Economic Development Indonesia Project C/58-3

WANTED: A NATIONAL URBAN POLICY

by Benjamin Higgins

Center for International Studies
Massachusetts Institute of Technology
Cambridge, Massachusetts
January, 1958

WANTED: A NATIONAL URBAN POLICY

The period since the end of World War II has brought a resurgence of interest in problems of economic growth, especially in low-income countries. By now most underdeveloped countries have prepared or are preparing national economic development plans. Many of them are also preparing regional and city plans. The United States, the United Nations, and Colombo Plan donor countries are providing technical and capital assistance at all three levels. The integration of planning at these levels thus takes on a new aspect and a new importance.

Plans at these three levels obviously overlap with respect to land use. A national development plan is usually presented in terms of levels and patterns of investment, income, output, employment, etc.; but it implies a certain location of industry and a certain distribution of population and thus a certain pattern of land-use. Regional development plans are more frequently stated in terms of land-use, and the land-use pattern is usually the core of a city plan; but the execution of city and regional plans affects investment, output, employment, and income.

The question therefore arises, "Is planning at national, regional, and city levels integrated with respect to land-use-either in theory or in practice?" Not only is the planning at the three levels done by different people under different kinds of authority and different laws, but the planners themselves usually have different kinds of training and use different kinds of analytical tools. It is therefore high time that serious thought be given to integration of national, regional, and city planning, both in terms of principles and in terms of their application, into a national urban policy.

Some progress towards a national urban policy can be made by improvements in administration. City and regional planners need a two-way street to the planning organization charged with responsibility toward a national development plan. Draft plans of the city and regional planners should be among the data studied by national development planners in preparing the overall plan. National development plans should be submitted in draft to the city and regional planners, for analysis of the impact on their area of execution of the national plan. This analysis of the city and regional planners should in turn be made available to the national planners, and utilized in preparation of the final draft of the national plan. Once development plans are in final form they should be made available to city and regional planners immediately so that they can make their final plans accordingly.

This process of solving a system of simultaneous equations should be a continuous one. Ideally, no plan, whether at the national or at the city or regional level, would have legal status for more than one year. In this fashion, there would be a continuous process of revision of national development plans for next year in terms of the city and regional plans of this year, as well as the degree of success in carrying out the national development plan this year. Direct contacts among the professional planners, and also of the planning authorities at all levels of government would help a good deal to promote integrated national planning.

Problems of Scope and Method

It is doubtful, however, whether providing opportunities for exchange of views and information among planners and planning authorities at all

levels of government will in itself produce an integrated planning process. There must also be greater uniformity of approach and methodology than now exists in the fields of physical planning on the one hand and economic planning on the other.

As a step towards delineation of the major difference in approaches to planning it may be useful to take a brief glance at the current controversy in India regarding physical planning versus economic planning. By physical planning is meant here what has been called elsewhere "target planning". Goals of national development are set in physical terms; at the end of a five year period, for example, the country should be producing so many tons of coal, so many tons of steel, so many kilowatt hours of electrical energy, so many square meters of cotton textiles, and so on. These goals are of necessity determined by the government, with the relative responsibility of the executive and legislative branches varying with the general political organization of the country concerned.

Setting targets does require some analysis of the productive capacity of the economy, and some kind of input-output analysis. A good deal of attention is paid to inter-sectoral and inter-industry balance in expansion. A large share of the planner's job consists of making sure that when the target is set for steel, the requirements for iron, coal, transport facilities, power, and the like are also included in the plan.

The implication of a purely physical planning approach to development is that the government has a good deal of direct control over the allocation of resources. It reflects complete lack of confidence in the market mechanism as an allocator of resources. In Communist countries, where physical planning was first developed, direct allocation of resources is substituted

for the market. In countries like India, where the public sector is relatively small, adoption of the physical planning approach would imply that the government can use other measures to control allocation in the private sector. These measures might include licensing, rationing, manpower allocation, and the like.

The economic approach is to make use of the market to a m ximum degree, and confine government intervention to areas where the market not only does not work, but can not be made to work. The first job of the planner, then, is to find out by empirical and theoretical analysis how the market is operating and the places and ways in which it is yielding unsatisfactory results. Next, the possibilities of making the market work better through monetary, fiscal, foreign exchange, and similar policies (perhaps including anti-monopoly legislation) are fully explored. If there are still important aspects of the economic development process which are not taken care of, the economic planner suggests direct controls over the private sector, or the expansion of the public investment sector.

The overall approach to development planning is "economic", if the analysis of the market process and ways of influencing it are the core of the planning process. Engineering, sociological, and other data are fed into the analytical machinery, but the analytical tools are essentially those of the economist.

It is true that economic development requires discontinuous and largescale changes in the structure of the economy, as distinct from comparison
of marginal returns on isolated investment decisions. It is also true that
economic theory as it now exists does not provide a reliable guide for
decisions where such discontinuous jumps are needed. It might also be pointed

out that input-output analysis plays a role in the economic approach as well as in the physical one. Nevertheless, economic planning of this kind is still conceptually a matter of patching the market, however big the patches may be.

The economic approach as here described implies a maximum decentralization of decision-making. To the greatest degree possible, in the light of the requirements for development as shown by analysis, decisions as to allocation of resources are left to individual investors, workers, and consumers; and where government must intervene, the decision-making is left as much as possible to regional and local governments.

The priority formula for allocation of scarce resources in the Philippines is an interesting combination of the economic and physical approach. The formula is essentially an effort to measure the contribution of various investment projects to growth of national income, to reduction of unemployment, and to improvement of the balance of payments position, relative to cost in scarce resources. These components of the formula are essentially reflections of market conditions. However, the formula also includes an "essentiality factor", introduced as a multiplier of the net addition to national income, which has to be determined independently of current market reactions. It is in effect an effort to measure the "external economies" attached to particular investment projects. That is, instead of considering only the returns of a particular enterprise from an investment made in it, an effort is made here to consider the impact on output in the economy as a whole. Thus particular projects-say land reclamation-may not in themselves be profitable, but may pave the way for other profitable private investment undertakings, so that the whole complex of investment projects, considered as

a lump, will add a great deal to total output and income. The effort to measure these effects takes the planner close to the physical approach, although sociological and psychological factors also enter into the calculation.

City and Regional Planning

Both the literature and the practice of city and regional planning in the United States and Europe involve a mixture of physical planning and economic planning. The broad goals of city and regional planning are usually stated in purely subjective and immeasureable terms, such as "an efficient and harmonious environment". The broad goal of economic policy-maximization of satisfaction--is equally subjective and immeasurable. During the past century, however, economics has made substantial progress in the construction of "thermometers" -- ways of measuring satisfaction indirectly. An economic policy is accepted as "good" only if objective and measurable guides show beyond doubt that aggregate satisfaction has been increased thereby. Probably the main contribution of economics to general knowledge has been the construction of a method for testing policies aimed at a subjective goal by objective and quantitative means. In my view, it is this method that would constitute the greatest contribution that economics could make to city planning. In general, application of the economic method would mean first isolating the "thermometers" for "efficiency and harmony" in the environment.

The next step would be to analyze the market process, isolating the defects in it in terms of these quantitative measures. Next the planner would decide, on the basis of empirical and theoretical analysis, what can be done to remove these defects by indirect policies (taxation, credit policy, etc.).

Finally, analysis should be undertaken to isolate those remaining defects in the market operation which could be best removed by public investment in unprofitable impulse sectors, and which ones could best be handled by direct controls of private investment, such as zoning, licensing, legal master plans, and the like. All this analysis would be conducted in terms of quantifiable functional relationships, the derivatives of which would be unequivocally related to the <u>direction</u> of change in degree of "harmony and efficiency".

It is not my impression that this sort of approach is followed by the majority of professional physical planners, whether in the classroom or in the planning office. Some planners may think in terms of analyzing urban growth and intervening only to bring marginal changes in the direction of growth; but even for them the relation between the intervention and "harmony and efficiency" is seldom set forth in terms of quantifiable functional relationships. And many other planners go straight from "harmony and efficiency" to physical goals in terms of street patterns, neighborhood units, green belts, transport facilities, and the like without reference to the preferences of individuals in the community as indicated by market choices.

The mixture of approaches and techniques is inherent in the way in which physical planning grew up. It started with city planning, and was an outgrowth of architecture. It was regarded as essentially a design problem, and "city beautiful" concepts dominated the activities of planners. Later engineering concepts were added to architectural ones, and physical planners became concerned with making a city function as well as making it beautiful. Traffic control, congestion, optimum density, physical relationships within and between neighborhoods, etc. became important topics for discussion.

Once into slum clearance, however, sociological questions began to arise, and the planner added sociological surveys to his function. At first economics entered mainly in terms of local government finance; but as more attention was paid to the relationship of cities to their hinterlands, considerations of location of industry began to play a role in physical planning. Since location of industry is a branch of economics, the physical planner became at this stage an economic planner as well. Moreover, it was recognized that a city could not be planned independently of its region, and regional planning became an increasingly important part of the physical planner's activities. In land-hungry countries such as England, the problem of encroachment of cities on agricultural land started to worry planners, and a whole new set of considerations came within their terms of reference. Indeed, once physical planners began analyzing the whole urban-rural complex and trying to formulate policies concerning it they were well into the field of economic development planning. The professional economist, however, was a late-comer to the field of physical planning.

As new aspects of planning were added to the physical planner's function (or at least to his concept of his function) the old ones were not dropped. The overall scope of physical planning was simply increased. The architectural and engineering aspects are still there; but now we have a very wide range of sociological, economic, legal, administrative and political theory aspects as well. Small wonder, then, that both theory and practice varies considerably with the individuals concerned.

Land-Use Aspects of Development Planning

The core of an economic development plan is a budget for the public

investment sector (at all levels of government), plus indications of what is expected from the private investment sector, and recommendations as to monetary, fiscal, and foreign exchange policies, manpower training programs, and the like to encourage and direct investment in the private sector. The economic development plans concentrate on <u>capital-use</u>; they assume implicitly that if an appropriate allocation of capital is obtained, the appropriate allocation of management, labor, and land will follow automatically. Thus economic development plans do not as a rule include a plan for land use. Decisions as to land use are left to private investors, local governments, and to central government implementing agencies, within the framework of capital allocation which is provided in the economic development plan.

There are exceptions. Some public investment projects are defined in place terms. The detailed presentation of the plan, listing roads, rail—roads, airports, harbors, land reclamation, resettlement projects, and the like will very often provide place tags for these projects. More rarely, the economic development planning process includes an analysis of location factors, and the plan may include suggestions as to location of new private industries as well. In the rare cases where such suggestions are made, they are usually connected with new public investment projects, such as power and transport, which are expected to open up new opportunities for private industrial or agricultural investment.

Indeed, here is one of the major weaknesses of economic development planning as ordinarily undertaken. Virtually no consideration is given to the optimum location of enterprises. Certainly development planners need not be concerned with street patterns, design of public buildings, and the like. But even the crucial questions of rural versus urban growth, and the

distribution of new enterprises among cities, small towns, and villages, the selection of growing points and leading sectors, which are the very core of economic development, are frequently neglected.

The first requirement for the development of a national urban policy, as a guide to inclusion of land use aspects of development in the development plans, is an analysis of what is happening now. Most underdeveloped countries show a disturbing tendency towards agglomeration, conurbation, and the like. Why have these trends appeared since World War II? Is it a healthy or an unhealthy development? What objections are there to permitting the pattern of land use to develop "naturally"? These questions deserve much more study than they have yet obtained. Conditions seem to vary from one country to another. For example, the available evidence suggests that in India people move from partial employment in rural areas to total unemployment in the cities. In Indonesia, on the other hand, it seems that unemployment among in-migrants is lower in the capital city of Djakarta than it was in the rural areas whence they came.

Conclusions

Until national development planners and city or regional planners come closer to speaking the same language, merely providing administrative devices for bringing them together is unlikely to produce an integrated national urban policy. It is necessary for the approach and method in both fields to incorporate more of the practices of the other.

On the physical planning side, an infusion of the methodology of economics would help to pave the way for incorporation of city and regional plans into the national development plan. A preliminary question to be

answered is, "Does maximization of 'harmony and efficiency in the environment' mean something different from 'maximizing satisfaction in the community', for the range of decisions involved in a city and regional plan?" If the answer is "no", then city and regional planners are simply concentrating on one segment of the national development plan. There should be no difference in approach or method unless it is clearly called for by the difference in the area of control by a local government and by a national government. If the answer is "yes", it become necessary to establish precise relationships between "maximizing harmony and efficiency" and "maximizing satisfaction". Do the two goals ever conflict? How? What do we do then? If they move in the same direction but are not identical, what is the functional relationship between them? How must the geographically and substantively limited goal of maximizing harmony and efficiency be modified to conform with the broader national goal of maximizing satisfaction? Just answering such questions as these will require a good deal of joint research by economic and physical (city and regional) planners.

At the same time national development planning must pay much more attention to spatial aspects of development than it has done to date. Ideally a national development plan would include a map as well as an investment budget—as a city plan should include a budget as well as a map. Most development planners are not trained to think in land—use or spatial terms. It is not merely a matter of analyzing location of industry, but also of taking account of the physical interrelationships of the projects included in a development plan.

What all this means with respect to training depends on how much teamwork

can be expected at the national and local level. If we could be sure that every city planning organization would include professional economists, public opinion poll specialists, engineers, sociologists, and architects, as well as "city planners", and if national development teams would include all these disciplines and also agriculturalists, geologists, etc., then city and regional planners could be trained primarily to test proposed plans in terms of their physical balance—their contribution to "harmony and efficiency in the environment" as indicated by quantitative analysis. But such teamwork is probably /more than we can hope for in every case. Accordingly, it would seem safer to make sure that city planners are capable of conducting economic analysis and that development planners can conduct physical analysis. If we accept these capabilities as part of our training goal, the organization of courses in both city planning and in development planning will need redical revision.

APPENDIX

City Planning: Art or Science

As indicated above, one barrier to closer integration of economic development planning with urban planning is the difficulty social scientists face in delineating the scope and method of urban planning. In particular, where does science end and art begin in city planning?

Let us assume that "hermony and efficiency" is accepted as the broad goal of urban planning. Presumably city planners are not aiming at attractiveness and efficiency of the entire universe. What is the accepted scope of city planning? It would be very useful if city planners would first complete some such list as the following:

A. Scope

Broad Goal: Attractiveness and Efficiency of Urban Facilities

I. Aspects of Efficiency

- l. Minimum travel time
- 2. Maximum safety
- 3. Minimum cost of travel facilities
- 4. Optimum density
- 5. Optimum location of shopping, financial, industrial, recreational, residential facilities

etc.

II. Aspect of Attractiveness

- 1. Street pattern
- Parks, playgrounds, green belts, etc.
 Design of public buildings
- 4. Design of private buildings (including residences) etc.

Having determined the scope of urban planning in this (or another) fashion, the next step is to determine the method. Three alternative possibilities occur to me.

B. Method

I. Urban planning as a science-approach through economics.

"Maximizing attractiveness and efficiency" would mean here "maximizing satisfaction" with respect to the various items listed under "Scope".

It would presumably mean maximizing satisfaction for the whole nation, not just residents of the city immediately concerned. To the extent that non-residents are interested in what happens in Urbania, their wishes must be reflected in policy decisions.

The criterion for "satisfaction" (and so for harmony and efficiency) would be market choices. These would be accepted in the absence of water-tight scientific evidence that the market does not give expression to choices in a way maximizing satisfaction. Urban planning would be a matter of "patching the market" with respect to items under "Scope".

With this definition of scope and method, urban planning becomes a specialized branch of economics.

II. Urbanism as a Science: Approach through Politics

An alternative approach would be to accept the <u>political</u> decision that local governments have responsibility for intervening in the market with respect to the items under "Scope". Maximizing attractiveness and efficiency would still be identical with maximizing satisfaction with respect to those items. Instead of using market choices as the indicator of satisfaction, however, wishes would be treated as expressed through the political process. Thus urban planning would become mainly a matter of analyzing the political process as it affects the items under "Scope", and discovering and using means (public opinion polls, surveys, electronic voting computing machines for

referendum, etc.) of making it a more accurate reflection of public wishes.

Instead of "patching the market", urbanism would concentrate on "patching the political process". It would therefore be a specialized branch of political science rather than economics.

Presumably urbanism might also be regarded as a combination of economics and political science. In that case, however, a good deal of work would be needed to determine the relationship of the market to the political process, so as to know when to patch the market and when to patch the political process.

III. Urbanism as an Art: Approach through Design

In order to avoid misunderstanding, let me say at once that I regard Art more highly than Science. However, if urbanism is to be pure Art, the integration of urban planning with development planning becomes more difficult, and will certainly take a different form.

With urbanism as an Art, "attractiveness and efficiency" are no longer coterminous with "maximizing satisfaction". They become subjective concepts of the planner himself. The planner now becomes a factor in the market and in the political process. He is trying to sell his product for the highest possible price, and he is trying to intervene in the political process to get results that he thinks are good. Like any artist, the planner will have his own view of what is "attractive and efficient", and also an estimate of what he can sell in the market or have accepted through the political process. He will make whatever compromise his conscience permits. The satisfactions of others thus enter the process of decision-making regarding aspects of the plan only as a factor limiting the artist's ability to sell

only what he thinks is good, and still make a living.

There is nothing more "undemocratic" about this approach than there is in the usual way of choosing an artist to paint murals in the town hall, or an architect to design it. But the planning process ceases to be scientific, and the social scientist has difficulty in seeing how he can integrate his analyses with this art. One may as well askfor integration of development planning with selection of paintings for a public gallery.

For about fifteen years I have been trying to discover what it is that city and regional planners think they are doing, in terms of some such framework as that presented in this Appendix. Usually I am told that planners are doing "all these things". But that is the trouble. What most planners seem to be doing is really practising their art, as under method III. But they have recognized that their bargaining power in the market and in the political process is enhanced by wrapping their artistic package in scientific trimming. They may also have enough intellectual curiosity to try to find out what others regard as attractive and efficient. But the policy recommendations of the planners do no follow rigorously from their scientific analysis. (See, for example, Urban Land Use Planning by Stuart Chapin; Part III on "Planning" and the "Plan" is not a set of logical and precise policy conclusions derived from the analysis in Parts I and II)

Art becomes the final arbiter.

I do not think this kind of mixture of art and science is a good besis for integration of urban planning with development planning. It would be better if it were pure art. If it is to become a true science, much more attention must be devoted to questions of scope and method.