URBAN LOW-INCOME SETTLEMENTS IN DEVELOPING COUNTRIES: CHARACTERISTICS AND IMPROVEMENT STRATEGIES

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> Alice thought she had never seen such as curious croquet-ground in her life; it was all riges and furrows; the croquet balls were live hedgehogs, and the mallets live flamingoes, and the soldiers had to double themselves up and stand on their hands and feet to make the arches... Alice soon came to the conclusion that it was a very difficult game indeed. The players all played at once without waiting for turns, quarrelling all the while, and fighting for the hedgehogs...
>
> – Alice in Wonderland*

I INTRODUCTION

This is a discussion paper on the relevance of characteristics of low-income urban settlements to improvement strategies. We have been asked to delineate typologies of such settlements, with the assumption that there is a relationship between typology and strategy.

Our analysis begins with a review of several well know typologies, leading to the conclusion that a typology of different residential settlements do not constitute a sound basis for formulating improvement strategies suitable for a variety of actual situations. This is followed by a discussion of a number of settlement characteristics in the context of on-sight upgrading, the only locality-based improvement strategy. First, we urge a more detail examination of each settlement according to its community, household and individual profiles. Then there is an analysis of the importance of size, density, continguity, terrain, location and access, and the jural situation (land tenure security). We also include a discussion on the relationship between settlement characterstics and micro-policy issues such as building codes and housing standards, income and affordability, and site selection. Finally, there is a brief comment on popular participation and community organization, with emphasis again on the potential relevance of some settlement characteristics. We conclude by pointing out the need for improvement strategies at the national level and raise a question whether urban housing conditions for most cities have deteriorated.

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* Quoted by Marshall Wolfe in his book Elusive Development to illustrate the real participants in policy making in contrast to mechanistic development prescriptions.

II SETTLEMENT TYPOLOGY AND IMPROVEMENT STRATEGY

Among the earlier and Western-based typologies, Charles Stokes has popularized the distinction between "slums of hope" and "slums of despair", and each of these is futher dichotomized into "escalator class" and "nonescalator class."[1] What differentiates "hope" from "despair" is the resident's attitude towards social and hence residential mobility. What separates the "escalator" from the "nonescalator" class is the measure of opportunities for advancing out of the slums. This fourfold classification of slum population comprises types "a" (slums of hope with escalator class), "B" (slums of despair with escalator class), "C" slums of hope with nonescalator class) and "D" slums of despair with nonescalator class). It has been suggested that slums of hope generally include homes of recent migrants whereas slums of despair are more populated by groups of longer residence. The escalator and nonescalator classes are comparable to two categories of jobs, one of which allows social mobility and the other one does not. Types "A" and "C" are supposed to be self-eliminating given time and economic growth whereas the other two will have much more difficulty. The hypothesis is that, in a growing and industrializing economy, a larger proportion of immigrants to the city may be unable to meet the increasing demands for high level education and skills and thus destined to remain in the slums of despair.

As classification, it is questionable to what extent stokes' 4 types of slums meet the test of empirical reality, especially in a cross-cultural setting. To begin with, the nature of his 2 main variables are in fact more heterogenous than suggested and the measurement of these variables is in essence more of a continuum than dichotomy. Relatively few members of urban low-income households have absolutely no social mobility aspirations; the question is one of the nature of desired mobility and the possibility of its realization. The individual-based hope-apathy continnum also has an aggregate counterpart in the context of community organization-disorganization continuum or continua, depending on the dimension(s) chosen. The second variable, opportunities or barriers for social mobility at the individual level,may be of different types ranging from physical handicap to level of education or skills. Even if a single variable such as education or occupational skills were to be used, the measure is again more of a continuum and it would be overly simplistic to dichotomize the population into either the "escalator" or "nonescalator" class. Furthermore, Stokes did not sufficiently recognize the variety of societal or institutional factors that may promote or impede socail mobility of the urban poor.

In the well-known "culture of poverty" study undertaken in Latin America, Oscar Lewis did not find the kind of personal isolation and social disorganization that are said to be associated with North American slums.[2] However, he did conclude that many (but certainly not all) squatters and slum dwellers in Mexico exhibit resignation, inferiority, a strong sense of orientation to the present and an inability to defer gratification. Furthermore, such attitudes are likely to be passed from one generation to the next. In this sense, both the "culture of poverty" and "slums of despair" suggest that there is a segment of the urban poor which is permanently locked into poverty and it is socially and economically marginal to the larger community. Given that economic integration - marginality is a matter of degree, just like the social components in the "culture of poverty", it is now generally recognized that there is considerable linkage in production and consumption between the slums and the larger community in developing countries.[3] To some critics, what appears as marginality is in fact exploitive integration in an asymetrical manner detrimental to the interests of the poor. According to this view, squatters and slum dwellers represent the economically and politically repressed underclass in a rigid social stratification system.[4] The analogy is somewhat akin to the concepts of core-periphery or formal-informal sectors. Therefore, traits such as little education, low wages, lack of mobility aspirations and fear of authority are instructural in origin rather than cultural. In other words, we should not blame the victims for being victims of discrimination by society and public policy.

The question of economic integration of slums and squatter areas was also raised by Frankenhoff who made the distinction between "open-end" and "dead-end" slums. The difference between the two is is economic linkage and potential in reference to the larger community involving variables of investment, fiscal contribution, market for consumer goods and labor force supply. Frankenhoff clearly recognized the slum's right to exist and the need for a slum community integration policy in any urban development strategy. Since all his variables are essentially continuous, to operationalize measurements will again require several scales which have to be somehow combined into a synthetic score for each slum. The resulting distribution of the synthetic scores may yield some insight into the "openess" of the slums.

It is not possible to generalize on the integration of the slum with the city because conditions vary from country to country, city to city, and site to site. Age and location are two important factors. When squatter settlements

are built in a hurry and on the periphery of the city such as a kind of "invasion" of public and private land seen in Latin America, they may be originally isolated from the economic and social systems of the larger urban community. However, some linkages will be established with time.

Based on the U.S. experience, Seeley has developed a typology of slum dwellers according to 2 criteria: reasons for involvement (necessity and opportunity) and term of involvement (permanent and temporary).[5] From this a fourfold classification of slum dwellers has been identified, each having from 2 to 4 subtypes. The first is the "permanent necessitarians" which comprise the indolent, the destitute and the social outcasts. The second type is "permanent opportunists", comprising those who are in the slums because of the opportunities offered there such as fugitives, gamblers and social missionaires. "Temporary necessitarians" consistitute the third type and includes the respectable or the working poor whose values remain outside of the slum and are likely to achieve mobility. Finally, there are the "temporary opportunists" to whom slum living offers a way of savings, independence and self-improvement. The unattached migrants to the city who see the slum as a transitional station while they find work and become adjusted to urban life. These 2 "temporary" types typify those in the "slums of hope". However, it should be pointed out that this is a classification of slum dwellers and not slums since all 4 types may be found in the same settlement At least in the U.S. context, this points to the heterogeniety of the slum population.

John Turner has developed some typologies, partly to show the complex relationship between people and housing and the importance of process as well as product. In one classification, he has distinguished 3 hypothetical economic levels of urban transitional settlements: the "very low-income bridgeheads", the "low-income consolidators" and the "middle-income status seekers".[6] The "bridgehead" type is mainly populated by recent arrivals to the city with few marketable skills. The most important priority of this group is access, especially proximity to employment. Security of land tenure does not assume much importance and concern with modern housing standards have the lowest priority. Some inner city slums typify the "bridgeheader" which has the appearance of "slums of despair". In the "consolidating" or improving type, access is less critical because of income stability although conventional housing is still out of reach. However, more funds are available to upgrade the dwelling in an incremental manner through self-help. Security of land tenure has the highest priority followed by infrastructure improvements. Many such settlements are found in peripheral squatter areas which

may be well organized and symbolized "slums of hope". The "status seeker" type of settlement is characterized by greater economic security which allows choice of good location with legalized land tenure. Upgrading of housing quality assumes high priority, followed by access to social services.

Classification such as this only begins to point to a range of settlement types with different subcultures. To warn against over simplification, Turner has strongly emphasized that any particular housing system is a highly complex matter comprising 3 basic sets of elements: the household, its dwelling and its neighborhood.[7] To understand the household situation, we need to take into account its economic status (occupation and income), its composition, and its future expectations in context of its recent history. By dwelling we include the components of location which provides access to economic and social supports, land tenure and the shelter quality. At the neighborhood level, consideration should be given to network of infrastructure, patterns of landuse and building types. The conclusion is that any particular locality or settlement subsumes a highly variable set of constantly changing subsystems or elements. The configuration of these elements is bound to change as the socio-economic context of the household, the settlement or the city changes.

While acknowledging the capability of self-improvement of squatters and slum dwellers and their changing priorities as the economic situation improves, Perlman also pointed out that Turner's typology which was based on observations in Lima, Peru, may not be applicable in Rio de Janeiro, Brazil.[8] Turner described the process in Lima as one where original migrants settled in rental slums of the inner city, followed by organized invasions of peripheral lands in a later stage of consolidation. In Rio incoming migrants have no clear patterns of "bridgehead" or "consolidation" settlements, but settle wherever kinship or friendship ties and likely to remain there for the next generation. Unlike Lima, peripheral settlements in Rio are not occupied through any sort of planned invasion, but rather incrementally as are the ones in the central city.

Perlman herself has developed a typology of squatter settlements based on 2 criteria: location (central or peripheral) and terrian (flat, hilly or marshland).[9] Location is considred crucial for policy purpose because a cluster of other variables tend to be associated with it. The peripheral settlements are futher dichotomized into 2 subtypes: those that developed spontaneously and incrementally over time and those that were planned in advance and settled through some planned action such

as the kind of "invasion" seen in Lima. Accordingly, this classification yields 9 types of squatter settlements: 3 for those with central location and 6 for the peripheral because of the planned-spontaneous variable.

Needless to say, the central - peripheral location is a continuum rather than dichotomy. While older age and higher density are likely to be associated with a more central location, we cannot assume that tenure security and quality of building materials will necessarily increase from central to peripheral settlements, as Perlman hypothesized. Also, the kind of planned invasion by squatters is not seen in again, thus pointing to the limits of generalization of some typologies.

The meaning of the term "slum" has no precision in definition. Characteristics such as low income, high density, overcrowding, disease and crime, social disorganization and personal isolation essentially constitute a series of individual continua and may exhibit different configurations from one settlement to the next. More importantly, the perception of, and response to, the mixture of these physical and socio-economic characteristics depends on context: what may be good enough in one place is problematic or offensive in another. A phenomenon is not a problem until some people define it as such. Marris has described it as follows:[10]

> The word "slum" is like the word "dirt": evocative, disapproving, and indefinable except in the context of our expectations of what should be. Garden soil becomes dirty only when careless feet trample it on the kitchen floor; a thatched hut becomes a slum only when transported to the city..... What to the newcomer to the city is a foothold on a more promising life appears to the administrator an eyesore.... If slums are like dirt, they are also like problems. Problems exist only in the context of someone's expectations - and according to one's interests and beliefs, the problem may change its definitions and disappear.... If we are to discuss slums, we need to remind ourselves that at the outset that we are not talking about overcrowding, lack of amenity, or poverty as such, but about the relationship of such conditions to a context of meaning that changes with one's point of view.

Although often described as a form of slum, the term "squatter settlement" refers to the illegal occupancy of land which necessarily involves insecuity of tenure. Tenure insecurity puts the squatter at risk of losing his investment on

housing and facilities, and also has the prohibitive effect of further investment. The reality of tenure security - insecurity may be a heterogeneous continuum with different forms and degrees of quasi-legality some of which are particular to the country or region, such as the so-called "purchases" of quasi-legal, unimproved, peripheral plots commonly occured in El Salvador or the different types of temporary occupancy licence issued to squatters by some governments in Southeast Asia.[11]

Therefore, global or regional classification of slums and squatter settlements that has a high degree of correspondence to reality can be difficult because of the variability of some key variables. Even at the city level, what constitutes a "slum" or "squatter area" is sometimes not easy to define. In a study of Balic Balic, a "long-income" settlement in Manila, Hollsteiner found a great mixture of housing types, tenure arrangements, a wide range of household income distribution as well as different patterns of attitudinal and behavioral adjustment to urban life.[12] The conclusion is that there are urban settlements, especially in large metropolitan areas, that do not neatly fall into the commonly perceived definition of "slum", "squatter area" or even "low-income settlement". In the words of the author, "A closer look at the bowl perceived from afar to contain just plan gulaman reveals sizeable chunks of fruit salad unevenly distributed all through it".

Certainly not all low-income urban population of developed and developing countries is found in slum or squatter settlements. To take 2 extreme cases, public housing estates and new towns in Hong Kong and Singapore provide shelter for more than half to 80% of the entire respective populations can these may also be considered low-income. In fact, in the Singapore case, it can be difficult to distinguish the boundries between low and middle-income public housing. In any event, the quest for a typology of all major low-income settlements with any power of generalization beyond the city level is even more elusive. Obviously, what is "low-income" is subject to operational definition, depending on the purpose. There may also be variations in the definition from city to city, and certainly from country to country. Also, different criteria may be applied to the size of a settlement, which may be of a few structures in close proximity to a very large area containing tens of thousands of population.

For illustrative purpose, Leeds has a classification of urban low-income settlements which include public and private area squatter settlements, emergency housing, multihouse housing projects, inner city slums, extrepreneurial rooming

houses, temporary space rentals, partment housing projects and private separate houses, and government-created shack towns.[13] Abu-Lughod has a classification for the Arab region, comprising centrally located slums, converted commercial and institutional structures, converted upper-class palaces, high density and inadequately maintained old residential building, squatter housing, cemetary zone residence, and public housing.[14] She has a brief discussion of the problems associated with each of these types but without any direct reference to improvement strategies.

But our concern is not with typologies per se but rather their policy or operational relevance for improvement of urban low-income settlements. In the academic context, typologies or "ideal-type construct" tend to describe some characteristics in broad, qualitative terms and do not necessarily have a great deal of correspondence with any particular set of realities. Typologies are usually simple in that they are based on a very small number of variables and thus cannot be expected to describe slums, squatter areas or other low-income settlements in any comprehensive way. The selected variables in general and well-known typologies, however important, may be too limited in number on one hand and not sufficiently specific on the other hand for a variety of planning purposes. Moreover, variables that are basically continuous are treated in typologies as if they were discrete so that the categories appear to be mutually exclusive.

Nevertheless, comparative and developmental typologies can be useful as important sensitizing concepts in the early stage of inquiry, leading to more in-depth analysis of the variables. Typologies do not usually tell us much about process; some analysts even said that typological thinking is atagonistic to processual thinking. But this need not be so; typologies can indeed promote more critical research resulting in useful knowledge. For example, Seely's original classification of "slums of despair" indirectly prompted the proliferation of reserach showing the positive attributes of the urban poor and the analysis of the structual problems of poverty.[15] Also, the impact of Turner's classification on the greater emphasis on context, process and causation is well known.

The relationship between a typology of different urban low-income settlements and improvement strategies was discussed at a UN expert group meeting in 1976. One main conclusion of the meeting is that typologies in themselves do not

constitute sufficient groud for the formulation of strategies appropriate for a number of actual situations at either local or national level.[16] Strategy formulation usually requires analysis of a large number of variables based on a variety of methodogies in specific contexts and this is not what ready-made general typologies can provide. In addition, we have just pointed out that different residential situations should be viewed not so much as distinct types but as a continuum which allows for differentiation and underlying continuities as well as processes.

Classification of characteristics of urban low-income settlements may have relevance to strategy formulation in so far as it is only part of the process. The content of relevance depends on the conceptual and methodological scope of the decison-making process. One approach is to undertake an essentially quantitative assessment of the economic and environmental characteristics of the settlement and the characteristics of the households as indicators for specific planning prupose such as site selection for on site improvement, resettlement or even urban renewal. In this approach, we may also begin with a general strategy such as slum improvement but the refinement of the strategy for implementation can be modified according to the particular characteristics of the slums or squatter areas. This is commonly done in practice, based on the recognition that there may be substantial varations in characteristics between slums and within a given settlement. Under these conditions, the use of classifications lend support to strategy formulation and implementation at the more micro or settlement level.

Another approach is to link manifest enviornmental and socio-economic conditions of settlements to certain larger processes such as distortions in the housing market or dualism in the city or country. To some analysts, the importance of the manifest conditions lies in what they indicate about the underlying processes and causation. In this context, the scope of policy and strategy concerns are likely to be directed to the macro or city and national levels.

To recapitulate, our view is that we cannot expect the formulation of any general typology to have significant and direct policy relevance suitable for adoptation in a number of countries or perhaps even in a single country. In planning for housing strategies, it is far more crucial to analyze the contextual (political, economic and socio-cultural) factors that determine the feasibility,

limits and effectiveness of any improvement strategy which may be at the macro -micro (national-city-settlement) levels. In so doing, it is not typologies but rather the analysis of individual settlement characteristics and their configuration for specific planning purposes, such as design standards and affordability, that has greater potential utility. In so far as we cannot anticipate the great variety of classifications needed for policy or operational use and given the impossibility of formulating typologies taking into account different contexts, may be we should let different users select and classify what is important to them for their own use.

III SETTLEMENT CHARACTERISTICS AND IMPROVEMENT STRATEGY

At the settlement or locality level, there are 3 general improvement objectives with each having its own distinctive strategy. A strategy defines a course of action to achieve a hierarchy of selected objectives. The first approach is essentially social in objective: on-site community upgrading (slum improvement) with maximum retention of population and preservation of existing community organization. The second approach is urban renewal which may entail economic or social objectives or both. Urban renewal with an essentially economic objective aims to enhance the economic viability of the area and usually implies site clearance and relocation of existing population. The social apporach is to relocate existing population to a staging area, construct public housing on the cleared site and offer the former residence the option to return. Urban renewal could also embrace a mixture of economic and social objectives, as seen in Singapore and Seoul. The third approach is slum clearance for public purposes such as infrastructure construction. Sometimes sites-and-service is a component part of this strategy. Needless to say, each of these three appraoches affects the living enviornment of the population and the character of the site very differently.

If we are concerned with the improvement of the living enviornment of the on-site population, then slum improvement is the only locality-based strategy. However, if our focus lies in the improvement of living enviornment of low-income groups in the city in general, then sites-and-service, core housing, conventional public housing, co-operative housing and even private sector low-cost housing

may be taken into account as components of an overall strategy. One could argue that there is certainly the need to combine both locality and non-locality-based strategies for all metropolitan areas in developing countries since not all low-income population is found in definable slum and squatter areas and that moderate income groups have housing needs too. For some cities such as calcutta and Madras, the large number of pavement dwellers will require a specail strategy to meet their shelter needs.

The utility of understanding various settlement characteristics in a policy or operational context depends very much on the objectives and the strategy. Data analysis required for delination of blighted areas in Korea for urban redevelopment is very different from criteria formulation for site selection in Jakarta's Kampong Improvement Program. Since we are primarily concerned with slum improvement as the locality-based strategy, the following discussion on the relevance of settlement characteristics is essentially oriented in this direction. The actual significance of any variable or combination of variables has to be defined in each specific context which delimits the extent of our generalizations.

From the planning perspective, it is important to emphasize differences between settlements as well as similarities and modify the improvement strategy accordingly. Experience in upgrading show that each settlement is likely to have a set of unique features that cannot be generalized in advance. The appendix table comprises a list of settlement characteristics or variables categorized at the community, household and individual levels which combine to give a community profile.[17] The list of variables is given for discussion purposes and not meant to be comprehensive, and many of them are found in surveys of slum and squatter areas. Expansion and elaboration of variables in the table will further enlarge the data base and permit the formulation of a series of indicators ranging from immediate housing enionment to community participation.[18]

Aprodicio Laquian has identified 10 significant variables which are amendable to specific forms of measurement and operationalization. The variables include spatial location, degree of deterioration of dwellings, age of settlement, type of land occupied, adequacy of urban services, community organization or disorganization, ethnic or class heterogeniety, extent of deviant behavior, apathy and social isolation, sanitation and mobidity levels.[19] His thesis is that, by empirical analysis of existing

settlements in cities, general configuration may emerge and the developmental implications of such configurations may then be determined. Instead of being captives of imprecise terminologies as slums and squatters, low-income settlements may be better described this way and some general hypothesis on the correlations between variables may be tested. Fro example, a high degree of association may be found among variables such as central location, high degree of physical deterioration, overcrowding and congestion, old age of area, high value of land, relatively more adequate services, greater ethnic and class heterogeniety, and higher degrees of apathy and social isolation. On the other hand, peripheral areas may show less physical deterioration and be far less congested, relatively younger, built on marginal lands, have inadequate services, be relatively more organized, have greater homogeniety, display less deviant behavior and may be less apathetic and isolated. This does not mean that a given settlement has to conform to all of the conditions; what matters is the predominant character of the area.

At the level of individual variables, size and density are crucial in their potential for upgrading. The population size and physical expense of a settlement help to delimit its manageability and resource requirements for improvement. Klong Toey in Bangkok covers 128 hectares and Tondo Foreshore in Manila covers 185 hectares. It makes a great deal of difference whether a government is dealing with a community of 30,000 or 3,000. In the former, the government needs to identify smaller and more manageable subcommunities for improvement programs whereas in the latter case they are likely to be a few readily identifiable communities. Size and geographical area may also determine the visibility of the settlement such as plolitical pressures, protest, and media exposure which can enhance or hinder improvement programs. For many years before it's upgrading, Tondo Foreshore had become a symbol of poverty in the whole community and large symbolic battles were fought on site. The population and geographical size may also termine the number of approaches in the improvement program since larger communities generally require more complex solutions. A community of 30,000 is likely to be more heterogenious than the smaller ones and require greater attention in the formulation of design standards. Density directly affects improvement standards. Tondo has 0,000 persons per km^2 and Klong Toey has 250 persons per dectare. Very

high population density usually means very intensive land use in the location of dwelling structures. With little space for infrastructure improvement, the strategy ideally requires that a portion of the population be relocated through a component sites-and-service project. This would be fine if suitable land in close proximity could be acquired; unfortunately this is often not the case in practice, resulting in further standard reduction or inaction on the part of the government.

Contiguity and topography are two other variables usually considered with size and density. An elongated or oddly shaped community can be difficult to organize. Depending on the specific case, provision of certain kinds of infrastructure may be technically difficult and expensive, such as settlements located along railroad lines and river banks. Similarly, provision of infrastructure may also be difficult for settlements located on steep hills or very low marshlands.

Where the low-income settlement is located affects its viability for upgrading. By location we mean both the actual physical location and relative location as determined by access to transportation and other methods for social circulation. Although slum and squatter concentrations shows on maps of Bangkok, Kuala Lumpur and Manila appear randomly spread through out the metropolitan areas, a closer look at community studies reveal the logic behind their location. Factors such as proximity to work place, access to public transport, availability of land and urban services emerge as reasons. In general, slum and squatter areas tend to be close to the city center where jobs for the poorly uneducated and unskilled are more available. In cities where there is proliferation of settlements on the periphery, land availability and sometimes government resettlement program are factors. Where people are allowed to settle spontaneously, they tend of locate as close to employment as possible.

Location and access are critical for sites-and-service projects that may or may not be a component of slum improvement. The link between place of residence and place of work is so important that it usually spells the difference between success and failure of the project. Experience in sites-and-service projects in many countries, usually outright failures such as the Sapong Palay project in Manila, Still, availability of public land generally takes precedence over location as the main criterion for project location. Sometimes there have been efforts to bring jobs to people. However, employment creation for

unskilled people who may have a history of high mobility on inadequately serviced sites located some distance away from the central city area can be very complex. In sites-and-service schemes, the economic and social components are usually the weaker ones in implementation as compared with infrastructural services.

The major variable differentiating among urban low-income settlements is the "jural situation" of dwelling occupancy. Jural situation refers primarily to the secuirty and legal status of tenure. It has consequences for the socio-political organizations of the settlement as well as for the appropirateness of strategies to improve the living environment. Insecurity of land tenure gives residents of squatter settlements a common interest in defending their occupancy of land and therefore incentive in community organization with well developed leadership. The tenure situation in centrally located slums, however, is isgnificantly different. The residents are mostly tennents whose security of tenure depends in varying degrees on maintaining good relations with the landlord or his agent. In some cases the landlords live in their slum buildings and have close relations with the tennents through kinship, ethnicity or common region of origin. In this case, a cohesive informal community structure may develop although slum communities seldome develop the kind of solidarity of squatter settlements.

Security of tenure varies from one settlement to another within the same broad grouping. One squatter settlement may be scheduled for demolition while another several miles away may be relatively secure, although both have the same legal status. Similarly, security of tenure will change over time for particular settlements. Squatter settlements often become more secure with the passage of time. The security of tenure of a particular squatter settlement may may evolve from great uncertainty immediately after occupancy to considerable stability that occurs with "consolidation" of the settlements. The community organization and degree of political mobilization may also change according to security of tenure. It is generally agreed that granting of title to land by the government will accelerate consolidation, particularly through investment by the inhabitants themselves.

There are several variables which may affect security of tenure of the squatter settlements: location and economic value, feasibility for improvement, whether the land is publicly or privately owned, nature of demand for the land, determination and the political status of the legal owner. One common impression

is that rationalization of land tenure is easier if the land is publicly owned. This is not necessarily so because in most instances the public land is not within the disposal of the national housing authority and the like. Sometimes the land that is needed for rationalization for slum improvement is owned by powerfu government agencies such as the ministry of interior or is otherwise designated for more urgent public use. The process of transfer of public land from one agency to another can be most frustrating, especially when low-income housing has low priority in the overall development strategy. A unique situation exists in Thailand where crown land, though public, cannot be legally converted to free hold status by the people. Under these circumstances, the best form of rationalization is to grant the sitting squatters a fixed term lease. When the land is privately owned, the housing authority will have to acquire it from the landlord and redistribute to the squatters. The well-known problem here is high cost and possibly very lengthy expropriation proceedings which may last 10 years. In some cities site selection for slum improvement heavilyfavor those squatter settlements located on certain kinds of public land and thus risks criticism of inequitable treatment of those on private land.

Probably the most important variable affecting the jural situation of the squatter settlements is the government's urban development goals in general and its attitude toward low-income housing, especially slum improvement, in particular. Even with a pro-urbanization policy, some governments emphasize the economic objectives much more so than the social ones which include other sectors beside housing. The extent of economic or social bias may be gauged from resource allocation to the various social sectors. More directly, even a pro-social housing attitude cannot always be equiated with pro-slum improvement, as seen in Korea, Hong Kong and Singapore. Government attitudes towards land tenure for the squatters range in a continuum from intolerance to begnin neglect to supporting. Clearly this variable changes from country to country, placing settlements that are otherwise similar but are located in different countries, in different situations. The kind and degree of support or nonsupport that governments offer residents of low-income settlements has substantial influence on their living conditions and the social organization of the community.

There is a close relationship between existing housing conditions in the slum and squatter areas and the design standards as well as building codes

of the improvement strategy. More specifically, the issues are to seek a set of standards that would be acceptable to the "professional minimum" and yet not so high as beyond reach for most of the beneficiaries. Frustrations with the use of building codes and housing standards in slum improvement and sites-and-service projects have prompted proposals to completely abandon such efforts. However, the answer may not be the elimination of standards totally but the formulation of more apprppriate or realistic ones. Lessons of experience have shown that the blind borrowing of legislative codes and professional standards of practice devised from technologically advanced developed countries can have disastrous results since most of these codes were devised under different cultural and historical conditions. Current attempts to formulate codes are based on more information and better understanding of actual conditions in low-income settlements. The gap between the professionals and their low-income clients has narrowed, and more realistic codes and standards are now being developed to replace paternalistic documents of the past. Nevertheless, certain issues tend to recur and these include plot size, size and design of dwellings, building materials, density standards, and building materials.

We may say that there is no one set of minimum standards that would be applicable from country to country, and sometimes not even from one city to another. The foremost consideration is to design a program scaled to meet the total size of the problem; anything less is to say that a certain percentage of the people will contintue to seek out squatter settlements and build unplanned, uncontrolled and unserviced areas of their own.

There is substantial variability in country policies related to size of project plots. In Tondo, plots range from a minimum of 30 m^2 to 96 m^2 whereas in Zambia the range is between 210 m^2 and 324 m^2. Plot size in most other countries would probably range between these two extremes. Discussion on minimum space standards could more effectively begin with practical knowledge of what is taking place and what is acceptable to people who actually live in the spaces, rather than on theoretical considerations. The smallest minimum plot size proposal is seen in Bombay, where 13 m^2 are considered fit for habitation.[20] Other proposed minimum for India include 20 m^2 for New Delhi and 23 m^2 are considered to be adequate for two rooms and a veranda or courtyard.[21] In Karachi, while discussion was being held to decide whether the minimum lot size should be 50 m^2 or 66 m^2, the residents of Asif Colony had already subdivided

their 66 m^2 plots. Apparently, it is the basti dwellers who have discovered empirically that a family could live decently on a 33 m^2 plot.

What has been said about space standards also implies to density, e.g., number of persons per room or dwelling unit. Plot size, size of dwellings, number of rooms allowed and size of rooms are usually governed by specific provisions in the building codes. As in most code provisions, density control is justified in terms of safety. Concern has also been expressed in terms of the need for privacy and effects of overcrowding on mental health. Dwelling or room density standards such as two persons per room can be set but they are impossible to enforce; in practice, there is no effective maximum. This is so because density results from the interaction between space and household size which can only be controlled to an extent, such as the exclusion of renters. All we can say is that density after upgrading tends to remain high although it is less than that before improvement. Given the larger principle of maximum rentention of population on site, there has to be a trade-off with density standards. Moreover, it is questionable whether Western standards for privacy and overcrowding are applicable to non-Western cultures. For example, in the Philippines there is no word for "privacy". In many homes doors are not usually closed; in fact, close doors are apt to raise eyebrows or suspicion. "Crowding" in small rooms is typical: the thinking is that the more relatives accomodated, the greater is the prestige of the family within the kinship unit.

Like plot size, the size and design of a dwelling structure is regulated in building codes and housing standards. The main concern again is safety and density. Very few basic housing schemes in slum improvement provide finished houses. It is more common to provide just a serviced site, sanitory core with one or two rooms. The expectation is that participants will construct and improve the dwelling unit themselves, using whatever designs and building materials they choose. Under these conditions, conventional housing design standards cannot be applied. On the other hand, some standard for the easement or setback of the dwelling unit must be determined, otherwise there is a tendency to build to the limit of property lines when the plot size is small. In areas of high population and structure density, an easement standard of 2 m is not uncommon.

Most building codes and housing standards do not allow the construction of dwellings made primarily of "temporary" or renewable materials in urban areas.

Safety is the primary reason as to why combustible materials such as grass, bamboo and scrap wood are banned from densely settled sites. In this case, there tends to be an agreement between the beneficiaries and the housing agency: both have a strong preference for strong and permanent materials such as cement, hollow blocks and sometimes steel rods. Therefore, the issue is not so much the control and regulation of building materials standards but a more accurate estimate of what people can actually afford.

Conventional landuse control usually prohibit residential areas to have other functions such as commercial or industrial landuse. However, studies in low-income settlements reveal that there is usually a complex of productive activities taking place which constitute a good proportion of total household income. Obviously, the imposition of unifunctionalism would defeat the purpose of improvement and have a negative impact on employment and income generation.

The categorization of low-income settlements as being in the informal sector, and building codes and standards as a mark of the formal sector has created an undesirable polarization in planning efforts. As pragmatic efforts to set up appropriate codes and standards for slum improvement have shown, the actual condition in developing countries reflect a continuum that ranges from the conditions in slum and squatter areas to housing estates of the rich. Therefore, one of the most difficult problems in upgrading is how to strike a balance between condition as they actually exist and the ideal conditions of how things can be. Some countries attempt to establish a separate set of codes and standards applicable to upgraded low-income settlements and sites-and-service projects; there is still room for experimentation in most instances. What has been lacking has been a fuller realization of what life is really like in low-income settlements. In some ways, this better understanding cannot be attained by research and professional studies alone; it should also entail the active participation of the urban poor themselves in the development process.

In the final analysis, programs of slum improvement and sites-and-services should be seen as a process rather than a one-shot, instant development. This is necessarily so because low-income people cannot be expected to invest large sums on their dwelling structure or enviornment all at once; there has to be a balance between means and ends. Therefore, one principle is to leave room for future improvement; current measures are not intended to make the situation

fixed but to increate the opportunity for incrementality.

Certainly one of the most important question in slum improvement is the issue of affordability. If the lefals are set too high, project benefits would tend to go to the more affluent households resulting in a "creaming off" effect. Setting the affordability levels too low may well lead to greater subsidies, thus cutting further into the already limited government resources and limiting replicability.

Income (and assests) is one of 3 factors in the consideration of affordability, the other two being proportion of income spent on housing and the cost of the improvement package. Income can be very difficult to estimate because it has many sources, such as production for one's own consumption, gifts from relatives and firends, proceeds from the sale of assests and transfer payments from the government. Many households earn their living in the informal sector such as howkers and vendors where income stability is uncertain and this also creates a problem. Declared income in surveys is likely to be inaccurate partly for lack of knowledge and partly due to bias according to the respondent8s perception of the survey objective.

The traditional belief is that 20-25% of household income in spent on housing although in upgrading projects a much larger range of 10-50% has been found, depending on a host of factors besides income such as household size, composition, number of income earners and owner or renter status. The general trend is that the proportional income spent on housing tends to decrease as income increases. Therefore, the poorer households may be spending 30% of their income or more on housing while the more affluent ones paying less than 20%. Affordability assumptiohs set too high will encourage default, debt or cutback of other basic consumptions such as food. Given the variability in income levels and income distribution, what happens is that each project formulates its own specific levels of affordability based on the actual conditions of the settlement, comparable experience elsewhere, and the cost of the improvement package which is more amendable to intervention.

The importance of settlement characteristics also manifest themselves in site selection for on-site upgrading. In Indonesia's Kampong Improvement Program, different criteria have been proposed and applied, depending on the city and other factors. An earlier and more comprehensive set of criteria include: age of kampong, population density, income, flooding, environmental hygiene,

water supply, dwelling structure, dwelling condition, road network and condition, self-sufficiency of residents, land allocation according to master plan, and acceptance of improvements.[22] These various items are classified into individual categories and assigned an unweighted score of 1, 2, or 3 points. The kampongs with high scores are then given priority in the improvement program. However, this system of criteria was not put into practice in any uniform way, partly due to the lack of data. The actual selection criteria comprise less number of variables. In Bandung, site selection criteria include sanitary conditions, severity of flooding, accessibility and housing conditions.[23]

Over 200 blighted areas have been identified in metropolitan Manila for either upgrading or clearance and resettlement. Site identification and selection criteria include water supply, drainage and waste disposal, roads and footpaths, physical feature of site, population density, school, number of families affected, power, and park and community center. The proposed appraoch is that each item has a weighted maximum score and is given a number of points in the evaluation process. The more depressed the condition, the higher the number of points given. Areas with greater total scores or penalty points are accorded priority, provided that they fall within the overall landuse plan for the metropolitan areas as a whole. Such a mechanistic appraoch also could not be strictly applied in site selection the process of which has to take into account factors that have to do with political considerations, technical feasibility and resource distribution. The combined score is too much of a "synthetic" indicator to be put into practice and may possibly be useful only as one of the components for initial screening.

In Bangkok, there are three different approaches to slums and squatter areas: those to be upgraded as temporary residential areas, those to be upgraded as permanent residential areas, and those designated for clearance.[24] With respect to upgrading for temporary purpose, these are the squatter areas for which land tenure cannot be guaranteed although final clearance is not expected to take place in the immediate future. Design considerations in this case will include minimum disturbance of existing landuse pattern and improvement will be focused on the socio-economic sphere. Criteria for selection of those settlements to be upgraded on a permanent basis focus on three aspects: feasibility of land tenure rationalization, physical (essentially infrastructural)

conditions, and socio-economic conditions, i.e., areas with lowest income and highest incidence of social problems. This appraoch implies that settlements located on public land that could be used and zoned for low-income settlement purpose take priority over other settlements on public and private land. This pragmatic approach is common in a number of countries but also raises the question of equity.

III COMMUNITY ORGANIZATION AND POPULAR PARTICIPATION

The general rationale for popular or community participation in slum improvement and the delivery of other urban services is now well reccognized by scholars, planning professionals and many political decision-makers. From the community's point of view, popular participation may make program results more successful because the intended beneficiaries take part in planning and implementation. It may provide lower cost of physical and welfare needs which may not be otherwise available to some people. It builds up self-enabling capacity and cooperative spirit of the community. While internal conflict is also unavoidable, it can, if properly handled, be turned into a strengthening device and yield effective results. When people learn to operate and even manipulate modern institutions and to grapple with technological problems and complex bureaucratic structures, they can grow as individuals and be better integrated with urban life. From the government's point of view, it is a form of widening the resource base and of cost reduction. It also provides the government with information and the needs of the community. Popular participation helps to identify real and potential leaders to disseminate information and assist in the development process.

Community participation is not unitary in concept and practice. There are different modes of popular participation which tend to be country or even city-specific, depending at the macro level on socio-cultural background in self-help and mutual-help, level of economic development, the political system and the structure of the power elite at the time. In a United Nations study, 6 modes of participation have been identified which more or less represent a continuum based on relative centralization of power and functions at the state of grass roots level.[25] At one end of the scale, there is greater strength in the role of the state where participants are local elites appointed by

outside authorities which have the locus of power. In this case, the role of community organizations is essentially to legitimize out-side planned programs and assist in its implementation. There is little "people power" in decision-making and the approach is still largely top-down. At the other extreme, we have the complete botoom-up mode where people have attained full participation in controlling activities of the official decision-making body by having majority representation on a decision-making board. In this case, the locus of power is jointly shared between the people and the planner-administrators, with the former in greater control. Therefore, "participation" is defined in community terms and legitimizes the concept of the people having the dominant voice and control in their own affairs.

Somewhere between the two extremes are the other 4 modes which, according to some, represent a "transitional situation". To what extent a government allows the decentralization of decision-making power varies from country to country, but in any case bridging the planner-people gap is usually a priority in any slum improvement exercise.

Community groups and organizations operate in 2 styles. The first is one of harmonious cooperation, following the traditional community development lines which stresses request to authroities for provision of services. The other is one of conflict-confrontation-negotiation where issues are raised more in the nature of demand rather than request. In the confrontational appraoch, the result does not always lead to a peaceful solution and violence sometimes result. In both stules the principle of self-help is involved, and the difference is also a matter of degree. The harmonious cooperation style can be seen both top-down and bottom-up modes, but the confrontational style is more a characteristic of the bottom-up appraoch.

All things being equal, the prospect for popular participation and community development is directly related to the presence of community organizations - a key characteristic of community profile in the consideration of slum upgrading. The presence of organized groups makes it easier to achieve the poeple's participation in project design, program implementation and evaluation. Some observers claim that even an initially antagonistic leadership is a positive sign. In general, it is easier to begin working with existing groups than to organize the population from scratch. In this sense, community development efforts begin with what already exists as building blicks.

One important factor in community formation among the urban poor is their capacity to organize. There is probably variations in both degree and type of communitity organization and cohesion on a cross-national basis, although research in this direction has been scarce. Before the World Bank upgrading project began in Tondo Foreshore in Manila, a survey showed that in one area occupaid by 2,000 households there were some 20 formal organizations in existence. In Krus na Ligas, a small squatter settlement in Metro Manila with 900 households, no less than 6 types of formal organization and another 5 informal groups could be found with their own leaders. In a comparative study of slum and squatter communities in 5 Philippine cities, there is evidence to show a high level of community cohesion and participation.[26] A very high proportion of respondents in the sample (70-87%) perceived members of the community as being cooperative by ways of participating in community affairs, extending help during emergencies and formation of mutual assistance associations. Participation in community activities in turn provided the means through which the slum dwellers achieve social stability and integration with the larger society. Similar observations may be made about some Latin American countries, especially those community organizations involved in land invasions. Community organizations may sprout spontaneously as well as through systematic interventional development. Physical proximity, common interest and needs, common socio-ethnic characteristics, and real or imagined threats to the community can mobilize people to form associations.

The importance of community organization can be illustrated by a study on habitat defense in Southeast Asia.[27] The study shows that there is very strong association between 3 variables: level of community organization, level of mobilization, and level of collective action. Bangkok, Jakarta and Manila are rated "high" on all 3 variables, Hong Kong is "low" and Kuala Lumpur and Singapore are "none" on all three variables.

There are several settlement characteristic which influence the development of community organizations and popular participation. First is the age of settlement. Over time, various kindship and friendship networks will naturally emerge and these informal ties constitute an important basis for the community to organize itself. Next are the variables of size and contiguity. A relatively compact community is usually easier to organize than an oddly shaped one where

people have to travel quite a distance to interact with each other, such as those squatter areas located along railroad lines or river banks. Community cohesion is dependent upon many factors, but physical prximity is certainly an important variable. The thousands of squatters along railroad lines in Manila and elwhere do not have community nodal points or a place for social interaction; consequently, cohesive social orgnizations are usually not to be found. Closely related to kinship ties is family structure. Studies have shown that important decisions are often made at the family or household level and therefore participation in community affairs tends to involve more than just one member of the family. In Indonesia's Kampong Improvement Program, activities organized by housewives are frequently successful with wide participation. This also shows the existence of a pool of potential leaders. On the other hand, participation rates tend to be low when the household is headed by a single woman. Studies in Zambia, Senegal, El Salvador and Jamaica show that, because of prevalent common-law unions, there is a high proportion of single female household heads in the low-income groups who are too busy making a living and looking after children to be involved in community affairs.

Community awareness, the perception among residents in an area that they share a common identity is a component of community cohesion and community development program. This sense of community may be gauged by several indicators which include number and types of community groups, prevalence of formal and informal leaders, perceived or real boundries of the community, and perceived common problems.

In addition to the number and type of community groups, the designer of a community development program has to know the functions, the leadership structure, length of time in existence and effectiveness in goal attainment. we cannot assume that all community organizations are set up to further the community's interests; some organizations are mainly reflective of community leadership structure. Some leaders are more representative of the establishment and do not reflect the pattern of influence and power in the community. Nevertheless, each organization us an aggregation of individuals adhering to a common interest and can serve as a building block in community development program.

The perceived boundries of a community is important because it reflects the extent of cohesion or fragmentation of people's cognition. Some people

perceiv boundries in terms of physical landmarks, others think in terms of legal jurisdiction of existing organizations, and still others describe community functionally, equating it with a area serve by a school or market. Analyzing the perceived boundries will indicate community within communities, the interlocking or overlapping functional and areal "jurisdiction" that formal or informal patterns of power encompass. To the extent that these bits of information make the community more understandable, it can be a sound basis for community development planning.

The same scale of community boundries may apply to community problems. In general, the greater the agreement on the hierarchy of problems, the easier it is to mobilize collective action. Families within a small area may have a heightened sense of their common problems but they may not perceive the overall implications of such problems for the whole community. Therefore, it becomes the task of a community development program to expand the group's perception beyond the immediate confines of their concerns.

Another factor affection community cohesion and the formation of local organizations is ethnic and socio-economic heterogeniety. Depending on context, a very high level of heterogeniety can hinder the development of community spirit and the process of participation, especially if the community is characterized by multi-ethnicity which have a tradition of rivalry. Community development efforts in a slum improvement program is made easier if the relationship between groups is one of structural pluralism where there is cordial secondary relations but segregation in primary relations. On the other hand, the urban low-income settlement is a reflection of the larger society whose communal conflicts may well interfere progress in settlement welfare. For example, the Orangi self-help project in Karachi may well be hindered by recent ethnic riots in the settlement and beyond.

IV CONCLUDING OBSERVATIONS

We are not going to summarize the preceeding discussions other than to reemphasize that slum improvement programs cannot be implemented by follgwing a closely standardized procedure. They must be designed to fit the characteristics of the particular situation and to address the priorities and requirements of

the residents in the settlement. Beyond the broadly similar physical appearances of slums and squatter areas, there can be substantial variations in many respects between settlemens in the same city, settlements in different cities, and settlements in different countries. In making generalizations, we should take the variability into account as much as possible.

It is an illusion to believe that there is a solution to the housing problems, conceived and treated independently of other social, economic and political problems, The housing situation and its larger urban conditions may be viewed as symtoms rather than generating factors which include the demographic context and the socio-economic and political systems of the country. The basic causes of housing problems may be ascribed to pervasive poverty, unequal income distribution, and various kinds of market imperfections. These, in turn, are related to the inadequate urban economy and degrees of dualism between the formal and informal sectors.

Strategies for the improvement of urban low-income settlements will be insufficient to bring about substantial changes in living conditions unless there are social and economic policy changes at the national level. Such policy changes are wide in scope and their implementation have to be supported by strong executive-administrative powers with sufficient resources - a condition that many developing countries cannot meet in the immediate future.

The context of the housing problem is therefore poverty. The World Bank has compiled statistics on the urban poor, in two categories.[28] Those living in "relative poverty" are defined as persons having less than one third the average per capita personal income of the country. Those in "absolute poverty" cannot afford a minimal nutritionally adequate diet plus essential non-food items. In much of South Asia these two groups are identical. The Bank estimates show that, out of a world-wide total of 150 million urban dwellers in the developing countries with market economies who are in absolute poverty, 46% are in South Asia and another 24% in Southeast Asia. In most of these populous countries, over 50% of the urban population are in absolute poverty.

Given the continuuing high level of poverty, high rates of natural population growth and migration from the rural areas, some observers and even government housing administrators have wondered whether general housing conditions in most third world cities have deteriorated while many government housing policies have become more realistic, strategies more rational and efficient with

increasing resource base. A glance at the literature and statistics seems to support this view. If a country's population growth rate is 3% per annum, city population growth rate is 6% and slum and squatter population growth rate is 12% (figures often cited for Mexico City, Lima, Istanbul and Manila), even the best slum improvement program will have little chance of catching up with demand resulting from the growth of the poor population. Without any immediate prospect of major policy and institutional changes at the national level, among housing scholars and practitioners there begins a sense of helplessness and hopelessness, somewhat skin to the characteristics of "slums of despair".

Is this argument satisfactory? Gilbert and Gugler are not so sure.[29] The counter argument is that if infrastructure and services are gradually extended to squatter settlements and if dwelling quantity and quality have been slowly improved and have more in common with conventional housing, then a portion of the squatter housing ought not be classified with the poorest dwellings. To confuse the term "spontaneous settlement" with slum and to assume that quantitative increase in the former proves that a deterioration in housing standards has taken place, negates the useful work done in Lima by Turner. If sponaneous or squatter settlements do improve through time, then perhaps different conclusions should be drawn. In this direction, different questions should be asked.that have to do with changing conditions of the dwellings. Have service levels been improved? Have real cost of construction become higher or lower? How have changing landuse patterns affect the location of squatter housing? Without such supporting evidence, the proliferation of squatter settlements proves little beyond the fact that cities in the developing countries are expanding rapidly and fail to provide conventional housing for all their inhabitants. Under the circumstances, is this "failure" couched in realistic standards of development?

Even if it can be demonstrated that housing conditions have deteriorated or improved, the accurate interpretation may still be difficult. If higher proportion of urban dwellers are living in poor housing, this simply reflects rapid movement of poor people from rural to urban areas or spatial relocation of poverty and continuation of poverty for the society as a whole. Similarly, a clear improvement in housing conditions in one or several cities also raises the question whether this is achieved at the expense of the rest of the country.

In sum, the purpose of this discussion is not to argue whether that there is no housing problem or to deny that conditions in many cities have worsened. Rather, the aim is that we should be careful not only in weighing the evidence but also in interpreting the importance and causes of this trend. The final question is: despite such care, can we still diagnose a decline in urban housing condition?

Appendix PROFILE OF LOW-INCOME URBAN SETTLEMENT

Community Level Profile

Spatial location
Age of settlement
Contiguity and terrain
Land area
Land ownership pattern
Infrastructure
Landuse pattern
Land value
Potential landuse value
Type and level of deviant behavior
Number and type of community organizations

Household Level Profile

Lot size
Dwelling unit size
Type and quality of structure
Household-housing unit ratio
Tenancy status of structure
Tenancy status of land
Access to services
Household size
Household composition
Number of income earners
Household income, assets and expenditure
Length of residence
Location of former residence

Individual Level Profile

Age, sex, marital status, ethnicity
literacy and education
Economic activity, occupation and industry
Access to employment and social services
Length of time in community
Location of former residence
Kinship network
Friendship network
Neighboring activities
Participation in community organizations
Social and residential mobility aspirations
Perception of community problems
Perception of community boundries
Levels of satisfaction with living environment
Hierarchy of environmental improvements desired
criminal victimization

REFERENCES

1. Charles Stokes, "A Theory of Slums", Land Economics, Vol.38, 1962

2. Oscar Lewis, "The Culture of Poverty", Scientific American, Vol.215, No.4, 1966

3. William Mangin, Peasants in Cities, Hougton Mifflin, 1970

4. Charles Frankenhoff, "The Economic Potential of a Slum Community in a Developmental Economy", paper presented at UN Interregional Seminar on Slum Improvement, Colombia, 1970

5. John Seeley, Redevelopment: Some Human Gains and Loses: Indianapolis:Community Surveys, Inc. 1956

6. John Turner, "Housing Issues and the Standards Problem", Ekistics, Vol.33, No.196, 1972

7. John Turner, "A Discussion Paper on the Question of Government Intervention in Urban Settlement Types", in UN Centre for Human Settlements, The Residential Circumstances of the Urban Poor in Developing Countries, Praeger, 1981

8. Janice Perlman, "Strategies for Squatter Settlements", in Un Centre for Human Settlements, op. cit.

9. Janice Perlman, op. cit.

10. Peter Marris, "The Meaning of Slum and Patterns of Change", in UN Centre for Human Settlements, op. cit.

11. Alberto Harth-Deneke, "Quasi-Legal Urban Land Subdivisions in Latin America", in UN Centre for Human Settlements, op.cit.

12. Mary Hollsteiner, "Socioeconomic Themes and Variations in a Low-Income Neighborhood", paper read at Workshop on Manpower and Human Resources, Los Banos, Philippines, 1972

13. Anthony Leeds, "Lower-Income Urban Settlement Types: Processes, Structures, Policies", in UN Centre for Human Settlements, op. cit.

14. Janet Abu-Lughod, "Strategies for Improvement of Different Types of Lower-Income Urban Settlement in the Arab Region", in UN Cetre for Human Settlements, op. cit.

15. See, for example, Peter Lloyd, Slums of Hope?, St. Martins, 1979

16. "Introduction", in UN Centre for Human Settlements, op. cit.

17. Revised from Stephen Yeh, "On Characteristics of Urban Low-Income Settlements and Improvement Strategies: An Asian Perspective", in UN Centre for Human Settlements, op. cit.

18. UN, The Social Impact of Housing, 1977 E.77.IV.5

19. Aprodicio Laquian, "Slums and Squatters in South and Southeast Asia", in Leo Jakobson and Ved Prakash, Urbanization and National Development, Sage, 1971

20. Greater Bombay Municipal Corporation, Slum Improvement, 1972

21. New Delhi Planning Commission, Report of the Working Group on Slums, n.d.; D.V.R. Rao, "Housing of Squatters in Delhi", Ekistics, No.224, 1974

22. Indonesian National Urban Development Corporation, "Housing Policy and Program in Indonesia", Jakarta, 1976

23. Sugijanto Soegijoko, "Case Study of KIP in Bandung", in Regional Development Dialogue, Vol. 6, No.2, 1985

24. Thai National Housing Authority, Slum Upgrading Implementation Program, Bangkok 1976

25. UN, The Social Impact of Housing, Op. Cit.

26. Benjamin Carino, "Hope of Despair: A Comparative Study of Slums and Squatters in Five Philippine Cities", Philippine Planning Journal, Vol.3, No.1, 1971

27. Brian Aldrich, "Habitat Defense in Southeast Asian Cities", in Southeast Asian Journal of Social Science, Vol. 13, No.2, 1985

28. John Taylor and David Williams, Urban Planning Practice in Developing Countries Pergamon, 1982, p.7

29. Alan Gilbert and Josef Gugler, Cities, Poverty, and Development, Oxford, 1982, pp. 94-96