - 1970			3	75.0	1	25.0							4	100.00	4
1970 - 1971	7	29.17	3	12.5	1	4.1	11	45.8			2	8.4	17	70.83	24
1971 - 1972	9	52.94	4	23.5	1	5.9	2	11.8			1	5.9	8	47.06	17
1972 - 1973	5	38.46	5	38.7			3	23.1					8	61.54	13
1973 - 1974	12	63.16	4	21.0			3	15.8					7	36,84	19
1974 - 1975	36	76.60	2	4.3	7	14.9	1	2.1	1	2.1			11	23.40	47
TOTAL	72	49.66	35	24.1	12	8.3	20	13.8	1	.6	5	3.4	73	50.34	145

#### MEANS OF SUPPORT OF MEP GRADUATES

\*For purposes of classification, "private grants" is used here to refer to those offered by universities.

\*\*"Others" include the Board of Trustees of World War II Veterans, United States Veterans Administration and the Philippine Veterans Administration.

given grants by the University of the Philippines <sup>10</sup> and one was on a study privilege under the U.S. Veterans Administration.

#### Professional Background

The first two enrollees of the program were both civil engineers. In the next six years, engineers and architects cumulatively continued to dominate the multi-disciplinary group that enrolled in the Institute. Together, they constituted almost 50 percent of the total graduates of the Institute, that is, out of 145 graduates, 36 were architects and 34 were engineers. This is not surprising since architecture and engineering have been the traditional background courses which were considered as providing the most appropriate preparation for the

<sup>10</sup>One secured a grant from the U.P. Endowment Foundation based on high academic qualifications and on financial need, while the other was the recipient of the Institute of Planning Fellowship to Filipino students. To qualify, one has to display high academic performance and must also be financially deserving, all qualifications being equal. Since ten, the IEP has sponsored five other fellows for the following years: three for AY 1973, and two for AY 1974. planning course.<sup>11</sup> Table 5 shows the various disciplines from which the graduates of the Institute came.

Graduates of Bachelors of Arts with varied areas of specialization constituted the second biggest number of enrollees in the program, compared to the architects and engineers taken together. Actually, however, where the engineers and architects are considered separately, the A.B. holders constitute the biggest group of graduates of the program. While forming a small minority in the first few years, they began to grow in number in the last three years of the program. This had consistently increased so that in the last four years of the program, they comprised the biggest group of enrollees.

Similarly, graduates of business administration with areas of specialization in Business Management, Commerce, and Economics, constituted the third biggest group of graduates

<sup>&</sup>lt;sup>11</sup>The American Institute of Planners in a publication in 1970 reported that until the last decade or so, a large proportion of the people going into planning were trained in architecture and engineering. Since then, according to the article, a growing share had its undergraduate preparation in the social sciences, particularly political science, sociology and economics. (The Challenge of Urban Planning, 1970, 4p).

	AB Major in			Business			
	Various Fields	Architecture	Engineering	Administration	LLB	BSE	Total
1968 - 1969	1	7	9 <sup>a</sup>	1	3		21
1969 - 1970	2	1		1		1	5
1970 - 1971	4	7 <sup>b</sup>	8	3	1		23
1971 - 1972	7	5	4	1			17
1972 - 1973	4	3	3	3			13
1973 - 1974	9	5	1	4		2	21
1974 - 1975	24	8	9 <sup>c</sup>	4		_	45
	51	36	34	17	4	3	145

#### UNDERGRADUATE DEGREES OF MEP GRADUATES

<sup>a</sup>Six (6) are civil engineers, one (1) is a geodetic engineer, two (2) are BSSE and BSCE graduates.

<sup>b</sup>One is also a civil engineer.

<sup>c</sup>Two are holders of two degrees each (electrical and civil engineering).

of the program. Lawyers and Education graduates were a poor minority each forming two percent of the total graduates. In fact, only in the first two years of the program were there lawyer enrollees.<sup>12</sup>

#### Foreign Students in the Institute

In the seven years of the MEP program, the Institute has graduated ten foreign students, two of whom were females, broken down by nationality and number as follows: Vietnamese (4), Thais (3), Americans (2), And Australian (1). Only in the first two years of the program were there no foreign enrollees.

The Institute had its first foreign students in the academic year 1970-1971. This was a Thai national who was employed in the Special Project Plan Division of the Department of Town and Country Planning in his country. He obtained a B.S. Architecture degree from the University of Sto. Tomas. In the next academic year, the Institute had three foreign students including two Americans, one of whom had been in the Philippines as Peace Corps Volunteer two years before his enrollment. The other American came to the Philippines a year after his graduation with an A. B. degree from Oregon State University in 1970. The third of these American students had actually been in the Philippines for four years prior to her enrollment in the Institute, during which time she pursued her undergraduate course in Foreign Service.

Two Thais were admitted in the next academic year (1972-1973), both of whom had done their last year in Architecture in a local University.<sup>13</sup> In the succeeding academic year, two Vietnamese joined the program. One was a graduate of the College of Architecture of the University of the Philippines in 1972 while the other was a recent B.A. graduate (1973) of Phebias College of Bible in Valenzuela, Bulacan, Finally, in the academic year 1975, the Institute admitted two foreign students. One was an Australian national from Papua, New Guinea, with a B.A. degree from the University of Papua, New Guinea. He was sent as a scholar by the Department of Lands of Papua. The other was a Vietnamese who also obtained her undergraduate degree from a local University,

Of the foreign students who have graduated from the IEP, five had degrees in Architecture, four had degrees in A.B. with different areas of specialization,<sup>14</sup> and one had a degree in

<sup>&</sup>lt;sup>12</sup>One of the felt needs of the country today is for lawyer-planners considering that the country has turned its attention seriously to institutionalizing planning in the national, regional and local levels, thus necessitating their expertise.

<sup>13</sup>Both have B.S. Architecture degrees from the Far Eastern University.

<sup>14</sup> These areas of specialization were in Geography, Social Sciences, History, Theology and Geology.

Business Administration, major in Marketing Management. While only three of them purposely came to the Philippines to attend the program since the others were already in the country prior to their enrollment, all of them, except for a graduate who in the meantime got married to a Filipino, have gone back to their respective countries. The survey showed that majority of them are engaged in planning and planning-related activities in their respective countries.

#### A Typical IEP Graduate

It is now possible to draw a profile of the graduates of the Institute. In the first three years of the program, a typical graduate would be male, married, either an architect or engineer, falling in the age group 30 and above and on some form of government or private fellowship. On the other hand a typical graduate of the last four years of the program would either be male or female, single, a graduate of the social sciences, falling within the age group 29 and below, and self-supporting. A general portrait of an IEP graduate, based on the summary of characteristics of all 145 graduates would show that he would be male, falling within the age group 29 and younger, either married or single, an engineer, architect or an A.B. graduate, and either self-supporting or on fellowship.

#### **Results of the Survey**

#### Whereabouts of the Graduates

One of the important findings of the survey concerns the whereabout of the graduates as of March 1975. The survey also revealed their occupation - whether they were working as planners or were engaged in planning-related activities or whether they were in employment which had nothing to do with planning. Information was derived on the sectoral location of their employment, i.e., whether they were in government agencies or in private offices; as well as their geographical distribution, i.e., whether they were working in Metropolitan Manila, in other regions of the country, or abroad. More specifically, it identified the various government and private agencies and institutions with which the graduates were connected, including the positions they were holding, and the functions and responsibilities attached to these positions. Information was also obtained on the salaries received by them.

#### Graduates Engaged in Planning and Planning-Related Activities

Of the 69 respondents, 47 graduates (68%) were engaged in planning and planning-related work and 22 (32%) were engaged in activities which have little or nothing to do at all with planning.

For the purpose of categorizing the work of the planners, the following criterion was used: Planning work or planning-related work refers to those work activities in any government or private agency which are directly related or provide inputs to the planning process. Said activities may be in the form of policy decision-making, research, preparation of plans and feasibility studies, review, evaluation, and assessment of policies and plans or the implementation of plans, whether partly or in full. It may also be in the form of consultancy services, regular or contractual, rendered to any office, agency, or individual clients relating to or involving any of the activities mentioned above, 15

The survey showed that the 47 graduates engaged in planning and planning-related activities are very much in the forefront of plan ning in the country today. Of these 47 graduates, five are abroad. Those working abroad include three Filipinos and the two others are foreign nationals who have returned to their home countries to resume their residence there. Majority of them occupy positions of great responsibility which afford them the opportunity to influence and effect desirable changes in the planning system of the country.

Some of the graduates of the Institute who at present occupy important positions in the planning organization of the country are the Undersecretary of the Department of Public Works, Transportation and Communications, and concurrently Chief of the Planning and Project Development Office (PPDO) of the same Department; the Assistant Director of the Bureau of Lands; and the City Engineer of Manila. The others hold equally important positions. Aside from the two national officals mentioned above, 22 other graduates work in national offices and occupy such positions as urban planner, regional planner, environmental

<sup>&</sup>lt;sup>15</sup>This is the same criterion that the institute applies in determining whether its students could be exempted from the internship course which the graduating students undergo for a total of 240 hours in any government or private agency where the desired practical experience is available.

planner, lawyer-planner, and Supervising Community Development Officer. In addition to the City Engineer of Manila, ten other graduates work for local offices in such capacities as City Planning and Development Coordinator, City Engineer, Planning Officer and Provincial Development Coordinator of the Provincial Development Staff.

The graduates who work in planning-related jobs perform functions which provide valuable inputs to the planning process. They are usually engaged in the more specialized activities which are important components of planing functions, or which constitute inputs to the comprehensive plans. Examples are the Senior Staff Engineer of the Infrastructure Staff of NEDA who is engaged in programming and planning of infrastructure projects, and the Infrastructure and Transport Specialist also of NEDA whose task is to plan, coordinate and integrate infrastructure and transport activities in the region. Two are engaged in planning research: one is with the Population Center Foundation doing studies in population development and the other is with the Bicol Regional Project where he is engaged in designing, supervising field operations and analyzing data on a study of development indicators for the planning of the Bicol region.

Three of those in planning and planningrelated activities are in the academic field. I wo are with the Institute of Regional Planning of the Mindanao State University, one of whom is the Director of the Institute who supervises, manages and directs the Unit in performing research, training program and extension services. The other is a Research Supervisor who prepares the research program of the Institute and supervises on-going research programs in development planning. The third graduate engaged in teaching is a lecturer in the Institute of Human Ecology, Howard University, in Washington, D.C.

Graduates working abroad are similarly wellplaced. One of the two Thais who returned to their country is now holding the position of Town and Country Planner with the National Housing Authority of Thailand, and the other, that of Chief of the Physical Planning Section of the National Economic and Social Development Board also of Thailand. One American graduate is now City Planner of the Department of Environmental and Social Services of the Citv of Las Cruces, New Mexico. He heads a three-man staff which plans for the long-term growth and development of the city and deals with the day-to-day planning tasks such as those affecting zoning and subdivision. He also teaches the introductory course in city and

regional planning at the New Mexico State University. Another one of the first foreigner enrollees in the program occupies the post of Senior Town Planner with the Town Planning Section, Land Survey and Mines Department at Port Moresby, Papua, New Guinea. He has the major responsibility of preparing and implementing town plans for the two cities and 98 towns of the country. In support of these functions, he is also engaged in redevelopment studies and coordinates with planning consultants in the area.

The other graduates are in active practice as private planners. They have either established their own planning offices or act as consultants to certain planning projects. One of said practicing planners is also a faculty member of the College of Architecture of the State University.

#### Graduates Not Engaged in Planning and Planning-Related Activities

Nineteen of the 69 respondents are presently in employment which have little or nothing to do at all with planning. These exclude three graduates, two of whom are pursuing further studies and the third is now engaged in farming.

Some jobs of planning graduates under this category include that of training specialist at the Entrepreneurship Development Program of the U.P. Institute for Small-Scale Industries, Personnel Officer of the Land Registration Commission, and a College Director who plans, develops, and administers a technical and development college of the Mindanao State University, Marawi City. The others work for some private agencies in various capacities such as bank architect, an Assistant to the President of a Building and Loan Association, a Tobacco Controller, a Management Analyst of a private company and an Administrative Manager of a sugar and rice milling company. There are also those who are working in non-planning jobs abroad such as an Army Officer. Office of the Chief of Chaplains in Vietnam, and four who are working in the U.S., namely a clerk and a civil engineer in two private companies in Chicago, a construction inspector of the Los Angeles County Flood Control District Construction Division, and an Administrative Assistant for a Medical Center in Dallas, Texas. 16

<sup>&</sup>lt;sup>16</sup>There are many reasons why these graduates are in non-planning jobs. One is the generally higher pay in these jobs, as the survey results showed. Another is that these were the jobs they already held when they enrolled in the program and for one reason or another they have decided to keep them. It will be noted that

#### Sectoral Employment of the Graduates

The survey results showed that the government is the biggest employer of the IEP graduates. It employs 71 percent (46) of all the respondents. The rest, or 17, are in the private sector, either as regular employees, as teachers or as private practitioners. Three others, as already mentioned, are engaged in different undertakings not falling under either of the two categories. These are the two graduate students - one of whom is pursuing a Ph.D. in Environmental Science at the University of the Philippines and the other is enrolled in the graduate school of the East-West Center in Hawaii, The third, who retired recently from the government service, has returned to farming his privately-owned agricultural land in Dumaquete City.

The government agency which employs the most number of graduates of the Institute is the Planning and Project Development Office (PPDO) of the Department of Public Works, Transportation and Communications. <sup>17</sup> The said office employs 13 of the 49 graduates who are in the government sector. This includes the Chief of the PPDO himself who is also concurrently the Undersecretary of the Department. Three of the 12 others who are in the PPDO hold such responsible positions as Area Manager for Luzon, Mindanao and the Manila Bay Region, respectively.<sup>18</sup> One is the Chief Planner of Transport while the others hold such

those who enrolled in the program under the sponsorship of government agencies would most likely return to the same jobs they had prior to enrollment for several reasons: first, the government agency usually requires them to render a minimum of two years' service in return for the "scholarship"; second, those who were sent usually were already holding responsible positions in their offices which make it difficult for them to shift jobs afterwards; and third, these officials are in the middle-age group and are usually reluctant to change jobs.

<sup>17</sup>The PPDO was organized primarily to rationalize infrastructure projects in the Department of Public Works, Transportation and Communications, but eventually it expanded its functions to include several other tasks. It serves as the Department's formal counterpart to the UNDP-assisted projects undertaken together with the Institute of Environmental Planning, and the NEDA. The PPDO was created on June 27, 1972 by Department Order No. 40 or the Department of Public Works, Transportation and Communications, PPDO Development Studies/Proposals 1975-1976 (PPDO: Manila, 1975).

<sup>18</sup>The PPDO operates on a Matrix System where the whole country is divided into several areas, namely, Luzon, Visayas, Mindanao and Manila Bay Region, the planning of each one of which is the responsibility of an Area Manager. positions as Project Officers for particular areas and as Urban and Regional Planners assigned to particular projects.

Next to PPDO as the biggest government employer, although behind by a wide margin, is the Task Force on Human Settlements <sup>19</sup> of the Development Academy of the Philippines which employs four of the 49 planning graduates. These four occupy the following positions: Research Associate, Urban Planner, Lawyer-Planner and Project Officer Planner, A close third is the National Economic and Development Authority (NEDA) which has three of the graduates in its employ: two of them in the central office in Manila and one in the regional office in Cebu. At least one IEP graduate is employed in each of the major departments and agencies of government, namely, the Bureau of Community Development of the Department of Loce Government and Community Development, the Department of Public Highways, National Power Corporation, the Land Registration Commission, and the following Bureaus: Bureau of Soils, Bureau of Lands and Bureau of Agricultural Extension. Two state academic institutions, the University of the Philippines 20 and the Mindanao State University, also employ some IEP graduates.

On the other hand, the following local government offices have in their employ several of the Institute graduates namely the NEDA in Cebu, the Offices of the City Engineer at Davao, Cebu, and Manila, the Department of Planning and Development in Cebu City and the Provincial Development Staff of the Office of the Governor of Negros Oriental.

The private agencies which employ the IEP graduates are the Diocese of Northern Philippines located in Bontoc, Mountain Province, where the IEP graduate works as a Planner; the Population Center Foundation, and the various architectural and planning firms engaged in planning and consultancy services, including a local private academic institution where two graduates teach.

<sup>19</sup>The Task Force was created by Executive Order No. 419 dated September 19, 1973 with the main responsibility of formulating a national human settlements program, including the setting up of guidelines for the formation of sectoral programmes. It has an interagency membership of 18 with the President of the DAP as Chairman.

20 The graduate referred to worked as a research associate in one of the planning research projects undertaken by the National Development Research Center of the University.

#### Geographical Distribution of the Graduates

The survey findings confirmed the observation of the Institute that most of its graduates are concentrated in Metropolitan Manila and that only a few of them have chosen to practise their profession outside of the metropolis. Of the 47 graduates engaged in planning and planning-related activities 30 are working in Metropolitan Manila, 12 in local governments outside of Metropolitan Manila, and five abroad. Of those working in Metropolitan Manila, 25 are connected with the government while only five are in the private sector. These five include a private entity, the Population Center Foundation and four private consulting offices. Among the graduates working outside Metropolitan Manila, only one is with a private agency. Two are working with the government and seven with local offices. Of the five working abroad, only one is connected with a private institution, the rest with national and local government agencies.

The dearth of planners is even more seriously felt in the local governments outside of Metropolitan Manila. Only 29 percent of those graduates engaged in planning are working in these areas at present. Seven of them are working in the Visayas, three in Mindanao and two in Luzon. This picture of the distribution of planners in the provinces is even more lopsided. For instance, of those working in the Visayas, six are in Cebu and one is in Negros Oriental.

As a general rule, those working outside Metropolitan Manila are the officials who were sent by their respective local govern-

#### Table 6

#### GEOGRAPHICAL AND SECTORAL DISTRIBUTION OF EMPLOYMENT OF GRADUATES ENGAGED IN PLANNING AND PLANNING-RELATED ACTIVITIES

	REGION/SECTOR	Number	Percent
1.	Metro-Manila	30	62.5
			02.0
	A. Government	25	
	B. Private Agencies	5	
11.	Outside of Metro-Manila	12	25.0
	A. Luzon	2	
*	1. Government	1	
	2. Private	1	
	B. Visayas	7	
	1. Government 2. Private	7	
	C. Mindanao	3	
	1. Government	3	
	2. Private		
IH.	Outside of the Philippines	5	10.2
	A. Thailand	2	
	B. U.S.A.	2	
	C. Papua, New Guinea	1	
	TOTAL	47	

ments to pursue the course under their sponsorship. Those are people who have long settled in their places of work before their enrollment in the course. For them, taking a job in Manila would mean, among others, uprooting themselves and their families from the place where they have lived for at least five years. Thus, all those who are now working in Cebu are those who come from the place and who enrolled in the program when the Institute offered courses in planning through the University of the Philippines in Cebu, <sup>21</sup> The same holds true for those who are now working in the cities of Marawi, Davao and Dumaguete. All of them hail from the said places and were sent to take the program by the local governments with which they are now connected.

It is logical to assume that among the reasons for the concentration of graduates in Metro Manila is the fact that the urban character, the range of facilities and services, and the pace of urban life experienced in the area could not be approximated at present in other areas in the country. Furthermore, the working conditions, including the salary range and the opportunities for advancement in the other areas are not competitive with those in Metro Manila.

#### Salaries Received by the Graduates

Figures on the salaries received by the 69 respondents provide the following interesting findings:

<sup>21</sup>In 1973, the Institute offered through the U.P. in Cebu various courses leading to the MEP degree to bring the program closer to the region. It met various problems such as the difficulty of getting faculty members to teach the courses in Cebu. The faculty who were already teaching during the weekdays were usually available only during the weekends and this meant flying to Cebu on Saturdays and Sundays and teaching the courses for several hours in these two days. Aside from the transportation expenses and the cost of overload teaching it entailed, the more serious problems were the understandable reluctance of some faculty to be away from their families during the weekends. Furthermore, the absence of the required textbooks and other reading materials in the library of the U.P. Cebu served as a serious constraint. Also, the straight hours of teaching, during the weekends somehow affected the quality of teaching. Finally, the Institute decided that the students should spend their last school term of the program at the Institute in the Diliman campus where they would have the opportunity to use the library and consult freely and more frequently with the faculty. Thus, the graduates of the Cebu program completed all the requirements of the course in the Institute by spending their last trimester in Manila.

1. That the graduates are in general well-paid, with the graduates who are engaged in nonplanning or planning-related activities receiving higher pay than those working as planners or are in planning-related activities.

The lowest salary range within which any of the 19 graduates who are engaged in non-planning activities falls is P801-1,100 per month and only three of them are in this range. All the others receive salaries higher than P1,100, with the following breakdown: two have salaries within the range of P1,101-1,400, two fall within the range of P1,401-1,700, and one is within the salary range of P1,701-2,000. The rest, which constitute 50 percent of this group are within the salary range of over P2,000.

The figures for the practicing planners are completely different. Five out of the 47 fall within the salary range of P501-801, by far the lowest range as gleaned from the survey.

The complete set of figures provided below shows a comparative picture of the salaries between the two sectors:

#### Table 7

#### SALARIES OF GRADUATES

NO. OF GRADUATES Non-Salary Range Planning Planning Total P501 - 800 5 5 3 P801 - 1, 100 11 14 P1, 101 - 1,400 2 13 15 P1, 401 - 1,700 2 6 8 5 P1,701 - 2,000 1 4 8 19 Over P2, 000 11 TOTAL 19 47 66

Except for two of the 19 graduates who are not engaged in planning, the rest got their jobs after graduation from the program. That these jobs offered better pay than those available for planners may or may not be the sole reason why they decided not to practise their professions but it could have been an influencing factor. A possible explanation for the difference in salary structure among graduates engaged in planning activities and those who are not is that more than one-half of those in nonplanning activities receive higher pay than those in the government. The inverse is true for the practicing planners, only 15 percent of whom work in the private sector. One other factor which would explain the generally high proportion of graduates in non-planning activities receiving higher pay is that of those who responded to the survey, 32 percent work abroad and the conversion of their salaries which are in foreign currency would definitely place them in the highest salary range listed.

Thus, the figures for those who work abroad are as follows:

#### Table 8

#### SALARIES OF GRADUATES WORKING ABROAD

Planners	Non-Planners
1	
	1
2	
2	5
5	6
	1 2 2

 Like in any other professions or occupations, those who work in the private sector, whether engaged in planning or non-planning work receive higher salaries than those in the government sector. As gleaned from Table 9, there is a greater proportion of relatively low-salaried planners in the government sector than in the private sector.  $^{22}$ 

This difference in salaries becomes more pronounced in the Metro-Manila area where planners in the private sector receive salaries not lower than the P1,101-P1,400 salary range while the lowest salary reported of those in the government falls within P801-P1,101. The three others of the five planners in the private sector working in Metropolitan Manila have salaries over P2,000 each while the fourth receives a salary within P1,101-P1,400. Even between the non-planners in the private sector and the nonplanners in the government sector such disparity exists. This is seen in Table 10.

#### Planners working in Metro-Manila receive higher pay than those who work on substantially the same type of jobs in local governments outside of Metro-Manila.

As shown in the figures below, the greater number of planners working outside of Metro-Manila receive salaries which are within the two lower categories of salary scales listed. So far, the highest salaries actually received by planners in this group fall between P1,401-P1,700. Two of these planners reportedly are receiving salaries in this scale.

On the other hand, of the 25 graduates who are working as planners in the Metro-Manila area, only five (20%) are receiving salaries in the range of P801-P1,100. No one is within the

#### Table 9

#### SALARIES BETWEEN GOVERNMENT AND PRIVATE SECTORS

	Gov	vernment	1	Private
Salary Range	Planning	Non-Planning	Planning	Non-Planning
P501 - P800	4		1	
P801 - P1, 100	11	3		
P1, 101 - P1, 400	11		2	2
P1,401 - P1,700	6			1
P1, 701 - P2, 000	3		1	1
Over P2,000	5	5	3	7
TOTAL	40	8	7	11

<sup>22</sup>The only planner in the private sector working outside of Metro Manila receives a salary which falls within the range of P501-P801.

#### SALARIES OF NON-PLANNERS IN GOVERNMENT AND PRIVATE SECTORS OF METRO-MANILA

Salary Range		Non-Planners in the Private Sector
P501 - P800		
P801 - P1, 100	2	
P1, 101 - P1, 400		2
P1, 401 - P1, 700	1	1
P1, 701 - P2,000		1
Over P2, 000	2	4
TOTAL	5	8

P501-P800 range. Ten (40%) of these planners are in the middle range, that is, P1,101-P1,400. The rest are distributed in the higher salary categories broken down in the following manner: four (16%) in the P1,401-P1,700 salary bracket, three (12%) each in the P1,701-P2,000 and over P2,000 bracket, respectively.

#### Table 11

#### SALARIES OF PLANNERS

Salary Range	Planners in Metro Manila	Planners Outside Manila
P501 - P800		4
P801 - P1, 100	5	6
P1, 101 - P1,400	10	
P1, 401 - P1, 700	4	2
P1,701 - P2,000	3	
Over P2, 000	3	
TOTAL	25	12

This may be one of the reasons why most planners prefer to work in Metro-Manila.

#### POST-MEP TRAINING AND EDUCATIONAL PURSUITS OF THE IGRADUATES

The survey was also interested in finding out about the other pursuits of the graduates after they completed the program. It looked into the various training programs undergone, seminars attended and fellowships obtained by the graduates. Information on this revealed the various opportunities opened to the graduates arising from their having obtained the MEP degree and also their level of aspirations and desire for professional growth and improvement.

Information furnished by the graduates shows that majority of those who are now engaged in planning activities have attended at least one seminar workshop related to their work, and that almost half of them have attended at least three such seminar/workshops in various capacities as resource person, participant, or observer. Among those whose jobs are not in planning, eight have at one time or another attended at least one workshop-seminar in Planning.

As to fellowships abroad, 12 of the total respondents of 69 have gone on observation tours, attended workshops or pursued further training in planning ranging from a period of several weeks to one year.

These fellowships were sponsored by various international agencies and organizations such as the United Nations Development Program, the United States Agency for International Development (USAID), the International Bank for Reconstruction and Development (IBRD), and the Government of West Germany. There were 12 grants, three of which were in the form of observation tours which took the fellows to different countries to observe the latest trends and developments in their areas or specialization. The rest were more formal workshop and short-term courses, some of which awarded certificates to their participants. These fellowships included the United Nations Centre for Regional Development (UNCRD) Course on Metro Region Planning in Japan, the UNDP-sponsored Urban Development Studies also in Japan, and the one-year fellowship on Regional Planning sponsored by the government of West Germany,

#### SOME CONCLUSIONS AND POLICY PROPOSALS

The follow-up on the graduates has led to some interesting findings which have far-reaching implications on the graduate program of the Institute and thus indicating some areas for possible policy measures and changes.

One particular finding is that most graduates concentrate in Metropolitan Manila and that even those who work in the local governments outside the region may not necessarily do so as a matter of choice. As discussed earlier, almost all of those who at present work in the said local governments are those who were sponsored by their respective local governments and who in fact come from the same places and have established their roots in the area.

The distribution of the graduates is loosided in favor of Metro Manila and although this is not unique to the planning profession, this is a situation which requires critical study. An inquiry into why such a situation exists and whether this is undesirable would be an area for further study. Some issues which it raises are: does the need for a regional distribution of planners really exist, or should it be assumed that with most of the planning activities being initiated by, and taking place in the national offices in Manila and with the existence in Manila of many of the serious urban problems and their concomitant effects on the other regions in the country, then it follows that Manila needs more of the planners than does any other place in the country.

Assuming that there is indeed a need for a more equitable distribution of planners ' skills and talents throughout the country, what policy measures can the Institute take together with the appropriate national and local agencies to ensure that its graduates are farmed out into the other areas of the country? That there is a need for planners in other areas perhaps needs no further proof, but a further issue is whether it is more realistic to distribute planners on a selective basis - that is, assign them to where the need is most urgent and then postpone planning for other areas. In short, a basic issue is whether it would be logical to observe some priority in the distribution of planners. The answer to this seems to be that indeed there is a need, although not as urgent, for local governments to have the service of professional planners before their own problems get out of hand. Also, if talents and skills are not equitably distributed, the more attraction Manila would have as against other areas of the country. And this would lead to a vicious circle where because Manila's planning problems are well attended to, it is going to continue to encourage uncontrolled migration which, in the first place, is one of the basic causes of its problems.

One possible alternative to encourage planners to get employment in other regions is to provide the needed incentives for them to practice their profession in those areas. The more difficult task is not only to encourage locals to stay where they come from originally, but also how to induce some graduates who are from Manila to render their services to the outlying areas. It may be a little optimistic to think that salaries for these positions in local governments could be comparable with those in Manila, but perhaps they could be a little better than they are now. What happens at present is that since the local governments cannot provide adequate salaries for planners, there are no applicants for the post among the professional planners and the local governments settle for those who have no experience or training in planning but who are willing to accept the salary offered them.<sup>23</sup>

What the Institute could possibly do is to encourage more local governments to sponsor scholars to the Institute on the condition that after they complete the program they shall serve the local government area for at least two years for every year of their fellowship. This would mean also that those who will be sent to the program are the locals who would hesitate about leaving their places of origin or residence for a job in Manila, A further possibility is for the establishment of urban planning grants by the national government for the following purposes: First, to sponsor well-deserving candidates from the various local governments, to participate in the program again under the condition that they will serve said local governments for a minimum period once they complete the program. Second, to provide funds to supplement the appropriation for salaries of planners that the local governments can afford, i.e., to make up for the difference between what the local governments can afford and what salaries are comparable to those received by their counterparts working in Metropolitan Manila. Third, to sponsor training programs for periods ranging from six months to one year which can be attended by local government officials who are doing planning work or who propose to engage in planning to provide them with the necessary preparation for the work they are doing. This would also take care of the problem of recruiting local officials who could spare the time to undergo training. It would be recalled that the reason why the institute offered a one-year graduate program divided into three trimesters of four months each was that very few officials could get away from their respective jobs for periods longer than one year.

For planners who come from Manila, it may be necessary to provide certain incentives to make it worth their while to go to the rural areas to assist in planning by providing better remuneration than those given to planners in

<sup>&</sup>lt;sup>23</sup>This was the gist of the talk of Mr. Juan Volfango, chief of the Urban Planning Division of the Bureau of Community Development in the Department of Local Government and Community Development in a lecture given at the Institute in May 1975.

Manila. This would make up for the number of advantages and benefits they have to forego by opting the jobs outside Manila. Perhaps the Charter of the Planning profession which has yet to be drafted could provide that before any planner could be issued his license to practise he would have to show that he has done some planning work in the rural areas for sometime. These suggestions are actually drawn from similar policies adopted by the government for other professions which also tend to concentrate in Metropolitan Manila or which are generally exported abroad.

Another important result of the survey is that with the shortage of planners, most planning graduates of the Institute are thrust into jobs of great responsibility soon after graduation with little opportunity for them to gather experience along the way to prepare them for the heavy responsibilities attached to these jobs. A study of the employment pattern of the graduates shows that the MEP degree becomes a license to occupy the top post of planner in any government agency without necessarily requiring some minimum number of years of experience which is usually the case in the other professions.

The Institute, after observing the career patterns of its graduates and realizing their predicament at being recruited into top planning posts armed with a one-year planning degree, has already introduced some changes in its graduate program. First: it has drafted a twoyear program which incorporates some substantial improvements on the present MEP program (e.g., introduction of new courses, expanding the scope of several courses, etc.). This program will require four semesters, studies spread out into two years to enable the students to complete it at a less hectic pace compared for instance to the three trimesters spread out in one year under the present program. The proposed program is now pending consideration by the University Administration. Second: in response to the suggestions derived from the survey, it has lengthened the internship period of the students. Even prior to this, the Institute already intoduced a course known as Supervised Practice in Environmental Planning whereby students who lack planning experience are required to take an additional three units of field training in an appropriate agency. While the students under the present program are required to render 240 hours of work, under the proposed program, the Institute has increased the number of hours to 480. The survey results now give rise to some doubts as to whether even the 480 hours of internship which amount to three months of full-time detail in

a planning office would provide adequate preparation. The Institute could consider extending the internship period from six months to one year. However, it is aware that although this may be desirable, it may not be realistic at all, considering that the demand for the services of its students is such that even prior to graduation, most of them are already recruited by planning agencies. Furthermore, by increasing the number of months for internship the Institute may be depriving its graduates of the chance to enter into gainful employment at the earliest opportunity. An alternative that may be worth considering is introducing more workshop components into some of its courses to enlarge the opportunities for the practical application of the theoretical components of the program.24

From this survey, a number of suggestions on how the present program could further be strengthened and how it could cope with the nature of the demands of the service on its graduates have been offered. Some graduates suggested the introduction of some new courses which they said they found necessary in their present jobs. This confirms the thinking of the Institute that a longer program would be necessary in order to incorporate some additional courses, including an expansion of the components. Many graduates also expressed the view that the internship program which some of them have undergone is not long enough and in fact could be extended. These feedback have, in fact, all been taken into consideration in the preparation of the proposed two-year program of the Institute.

The survey, it is believed, has proven to be mutually beneficial to the respondents and to the Institute. On the part of the Institute, it has brought about useful information in the identification of some areas for the strengthening of its graduate program and making it more relevant to national development efforts. Most of these ideas have been incorporated into its proposed two-year graduate program. On the side of the respondents, the survey has further opened the door for continuing dialogue between them and the IEP and has provided them the opportunity to take a hard look at their own professional needs and demands. This has also stimulated great interest and concern for the graduate program even after they have ceased to be directly involved in it in return for the Institute's similar show of interest in the professional growth and development of its graduates.

<sup>&</sup>lt;sup>24</sup>For the features of the proposed two-year Masters in Urban and Regional Planning, refer to Dr. Cariño's article.

#### Republic of the Philippines Department of Public Works and Communications BUREAU OF POSTS Manila

#### SWORN STATEMENT (Required by Act 2580)

The undersigned, BENJAMIN V. CARIÑO, editor of the PHILIPPINE PLANNING JOURNAL, published semi-annually in English at the Institute of Environmental Planning, U.P., Quezon City, after having been duly sworn in accordance with law, hereby submits the following statement of ownership, management, circulation, etc., which is required by Act 2580, as amended by Common-wealth Act No. 201.

NAME	ADDRESS
Editor BENJAMIN V. CARIÑO	Institute of Environmental Planning, U.P., Quezon City
Managing Editor DOLORES A. ENDRIGA	Institute of Environmental Planning, U.P., Quezon City
Publisher	Institute of Environmental Planning, U.P., Quezon City
Office of Publications	Institute of Environmental Planning, U.P., Quezon City

In case of publication other than daily, total number of copies printed and circulated as of the last issue dated October 1974.

1.	Sent to paid subscribers	100
2.	Sent to others than paid subscribers	900
	TOTAL	1,000

(SGD.) BENJAMIN V. CARIÑO Editor

SUBSCRIBED AND SWORN to before me this 23rd day of October, 1974, at Manila, the affiant exhibiting his Residence Certificate No. A-6015102 issued at San Juan, Rizal, on January 15, 1974.

(SGD.) MOISETES O. MUSNI Acting Postal Inspector (Officer Administering Oath)

# Social Indicators and Standards for Housing\*

### TAPAN K. MAJUMDAR

In most discussions and current literature on urban housing in developing countries, one finds statements describing the urban growth as a situation where cities suffer from severe housing shortage, poor quality of housing stock and environment and the lack of, or woefully deficient, basic urban services.

It is also pointed out, sometimes quite meticulously, that the problems of housing are further compounded by the extremely low level of incomes, disparate income distribution patterns and high costs associated with urban infrastructure and housing. The income levels of 50 to 60 percent of the urban households in most cities of the developing world are regarded as inadequate to pay for the use of even the acceptable minimum level of urban services and amenities For example, a study by the People's Homesite and Housing Corporation of the Philippines states that only 12 percent of the urban families could afford the open market cost of housing and the remaining 88 percent could do so only with indirect subsidies. Similar examples are available from other countries like India, Indonesia, Pakistan and Sri Lanka. Indeed, low income levels and population growth strain the existing housing situation of squatter settlements, slums and shanty towns, etc. and deterioration in the quality of life of a large mass of urban dwellers.

In all these statements and references, there is an underlying assumption of "standards" or "yardsticks" whereby the housing situation is being evaluated. However, hardly any serious thought is given to the manner in which the standards are being established and the fact is overlooked that standards not only determine the quantity of housing within a given allocation of resources but also determine the quality of housing environment. Moreover, it is not fully appreciated that standards are an integral element of housing policy, particularly so at the operational level.

Standards are relative. They reflect the concept of "adequate" or decent housing that people hold and the opportunities available to realize this idealized image of housing. Both the concept of housing and the opportunities for such vary between nations, and within nations, among the various socio-cultural and economic groups in accordance with their life styles, needs, aspirations and level of development. Hence, one can expect to find different standards; different both in their roles and in their conceptual definitions.

\*This article is an advanced copy of the lecture which Dr. Majumdar prepared to be read in the symposia on Metropolitan problems to be held within the year as part of the program for the forthcoming 10th anniversary celebration of the UPIEP. The editor wishes to express sincere thanks to Dr. Majumdar for allowing the inclusion of his paper in this issue of the PPJ.

But planning standards in the "developing" cities particularly so in the field of housing and housing standards have, by and large, been modeled along the lines of European and North American examples. The fact is often overlooked that different perceptions of reality lead to different actions and different solutions. The problems, the solutions and the ideal environments have been perceived through a distorted view glass without due regard to the socio-economic conditions of the society of which they are a part. The housing problems have been described not in relative terms taking into consideration local existing realities - but in absolute terms - based on global concepts of what constitutes an adequate housing. This has only encouraged despair. The solutions to housing problems have been usually provided piece-meal to serve the lucky few who could afford these arbitrary standards. The ideal environments have been planned to create the city beautiful and not the city livable. The "Garden Cities" hide at their back ghettos and shacks which house the majority of the urban poor.

Housing solutions and housing standards have been mainly focused on providing physical structures and are therefore based on a "public works" approach, primarily guided by architectural-cum-engineering considerations, with little or no regard for social backgrounds and cultural roots. Achievement is measured by the number and cost of housing units produced, the sizes and materials of these units and so on. But the social consequences of the type of housing and environments produced are invariably left to chance. In fact, there are several occasions when housing solutions have caused social and economic disruption, family disintegration and hardships. Two such instances from a long list of such cases can be cited to illustrate the point.

In Karachi, (Pakistan), 50,000 slum dwellers were rehoused in single-room nucleus houses in new township built about 15 kilometers away a from the city. The sponsors, the designers and executors of the scheme felt that the problem of the slum dwellers was being effectively solv ed by providing them with a clean and hygienic environment. However, a subsequent study revealed that the slum dwellers who moved to this new township could not find employment in the nearby industrial and commercial enterprises since they did not have the required skills. Many were thus forced to travel long distances back to their original jobs or back to the central areas looking for jobs. This imposed a heavy transportation cost from their meagre incomes, in addition to the subsidized rent which they had to pay for their new houses. These additional expenses were a serious drain on their modest earnings. As they had to spend 33 per cent more than they did previously, the level of living of these slum dwellers became lower and many of them either sold their houses to others, or did not pay their rents or just left for other slum areas.

Similar experiences are revealed among the 45,000 urban households in Delhi who were relocated in planned settlements 20-25 kilometers away from the city. Nearly 70 percent of the residents who reside in these settlements today are other than those for whom the settlements were meant. These two projects were executed at a cost of US \$80 million and US \$30 million, respectively. If the process of slum formation is analyzed, it will be found that the problem is rooted not only in physical but also in socio-economic causes, and as such, cannot be effectively solved purely by what may be called a public works approach.

Housing standards may be defined as measures of acceptability of housing at a given time and place in a given set of cultural, technological, and economic conditions. This would imply that several dimensions enter into the evaluation of housing standards such as the amount of space available, community facilities and services, accessibility to transportation, workplaces and availability of finances that can be used for achieving these standards.

Singly, most of these aspects can be measured and acceptable limits established, but it is not necessary that they, taken together, would insure acceptable living conditions automatically. The final product has to be assessed in relation to the specific characteristics of its users such as their income levels, ways of life, social needs and priorities, among others. One family may forego proximity to town center in favour of ample space in the outskirts; another family may live in a compact house or flat with modern equipment and facilities; a third family with fewer resources may opt, in consideration of accessibility, for a small piece of land with the minimum shelter and so on. It would thus mean that housing standards should be formed to serve each of these family types in the most acceptable ways within the limits of available resources and without sacrificing the interest of the community.

All these considerations suggest that the concern for housing standards is not limited to the establishment of physical criteria but it involves the overall characteristics of the house and its surrounding environment in relation to the specific social and cultural characteristics of its users. This implies that housing standards have to be viewed in totality as a set of closely interrelated criteria to achieve the best feasible balance between the needs and resources of population groups at various stages of development.

Thus there has been a discernible change from the concern with overcrowding and ill health to concern with social and functional requirements of its users in the objectives of housing. The emphasis has shifted from the shell to the improvement of the total living environment including accessibility to work areas, transportation, educational and health facilities, other social services and opportunities for sociability and community participation. It is illustrative in this context to look at the housing definition provided by the expert committee of the World Health Organization (WHO). Housing is defined as "the residential environment, neighbourhood, 'micro-district' or the physical structure that mankind uses for shelter and the environs of that structure including all necessary services, facilities, equipment and devices needed or devised for the physical and mental health and the social well-being of the family and the individual."\* It is evident that the importance of the residential environment as a whole has been particularly emphasized in this conception,

Obviously, standards formulated along these lines are less precise and more flexible. But though the standards currently applied in most developed countries differ in their forms, units and degree of precision, they recognize in all cases, the relation between the social characteristics of families and the types of houses which they occupy. In contradistinction, standards evolved in the developing countries pay little or no attention to this relationship. A review of the housing standards in most developing countries reveals that they are aspectual, i.e., they relate to different aspects of the residential environment. These have been stated with varying degrees of precision and obligations. The formulation of standards in separate parts had led to distorted wholes and has often meant lack of balance between different aspects of the same housing environment. This has placed more and more emphasis on the shell of the house to the extent that it stands completely alienated from its surroundings. It has also meant that the net cost of housing in most developing countries is beyond the available resources since different standards have been set

for various aspects in relation to an absolute and global measure of quality.

Another feature of the housing standards in developing countries is that they have been pegged to family income and one's rent-paying capacity, without consideration for their other social requirements. This is the natural outcome of the national government's preoccupation with an idealized concept of a decent home without providing for its operational implications, or securing certain predetermined standards for all families in need of housing. Housing is therefore provided to those who can pay for it. The most obvious social consequence of this approach is that a very huge number of families have been deprived of the benefits of housing. Although most projects have been labelled low-cost housing projects, they actually serve those who are relatively better off. As a result, large numbers of families are pushed to occupy uncontrolled, overcrowded quarters and unsanitary squatter areas and slums. Thus, instead of directing standards and mobilizing resources to secure acceptable living conditions for the majority of families in need of housing, they concentrate on solving the problems of a small proportion of families.

However, there have been some recent efforts in providing a more socialized concept of housing in some countries asseen particularly in the upgrading of squatter settlements in Latin America, environmental improvement programs in slums and squatter settlements and the Low-Cost Temporary Urban Settlement Programs and the Urban Village schemes in India. One must also look with some hope at the aided self-help programs, and the site-andservice programs now being applied in various developing countries, with varying degrees of success, to improve the housing standards of the urban poor.

Social life in the urban areas of most developing countries is still characterized by traditional communities wherein the obligations of the individual are not only confined to his immediate family but also to the community as a whole. Both the individual and family are community-or society-oriented.

This social pattern gets reflected in the physical structure of the house and layout of the community. The house opens directly into the community and is often without boundary walls. The community itself is compact with narrow lanes and small open spaces giving access to houses on each side. Houses of various sizes and types are grouped along these lanes.

<sup>\*</sup>World Health Organization, Expert Committee on Public Health Aspects of Housing, 1961.

We find a very large portion of such "closed neighbourhoods" of rural or semi-rural character with multi-family households and strong social ties.

These neighbourhoods provide natural security systems for their members; parents are cared for in old age, young children are looked after by older siblings and their grandparents; newly married couples are housed with parent families; newly arrived migrants are accommodated, provided with social and economic security, acculturated and socialized in urban living, facilitating adjustment to new environment; mutual help is exchanged and a general sense of belonging prevails.

However, the modernization process is altering the pattern of social interaction from one based on group affinities to that of individual identity and choice. The emerging pattern of social relationships is characterized by associational affiliations based on economic, occupational, cultural or political interests. The community-oriented household is being gradually replaced by the individual-oriented nuclear family. All these social changes should be taken into account in formulating housing standards, but while doing so, the standards should accommodate not only the new needs of the modernizing family but also traditional cultural patterns.

Standards may be applied to direct and regulate the process of social change to avoid tensions and confusion which normally ensue from this process. Current housing standards, however, have failed to achieve this role. Instead, houses and residential areas have been classified and segregated by economic class. This runs across the existing pattern of social living. An exaggerated preoccupation with the new family requirement of independence, privacy and self-containment, leads to fractionalized family groups, loneliness and loss of identity, as well as destroys the traditional security system in the absence of adequate public provisions for the same. People do need privacy but not isolation among computer - selected neighbours. It is possible to plan housing communities without widening the social and physical distance between the families, and housing standards should be directed towards this end.

The adoption of modern mass-produced housing without the necessary information on user needs has meant that housing standards are based on subjective experience and as such are often a reflection of imported conventional solutions. Housing is produced "package deal" leaving fewer chances for user participation and fewer elements which can be adapted or personalized.

This also goes against the sequence of house construction in the developing countries. Building a house is an incremental process performed over several years in response to people's needs and resources. It starts from a modest nucleus and is developed as needs change and resources permit. Besides, it being a function of income and cost, this open-ended approach encourages people's participation in the continuous improvement of their home environment. In contrast, the standardized housing solutions impose standards which, besides raising the cost beyond the reach of most families, are often wanting in satisfying their social and functional requirements.

The very concept of "floor space" which has been widely used for prescribing space standards for various functions is, as a whole, found to be misleading. Majority of the urban families are used to rather spartan space standards and as yet are not adapted to the complex and rigid practice of separating family life-support activities such as cooking and dining with living. In most cases, several functions are performed in informal harmony without modern rigid division of space. It seems to be incorrect to evaluate the housing stock on modern standards of rigid and functional division of space. Furthermore, in tropical and subtropical countries, family living is mostly performed outdoors. In this context, physical structures have no independent existence of their own. Rather, they are intimately related to people's lives, their social and economic levels and potentialities.

The foregoing analysis of the housing standards suggests that different objectives have governed their formulation of standards at different times, emphasizing one housing aspect or another or serving one population group or another. However, none of the housing standards formulated have considered simultaneously the requirements of various family groups nor have tried to interlink the different sets of housing standards in terms of the requirements of the emerging pattern of urban society or to study the interactions between different aspects of housing. This has resulted in the maldistribution of resources between different family groups and lack of balance between different aspects of the same housing environment.

There appears therefore a need for rethinking the role of housing in its various dimensions as applicable to the emerging groups in the contemporary urbanizing world of the developing countries. A great deal of evidence suggests that within the general framework of the existing city-village situation in the developing countries, a new type of city is emerging, in many ways a rural city. And from another point of view, a majority of its people are involved in the service, small industry and the traditional bazar sectors of the economy.

This makes the city in the developing world very different from the large-scale heavy-industry-based cities of the West which evolved under very different conditions.

The growing cities have a very large population of rural migrants who bring with them their traditions and settlement patterns. As a result of this continuity of rural traditions and life styles, a new society--a hybrid rural-urban or traditional - modern society--is being shaped with appropriate social structures and institutions. Given the population involved, this may well be the beginning of the city of the future - not just a marginal society. It is this indigenous, vernacular evolution, a slow adaptation of modernity in its own medium of social and cultural framework that determines the development perspective. Yet planners and policy makers still draw their lessons from western cities and try to remake their cities in those terms.

It is also the rural migrants who form the lumpen proletariat - the great majority of urban dwellers who are deprived of the minimum level of social services and community facilities. Under these circumstances, the hybrid society has a specific inherent value for the poor and the not-so-affluent by allowing them to develop as they wish to meet the demands of city life and as a result new hybrid values are being evolved which allow flexibility and security both of which are vital in an emerging situation. It is to these people that the real experience and lessons of development, and in the context of housing, of standards that are relevant to the lives of majority of urban dwellers, are meaningful and significant.

In fact, what is demanded is a reappraisal of what housing development should be, for whom and how. Different answers can be reached if the aim of the standards is to upgrade the quality of housing or to ensure acceptable living conditions for the majority of families within the limits set by available resources and objectives. The former notion tends to bring about good quality housing which may be afforded by relatively well-off families, while the latter tends to encourage a broader view of housing. According to this latter notion, housing standards can be directed in a realistic way to improve the housing of urbanizing rural migrants and other emerging groups whose monetary resources are meagre. It may improve, though to a lesser extent, the housing and environmental conditions of a greater number of families. In other words, this notion of housing standards looks at housing and its environment within a broader context taking into consideration the fundamental issues embodied in the objectives of social development. It has two implications: first, housing must be viewed as an integral element of social development and secondly, it must be linked to the indigenous, vernacular evolution of the cities.

From the point of view of social development, an individual's resources include, in addition to income and wealth, such components as health, education, access to socialization etc. In other words, "resources" include all the means whereby an individual can influence his condition. This would imply that the development concern will not only be with the size and composition of the consumption of the individuals but also with the conditions of their physical and social environment; housing conditions, work milieu, participation in community affairs, etc. In the context of housing, it will mean that amenity, in terms of location, environment, cultural tradition and social relationship becomes an important variable in the process of establishing housing standards. It also means the harnessing of the human resources, e.g., through self-help programs and support of indigenous solutions to housing for that seqment of population whose monetary resources are insufficient or nil.

From the point of view of the emerging rural-urban society, housing standards have to be additive or incremental allowing the transition from one stage of development to another - from the rural to the more urbanized and modern. The process of social change is slow and can not be accelerated by imposition of global concepts of housing standards serving mainly the modernizing sectors. The characteristics of the urban development process in most Asian cities would imply the adoption of multiple housing standards. These can be broadly classified into two groups, namely, Permanent and Temporary. The housing standards would simultaneously be linked in this context to the two types of situations in the same city: one, to the urbanized and modern sectors, mainly consisting of the elite and the middle classes engaged in corporate organized sector and its associated service institutions; the other, to the

rural-urban sector mainly engaged in small industry, craft, family enterprises, trade and services and the so-called survival sector.

Permanent housing will be mainly concentrated in the modern sector and the higher categories of rural-urban sector (lower middle classes). Permanent housing development will also have both traditional and modern components. In the traditional component, housing standards would allow highland coverage, medium and small size plots, narrow streets, irregular layouts, and high densities. Modern permanent housing would include adapted or modified western standards and layouts based on massproduced housing technology.

Standards direct to temporary housing development would comprise upgrading of squatter settlements and slums, shelters on minimal plots, sites and service programs, and urban villages, developed along self-help lines. Environmental facilities would be provided at the communal level with greater emphasis on measures of accessibility to health and educational services, community facilities and social services, transportation and job opportunities.

The enlarged concept of housing recognises the close relationship between housing and other social policy areas such as health, education, employment, family stability, etc. It also realizes that one of the important goals of housing is to effect redistribution of housing resources and also using it broadly as one of the tools of redistributing incomes. It is from this perspective of housing that some guidelines are suggested for the formulation of housing standards:

- Standards should combine both the features of traditional practice and the efficiency and economy of modern techniques. The life-styles and the patterns of outdoor living of a large number of families in Asian cities provide opportunities for cheap but effective solutions. In particular, the current practice of families of building their houses in direct relation to their needs and economic resources should be encouraged. Standards should be formulated to leave room for progressive development and adaptability.
- Standards might be defined in such a manner as to be attainable or considered feasible by the majority of urban dwellers. It should be possible to identify those aspects of housing quality which need to be sacrificed because of lack of sufficient resources. This involves reflect-

ing order of priorities and preferences of the users in these standards.

- Standards ought to be flexible enough to satisfy the needs of different sizes and types of families within the limits set up by social goals of housing. This may require the formulation of both minimum and maximum standards.
- 4. The methods adopted in the formulation of housing standards should make it possible to consider simultaneously all the factors involved. The family and functional requirements should be considered along with economic ability, the cost of housing at a particular time and location, the social objectives and resources and so on.
- Standards should be such as can be implemented through housing programs.

#### Social Indicators for Housing

The contemporary interest in social indicators mainly arises from the concern that growth and development cannot be measured in economic terms only, without an adequate consideration for social dimensions as well. This also applies to the development of indicators in housing. With an increasing interest in the development of indicators, it has become extremely difficult to arrive at a commonly accepted concept of social indicators. The term is generally used to indicate units of measurement of intangible or non-quantifiable factors. Another use of the term is to designate social statistics, i.e., statistical time series measuring changes in significant aspects of society, particularly those related to the quality of life.

Instead of attempting a definition of social indicators in general terms, we will first discuss the objectives of social indicators for housing and then arrive at the criteria for selecting the indicators.

a. The statistical indicators, which are generally applied for reporting housing conditions are inadequate in measuring the impact of changes in housing conditions on the life of the people. Indicators of housing generally describe the physical characteristics of the housing stock and the physical amenities available, but not the benefits of housing to users.

- b. Goals in housing policies and programs are usually identified in economic and physical terms. This has been mainly due to the fact that information has been available mainly on the economic and physical aspects of housing. Social goals have been identified in abstract goals into specific and even measurable terms.
- One of the problems in the field of С. housing development has been that hardly any evaluation is made of specific policies and programs. Besides resistance on the part of policy planners and decision makers, one of the hurdles has been the lack of adequate measures for evaluation. How does one evaluate the success of policies and programmes? It is not enough to measure this in terms of the number of units built and/or the amount of money spent. The social aspects have to be measured - that is, the impact of housing in promoting social development.

In view of these objectives, the following criteria are suggested for the development of social indicators:

- a. The indicators should be oriented towards the individual/household. Housing should be provided in order to satisfy user needs. These needs should be defined at the individual/household level and cannot be expressed for the society as a whole.
- b. The indicators should be output-oriented in terms of their performance from the user point of view. Outputs of the building and planning processes, such as the number of units produced should be regarded as inputs to the housing process.
- c. The indicators should be normative even if it is hard to define what constitute good housing. Certain desirable characteristics can always be identified in all situations, thereby enabling the use of indicators.

A concept of housing is needed in order to develop social indicators for the same. Housing, it is generally accepted, is more than a shelter. But what the other aspects of housing are is difficult to answer. Housing is defined in different ways depending on whose point of view it is seen. A house is not only a place to live in, or to carry out certain domestic activities, but also as a location from whichone has access to employment, recreation, education, relatives, friends, etc. It may also mean investment in money or time. Housing can also be seen as a complex aggregate of materials, components and labour. For the economist, housing provides a tool for counter cyclical measure and for the job seeker, it provides livelihood.

All these aspects of housing, however, seem to be static. The dynamic aspects of housing are reflected in the changing needs of the user during his life cycle and his ability and willingness to invest in housing when his socio-economic situation changes. Seen from this point of view, housing is a function of what it does in the lives of its users and not as material qualities of the physical product.

Thus, instead of looking at the physical characteristics of the house and or characteristics of its user, the interaction between the two can be used as a framework for the development of social indicators for housing. The components of such an interaction process would consist of users (individual, household or the extended family) whose lives are affected by housing conditions; resources, implying the facility of shelter, financial and institutional resources, social and community services, public utilities, etc.; and activities, through which the interaction takes place, some of which relate to the function of housing as shelter, others to its function as a location and others to the social and psychological development of the individuals. The performance of activities has consequences both for the user and the housing situation. By analyzing the consequences of the housing situation for the user, social indicators for housing can be derived, which are goal and output oriented and related to the individual. It should be stressed that while indicators derived in this way aim at measuring the benefits that a certain housing solution provides to its users, they are by no means to be considered as the sole indicators for housing conditions. On the contrary, economic indicators such as expenditure on housing or physical indicators, such as the adequacy of potable water, may be considered simultaneously in order to make an overall assessment of the housing situation.

When searching for indices for social indicators, two approaches have been identified a statistics approach and a normative approach. The statistics approach implies the improvement of statistical indicators currently used when reporting on housing conditions to better reflect their social aspects. This has been done mainly by studying the distribution of the physical and economic resources of housing between different user groups.

In the normative approach, the concerns or goals for housing are defined independently of the physical and economic characteristics of a dwelling or residential neighbourhood. These goals are then translated into social indicators which reflect some aspect of the concern. This approach presupposes that goals are set and explicitly expressed. While the goal statements in housing policies and housing standards too often reflect the physical or economic aspects of housing, an awareness of the social goals can be created if indicators to measure progress towards achieving these goals are made available.

As mentioned above, it is most important that certain broad areas of concern or social objectives reflecting the performance of housing from the users' point of view are selected so that the impact of housing on the lives of the individuals can be assessed. In selecting such concerns, care must be taken to see that a relationship between the concern and housing exists. Another aspect of selection of the concern is that they should be normative. This means that for each concern, one should be able to indicate a desirable direction or goal. In the context of social indicators of housing, it will mean that improvement in housing conditions would improve the situation in terms of achieving the goals.

Based on these considerations, the following concerns may be suggested:

- a. Equal distribution of housing resources;
- b. Health;
- c. Safety and security;
- d. Family stability and family life support activities;
- e. Participation in school education;
- f. Access to employment, transportation opportunities and utilization of community facilities and social services; and
- g. Participation in community affairs, planning and management of housing.

It may be pointed out that these concerns are thought of in a structural framework permitting an integrated analysis of housing conditions and changes in these instead of considering housing as a separate aspect of the individual's life situation.

It may be pointed out further that factors other than housing do also affect the socioeconomic situation of the individual and it is admittedly difficult to isolate the influence of housing situations. On the other hand, it cannot be denied either that a relationship does exist between housing and other areas of concern. The application of social indicators is one of the ways to understand this relationship empirically. It is also assumed that these social concerns identified have a relationship with the housing situation.



# Transport and Energy

# **Conservation:** Issue on

# **Public versus Private Transportation**

## **TEODORO T. ENCARNACION**

The uprecedented oil crisis in 1973 triggered an almost global search for alternative sources of energy as well as measures aimed at conserving fuel. Most of these measures relate to transportation, as it is reported to be the world's biggest consumer of energy, especially of petroleum. Like many other developing countries that are non-oil producing the Philippines has attached a high priority to energysaving programs. On December 13, 1973, President Marcos launched the Energy Conservation Movement and issued four decrees to discourage the wasteful consumption of fuel oil and gasoline, including one which raised registration fees for and taxes on vehicles. He urged the participation of every sector of society in this concerted drive to save energy.

**Overview of Energy Supply and Consumption** 

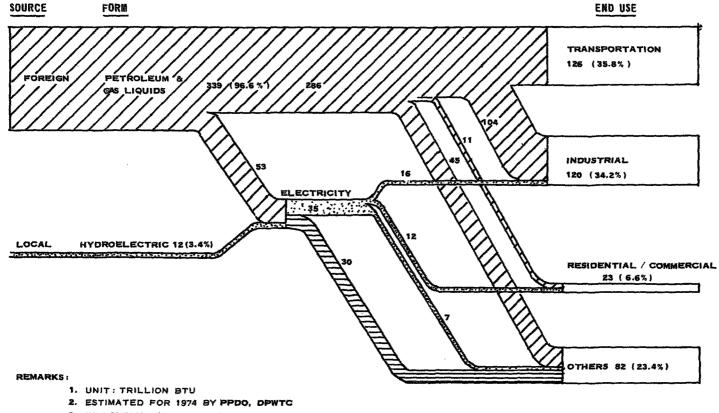
Figure 1 shows the energy flow patterns in the country. As depicted in the figure, petroleum is the primary source of the country's fuel needs. Almost all the energy consumed in the Philippines is derived from petroleum sources. And because we import all our petroleum needs, the country's consumption of energy, estimated at \$840 million this year and projected to increase to about \$1 billion by the end of next year, therefore constitutes a heavy drain on our foreign exchange reserves.

Of the total energy used up in the country, transportation devours nearly 40%, which exceeds the total requirement of other industrial sectors. Transportation is inherently energy-intensive, and petroleum is the prime source of energy for transportation in the country. If an energy conservation program is to be fully effective and workable, therefore, it should involve the transport sector.

The energy distribution among the different modes of transport is shown in Figure 2. Road transportation is the biggest energy user, absorbing 84% of the total. The remaining 16% is distributed to the rail, water and air modes. Over one-fourth of the total is consumed by the trucking sector, one-fifth by cars, another fifth by jeepneys, and one-eighth by buses, while the petroleum need of the rail transport is negligible.

<sup>\*</sup>The author is deeply indebted, and wishes to express profound gratitude to the staff of the Planning and Project Development Office, DPWTC, for their assistance in the preparation of this article.

## FIGURE 1. ENERGY FLOW PATTERNS IN THE COUNTRY



- 3. INDUSTRIAL SECTOR INCLUDES AGRICULTURE AND MINING
- 4. OTHERS INCLUDE UTILITIES AND LOSS
- 5. COAL IS NEGLIGIBLE AS ENERGY RESOURCE
- 6. CHARCOAL AND WOODS FOR FUEL ARE UNKNOWN, BUT SEEM NEGLIGIBLE.

#### **Energy Efficiency by Transportation Mode**

Figure 3 shows the efficiency of energy use by the different transportation modes based on existing capacities and operations. Ranked according to the level of fuel requirements expressed in British Thermal Units (BTU) per passenger-kilometer, air transport leads the land and water modes. This hierarchy is directly proportional to the level of the speed attained by the different modes. In other words, a faster conveyance requires more fuel.

Secondly, it can be said that the bigger the conveyance, the less energy is required per passenger-kilometer or ton-kilometer. It is known for instance, that buses are more energy-efficient than jeepneys. The same relation holds true between heavy and light trucks.

Among the land vehicles, the train consumes the least amount of fuel per passenger or tonkilometer as related to speed. However, the nature of the vehicle's operation should be considered. The train is being operated mainly for regional or inter-provincial transportation, while buses, jeepneys and other vehicles are being used for urban as well as regional movements. In urban areas, 50% to 100% additional energy is needed on account of traffic congestion and frequent stops. If the railway is used for urban transportation it would require more energy and attain lower speed than it would normally need for regional transport, but it would still outrank road vehicles in energy usage per passenger or unit cargo per kilometer.

The motorcycle, the tricycle, and the car, in that order, are the heaviest consumers of energy, based on their capacities. Under present conditions, the car actually consumes up to 50% more energy per passenger-kilometer than what is shown in the figure if the prevailing load factor rather than the capacity is adopted. A car actually carries three to four passengers, while the capacity of five seats is assumed in the figure. Thus, under existing circumstances, the car is considered to be the least energy efficient among the road vehicles. On the other hand, the bus is the most economical user of energy, while the jeepney is placed somewhere in the middle.

#### **Transport Measures for Energy Conservation**

Various means to conserve energy in transportation can be adopted, the shift to more energy-efficient transport modes being only one of them. The possible measures can be grouped in the following manner:

- 1. Improved Vehicular Flow
  - a) traffic management
  - b) traffic engineering
- 2. Better Maintenance
  - a) maintenance of conveyance
  - b) maintenance of facilities
- 3. Shifts Among Transportation Modes
  - a) jeepneys, tricycles and motorcycles to walking and bicycles
  - b) private cars to taxis and private trucks to hired trucks
  - c) cars to buses and jeepneys
  - d) jeepneys to buses and buses to rails
  - e) trucks to rails and waterways

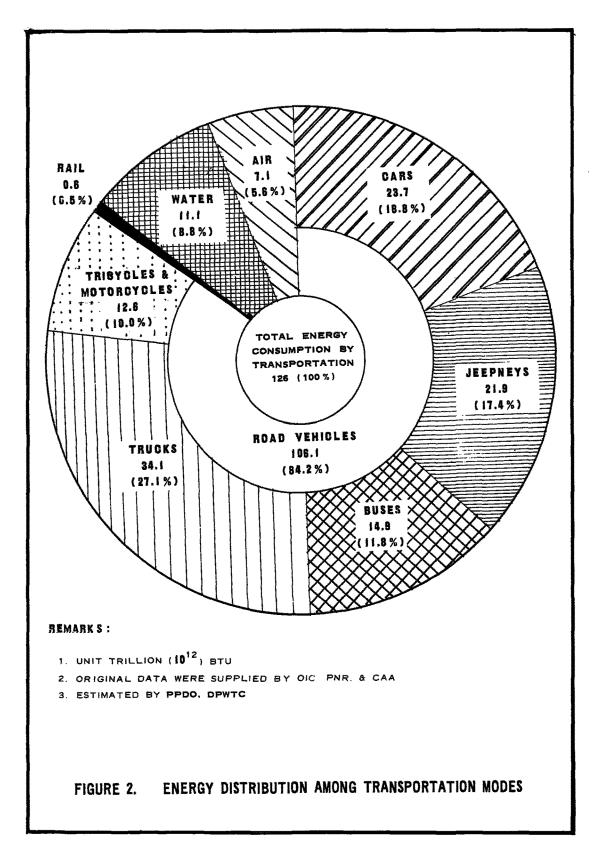
4. Reduced Transport Demand

- a) land use
- b) telecommunications

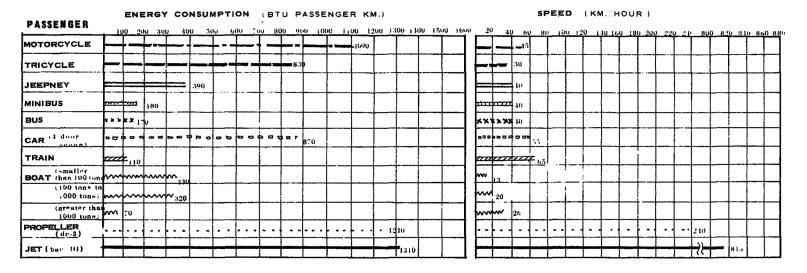
Energy efficiency hinges closely on the usage or flow of vehicles. Hence, the first set of measures -- traffic engineering and management -should not be overlooked as a practical means of streamlining vehicular operations without introducing major investments in infrastructure and vehicular fleet.

Fuel consumption can be remarkably reduced if a smoother flow of vehicles is attained through vigorous enforcement of traffic regulations on speeding, obstructions, parking, illegal stops, laneweaving, one-way routes, and similar traffic management schemes. Also, the energy conservation drive can be disseminated through traffic education and public relations campaigns directed to drivers, passengers and pedestrians alike. Furthermore, traffic engineering measures in the form of low-cost physical facilities such as traffic signals, traffic signs and road markings can contribute a great deal. For example, proper phasing and synchronized operations of signal lights, combined with regulated vehicular speed, can result in a fairly smooth flow of traffic that will yield handsome pay-offs in fuel savings.

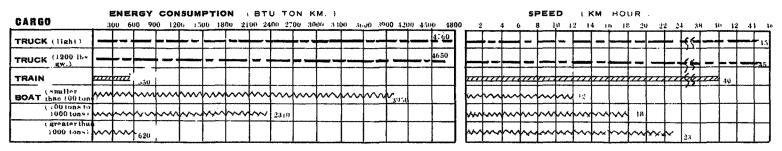
The second set of measures aims at better and sustained maintenance practices for both conveyances and infrastructure facilities. The consumption of fuel increases disproportionate-



## FIGURE 3. ENERGY REQUIREMENTS FOR VARIOUS TRANSPORTATION MODES



### FIGURE 3B. ENERGY REQUIREMENTS FOR VARIOUS TRANSPORTATION MODES



REMARKS :

- 1. ENERGY CONSUMPTION IS BASED ON CAPACITY THEREFORE THE LOAD IS NOT CONSIDERED 2. THE DATA OF THE TRAIN THE BOAT AND THE AIRPLANE ARE FURNISHED BY PNR
  - MARINE AND PAL RESPECTIVELY. THE OTHERS ARE ESTIMATED BY PPDO. DPWTC.
- 3. VARIOUS ASSUMPTIONS ARE INCLUDED WITH REGARD TO THE SIZE OF CONVEYANCES THE RATIO OF GASOLINE AND DIESEL.

ly with the deterioration of vehicle and road conditions.

Under the third set of measures, shifts to less energy-intensive transport modes, are suggested.

The last set of measures aims to reduce the demand for trips through judicious land-use development patterns and improved telecommunications. Factories and other working establishments, for instance, can be established nearer to residential areas, based on a land-use development plan to diminish the number and length of commuter trips. Moreover, in many cases a well-functioning telecommunications system can be an economical alternative to physical movements.

## **Energy Efficiency of Public Transport**

Public transport is often limited to mass transit represented by buses and jeepneys, as opposed to personal transport which includes private cars and motorcycles. In a broader sense, however, public transport includes all types of conveyance used commonly by the public, including taxis and tricycles, which may be exclusively used by a certain person or group of persons but nevertheless is open for patronage by the general riding public.

In Metropolitan Manila, a total of 1.7 million vehicle trips are made per day, with private cars accounting for 41% followed by jeepneys, 28%; trucks, 16%; taxis, 13%; and buses two percent. On the other hand, in terms of passenger trips, jeepneys account for 46% and buses for 16%, while cars and taxis convey 25% and six percent, respectively, in great disproportion to the road space occupied and, as will be discussed, to the energy consumption per passenger-kilometer. This is depicted in the following table:

	Vehicular Trips		Passenger Trips	
	Number	Percent	Number	Percent
Buses	34,100	2.0	1,364,000	16.4
Jeepneys	479,875	28.2	3,839,000	46.1
<b>Private Cars</b>	697,000	40.8	2,091,000	25.1
Taxis	225,500	13.2	451,000	5.4
Trucks	272,000	15.8	579,000	7.0
TOTAL	1,708,475	100.0	8,324,000	100.0

**Cars versus Buses and Jeepneys** 

Why and how is public transport energy-efficient compared to private transport?

As shown in Figure 3, a car consumes nearly three times as much fuel per passenger as does a bus, assuming that the former carries four passengers and the latter 50 passengers. The difference in fuel consumption is significant. The bus is more economical not only in terms of fuel usage but also in terms of overall costs to the entire economy, i.e., to the Philippine society at large, considering the total vehicle operating costs, travel time costs, and infrastructure costs.

Clearly, from the standpoint of energy efficiency, the bus is superior to the car. It might be argued, however, that energy usage is not the only decisive factor for inter-modal comparisons. Other cost components come into the picture, e.g., capital cost of cars, tires, repair and maintenance, etc. And equally important is the fact that the different modes of transport do not offer the same "level of service." The car, for instance, provides a higher degree of comfort, door-to-door service, and faster travel time under ideal conditions. Therefore, a fair comparison of public and private transport must fully encompass all relevant costs and benefits. To be sure, however, this comparison must be based mainly on the criterion that the welfare of society as a whole, and not only that of a privileged few be advanced. Individual demands for comfort and convenience in transport are to be respected but not to the extent that they would render the majority of the citizenry worse off.

Thus, in addition to fuel, one ought to consider the capital cost of vehicle, the repair and maintenance costs, the cost of parts, the cost of the crew, and overhead costs. All of these might be termed private costs, which have, however, significant implications to society or the entire economy. For example, the usage of scarce capital for the vehicle, fuel or tires for a car carrying two or three passengers means in effect the demand of the same service for a more economical alternative - say, a bus carrying 50 passengers. In addition, the time costs must be

taken into account. A car admittedly can convey a highly paid executive to his destination in a shorter travel time under ideal conditions and. therefore, he would have more time to do productive work in the office. On the other hand, a bus may carry more passengers with a much lower average per capita income in a longer travel time, but the aggregate earning capacity of all bus passengers during their net working time might exceed that of the car-riding executive, other things being equal. Furthermore, the usage of the car causes less tangible but significant costs to society which are often neglected. This is particularly so in situations where congestion or near congestion exists. The addition of a car bearing only two or three passengers occupying a disproportionately large amount of street space definitely causes undue lowering of speed and, therefore, lower travel times of all other vehicles and even of the car itself. In addition, it tends to create an avoidable need for investments for widening or construction. These time and infrastructure costs are social costs for which the car user does not, but should, fully pay.

If all of these factors are considered, it can be shown that, from the viewpoint of the national economy or society, the car pales in comparison with public transport in terms of efficiency in resources devoted to fuel as well as to other vehicle components, travel time and infrastructure.

Some shift in passenger traffic from cars to buses thus appears desirable from the social standpoint, but the success in effecting the shift depends a great deal on how well the "level of service" provided by the bus can be raised to match that of the car.

How can this be done in Metro Manila? One way is to reserve lanes for the exclusive or priority use of buses for faster travel. It will also be necessary to field in additional bus units to cut down waiting time and reduce jampacking of passengers. There is also a need to realign traffic routes with major points of origin and destination of people, considering the latest developments in the suburbs, and in order to minimize inter-vehicle transfers. More frequent services have to be provided during slack hours to reduce waiting time. And bus maintenance practices should be upgraded to minimize the probability of their being stalled.

The mere issuance of franchises will not guarantee good service. It is also necessary to lay down the responsibilities of the operator and to ensure that the operator strictly complies with them. Relative pricing of the services of buses, jeepneys and cars is a key factor in influencing the distribution of traffic among these modes. For example, to attract more passengers to the more energy-efficient buses, the fares, as related to the level of service, should be competitive with the higher cost and service level entailed by car travel. To achieve this, the operating costs of buses can be reduced through more, liberal arrangements for the importation of buses and bus parts than for cars.

These incentives for increased patronage and viability of buses should, however, be complemented by restraints on the indiscriminate and uneconomic use of private cars. In line with this, the registration fees for automobiles have been raised by the President, with higher fees imposed on the heavier, more luxurious, but heavy-energy using types. Higher import duties and taxes for cars, parts, and fuel than for buses or jeepneys also seem logical. To discourage the entry of cars into congested areas especially during the peak hours, a congestion tax or charge similar to the Singapore area licensing scheme, may be imposed. Physical prohibition of cars from certain streets or taxes during certain periods also appear feasible. These measures will not only encourage the shift from cars to buses but also generate revenues from those who create the social costs in order to pay off the extra bill for fuel, equipment and infrastructure that the country incurs as well as to cross-subsidize mass transit operators. The magnitude of savings that can be generated through this inter-modal shift can be gleaned from the table on vehicle-trips and passengertrips,

#### Cars versus Taxis and Private Trucks versus Hired Trucks

The taxi approximates the car in terms of operating costs and service level provided, but the latter clearly has a lower degree of capacity utilization or load factor, i.e., the number of passengers transported per vehicle-kilometer, and therefore, higher energy utilization per capita. A private car with a driver is often sent back empty after dropping a passenger to the office. In the case of a taxi, it may be loaded with another passenger on the way back.

Car pools will help in increasing capacity utilization. Some cities, like Singapore, allow the entry of cars to the downtown area only if there are at least three passengers.

A comparable situation exists between private trucks owned by factories and commercial establishments, on the one hand, and common carriers for hire maintained by specialized trucking companies, on the other. A factoryowned truck plying between the production site and a customer usually goes back empty after unloading goods at the customer's place; where the truck services different clients, its load factor diminishes along the route. On the other hand, the operations of a truck-for-hire owned by a trucking company can be planned in such a way as to be loaded both ways with cargoes of different clients. In addition, the truck can pick up a variety of goods on the way so as to be full most of the time.

To make for-hire passenger and cargo vehicles more viable and attractive to users, it is necessary to look into, among other things, the need for adjusting traffic to align with transport costs, upgrading of services and vigilant enforcement and inspection of units. Financial incentives to stimulate the growth of the trucking and taxi industry similar to those cited for buses are also required. This can be coupled with steps to raise the capacity utilization of private cars and trucking fleet. One is the setting up of car pools such as those obtaining in Singapore where a car is allowed into the central business district only if it carries at least three passengers.

#### Jeepneys versus Buses and Buses versus Rails

We now turn to a comparison of energy consumption among mass transit models.

According to Figure 3, a jeepney consumes more than twice the fuel consumed by a bus. The bus, however, consumes twice as much energy as the train. Therefore, a mode which is more energy efficient entails a heavier investment that should be justified by a greater level of patronage. Needless to say, the shift of patronage from the jeepney to the bus needs the purchase of bus units. Some road facilities, like bus stops, may have to be installed for smooth operation. The bus, though, is more efficient in using expensive urban road space. The street space requirement per passenger for the bus is less than one half of that for the jeepney, when both are loaded up to the nominal capacity. Again, other factors come into play here and must be considered for a complete comparison. It is necessary that the overall cost of vehicle operations, travel time and congestion costs differ and so do levels of service. All private and

social costs must be accounted for and appropriate cost recovery measures be adopted. There is room for both buses and jeepneys to complement each other in Metro Manila, but the extent of their operations and tariff structures may differ because of their different cost implications and service potentials.

The urban rail system calls for a tremendous amount of initial investment, based on the feasibility study for the first subway line in Metropolitan Manila. The huge initial cost is required for the construction of underground structures, which are unavoidable because of limited surface and above-ground space. The cost would be less if rights-of-way were available to accommodate surface and elevated structures.

#### Conclusions

To recapitulate, the main thrust of energyconservation measures for transportation should be the following:

First, all types of mass transit should be developed, but their relative roles should be defined in accordance with their different but complementary capacities, service levels and transport cost implications including energy usage, on the one hand, and with the characteristics of trip demand, on the other. At the same time, the unnecessary and wasteful use of private vehicles should be moderated by various measures including traffic management, traffic engineering, and pricing policy.

Second, the operation of public transport other than the conventional mass transit, i.e., taxis and trucks-for-hire, should be encouraged on account of its greater capacity utilization efficiency than that of vehicle types with comparable capacities and service levels.

Third, "non-transport" measures such as land use planning and controls should not be overlooked as they can indirectly but still significantly generate energy savings.

And last, while these means taken singly would lead to a substantial reduction in energy use, the results can be maximized if all feasible measures are planned and implemented together taking advantage of their reinforcing effects.

## **ABOUT THE AUTHORS**

**Benjamin V. Cariño** is associate professor and director of research of the Insitute of Environmental Planning of the University of the Philippines. He obtained a Bachelor of Arts degree in Public Administration from the University of the Philippines in 1963. He finished Master of Arts and Ph.D. degrees in political science from Indiana University in 1968 and 1970, respectively.

Asteya M. Santiago is associate professor and director of graduate studies of the Institute of Environmental Planning of the University of the Philippines. She obtained her law degree (cum laude) from the University of the Philippines in 1963. She has a Masters in Town and Country Planning degree from the University of Sydney which she finished in 1968 under a Colombo Plan Fellowship program.

Tapan K. Majumdar is a sociologist of the Ministry of Works and Housing and Urban Development of the Government of India. Mr. Majumdar holds a Bachelor of Arts degree in English from Herbert College, Kotah, India in 1950. He finished Master of Arts and Ph.D. degrees in Sociology from Lucknow University, India in 1952 and 1956, respectively. He had worked as a sociologist in a United Nations Development Programme Special Fund Project in Afghanistan from October 9, 1966 to August 15, 1970.

**Teodoro T. Encarnacion** obtained a Bachelor of Science in Civil Engineering degree from the University of the Philippines in 1960. He finished the Masters in Environmental Planning degree from the Institute of Environmental Planning in 1969. At present he is the Chief of the Planning and Project Development Office, Department of Public Works, Transportation and Communications.

## **BOOK REVIEW**

Alan Gilbert, Latin American Development: A Geographical Perspective (Middlesex, England: Penguin Books Ltd., 1974), 365 pp.

Perhaps at no other time in the history of the world has the phenomenon called development been more crucial and relevant than it is today. In an admittedly more enlightened and liberated century where age-old norms, traditions, and laws are continuously being questioned, the word "development" is receiving its own share of scrutiny and evaluation. Thus, today has witnessed not only the rise of what has been traditionally regarded as developed countries like the United States and Japan but also the emergence of the so-called third world countries which has spotlighted the twin phenomena of development and underdevelopment.

Latin American Development by Alan Gilbert primarily underscores the dramatic impact of development on traditionally backward Latin America. Seen in the light of Gilbert's book, Latin America is a continent bound together into a single entity by common cultural and economic phenomena arising from similar colonial experience and common fight for independence. At the same time it is a continent of major contrasts as reflected in the different socio-economic levels obtaining among its component countries. Dependent on the U.S., Japan and Western Europe for trade, capital, and technology and suffering from unequal distribution of personal income, Latin America is identified with the Third World.

Placed in such a setting, *Latin American Development* may very well be a documentation of the relationships that exist between the developed and the underdeveloped countries. More specifically, however, it gives special emphasis on the spatial dimensions which have both guided and resulted from this very development.

Development as used by Gilbert is not synonymous with economic growth, urbanization, modernization or progress for, although it may improve the position of large sections of society, there is not an inevitable association between the two. It is used more in the sense of evolution, than of progress, implying neither an improvement nor a deterioration in the quality of life. Thus, it covers the general, social, economic, and political transformations which are affecting Latin America and the rest of the world.

In this context, the book traces the evolution of Latin America as we know it now. It discusses the origins of economic dependence and the land-ownership system, the evolution of administrative systems and distribution of population. In the process, Gilbert devotes particular sections of his book to the processes of urbanization, industrialization and rural development.

This emphasis on the historical perspective of Latin American development is seen by Gilbert as a means of measuring the desirability or flexibility of Latin American institutions and patterns of behavior. Without such perspective, he feels that no true assessment can be made of the extent to which fundamental changes may occur.

Rejecting the dualism theory of development which seeks to explain development in terms of a dual economy, composed of the agricultural and industrial sectors, Gilbert turns to the dependence theory of development for confirmation of what has transpired in Latin America. His lengthy discussion of the regional differences in income and welfare in the continent identifies him as an advocate of the theory of development which originated in Latin America through Gunder Frank. In essence, this theory states that the developed nations have accelerated their own growth at the expense of the poor nations of the world. Thus, rich nations like the U.S. and Japan become richer at the expense of poor nations like the Latin American countries and presumably, the Philippines.

# LORNA BORJA

This exploitation of the poor by the rich is a relationship that exists not only between a nation or a continent and the external world but even between the regions within the nation itself. Thus, the backward regions within the poor nations have been handicapped by the transfer of their economic surplus to the more prosperous regions as exemplified by Peru.

Gilbert points out that paradoxically, the government, through some of its policies specifically those on industrialization which normally tend to benefit the richer and urbanized regions of a nation help to perpetuate this disequilibrium. As a whole, however, this state of 'internal colonialism' is a commentary on the whole social and economic structure of less developed countries by which the privileged exploit the poorer classes of society. The Latin American experience is a case in point.

It is evident from the trend of development in Latin America and in the rest of the world that the development process has great repercussions on their spatial dimensions. *Latin American Development* therefore, while integrally concerned with the phenomenon of development, more specifically concentrates upon those changes which involve some degree of spatial adjustments -- changes which modify existing geographical distribution of social and economic activities affecting the relations between different areas. It points to the observation that just as development involves a transformation in the structure of employment and in the social environment, so too, it stimulates changes in the location of economic activity and in the distribution of population.

Gilbert contends that although it is a completely new trend in development studies, the consideration of the spatial component as a major factor in planning promises to be the right step towards the attainment of the professed goals of development. It is vitally important most especially in the formulation of development policies which bring tremendous implications in their wake.

An analysis of the spatial tendencies in Latin America as reflected in its different development projects has strengthened Gilbert's belief that different societies at different levels of economic development require spatial forms appropriate to their particular economic needs and value systems. As such, primitive subsistence societies with limited commercial and exchange requirements do not require complex or highly specialized hierarchies of service centers. In this connection, Gilbert upholds Friedmann's view that "transitional societies are the most directly concerned with regional organizations partly because of the spatial shifts involved in moving from an agrarian to an industrial economy and partly because a large proportion of their potential resources are still unutilized."

As it is, spatial organization is frequently inflexible to changing development needs. At times, the spatial structure may need modifying before development can take place but oftentimes this is not recognized, thereby retarding or distorting the whole development process.

Gilbert reiterates his belief that there is really an urgent need for spatial planning so much so that the spatial organization of an economy is as much a matter for planning as is the amount of investment to be directed into the different sectors of the economy.

The task and responsibility of carrying this through rest heavily on the planner who must be strengthened by the fact that several spatial alternatives and strategies lie before him through which he can influence the course of development and hopefully, Gilbert avers, minimize if not altogether erase the social and economic imbalance that is plaguing the world today. Failure to do so may justify the people's seeking what remains as the long-term solution - a structural and revolutionary form of government like Cuba's.

## BOOK NOTES

# Bergmann, Helmuth. Guide to the Economic Evaluation of Irrigation Projects. Paris: Organization for Economic Cooperation and Development, 133 p.

The data contained in this book are derived mainly from the results of discussions during a seminar of the Organization for Economic Cooperation and Development (OECD) held in Athens in October 1971 under the sponsorship of the Technical Cooperative Programme. Broadly, it deals with the methods and criteria for measuring the profitability of irrigation projects. The general features of such projects, the problems incurred and policy formulations and programmes are also considered.

While the discussion has been based on the varying irrigation experiences of the six participating Mediterranean countries of France, Greece, Italy, Portugal, Spain and Turkey as well as one adjacent nation, Yugoslavia, the methodological framework developed in this book, in consideration of these differences, is such that the guidelines provided for "... could be applied without great difficulty and which would allow for inter-regional and international comparisons."

#### Best, Robin H. and Alan W. Rogers. The Urban Countryside: The Land-Use Structure of Small Towns and Villages in England and Wales. London: Faber and Faber, Ltd. 1973. 186 p.

In general, this book integrates all the studies carried out in the small towns and villages of England and Wales and presents a more specific methodology by which to analyze these small urban settlements. Specifically, it is concerned with a quantitative study of the basic land-use structure and composition of those towns and villages with a population of less than 10,000.

Investigations into the pattern of urban area composition, land provision and intensity of landuse, space-standards, settlement function and its relation to the local-economy, changes in the socioeconomic structure among the various localities reveal interesting differences. Inquiries into the relationship of settlement (population) density and the density of development in those areas bring about the formulation of a specific measure - the density-size rule - which simply states that an increase in population size is followed by a rise in the density of development. With all these variations, alternative planning policies for those areas are presented.

#### Burberry, Peter. Environment and Services. Botsford, 1970.

This book attempts to give a detailed discussion of the technical processes involved in the design and construction of hardware environmental services, such as water supply, sewerage, etc. Stressing on the relationship of man, particularly his needs, to his physical environment, the book proceeds to talk about the basic principles considered in the provision and installation of services. Likewise, standards, materials and equipment, design principles, as relevant to a specific type of service are discussed.

Primarily intended as a general introduction to the planning of physical facilities and utilities, this book will be a valuable help to planning students in their planning studies. Even planners themselves can rely on this as a general guide for specific planning endeavors.

#### Burley, T. M. The Philippines: An Economic and Social Geography. London: G. Bell and Sons Ltd., 1973. 375 p.

Dr. Burley's geographical study of the Philippines attempts to depict a comprehensive picture of the Filipino people against the backdrop of their physical environment. Special attention is given to the Filipino way of life and means of livelihood, taking into consideration the interaction of social and economic elements with the natural forces. Following current trends, the author shows that, "as a nation continues to develop, these inter-relationships have become less closely knit with the role played by nature diminishing in significance."

The volume provides a regional breakdown of the archipelago and its people. Presentation and analysis of salient national and regional features are substantiated by case studies, wherever possible. The scope covers diverse and wide-ranging subjects including among others, the people's demographic characteristics, the problem of land reform, the extent of industrialization and the variety of settlements in the urban hierarchy. Figures and references mostly drawn from the 1970 Census are also included, let alone a large number of maps and tables.

Designed for any layman interested in Southeast Asia, the book will make a useful reference material not only for students in Philippine geography but also for professional geographers as well. Easily understood, the text is so arranged as to lead the reader towards significant evaluations in the concluding chapters.

#### Cook, Ann, Marilyn Gittell and Herb Mack, eds. City Life 1865-1960. Views of Urban America, New York: Praeger Publishers, 1973. 202 p.

Documented in this book is a humane description of the general physical and social conditions in the cities of America as experienced by people who lived in those cities during the period 1865-1960. Accounts of the striking differences in the life-styles of the rich and the poor as well as the problems met by the city-dwellers are vividly presented. Moreover, the problems in those days, for example, congested housing, unhealthy working conditions, high incidence of crimes, immorality, drunkenness and the like, are in no way different from the problems existing in the contemporary urban scene. In the words of the editors, " the beginning of American cities . . . are the roots of today's urban problems."

#### Cowling, T.H. and G.C. Steeley. Sub-Regional Planning Studies: An Evaluation. Oxford: Pergamon Press, 1973.

This book offers guidelines to be considered in the evaluation of sub-regional planning studies. According to the authors, the relevance of such studies should be gauged in terms of the need for such, their goals and objectives, their advantages and disadvantages, and finally, the technical processes involved.

The book further extends its scope to include a general discussion on the historical development of sub-regional planning, its characteristic features as well as the technical details which form part of the sub-regional planning process. Special attention is likewise directed to the interplay of various factors such as the financial capabilities of the sub-region, its technical resources, adequacy of manpower and the influence of the physical, economic, social and political environment.

#### Judd, Dennis R. and Robert E. Mendelson. The Politics of Urban Planning: The East St. Louis Experience. Urbana University

Working together on Model Cities projects, a practicing planner and a political scientist examine the significant role of politics in the field of planning. Particularly, the experience at East St, Louis attempts to shed light on the wide gap between planning and implementation. For a period of nine years since 1960, more than 125 studies have dealt with the problems of East St. Louis, exhibiting instances of proliteration of planning activities. These studies, on which a good portion of the book is devoted, only attest to "the overwhelming influence of professional and bureaucratic autonomy and self-interest in the planning process." The volume concludes, however, that planning in East St. Louis is not a unique experience. It reflects the values and practices, generally arising from the planning profession anywhere.

To effect some changes in the planning practice, the authors advocate the involvement of the planning clientele in determining priorities and values of planning activities. This will likely occur by applying external forces. Such recourse is in order as planners are less likely to initiate changes with the profession which will threaten their livelihood and status.

This book will make a very useful reference material for students in planning administration. Praticing planners in general will benefit likewise from the East St. Louis experience.

#### Rame Gowda, K.S. Urban and Regional Planning. Mysore: University of Mysore, 1972. 254 p.

Dealing mainly with principles of urban and regional planning, this book provides special features of drawing practical applications from the experience of a developing country. The text is divided into two parts, the first being devoted to the various theoretical aspects of urban and regional planning, including village planning. The other part consists of case studies in planning as gleaned from the experience of various cities and regions of India. These dwell mostly on planning, metropolitan planning and regional planning. In the course of the book, the reader is easily shown that urban and regional planning industries are frequent to be between urban and rural life.

The theories and applications are elucidated through the use of extensive statistical data. Comparison is facilitated with the presentation of data grouped by population, town size and geographical location arranged in suitable tabular form. The text is clarified and enhanced further by large illustrations.

The book seems to be one of the very few on this subject. K. S. Rame Gowda, who is the incumbent Director of Town Planning in Mysore, deserves credit for sharing with practitioners in the field and would - be planners his knowledge and vast experiences in planning through this volume.



## news • planning news • planning news • planning

## **IEP MARKS TENTH ANNIVERSARY**

The Institute will observe its tenth anniversary on December 18 - 19. The celebration will focus on the accomplishments of the Institute as a public service agency, particularly in terms of its extension-training and consultation services to other government agencies and planning units,

Formally established in 1965 by virtue of R.A. 4341, the Institute is involved in consultation, extension-training, research and graduate education. Its graduate education program offers the degree of Master in Urban and Regional Planning (MURP).

This year's foundation activities will be ushered in by an Open House starting at 8:00 a.m., December 18, followed by a film presentation of specific planning subjects and will culminate with an alumni-homecoming and program at 8:00 p.m., December 19, at the ISSI (Virata Hall). Photographs, maps, charts as well as other visual aids depicting the activities and achievements of the Institute during the last ten years will be on display during the Open House.

During the dinner program, an award will be presented to the most outstanding graduate of the Institute, to be selected by a panel of judges headed by the Dean, Dr. Ramon C. Portugal. Criteria for selection include academic background, job positions and specific contributions to the advancement of planning practice in the Philippines, among others. Likewise, loyalty certificates will be presented to some non-academic employees of the Institute in recognition of their long years of service.

Earlier, a series of lectures dealing with specific planning issues will be held.

Overall chairman for this year's celebration is Prof. Tito C. Firmalino. Committee chairmen for the various celebration activities are: Prof. Asteya M. Santiago, Alumni Homecoming and Participation; Prof. Federico B. Silao, Exhibits and Booths; Dr. Benjamin V. Cariño, Dinner-Program and Invitation; Prof. Gerardo S. Calabia, Symposia; Mrs. Dolores A. Endriga, Outstanding Graduate Award; Prof. Cesar O. Marquez, Souvenir Program; and Prof. Jose Valdecañas, Publicity.

## NEW GRADUATE PROGRAM LAUNCHED

Beginning with the academic year 1975-1976, the Institute will offer its new Master in Urban and Regional Planning (MURP) Program.

The new curriculum is one of the two degree courses of the Institute proposed in the last faculty seminar at the Continuing Education Center at U.P., Los Banos in September last year.

The second proposed degree course, the Diploma course, has been deleted. Instead, special training courses and programs will be offered. These are intended to provide further training to people already engaged in planning and related activities.

The new MURP program is basically a revision of the Master in Environmental Planning curriculum (MEP) which is now on a phasingout stage. It consists of two courses of study -Plan A which requires a thesis and Plan B which requires additional course work in lieu of a thesis.

A major innovation in the new program is the emphasis of its course work on problemoriented activities. Furthermore, the new program includes major areas of specialization such as housing, transportation planning, infrastructure planning and industrial location analysis.

Both study programs require at least four semesters of academic work on a full-time basis.

### IEP PARTICIPATES IN METRO-MANILA V REORGANIZATION PLAN

The Institute has been asked to assist in the formulation of proposals for a new organizational set-up for Metro-Manila.

The move for an organizational re-structuring has been initiated as a result of the national referendum of February 27, 1975 where the citizens of the four cities and 13 municipalities of Greater Manila advocated for changes in the present local government machinery.



Recently considered as a provisional alternative to the existing set-up is a manager-commission type of government. This new set-up, which provides for a general manager to be appointed by the President to coordinate the activities in the Greater Manila area, is contemplated to take effect after December 31, 1975, the official termination date of the terms of office of local government officials.

The proposed set-up offers newer possibilities in planning efforts. For one, it presents a vantage point by which government activities, plans and projects could be effectively implemented. The integration of the participating cities, centralization of functions and the tighter coordination through the general manager promise increased efficiency and greater expediency in the formulation and execution of plans.

Named to represent the Institute are Professors Asteya M. Santiago and Gerardo S. Calabia.

## EAROPH V CONGRESS HELD IN MANILA

The Eastern Regional Organization for Planning and Housing (EAROPH) met at the Hotel Intercontinental on March 16-22, 1975 to discuss "planning human settlements and the environment for human development." This conference was held in preparation for the Habitat Congress scheduled to be held in Vancouver in June, 1976.

The EAROPH has been formed to promote and coordinate the study and practice of housing on one hand, and regional planning as well as town and country planning, on the other, to ensure better housing, better population distribution and better towns and cities.

Exhibits on human settlements and planning issues were shown during the 7-day congress. The Institute of Environmental Planning presented a display on the development of environmental planning education in the country.

Representing the Institute in the Congress were: Dr. Benjamin V. Cariño, Professors Gerardo S. Calabia, Asteya M. Santiago, Cynthia D. Turingan, Tito C. Firmalino, Lita S. Velmonte, Roque A. Magno and Cesar O. Marquez. The Congress was held under the joint auspices of the Development Academy of the Philippines (DAP) and the Philippine Institute of Environmental Planning (PIEP).

#### FOUR STAFF MEMBERS IN CONFE-RENCE, STUDY TOUR ABROAD

During the past months, two senior faculty members of the Institute departed for various conferences abroad.

Prof. Asteya M. Santiago participated in the International Seminar on Urban Land-Use Policy, Taxation and Economic Development in Singapore from December 16-21, 1974. During the seminar, she read a paper on "Urban Policies in Land Reform Areas" where she discussed integrated land-use policy formulation and implementation in the Philippines.

Dr. Benjamin V. Cariño, while on special detail with the National Development Research Center as project director of the Bicol Regional Development Study, attended the Fourth Working Meeting of the Cooperative Regional Development Project in Singapore on February 8-16, 1975.

Another staff member, Mrs. Cynthia M. Alvarez, the Institute's Chief Librarian, also left on a two-and-a-half month study tour of England and the United States. A recipient of a U.N. Training Fellowship, she observed Planning Library Services in London, Sussex, New York, Los Angeles and Chicago. She returned in December 1974.

Lastly, Prof. Roque A. Magno will represent the Institute in a conference to be held at Bangkok, Thailand from May 5 to June 8. Theme for this conference focuses on "Environmental Aspects of Development for Planners and Decision-Makers."

## REGIONAL DEVELOPMENT CENTERS

The Institute has deferred its activities and operations in the two remaining regional centers of Cebu and Iloilo due to financial setbacks. Currently, the Institute has taken steps to transfer the custodianship of the centers' equipment



to local research and academic agencies for their temporary use.

Prof. Gerardo S. Calabia, the former director of the Cebu Regional Development Center, had made arrangements with Dr. Agustin Kintanar for the transfer of Cebu Center's equipment to the University National Development Research Center which the latter heads, and with Dr. Dionisia Rola of U.P. Iloilo on the transfer of Iloilo Center's equipment to U.P. Iloilo.

#### NEW UNDP BOSS AT IEP

Mr. William P. Paterson has joined the Institute as the new Project Manager of the U.N. Special Fund Assistance program to the Institute effective January, 1975. He succeeds Dr. Raymond Apthorpe who had left for England to accept a post as Professor of Development Studies in the University of East Anglia.

Aside from being the project manager, Mr. Paterson acts as the Institute's adviser and consultant on curriculum development and as a professor in Land-Use Planning, a new course to be offered under the new MURP program.

Prior to his appointment, Mr. Paterson was the U.N. Project Manager for the Mindanao Regional Development Study.

### SHORT-TERM VISITS BY U.N. SPECIALISTS

Two U.N. consultants have arrived to assist in the Institute's graduate education and consultation programme during the school year 1974-1975.

Mr. Marshall Wolfe, a U.N. adviser from the Economic Commission for Latin America (ECLA), undertook a short mission in the Institute as consultant in Social Planning, from December 1974 to mid-January 1975.

Dr. V. Setty Pendakur, a Professor of Planning at the University of British Columbia

. • .•

visited the Institute as a consultant, first in Transport Policy Planning and then in Planning Education in February and June 1975, respectively. While in the Philippines, he conducted a class seminar on Transportation Policy Planning, provided advice on Metropolitan Transport Planning to the NEDA and the DPWTC and assisted in the Institute's curriculum development program.

### MORE VISITING CONSULTANTS EXPECTED

As part of the U.N. assistance the Institute's curriculum development and staff development programs, a number of foreign specialists have been invited to extend consultation services to the Institute on a short-term basis for the schoolyear 1975-76. Expected to arrive within the year are: Dr. Robert North Merrill, a U.N. housing specialist currently assigned in Tanzania, as housing consultant, and Dr. Tapan Krimar Majumdar, a sociologist of the Ministry of Works and Housing and Urban Development for the Government of India, as consultant on secondary urbanization.

## UNDERTAKE BUILDING EXPANSION AND IMPROVEMENT

To accommodate the Institute's growing population as well as its expanding facilities, a building and facilities improvement program was started in January this year.

With the assistance from the Department of Public Works, Transportation and Communications, a two-unit prefabricated extension building is under construction. The new wing will house three additional classrooms, a faculty lounge and a snack room, a storeroom, a drafting room and three cubicles for printing.

Through the Institute Building Fund, the Faculty Room is also being renovated and partitioned into cubicles which will serve as private offices of the faculty members.

The project is due for completion in early May.

## THE INSTITUTE OF ENVIRONMENTAL PLANNING 1974-1975

#### **Advisory Council**

Chairman: SALVADOR P. LOPEZ

Members:	LUIS ARANETA	JOSE M. LAWAS	SIXTO K. ROXAS
	ALFREDO JUINIO	RAUL P. DE GUZMAN	ANTONIO VARIAS

#### Administration

Ramon C. Portugal, A.B., LI.B., M.P.A., Ph.D., *Acting Dean* Gerardo S. Calabia, B.S. (Agr.), M.S. (Planning), *Secretary* Pedro E. De Luna, E.T.C., B.S. (Educ.), *Administrative Officer* 

#### The Faculty

- Gerardo S. Calabia, B.S. (Agr.), M.S. (Com. & Reg'l Planning), Assistant Professor & Secretary
- Benjamin V. Cariño, B.A. (P.A.), M.A. (Pol. Sc.), Ph.D. (Pol. Sc.), Associate Professor & Director of Research and Publications
- Susana S. Cayco, B.S. (Geog.), Dip. in Regional Development Planning, *Instructor*
- Dolores A. Endriga, A.B. (Psycho.), M.A. (Socio.), Instructor
- Yolanda M. Exconde, B.S. (B.A.), Dip. in Comprehensive Regional Development Planning, *Ins*tructor
- Felisa D. Fernandez, B.S. (Commerce), M.A. (Econ.), Ph.D, (Econ.), Associate Professor\*
- Tito C. Firmalino, B.S. (Educ.), M.P.A., M.S. (Com. & Reg'l Planning), Associate Professor & Director of Training
- Jose S. Gutierrez, B.S. (Agr.), M.S., Ph.D. (Econ.), Associate Professor\*
- Rosario D. Jimenez, A.B. (History), Dip. in Comprehensive Regional Planning, *Instructor*

#### Lecturers

- Candido P. Filio, B.S., M.S. (Phy.), M.S. (Math.), M.A. (Econ.), Special Program for Urban and Regional Studies
- Pedro N. Prado, A.B., M.E.P.
- Rene S. Santiago, B.S. (C.E.), M. Engr.

- Roque A. Magno, B. Surv., B.S. (G.E.), M.T.C.P., Assistant Professor
- Cesar O. Marquez, B.S. (Arch.), Dip. in Urban Planning, Assistant Professor
- Jaime U. Nierras, B.S. (Arch.), M.U.P., Instructor
- Ramon C. Portugal, A.B., Li.B., M.P.A., Ph.D. (Pol. Sc.), Professor & Dean
- Milagros R. Rañoa, A.B. (Econ.), M.A. (Demog.), Ph.D. (Socio.), Assistant Professor\*
- Asteya M. Santiago, LI.B., M.T.C.P., Associate Professor & Director of Graduate Studies
- Federico B. Silao, A.B. (Pol. Sc.), M.P.A., Assistant Professor
- Cynthia D. Turingan, B.A. (P.A.), Dip. in Comprehensive Regional Development Planning, Instructor
- Jose R. Valdecañas, B.S. (C.E.), M.T.C.P., Assistant Professor
- Lita S. Velmonte, B.S. (Social Work), Dip. in Urban Studies, Assistant Professor\*
- Leandro A. Viloria, A.B., M.P.A., D.P.A., Professor •

#### UNDP Project Staff

- William P. Paterson, B.A. (Socio), B.S.W. (Social Work), M.Sc. (Physical Planning), Project Manager & Visiting Professor
- V. Setty Pendakur, B.E. (Civil), M.S. (Planning), M.S. (C.E.), Ph.D. (Transportation Engineering, Public Policy), *Consultant in Transportation Planning*

\*On leave