THE STATE OF HOUSING FOR
THE LOW-INCOME GROUP IN RAPIDLY
URBANIZING CENTRES IN DEVELOPING COUNTRIES
IN THE 1980's WITH PROSPECTS,
FORECASTS AND PROPOSALS FOR SATISFYING ITS
COMPARATIVE ADEQUACY BY THE YEAR 2000.

A RESEARCH PAPER SUBMITTED FOR THE
THESIS IN
MASTER OF SCIENCE DEGREE, MANAGEMENT AND
ORGANIZATIONAL DEVELOPMENT.

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DECLARATION

a) I, Thuthuka Yeni, declare that this thesis is my original work and has not been presented for a degree in any other university.

THUTHUKA YENI
DATE 25 Oct 1983

b) This thesis has been submitted for examination with our approval as University supervisors.

Mr. S. HARMON
DATE Oct 28, 1983

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PREFACE AND INTRODUCTION

The problem concerning provision of dwelling facilities and shelter for the low-income group is a world-wide one, and efforts to tackle this phenomenon have assumed varying aspects, methods of approach and strategies by the agencies, institutions and administration bodies entrusted with finding solutions to that immense task. Although no single one of the desired methodologies can boldly claim to have identified the path leading out of the labyrinthine dilemma, each and everyone of them has a trail of both exasperating setbacks and relative successes along the difficult route. Factors influencing these problems have their anchor embedded in the prevailing conditions and circumstances whose array spans the wide ranging economic, sociological and indeed the geopolitical spectrum whose impact fluctuates in degree rather than in kind, situation to situation, organization to organization and region to region. All things considered, there is a universal consensus that the Third World Nations or rather the Less Developed Countries (LDCs) are the ones most beleaguered by the acuteness in shortage of housing facilities for its teeming poor and low-income groups.

No doubt, there's no single event that takes place in isolation as all outcomes have their origination entwined in the network interlinking cause and effect, precedence and posterity. True enough, the LDCs have plagues whose nature is separate and distinct from those that the developed nations of the world have been confronted with in both the past and present and whose peculiarity necessitated unique strategies in handling them. Nonetheless it is commendable that for the sake of hastened yet programmatic, systematic and controlled development and modernization, an examination is conducted of the urbanization process in the Developed Countries (DCs) in the hope that the urbanizing LDCs can learn and incorporate in a modified form some impressionable aspects or positive elements and curtail or better still avoid the undesirable. It is that awareness from a global context that can facilitate an effective change and transformation desired at the narrower regional scale.
Again this awareness does not of necessity render the projects and schemes readily manipulable and manageable but merely aids to gain a broader and deeper insight into the interplay of forces and hence the maximization in their co-ordination and integration.

The global outlook is of importance in the sense that the entire question of development laden with paradoxes and vicious circles amongst which is the dual central theme involving material resources and manpower. Thus problems endemic to the specific region are least likely to have solutions to them all located within its confines simply because of the non-complimentarity between the resources and skills required to shape and mould them into servicable commodities and utilities. Solutions oftentimes lie beyond. It is these imbalances, lack of self-sufficiencies that impose the involuntary international, interhemispherical, interregional and inter-organizational interdependence and co-operation.

The purpose of this research paper is to attempt to examine past and present trends in the urbanization process as witnessed in major metropolitan regions of the world and how new and emergent nations of the developing world stand to profit from the lessons learned therefrom as they seek to furnish one of the fundamental of man's basic needs, the need for shelter. The select few causes to serve as illustrations, seek to vivify dramatically the synthetic coalescence of the multi-faceted views, translated to concrete manifestations in various permutations as LDCs surge their way forth into the new era. The key to the prosperous future lies in mobilization and development of these nations' true potential and prime asset - the human resources, to be found most abundantly among the low-income group and for whose sake the question of housing should address itself with increasing intensity as the epochal and historical century steadily draws to a close. To the questions of housing and urbanization, the following is thus a treatise in an effort to arrive at proposals, suggestions, approaches and strategies for their alleviation and whose choice in their entirety, unless otherwise stated, are purely subjective and discrentional.

THUTHUKA YENTI
NAIROBI, KENYA
JUNE 1983.
SETTLEMENT OF THE LOW-INCOME GROUP

CHAPTER I

URBANIZATION IN PERSPECTIVE

In historic times, migrations were principally a tale of the movement of people from heavily populated areas to relatively empty locales. Some of these migrations were forced, but over-population and economic pressure caused an even greater voluntary movement to the new lands, such as that from Europe to the New World. Today are still witnessed, migrations of refugees seeking to escape from war, civil strife or a discriminatory administration. By far the biggest modern migration movement in terms of numbers and ultimate social consequences is the steady drift from the countryside to the cities. Spurred by the prospects of a richer life, this movement by and large usually involves quite short distances but comprising tremendously large numbers of people. It is envisaged that ultimately, nearly the entire population will live in gigantic urban regions or megalopolises as adjacent metropolises fuse together. Each of these monstrosities of super-cities will house many millions, as seen in the Hokkaido Megalopolis in Japan (70,000,000). The intervening space will be used for food production and leisure.

In 1900, about one person in every six in the so-called developed countries lived in a large city. In 1950, one person in every three lived in the city. This movement soon engulfed the whole world and cities mushroomed everywhere. Until quite recently there were relatively few million cities' (pop. 1 million or more). Today the number of such cities is well over 150 across the globe. Curiously, the fastest-growing examples are to be found in the developing lands. Until this century, cities grew naturally without imposing any severe problems but today's cities are the sites of problems such as overcrowding, pollution of air and waters and transportation deficiency. To most of these problems, solutions are not easy to find.

It was not until about the 1930's that the upswing in urbanward migration became evidently expressed. The push of the existing rural circumstances suggested to the rural resident that things might be better in the urban areas. There have also been international migrations...
to urban areas such as that of Indians to Southeast Asia and South Africa, Chinese to Hong Kong, Malaysia and Thailand. The partition of India and Pakistan together with the founding of Israel, have led to other notable migrations.

A definite pattern in migration seems to suggest that it occurs first from rural to small towns and then to larger towns. Resocialization of the rural migrant to adapt to a new way of life varies differentially according to the rate of change of specific urban practices, and conflicts between these differences may lead to strains and discontinuities as the ruralss oscilate between modern relationships and traditional customs.

In certain cases, the impact of urban environment on traditional family arrangements has led to its deterioration and is related to the fact that both father and mother have to be absent from home during the day in order to earn wages to promote the family's upkeep. This can lead to disturbed childhood for the young. The cities can enhance the persistence of status differentials and class stratification as individuals seek to associate according to cultural and economic prescriptions. The tendency to band together with origin groups may produce a private "cocoon" society within greater society to ensure protection against culture conflicts and malcontents of the new environment. It is these affiliations that help heterogenize market sites, occupations, lines of trade and residences. These monopolies can assume social, cultural, religious, economic and political distinctiveness found within the urban milieu.

In many developing countries, the first migration to an urban region may occur during the interval and long period between the planting and harvesting of crops. It is usually temporary but sometimes may lapse into years as in the case of migratory labourers who are contracted for employment by mining companies. In these seasonal or cyclical migrations people learn more and more about coping methods in the city and return to the rural areas becomes less and less attractive. It is believed that rural to - urban migration is more nearly permanent in Latin America than most newly developing countries elsewhere. More than half the people of most Latin American countries are no longer rural and this contrasts with Africa where 15 per cent of its population lives in urban areas and
18 per cent in South Asia. Exceptions exist when there are higher levels of urbanization. Malaysia and Taiwan have 45 per cent of their population living in urban areas. The Middle East, Israel, Egypt and Lebanon are highly urbanized too. Third World countries are doubling their population every 15 years or so and urban growth increases at a rate of 8 per cent annually and probably will have 70 to 80 per cent of their populations eventually living in urban areas.

"What needs emphasis is the fact that growth of urban population in the underdeveloped world appears to be occurring at a much faster rate than the growth of urban population in their comparable period in European growth".

McGhee T.G., The Urbanization Process in the Third World
Bell and Sons, London, 1971 p. 14

These countries gain urban population at the rate of roughly 4.5 per cent in contrast to European Countries' 2.1 per cent at the period of their fastest growth in the latter half of 19th century.

Reissman finds the urbanization process in LDCs being repetitive of that seen in Western Nations although separated in time and space. If so then in theoretical model focussing on that experience can be transferred to the urbanization process in the LDCs.

The three main facets of urbanization are:

1. Demographic
2. Economic
3. Social.

Firstly, cities grow because of re-classification of rural population as urban. As births exceed over deaths, there is a natural increase in population.

Secondly, the economic feature is the shift from agricultural to non-agricultural or industrial occupations. The rise in technological enhancement of human productivity rewards urban growth and concentration.
Thirdly, urbanization is a social change that alters sectors of society giving way to urban institutions, values, demands and expectations. Since in LDCs the redistribution of population from rural to urban areas, basic to economic growth, is not occurring, city growth is not to be equated with urbanization and is probably pseudo-urbanization. Gunder Frank proposes theories that are applicable specifically to the underdeveloped world where cities are not necessarily the leading sector of economic growth and crucible of social change. Hoselitz suggests a shift from particularism to universalism or achievement orientation for change to take place. Other theorists argue that LDCs will develop due to diffusion from the West of capital, institutions and technology through cities, promotion of social mobility and growth of the middle class and transformation of social structures. However, the reality of LDCs is that urbanization is expanding more rapidly than manufacturing employment with the result that there's direct leap from agriculture into services, a tertiary sector that is urban located and not amenable to balanced economic growth. Tertiarization is as result of capital and not labour intensive industrialization and is associated with underemployment and unemployment due to lack of educational and vocational training facilities to convert an individual from an agricultural worker to a skilled worker in services in this sector. This affects government bureaucracy and business organizations.

In a traditional setting, authority is concentrated in the hereditary chiefs and thus the governmental process and demands for services that are placed upon metropolitan administrations are more than they can provide. The inadequacy in efficiency of communication channels between the residents and authorities can lead to tension.

The economic structure of most towns and cities to be found in LDCs is centred on firms. Secondly, it is made up of bazaar economy whose base is grounded on independent activities of highly competitive commodity traders engaged in ad hoc exchange of valuables.

The former is capital-intensive whilst the latter is labour intensive, roughly giving a semblance of dual economy. In the firm-centred economy employment opportunities are limited and it is the bazaar economy which is by far the most absorptive. This scenario can be termed subsistance

N.D. Bazaar economy = Informal economy or sector.

/...
urbanization. The institutional base of the bazaar economy is the family. Within it, the system of flow of goods and services make possible generation of labour. This economy has self-inflationary qualities whereby the more the available labour, the greater the market growth. There's a remarkable interdependence between this sector and the peasant economy on one hand and the capital-intensive sector on the other.

According to Western social scientists, for DC's, the service sector or tertiary sector provides a significant bulk of urban employment if not the largest. Tertiary employment is positively correlated with a high level of urbanization and economic development. These urban centres have a high rate of consumption and relative capacity for labour absorption. In LDCs, however, the tertiary sector is unproductive and economically irrational. This sector does not produce goods in countries that are highly lacking in them. This leads to mass unemployment and disaffected throngs of impoverished lumpen-proletariat without social and economic outlets. This structural imbalance is due to transformation of the indigenous economy from traditional to capitalist modes of production. This situation can be remedied by ensuring the continued existence of the agricultural resource base to serve the bazaar sector as it cushions against urban and rural discontent.

The Scale and Pace of Urbanization

Urbanized Areas are cities of 50,000 or larger and built up agglomerations around them. Urbanized Societies arose in North Western Europe - in contrast to the major cities of the past. Leading directly to rise of cities were such factors as low productivity of medieval agriculture and the feudal system. Towns could not rely on agriculture alone but also manufacture and trade. Craftsmen with skills had to be housed in towns. Need for skills in accounting and geographical knowledge caused investment in secular education.

Urbanization is best understood in terms of its connection with economic growth and is a finite process, a cycle undergone by nations as they evolve from agrarian to industrial society(ies). Intensive industrialization occurred beginning about 100 years ago and more recently in under-developed countries. Urbanization is transitional and finite. Basic feature is switched from agricultural to non-agricultural employment. Later
on the availability of automobiles, radios, motion pictures, electricity and reduction of work week and work day. Later still the rural areas receive trickles of refugees from expanding cities.

Cities in under-developed countries are growing at a rate far outstripping that of their predecessors in the advanced nations at their prime in 19th century. If this trend continues, they will double their population every 15 years. (Average annual population gain of 4.5 per cent. The chief reason for this is the population boom in city population inflation not so much the rural-urban migration. Increase in fertility and decrease in mortality rates has led to yet a greater population boast.

In quantitative terms urbanization entails increase in population concentration and qualitatively, a change in the mode of living emphasis being from rural to urban.

Combinations of 'urban population' have been estimated for countries and major world areas as the following:-

<table>
<thead>
<tr>
<th>Population</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>20,000</td>
<td>and over &quot;urban population&quot;</td>
</tr>
<tr>
<td>100,000</td>
<td>&quot; &quot; &quot;city population&quot;</td>
</tr>
<tr>
<td>500,000</td>
<td>&quot; &quot; &quot;big city population&quot;</td>
</tr>
<tr>
<td>2,100,000</td>
<td>&quot; &quot; &quot;multi-million cities&quot;</td>
</tr>
<tr>
<td>12,500,000</td>
<td>&quot; &quot; &quot;metropolitan region&quot; &quot;megalopolis&quot;</td>
</tr>
</tbody>
</table>

The momentum of urbanization and concentration in big cities can be affected by such factors as wars, epidemics, and economic depressions. Big cities can increase in size when urban population is already large, surpass size limits and absorb previously smaller cities and towns.

Some stated objectives in the task of low-income housing provision (concept of Integrated Development of Housing).

* Upgrading and preserving existing stock through development and use of low-cost techniques and involvement of dwellers therein.

* Resolving to clearance only when conservation and rehabilitation
are not feasible. Improve physical living conditions.

* Ensuring the welfare of affected inhabitants with respect to employment opportunities and basic infrastructure.

* Preservation of existing social and cultural fabric.

Urbanization Trends in the Developed Countries

In taking a broad view when looking at the question of urbanization, one naturally would like to examine the past and current trends as obtaining in developed countries, which although they encountered urbanization at a different period and circumstances, have something to draw from by the LDCs at this point in time. DC's urbanization was slower in evolution and was precipitated by the Industrial Revolution of the latter half of the nineteenth century. The unfolding scenario would lay the foundations of the Euro-techno-culture that has permeated so pervasively the climate in the civilization as witnessed in the twentieth century. Abetted by the new technology and deeper entrenchment of the capitalist system, the Protestant Ethic took a new turn as traditionalism meekly succumbed under revolutionary Western values, modes of production, social, economic and political relationships in the wake of industrialization and modernization. Agrarianism was to be soon superceded by industrialism and the focus for production shifted from the land in the countryside to the machines in factories located in the cities. Urbanization for the Western Nations thus was pivoted around industrial production. With changing consumer patterns as goods flooded the market, the city dweller looked forward to more and more services his wage earnings could purchase for him. Needless to say, and true to classical economic theory, the greater his demand for goods and services, the more he had to be willing to expand in their purchase owing to the scarcity this increased demand created on supply. Whilst he could not retrace his steps to the rural areas where his economic well being was not assured he had to alternative but to find a way of survival in the disquietude and discomfort of the cities. An individual's economic status determined the extent to which he could claim rights to private ownership of land and property. It is the self same economic disparity that has been responsible for the social stratification consisting of groups of people belonging to the lower, middle and upper classes who have varying
degrees of economic power, capacity for ownership and access in goods and services. Urbanization has to a great extent helped further this process of compartmentalization of human kind. The urban public and private sectors cater for the interest of low-income and the middle/high income groups respectively with some amount of intersectoral feedback and overlap according to prevailing conditions.

The process of urbanization in the DC's is a complex one and although systematic planning methods have been infused and applied to it, success has been illusive, momentary or altogether unattainable. There've been efforts to alleviate shortage of employment, housing, medical and educational facilities and opportunities for especially the low-income group with the hope that economic development and social stability hinged on promotion of community and human development through meaningful programs. To such an end thus, labour intensive public works and programs have been initiated with stress on maintenance and renovation. Through well devised tax incentives an attempt is made to provide jobs that hire the young and poor workers so as to promote investment in distressed areas. There is supplementary fiscal assistance for distressed cities and towns with the state providing incentive through grants to develop urban revitalization programs. With special application to urban housing for the low-income group there are:

(i) Rent supplements to help the poor who can not afford housing on their own incomes.

(ii) Promotion of home ownership for the poor by providing state or institutional subsidies.

(iii) Low interest rates of home purchaser's mortgage.

Specially geared and tailored for low-income residential regions are financial and economic incentives to attract business with good rates of capital amortization. There are campaigns to boost entrepreneurial venture in these areas but their poverty is their liability and source of discouragement for risk taking. Transportation systems between the poverty belt residences and work places are to a large measure inefficient due to
commuter congestion that defies neat scheduling. Despite the massive effort at urban renewal or improvement and clearance of dilapidated structures and code-violating dwellings, the problem of housing for the disadvantaged still remains an enormous and sorry one at that. Law enforcement task especially in the minority colonies found in the big U.S. cities is dumbfounding. Crime rates soar higher and higher and rehabilitation efforts meet with minimal success. Justice administration is inadequate and inefficient.

The war on unemployment defies all strategic logistics in that for the millions inhabiting the cities of the DC's some have put down their arms in that never ending combat. Poverty and relative deprivation has become familiar to most. If unemployment is not permanent it is at least periodical for many. For the many that are fortunate to be having jobs, subemployment is perhaps apt to describe the true condition for were they to be fully employed, there'd be no plant to work at due to costs of running the establishment. To draw a pay check is all they are thankful for. Poverty and lack of shelter gives rise to overcrowding conditions that are conducive to generation and flourishing of urban social ills such as poor health, crime, prostitution, alcoholism, addiction and insanity. Overcrowding also has the effect of making maintenance of residences exceedingly difficult due to the incredible rate of property deterioration and depreciation hence the general condition of squalor in low-income groups residential areas. Pollution rates are high. Due to poor family relations, many of the low-income families experience strife and disorder that often terminates in the disintegration of the unit, the spouses separating and some of the members gaining conscription to the welfare programs who together with the unemployed, aged and disabled are doled pensions and social security funds. General lack of job - creating facilities and services such as sewer and water amenities, housing, schools and hospitals mean a general lower level of material well-being, literacy, quality of education and health for the low-income group. Their locational handicap and lack of information resources, the low level of civic participation and representation makes it impossible to cope in a neighbourhood high in rent and energy costs and poor in harmonious ethnic relations. Low-income neighbourhoods have the characteristic distinction of low quality houses,
abandoned tenements, being infested with plague inducing rodents, a general state of disrepair, exposed electrical wiring, leaky roofs, walls with paint peeling off, chipped plaster, pot-holed floors, hazardous staircases, non-existence of garbage disposal systems and poor extent of electrification internally in the buildings and externally in the streets. Provision for recreation facilities and open space are also at a low ebb.

Although planning agencies expend a great deal of time, energy and resources in drawing plans to alleviate this state of affairs, the problem is near insurmountable due to its in-laden twists and turns. New strategies such as the systems approach to city planning and design promise to arrive at solutions that are realization if the physical nature of planning is complimented by the social, political and economic concomitants of the entire exercise.

Urbanization Trends in Third World Countries

While the process of urbanization in DC's has caused immense problems it is virtually a catastrophe in LDCs as a result of massive unanticipated immigration from the countryside. This unidirectional population influx toward the cities as peasants flee rural impoverishment, leads to wide scale uprootedness, isolation, deprivation and alienation as these fugitives encounter economic non-absorption and non-participation in the towns where resources and opportunity structures are underdeveloped. The result has been the development of shanty towns around the fringes of cities, variously termed in different places as favelas, tugurios, ranchos, barriadas, bustees etc. Rapid urbanization emanates from this source and cities such as those of Africa have a growing rate of 7 per cent or more, subsequently higher than that of DC's cities. The following are the African cities with annual per cent growth rates. Nairobi (8), Abidjan (10), Lagos (14). Whereas Latin American urban migrants become permanent residents, African migrants (ages on arrival 15 - 30 years old), return to their families in the countryside due to lack of employment and housing for those families in towns. The rate of urbanization in Asia has been equally rapid, for instance in India, more than 20 per cent of the population lives in the cities and like African migrants, Indians return after a period in towns to the countryside. The LDC immigrant has little skills to offer, often undernourished, illiterate and frail of health. Out of poverty, they establish urban villages, which are vestiges of ruralism in towns to which they transfer village culture complete with its attitudes and reproductive patterns.
A modification of these are squatter settlements that start out with rudimentary dwellings that progress to more permanent structures with the inhabitants as their own planners and architects. They organize a community social structure that can afford to furnish required services such as food, public transportation, schools and health facilities.

Although most of the squatter population is directly from the rural areas, it soon becomes a recluse also for the socially maladjusted elements from the inner city who have been unsuccessful to ascend the ladder of upward social mobility, hence the chaotic atmosphere in them. Cooperation among governments and squatters is quite a rarity and the attitude has been that of trying to ignore the slums or carry out its clearance which involves an expensive program of constructing urban housing for the poor. Programs for slum clearance and renewal often entail Western style solutions which are technologically and financially beyond the means of most LDC's.

Present urban situations are bleak enough but not as alarming as projections of trends in urbanization in not too distant future. By year 2000 Calcutta will have 66 million inhabitants more than 8 times its current figure. For not so poor Japan, but lacking in land for urban expansion, prospects are equally gloomy. By year 2000, Tokyo is projected to have 40 million inhabitants and its dense crowding can only get bleaker. If, according to demographer Kingsley Davis this trend continues, half the world's people will be in cities in 1984 and theoretically all of them in the cities in 2023, a utopian postulate because as in the DC's movement to urban areas will decline at a certain stage and possibly take a reverse-turn. Urban growth rate in LDC's ought to be reduced by accelerating the pace of rural development and providing employment opportunities there. A social breakdown can thus be precipitated due to contradictions of wealth and poverty, elitism and illiteracy, opulence and deprivation precariously juxtaposed. The Rural-urban inequality and 'urban bias favouring cities' has to be eliminated. An equitable approach should find for both rural and urban areas food pricing policies, public investment in infrastructure and social services. 

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With the advent of industrialization’s effect of urbanizing the LDC’s, the growth of slums have been these urban centres uneasy anomaly in that they have a standard of living lower than that found in most of the rural countryside and form a contrasting backdrop in architecture compared to that of the down town in the modern city. The population that has migrated to the city and dwelling in the haphazard slums are urban misfits and at the same time rural outcasts who live an insecure existence and live under constant threat of arrest for handling illicit liquor and other contraband. Jobless and landless, they are later joined by families as the cityward movement accelerates in growth rate. In Asia and Africa, men dominate the migration and in Latin America, the sex ratio is almost equal. In early urbanization stages in LDC’s one third of the city population increase is due to natural means and the other two thirds due to immigration. Over a period of time, these proportions became reversed. In 1960, Manila and Djakarta had 25 per cent of the proportion of their population in the shanty towns, Mexico city 33 1/3 per cent and Ankara and Lima both 50 per cent. The industries are dominated by multinational corporations which prefer the capital city as a locational site due to availability in most cases of sea port and harbour facilities, technical skills and services more accessible. The migrant workers can sometimes come from across the national borders as in South Africa or they could be seasonal migrants or target workers. As populations shift to one region, the detribalization or de-ethnicization process occurs whereby there’s adoption of the dominant cultural standard by the converging groups.

There are two alternatives available to governments as regards policy toward shanties or slum. They can choose to ignore the phenomenon altogether or opt for their eradication, an infinitely enormous undertaking given the lack of financial and technical potentialities most of them are confronted with. Where there have been eradications, it is usual that the new housing units are occupied by the middle and high-income group and the poor continue in distress. Housing, though intended for the low-income group tends to be expensive because planners and architects seek to conform to standards of construction appropriate to Western cities. It is a matter of their professionalism being at stake.
As the city population doubles, its surface area triples which leads to insurmountable expenses in terms of infrastructure development. Roads and various network become inadequate and facilities such as hospitals and schools become deficient. There comes the problem of economic development of the labour force. Their overall psychological orientation will depend on the social and behavioural overlap. Coming to the city from a traditional sector and rural subsistence agriculture, the in-migrants remain on the economic periphery to be absorbed by the metropolitan informal sector and petty trade as hawkers and vendors. There are also problems of lifestyle adaptation and need for services.

According to United Nations projections, the world urban population in 1970 was 1326 million and in 2000 it will rise to 2236 million, 1000 million of which will be absorbed by the LDC's.

The World Bank estimates that Africa's low-income population will need 7.7 million new homes by the year 2000. Judging by the magnitude of the figures revealed by these estimates, it becomes apparent that state effort alone cannot possibly meet these obligations and for that matter, community participation and contribution is definitely solicited. Site and service schemes in housing help to meet this need.

The problems of Third World urbanization are bifurcated.

Macro - problems:

1. Food surpluses
2. Cheap energy resources
3. Productive employment

Micro - problems:

1. Housing shortage
2. Rapid population growth
3. Unequal income distribution
4. Shortage of cheap land
5. Lack of state involvement in low-income housing
As seen from above, housing comes at the top of the list of LDC’s micro-problems. The need for shelter for the low-income group is extremely acute and one of pressing urgency and priority in developing countries. Since migration control is lax in most of them, villagers maintain their rural ties by banding together as co-villagers in the cities. If the slums that later develop can not be done away with, it is advisable that they are at least rendered livable in the interim period they await a plan of action. Therefore controlled slum development would be well in line instead of high rise, high density construction that is designed to impress rather than meet the needs of the urban disadvantaged. Moreover, as seen before eradication is often followed by middle-income households usurping vacated plots and help maintain the existing inequalities by so doing.

The urban housing landscape in the LDCs as pertaining to the low-income group then is threefold. There are squatters, slums and public housing.

**Squatters:** These are unauthorized, spontaneous, temporary, uncontrolled, make-shift, chaotic and illegal residential colonies usually built out of scrap material on the periphery of the city.

**Slums:** These are substandard, aged, neglected, permanent dwellings, subdivisible into rooms and cubicles. They are legal and not necessarily built from cheap materials. (Authorities can not afford to diminish already inadequate housing stock by demolition.)

**Public housing:** Government and corporation construction for urban poor housing. Rents are high and extra charges for water, electricity and similar basic facilities. They are located usually on the city periphery.

...
There is a differential involvement of members of the low and high economic status. Low-income households that have stable employment and can accumulate savings can benefit from private-sector financing. Through neglect and deterioration, private housing falls below standard and is thus inherited by the low-income group as a slum. For tenants who are unable to meet regular rents and payments for site and service, the slum still provides a home and shelter.

The issue of low cost housing in relation to national economic and social goals and objectives is tied with the overall national development plan. Housing for the low-income group is the question of role of the informal sector within the economic framework in the nations of the LDCs. The concept of the urban informal sector was introduced by the ILO to depict the prevalent pattern of employment in urbanizing cities in the LDCs. It stresses aspects of the labour market employment opportunities and economic activities which are unregulated and unprotected by formal institutional arrangements.

Essential in generation of employment for the low income group and supply of goods, services and housing almost to the point that in many LDCs, it is this sector which pervades the economic lives and activities of the majority of their cities inhabitants. The informal sector for one thing is easy to enter. It has its reliance and hence its forte on indigenous resources and has as its cornerstone in family ownership of enterprise whose smallness in scale of operation lends it easily manageable without much skilled expertise. The sector is labour intensive and uses adaptive technology with most skills acquired outside the formal system. It has at its command a wide unregulated and competitive market.

Access to credit within the informal sector is highly fragmented and limited. There might be a rotating credit society organized on voluntary basis to collect and save contributions from selected members who can be extended loans (with or without interest). A chief source of housing finance within the informal sector is through such means. Lack of property to pledge as collateral reduces credit-worthiness in this sector.
<table>
<thead>
<tr>
<th></th>
<th>1970 Population (millions)</th>
<th>1985 Population (millions)</th>
<th>Projected Growth (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BIGGEST CITIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. New York</td>
<td>16.3</td>
<td>18.8</td>
<td>16</td>
</tr>
<tr>
<td>2. Tokyo</td>
<td>14.9</td>
<td>25.2</td>
<td>69</td>
</tr>
<tr>
<td>3. London</td>
<td>10.5</td>
<td>11.1</td>
<td>6</td>
</tr>
<tr>
<td>4. Shanghai</td>
<td>10.0</td>
<td>14.3</td>
<td>43</td>
</tr>
<tr>
<td>5. Paris</td>
<td>8.4</td>
<td>10.9</td>
<td>30</td>
</tr>
<tr>
<td>6. Los Angeles</td>
<td>8.4</td>
<td>13.7</td>
<td>63</td>
</tr>
<tr>
<td>7. Buenos Aires</td>
<td>8.4</td>
<td>11.7</td>
<td>39</td>
</tr>
<tr>
<td>8. Mexico City</td>
<td>8.4</td>
<td>11.9</td>
<td>113</td>
</tr>
<tr>
<td>9. Sao Paolo</td>
<td>7.8</td>
<td>16.8</td>
<td>115</td>
</tr>
<tr>
<td>10. Osaka</td>
<td>7.6</td>
<td>11.8</td>
<td>55</td>
</tr>
<tr>
<td>11. Moscow</td>
<td>7.1</td>
<td>8.0</td>
<td>13</td>
</tr>
<tr>
<td>12. Peking</td>
<td>7.0</td>
<td>12.0</td>
<td>71</td>
</tr>
<tr>
<td>13. Calcutta</td>
<td>6.9</td>
<td>12.1</td>
<td>75</td>
</tr>
<tr>
<td>14. Rio de Janeiro</td>
<td>6.8</td>
<td>11.4</td>
<td>68</td>
</tr>
<tr>
<td><strong>FAatest Growing Cites</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Bandung</td>
<td>1.2</td>
<td>4.1</td>
<td>242</td>
</tr>
<tr>
<td>2. Lagos</td>
<td>1.4</td>
<td>4.0</td>
<td>186</td>
</tr>
<tr>
<td>3. Karachi</td>
<td>3.5</td>
<td>5.2</td>
<td>163</td>
</tr>
<tr>
<td>4. Bogota</td>
<td>2.6</td>
<td>6.4</td>
<td>166</td>
</tr>
<tr>
<td>5. Baghdad</td>
<td>2.0</td>
<td>4.9</td>
<td>145</td>
</tr>
<tr>
<td>6. Bangkok</td>
<td>3.0</td>
<td>7.1</td>
<td>137</td>
</tr>
<tr>
<td>7. Teheran</td>
<td>3.4</td>
<td>7.9</td>
<td>132</td>
</tr>
<tr>
<td>8. Seoul</td>
<td>4.6</td>
<td>10.3</td>
<td>124</td>
</tr>
<tr>
<td>9. Lima</td>
<td>2.8</td>
<td>6.2</td>
<td>121</td>
</tr>
<tr>
<td>10. Sao Paolo</td>
<td>7.8</td>
<td>16.8</td>
<td>115</td>
</tr>
<tr>
<td>11. Mexico City</td>
<td>8.4</td>
<td>17.9</td>
<td>113</td>
</tr>
<tr>
<td>12. Bombay</td>
<td>5.8</td>
<td>12.1</td>
<td>109</td>
</tr>
</tbody>
</table>

**OTHERS**

Jakarta   4.0  7.7  93
Detroit   4.0  4.9  23

Source: Adapted from "People" Vol. 1, No. 4 p. 10
The question of urbanization can not be discussed effectively without recognizing its linkage to overall growth of population by means of demographic indices such as methods of birth control, age compositions and mortalities. Predictions of population sizes have been made by among others, R.T. Ravenholt of Agency for International Development (AID) who claims that family planning programs can cut down the average world birth rate below 20 per 1000 and growth rate to less than 1 per cent by 1985. He forecasts a world population of only 5.5 billion by the year 2000. More useful population projections are those made periodically by the United Nations and are not merely extrapolations of past and present trends but computed on the basis of individual forecasts of trends in age-specific fertility, death rates, migration and so forth. These are again based on best available demographic data for nations and scope for future variation in rates is estimated on the basis of past trends in DC's and LDC's. The accuracy of projections depends on how much the realized rates differ from the forecast's ones. Their prediction for world population in 2000 was 7.2 billion, which is however too high.

Population density is expected to keep increasing as the human population grows. Some regions will increase their density from three to five fold while others will not even double theirs in the coming century. In the United Nations medium - variant projection in density, 1925 - 2075, South Asia will reach a density nearly three times that of Europe's today, the highest ever known in a major region. Europe as it is today is far from self-sufficient for resources, housing and food, so how much more for South Asia at a higher density and concentration of population.
## Table 2

Population of the World and Major Areas at 25 years Intervals, 1975 – 2050 (Medium Variant in Millions)

<table>
<thead>
<tr>
<th>Area</th>
<th>1975</th>
<th>2000</th>
<th>2025</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>WORLD TOTAL</td>
<td>3988</td>
<td>6406</td>
<td>9065</td>
<td>11,163</td>
</tr>
<tr>
<td>NORHERN GROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(MOSTLY DCs)</td>
<td>1971</td>
<td>2030</td>
<td>2930</td>
<td>3,084</td>
</tr>
<tr>
<td>US and Canada</td>
<td>237</td>
<td>296</td>
<td>332</td>
<td>339</td>
</tr>
<tr>
<td>Europe</td>
<td>474</td>
<td>540</td>
<td>580</td>
<td>592</td>
</tr>
<tr>
<td>USSR</td>
<td>255</td>
<td>321</td>
<td>368</td>
<td>393</td>
</tr>
<tr>
<td>East Asia</td>
<td>1005</td>
<td>1373</td>
<td>1650</td>
<td>1760</td>
</tr>
<tr>
<td>SOUTHERN GROUP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(MOSTLY LDCs)</td>
<td>2017</td>
<td>3876</td>
<td>6135</td>
<td>8079</td>
</tr>
<tr>
<td>Latin America</td>
<td>326</td>
<td>625</td>
<td>961</td>
<td>1202</td>
</tr>
<tr>
<td>Africa</td>
<td>402</td>
<td>834</td>
<td>1479</td>
<td>2112</td>
</tr>
<tr>
<td>South Asia</td>
<td>1268</td>
<td>2384</td>
<td>3651</td>
<td>4715</td>
</tr>
<tr>
<td>Oceanic</td>
<td>21</td>
<td>33</td>
<td>44</td>
<td>50</td>
</tr>
</tbody>
</table>

### Table 3

<table>
<thead>
<tr>
<th>AREA</th>
<th>Land Area (1000 Km²)</th>
<th>Inhabitants per Km²</th>
</tr>
</thead>
<tbody>
<tr>
<td>World Total</td>
<td>135,779</td>
<td>22.1</td>
</tr>
<tr>
<td>More Developed Regions</td>
<td>60,907</td>
<td>16.0</td>
</tr>
<tr>
<td>Less Developed Regions</td>
<td>74,872</td>
<td>27.0</td>
</tr>
<tr>
<td>Europe</td>
<td>4,936</td>
<td>86.1</td>
</tr>
<tr>
<td>USSR</td>
<td>22,402</td>
<td>9.6</td>
</tr>
<tr>
<td>US and Canada</td>
<td>21,515</td>
<td>9.2</td>
</tr>
<tr>
<td>Oceania</td>
<td>8,509</td>
<td>1.9</td>
</tr>
<tr>
<td>South Asia</td>
<td>15,775</td>
<td>54.9</td>
</tr>
<tr>
<td>East Asia</td>
<td>11,756</td>
<td>67.0</td>
</tr>
<tr>
<td>Africa</td>
<td>30,320</td>
<td>9.0</td>
</tr>
<tr>
<td>Latin America</td>
<td>20,568</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Not including the Antarctic Continent

Source: United Nations, "Concise Report"
### TABLE 4

**Land Area and Inhabitants per Square Kilometre, in the World Major Areas, 1975 – 2050 (United Nations Medium Variant)**

<table>
<thead>
<tr>
<th>Major Areas</th>
<th>Land Area (1000 Km²)</th>
<th>Inhabitants per Km (sq.km)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1975</td>
</tr>
<tr>
<td><strong>WORLD TOTAL</strong></td>
<td>139,450</td>
<td>29</td>
</tr>
<tr>
<td><strong>NORTHERN GROUP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(MOSTLY DC's)</strong></td>
<td>60,574</td>
<td>33</td>
</tr>
<tr>
<td>US and Canada</td>
<td>21,515</td>
<td>11</td>
</tr>
<tr>
<td>Europe</td>
<td>4,931</td>
<td>96</td>
</tr>
<tr>
<td>USSR</td>
<td>22,402</td>
<td>11</td>
</tr>
<tr>
<td>East Asia</td>
<td>11,726</td>
<td>86</td>
</tr>
<tr>
<td><strong>SOUTHERN GROUP</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(MOSTLY LDCs)</strong></td>
<td>78,786</td>
<td>26</td>
</tr>
<tr>
<td>Latin America</td>
<td>20,535</td>
<td>16</td>
</tr>
<tr>
<td>Africa</td>
<td>30,227</td>
<td>13</td>
</tr>
<tr>
<td>South Asia</td>
<td>19,557</td>
<td>65</td>
</tr>
<tr>
<td>Oceania</td>
<td>8,557</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: United Nations, "Concise Report".
### TABLE 5

Annual Housing Needs of Africa, Asia and Latin America (1960 - 1975)
(In millions of dwelling units)

<table>
<thead>
<tr>
<th>Categories of housing needs</th>
<th>1960 urban</th>
<th>1965 urban</th>
<th>1970 urban</th>
<th>1975 urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>I Population increase</td>
<td>0.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>0.3</td>
<td>0.4</td>
<td>0.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Asia</td>
<td>1.9</td>
<td>2.6</td>
<td>3.5</td>
<td>4.8</td>
</tr>
<tr>
<td>L. America</td>
<td>0.8</td>
<td>1.0</td>
<td>1.2</td>
<td>1.5</td>
</tr>
<tr>
<td>II Elimination of deficiency over 30 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>Asia</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
<td>0.80</td>
</tr>
<tr>
<td>L. America</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
<td>0.30</td>
</tr>
<tr>
<td>III Replacement of stock over 30 yrs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>Asia</td>
<td>1.10</td>
<td>1.10</td>
<td>1.10</td>
<td>1.10</td>
</tr>
<tr>
<td>L. America</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
<td>0.40</td>
</tr>
<tr>
<td>Population</td>
<td>3.00</td>
<td>4.00</td>
<td>5.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Deficit</td>
<td>1.23</td>
<td>1.23</td>
<td>1.23</td>
<td>1.23</td>
</tr>
<tr>
<td>Replacement (30 years)</td>
<td>1.63</td>
<td>1.63</td>
<td>1.63</td>
<td>1.63</td>
</tr>
<tr>
<td>Total</td>
<td>5.86</td>
<td>6.86</td>
<td>8.06</td>
<td>9.86</td>
</tr>
</tbody>
</table>

Rate per 1000 inhabitants in 1965 = 13.6 dwelling units
(30 years replacements)
Public Services and the Public Sector

There is always the pressing demand for urban public services. Although observations on prices and quantity are indefinite and also the description of who uses the services one varied fact is their widespread popular demand. In trying to understand the demand for urban public services it is essential to undertake an economic analysis of the urban public sector which can either be derived from a survey of requirement for a satisfactory urban society or surveys of service levels that governments are making an effort to achieve, the goals, priorities and costs underlie therein. The economist's focus is on utility of individuals, their preferences, and devices an analytical structure he develops with individuals or groups as major elements. Welfare economists extend their models to include public goods with public decision-making incorporated. Cost-benefit analysis pays attention to the value of public works and also merges operations research type of cost-effectiveness studies to formulate programming, planning and budgeting systems analysis of public operations. These developments, happening mostly at central government level also take place at local levels. Many public services are characterized by a large ratio of capital to operating costs or by establishment of a large network. If the system is to be used beneficially and efficiently and entry is to be controlled by price, it is likely that the sum of revenues may be less than the costs though the sum of benefits, the value of the demand, may be higher than costs. Public services deserve uniform treatment in the public sector.

Planning and implementation of any projects has its success largely dependent on community commitment and participation, whereby the community grapples with plan implementation through their own organizations in augmentation to municipal services and financial resources. Amenable to these proposals are such public services areas as fire protection, water supply, transportation facilities, custodial service, recreational facilities, education, health and hospital services and public utility services.

Urbanization and The Environment

Urbanization does not entail an increase in numbers of people and buildings per se, but increasing encroachment on the natural environment, the nearby agricultural land and forests. Urban centres pollute not only themselves but also rivers and the air, creating toxic situations...
that upset natural cycles in areas remote from them. Thus the advent of the metropolis and the megalopolis threatens the natural balance of the ecosystem.

If a major catastrophe is to be averted, food for the growing population has to be generated from within the developing countries themselves. But owing to the underdevelopment of the infrastructures in many of them such as road network, shipping and harbour facilities, to say the least of the distribution channels, huge tonnages of food resources would defy importation from one region to another and large proportions of it going to spoilage.

Urban spread is accompanied by monotony which can accrue from satisfying urban design. The massive movement of migrants to cities without adequate employment opportunities and shelter gives rise to population concentration in urban areas. Population density tends to be higher for the low-income group among whom there's an intensity of living patterns and higher intrusion and noise levels. Density relates to the interference in pathways of movement, interaction and communication. Densities can define social contacts and proper densities have contributed to the creation of civilization. The effect of densities upon attainment of human values will vary with the society's culture, technology and economic wealth.

Culture is a determinant of what constitutes a stressful density. The Japanese will react differently to densities from the Germans, according to their nation and understanding of the concept of "cultural space". Space conception and perception is visual auditory, tactile, kinesthetic, ofactory, thermal and aesthetical.

Urban man living in crowded conditions looks for respite in open spaces. If there's is high density (culturally determined in public space), there must be relief in the private space at home or else in the readily available space beyond the city. Economic considerations and special interests will destroy the difference between public and private space. Cities should be designed to provide congenial spaces to encourage and strengthen cultural enclaves in the transformation process, generation to generation as the country folk convert to town folk and in the process of combating lawlessness.
In the book "THE SILENT LANGUAGE", E.T. Hall has distinct approaches to the handling of time by different people. There is the monochronic attitude which is characteristic of low-involvement peoples who compartmentalize time, schedule one thing at a time and become disoriented if they've to deal with more than one thing at a time. There is the polychronic attitude which is characteristic of low-involvement peoples who are jugglers and tend to keep several operations going on simultaneously with little distraction. The former prefer to separate activities in space and the latter to collect activities. The low-income group members have a higher involvement ratio (polychronic) than the suburbans (monochronic). It helps to understand why the former thrive in high density situation under conditions whose tempo would prove stressful to the latter and why construction of dwelling facilities for the low-income group has to cater to these density considerations.

ECOLOGICAL PROCESSES

Urban growth has a past, present and future and there are certain observable ecological processes in the development of every urban area. These include the processes of concentration, centralization, decentralization, segregation, invasion and succession. They operate in different rates and circumstances with one being more predominant than others. To all these process there is an additional components of mobility within the spatio-temporal framework in movement of people, good land uses and functional areas from one end of a city to another. This mobility is related to availability of transportation, whether by foot or public transit.

Concentration

This refers to the differential distribution of population in the cities. It centres on residence and concentration measured in terms of population density. Factors influencing the process are access to transportation, variation in economic capacity to purchase a residence or location for a function. There's a tendency of population density to be higher near city centres and decline toward the periphery. In LDCs there's concentration of densities in these peripheral regions due to squatter settlements.
Centralization

This process focuses functions around key points of activity. The ordinary measure of centralization is dominance and it seeks to uncover the effect of focusing activities in particular areas in the urban complex. The Land Hypothesis of Burgess can illustrate the point where the city centre develops as a business district.

Decentralization

This refers to the tendency for human beings and institutions' radial shift away from the core of the urban complex and the two factors central to the process are mobility and competition noticed in demographic movements, commercial activities and industry. In LDCs, industries may be located in decentralized locations rather than city centre where there's congestion and less accessible transportation facilities.

Segregation

This is the clustering or sorting out of land uses and population enclaves as a bastion or buffer to the introduction of undesirable type of land use, ethnic group or population group. Segregation can take form along attributes of race, income, language, culture or religion. Prejudice underlies most of it and expresses preferences for associating with one group as opposed to another.

Specification

A non-population central type of segregation is specialization involving sorting out of uses and other types of activities in cities. Activities get centred around a specific area mostly dictated by economic needs. The extent of homogeneity depends on duration of the practice in use, visibility and mobility conditions. Establishment of planned industrial districts and civic centres, leads to sorting out of commercial and governmental functions into strictly specialized areas.
Invasion:

Since change is inevitable, most cities experience this ecological process without fail. It is the penetration of a segregated region by a population group or institutional function different from the existing one. It has often involved displacement of a higher group use by an encroachment of a lower one setting up a cycle of invasion and succession due to competitive relationships among differing groups and institutional agencies. The reaction to it can either be resistance or submission depending on the attitudes prevailing.

Succession:

As invasion continues, succession of group or use pattern follows, 100 per cent invasion is seldom achieved nor is succession always complete. Urban areas of developing nations have observable kinds of invasion due to rapid extension and expansion of built up areas to absorb increasing population. Observable also is replacement of agricultural functions by urban ones such as industry and residences. A commercial undertaking may invade areas originally meant for residential purposes.

Routinization:

This is the daily movement of population to and from place of residence to place of work and also of goods from point of manufacture to point of use. This process follows a predictable pattern and course or route taken and time expended in so doing. Predictions can be made for weekly, seasonal and annual movements. There are discernible in every city typical routinization pattern in movement of people and goods, varying in degree as a result of variations in mix of land use, variations in transport facilities and other factors influencing movement. The operation of the ecological processes shed light on functional relationships among various parts of an urban complex.
CHAPTER II
LOW COST HOUSING AND LAND USE

Housing:
Rapidly growing urban areas in the developing countries have one of their pressing problems being that of shelter, whose acuteness is most expressed in its shortness in dwelling units for the low-income group. Like employment it has social and economic ramifications. This deficit in housing sometimes underestimated exists in enormous proportions gets progressively greater as a result of increased immigration of population from rural areas, whose impact on existing housing supply enhances its fast deteriorations and removal from use. As town dwellers' relatives move into urban areas in large contingents, there is chronic overcrowding and housing deficits worsening. Some housing destruction is also inevitable as modern central business and government projects get underway.

The financial problem provides one dimension to the shortage whilst also of importance is the critical shortage of building materials and building skills. The dependences on land labour affects the pace of production of housing units. Accompanying the housing deficit is that of community services and facilities. Urban government in newly developing countries is underfinanced and due to this handicap, cannot cope with the scale of problems facing it. This is a vicious circle where lack of finances, materials and expertise generates shortages in housing, sanitation and health care with wanton tools on human health and therefore increased government responsibilities. The urban population lacks the capacity to realize tax returns to the municipal administration of a dimension that it can keep up effectively with its task of furnishing required public urban services.

Most LDCs are confronted by a serious shortage of both professionally trained and experienced staff in the housing field together with the lack of supporting services or administrative devices to formulate and implement a viable program. Most notable and regrettable is the low interest of private enterprise in supplying housing for low-income people.
The greater responsibility for such housing, thus becomes that of government which has already on its hands the burden of other vital problems of development. Housing is just one of the manyfold programs that compete for priority in government funds, staff and implementation. The magnitude of the dimensions surrounding the housing task are suggested in Table 5, which provides projections of annual need for the period 1960 - 1975. Out of lack of more up to date statistical data, this serves to illustrate the trends and help estimate future requirements.

An overall annual housing programme of 8 to 10.4 dwellings per 1000 inhabitants is required in the developing countries of Asia, Africa and Latin America, depending on the rate at which existing dwellings are replaced.

The problems of urban development can be efficiently tackled best by meticulous planning. As it is for many LDCs, urban planning seems to stand a way down the list of priorities. It may be just getting underway, very late in coming, not broad enough or totally absent. A gap exists in many between objectives of planning and their practice accentuated by the relative availability of professional planning staff, capacity, interest and funds. Often times there is no overlap between technical capacity and culture standards which hinders objective realization, with plans being sent on the shelf. If these plans survive the delay in execution, practically all of their significance, balance and comprehensiveness has long since been weakened or entirely removed. To offset such premature obsolescence of plans, there ought to be closer linkage between completion of theoretical drafts and plan implementation.

SOCIAL ASPECTS OF HOUSING AND URBAN DEVELOPMENT

Slums:

Historically, these are the "nursery" of urbanization. Slum dwellers derive some benefits that arise from the following four conditions:

1) Lack of legal and social controls
2) Low rents for affordable housing
3) Proximity to the hearts of the city where job opportunities are concentrated.
4) Recourse to traditional security that exists where persons live in natural groups as extended family, tribe, nationality, religious affiliates or caste.
Lack of control permits a slum dweller to do as he pleases like building a make shift dwelling, use of shop as a house, use of labour not paid regularly and unionized keeping livestock that forage in the street, setting up a beauty parlour or hair salon in the living room, earn a living without paying shop rent, setting up a repair shop for radios, shoes, bicycles etc. All these projects are not allowed in a proper housing project or planned residential neighbourhood in developing countries where controls are higher.

Location close to job centres minimizes transportation expenditures. A single bus ride might be the same as a cost of a square meal.

If these aspects of low cost housing are taken into consideration, slum improvement schemes or upgrading becomes meaningful. The social goal of slum improvement is to permit families and dwellers to continue staying at their sites or lots while improvement or alteration gets underway. There might be temporary shelter that is constructed while more permanent units are being built and others demolished.

**Advantages of Slum Improvement Schemes**

1) Keeps families close to whatever jobs they had.
2) Keeps social structure of families or larger groups.
3) It gives stimulus and incentives for advances that are inherent in the city.

In cases where there have been mass housing schemes built for the low-income worker but not by him, there is always been the element of imposing dehumanizing and degrading aspects in the housing in sharp contrast to the unplanned housing built by the inhabitants themselves. The architect, unfamiliar with the culture or subculture of the low income group may incorporate middle-class standards of modern sanitation, assumptions of privacy, comfort, forms of sociability and community living, all of which may be inappropriate, nonetheless well-meaning in the intent.

For that reason inhabitants of shanty towns have been known to abandon government built apartment buildings to go back and rebuild destroyed shacks. Also the low-income community may sell their new apartments to middle-class families and move back to their old but familiar physical slum.
Riots may flare up (Kingston, Jamaica in 1966) as a resistance to public housing to replace familiar slums. There are clear indications of social inadequacies vs technical adequacies as evidenced by such incidents. In physical design there should be compatibility with prevalent social patterns. If these do not overlap, it is not uncommon to observe such anomalies as absence of painting on tenements, windows painted black, doors nailed shut, ramps built over stairs, non-use of playgrounds, balconies, park benches, dinners cooked in fire escape or in the backyard and not in the kitchen and cars parked on the verandah and not in the garage. In cases where there is overlap of interests of the two sides, there will be little destruction and misuse, but beautification of the houses, sites and surroundings by the community's inhabitants.

There is an increase in chronic and degenerative diseases (cancers, ailment of respiratory tract etc) due to environmental and behavioral changes resulting from industrialization and urbanization and these diseases of civilization are results of man's failure to respond successfully to the stresses of the modern environment.

Man is threatened by constant and unavoidable exposure to stimuli of urban civilization, environmental pollution, physiological disturbances associated with sudden changes in the ways of life, estrangement from the conditions and natural cycles under which evolution took place. The emotional trauma and paradoxical solitude in congested cities, the monotony, boredom and compulsory leisure ensuing from automated work. How he copes with urban crisis is a function of the conceptual modes he has of himself and of the city. His survival is contingent upon learning to use the city creatively, learning more about its functions as an expression of culture.

Social Values and Housing Orientations

Housing Attitudes - In West End Boston a preliminarily working class neighbourhood, 78% reported that they like the apartments in which they lived 13% expressed dislike. This goes to show that the usual descriptive criteria of substandard living conditions are either objective physical standards or subjective value preferences. Low levels of rent both in absolute terms and proportionate to income source for satisfaction.
The difference in quality of interior and exterior residential spaces is a vital factor to be considered in evaluating slum areas. Slum dwellers develop a deep attachment to their houses and neighbourhood. Dwellings may be replaceable but the area certainly not.

A basic housing system such as in Mexico city may experience a breakdown that can cause "excessive growth of far less satisfactory housing or settlement type". Furthermore, quasi - legal subdivision of suburban land induced by the landowners appetite for profit and taking advantage of laxity and loopholes in regulatory controls can result in the depreciation in overall housing standards.

The major differentiating variable among lower-income urban areas is the 'jural situation' which refers primarily to the security and legal status of tenure within them, which also has consequences for social political organization of communities and appropriateness for strategies to obtaining living conditions. Squatters are characterized by illegal invasion of land insecurity of land tenure. Squatters become more secure with the passage of time and the more the control people have over their houses, their environment, their source of livelihood, the more they gain a sense of proximity to forces that control their circumstances and thus a greater capacity to cope in general.

Approach I: Offer small loans or grants to households for building materials to improve infrastructure services. Support rather than replace.

Approach II: Construct new buildings and provide complete services.

Improvement programs ought to take into account not merely the residential environment (shelter) in its narrow sense per se but incorporate a broader view responding to physical environmental needs that tap environmental circumstances in the neighbourhood, by that being meant the use of the social and economic resources of the community, distribute benefits of urban development in order to spread out the services and facilities to all groups and curtail conflict between government agencies and neighbourhood inhabitants. To best facilitate these requirements, improvement programs, rather than follow a closely standardized procedure, must be designed to suit characteristics of the given situation that addresses itself to the unique priorities and requirements of the community they are aimed to benefit.
Lower income settlements are not only confined to "slum and squatter settlements" but include spontaneous settlements with legal tenure, transitory urban settlements such as pavement dwellers, boat people, caravan dwellers and others characterized mainly by substandard living conditions and poverty more or less similar all over the world with on the other hand a unique set of political cultural, economic and enviromental characteristics.

Improvement programs must encompass conditions underlying the processes affecting the housing market and the earning capacity of lower-income households.

Attractiveness of the Inner City

Cities offer more employment opportunities than the countryside and the inner city is the point of entry of those seeking to gain employment.

With rapid increase in economic activity, the upward mobile abandon the inner city and leave behind the elderly, the least skilled, the disadvantaged minorities and the backsliders.

The tenure and livelihood in the inner city may be threefold:

1) A neighbourhood of small, not so well built houses sometimes illegally intruding into strips of public space. Chief engagements for livelihood may include small trade, crafts, repair work, casual and manual labour. As the neighbourhood gradually improves, residents become more prosperous with increasingly strong internal social organization which in turn provides support and control anchorage. On the whole, tenants treat their landlords as patrons rather than exploiters, to whom they pay little rent.

2) A neighbourhood of tenement housing with absentee landlords extracting exploitative rents. People are poor, overcrowded, unemployed or at best taking part in lowest-paid manual work and the houses are in the most degenerative state imaginable. There is little social organization in comparison to the previous case.

3) A neighbourhood similar as above but less overcrowded as vacancy rate gets high. Lax controls lead to its being rendered a generally dangerous neighbourhood. Building maintenance is very bad and landlords charging exhorbitant rates.

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Inferences

1) Emerging from this picture is that the more secure the tenure the more stable the community economy and the more the mutual support or social quietude will run through the neighbourhood.

2) The more attractive the inner city, the more tidal wave of immigration which will disrupt the stable pattern owing to religious, ethnic or clan conflicts as late arrivals with varying origins and background gain their foothold in them.

3) The more the inner city declines, the more the prevailing community norms and structure are faced with obsolescence and demise.

A common thread running through the three states is the measure of autonomy experienced and exercised by the inhabitants.

Some Anomalies of Housing - Some Observations

Underlying the glaring anomaly in housing situations to be found in a given city is the disparity between the rate of economic adaptation and the rate of social adaptation.

There is a conflict between national interests, indigenous commercial structures and that of international capital that seek a stake in a developing economy, concisely stated, a clash between the drive for westernization and claims for economic independence.

There is a conflict between demand for cheap labour as can be drawn from the squatter concentration and the extreme squalor of these regions, where space is available and shelter cheap.

There is a conflict between the distribution of relatively unskilled workers and the relegation of the demand for such work to other regions, especially the underdeveloped countries' cities.

Remedial strategies such as urban renewal, slum clearance, housing improvement grants, site and service schemes rearrange housing stock with minimal impact on what people can afford. This is mainly due to the scale of the undertaking. The larger the scale the lower the prices of houses are guaranteed to become.

Home improvement grants, seldom create better homes for their original inhabitants rather, they encourage landlords to renovate low-cost rental accommodation into high-rent suites, off the reach of the poor, that can only be sold to higher bidders.
Site and service schemes, take vacant land at lowest price, offer minimal infrastructure for housing on peripheral land but far removed from work regions and those who can meet transport cost are normally the well-off. Site and services are thus investment opportunities for small-scale entrepreneurs, acquiring land on subsidized rates and can make profit by renting rooms by subletting. This does not help resettlement of inner-city squatters, the alleviation of overcrowding and unauthorized trade.

By and large, methods of putting land into use for city building has been calamitous. Urban renewal constitutes a revolutionary approach to dealing with land, primarily with respect to land reclamation and rebuilding. This formula is applied to demolition and redevelopment of the worn-out older parts of the cities. The strategy consists in an agency of local government, with the aid of the state, buying up sections of the old and delapidated areas, clearing them up and resell or lease them to chiefly private developers who undertake to build afresh.

Site and Service

This is a system of survival where tenancy of a small place of land has been secured. Secure tenancy of land is one of the means to procure social and economic mobility among the low-income people who lack in possession of wealth, goods, education and other assets. Site and services are different from squatter settlements in that they have the sanction of public authorities and are officially sponsored. They afford a means of survival and are a temporary mechanism for the progressive improvement of the community. It provides housing to a few beneficiaries and shifts the government major effort from housing to provision of utilities and services to a much larger sector of the population. The advantages in this is that shelter can be constructed with limited resources of individuals making use of inexpensive materials. No special skills are required. Self-help or artisans can be employed. Provision of utilities and services demand more than individual effort. It requires collective effort from the community and government in planning, and mobility resources (technical, economic and political). A systems approach to site and service scheme would entail project assessment, site analysis and design criteria. This self-help housing
housing scheme has been popular since 1970 in LDCs. Financial and technical resources can be sought through international organizations like the World Bank and United Nations.

**Project Assessment**

Reference for the appraisal of site and service covering project, site, design and cost data. Also included would be guidelines for evaluation; normal and special site conditions.

**Site Analysis**

Reference for the evaluation, selection and planning of sites in urban areas covering environmental, physical conditions, services and community facilities, land development, government regulations; site attributes defining economic and physical feasibility of development and site determinants defining the constraints of physical planning.

**Design Criteria**

Reference for the design of sites and services covering planning and subdivisions of land; provision of utilities, detailed cost evaluation studies. Furthermore, a matrix for site and service projects with models of grid and gridiron urban layouts, design of utilities such as water supply sewage disposal, electricity, telephone and street lighting, circulation and storm drainage; analysis of cost implication of land utilization and utilities, with unit costs, total model costs and comparative costs per lot and per hectare.

Among the issues that the urbanization process involves are the shift in economic enterprise from one region to another, the isolation of its poor, disadvantaged minorities within them, and the upsurge in crime rate.

Urban policies have evolved out a shifting consensus among urban experts on the requirements and remedies needed to make a substantial contribution to easing the problems of cities. It has been assumed that cities are both too poor and ill administered to manage more than traditional city services. Therefore change has been seen as soliciting guidance and infusion of government funds in such undertakings as tackling housing, planning, metropolitan governance, poverty and revenue sharing. Let us examine the housing question in greater depth.
With special reference to metropolitan USA, the public housing program beginning in the 1930’s was designed to replace urban slums and provide modesty subsidized housing for the working poor. With cleared slums, new and better neighbourhoods would be provided. 1949 saw an addition to this program in the form of urban renewal which would also be aided by government funds.

Its chief default and consequently its Archilic heel from the point of view of the critics was that although it entailed the eviction of the poor from their dwelling, the new scheme was designed for higher-income groups. It provided a stronger tax base for cities by attracting private investment to the cities older parts where substandard housing had been eliminated and replaced. By mid 1950’s public housing had lost its glow and had achieved a tiny fraction of the nation's low-income households. Leveled against public housing was the accusation that the projects were too big, too uniform and they concentrated the problem of population. They did not provide a good living environment.

By 1961 new subsidy programs came into being which called for the building management of housing for the low-income groups by private non-profit corporations. These programs had a remarkable success and had a greater bulk of housing constructed, outstripping that made available under the prior public housing programs. Money scandals and corrupt practices led to their scrapping off in 1973, to be replaced in 1974 by a new housing program which provided rental assistance to low-income families. Local communities could adapt their programs to local housing market conditions.

Housing is not merely shelter but encompasses the neighbourhood it is located in which should meet other needs such as personal security, information, access to employment, credit, friends and standard public services. Therefore improvement on housing should aim at improvement in the neighbourhood, which is not so easy to accomplish.

Land Use and Urban Growth

Land use is a basic environmental issue that affects transportation, housing, recreation and employment opportunities. Confrontation with
it requires adjustments, accommodations and balances since it is concerned with making sure that conservation and development take place in the appropriate places. The central problem then becomes, how shall the process of urban development be organized, controlled and co-ordinated so as to protect what is most valued in the environmental, cultural and needs for changing population, new housing, roads, power plants, shopping centres, recreation facilities and industrial facilities.

The history of development is replete with evidence to substantiate the fact that public opinion has favoured growth almost irrespective of the consequences and cost to the environment.

Whereas there might be institutions and policies for solving the problems of air and water pollution, there are neither adequate institutional processes nor the necessary legal doctrine to solve problems of urban growth. There is an enormous opportunity for governments to encourage open space protection by formulating, mapping and launching a publicity campaign for a set of advisory national open space categorization or classification for consultation by state agencies that seek to carry out planning of development projects. This consultation can also be of benefit to private land buyers and sellers. As a prime requisite for newly urbanizing areas, public policy should be geared toward acquisition and preservation by the government of the limited natural supply of recreational open spaces such as beaches and water front areas and making them publicly accessible. Where there are budgetary surpluses open space acquisition should adjust to the pressing needs of anticipated urban growth. The government should exploit its full range of powers which encompasses its permit authority and public policies should not entail an unnecessary burden on the members of the low-income group who have legitimate needs to be met that ably development can respond to. The case for more development has the viable option that is based on demography. Not only is there a need to house the present population but also those whose birth is foreseeable. Economic growth takes place most dynamically in metropolitan regions where there are large concentrations and job opportunities. Whether the resort is to high density/high rise living or low-density sprawl the ideal should be to provide utilities and services economically and at the same time conserve open spaces.
These then are some of the measures that the government can take in order to procure as much land in the form of open space as it possibly can whose purposes would be to cater for the public needs in housing, recreation etc.

a) Government estate tax laws could be amended to permit the transfer to government of land (designated to be of national significance by the Ministry of Local Government) with the market value of the land offset against government estate tax liabilities.

b) Government should actively solicit open space donations and should delegate this responsibility to creditable private organizations, (e.g. NATURE CONSERVANCY), to whom it can grant the charitable status for real estate tax purposes.

c) Mandatory dedication requirements could be imposed on developers to ensure proper utilization of urban open space.

d) State and Local government regulations could have in-built into them clauses requiring contributions from developers in the form of open space or cash to purchase larger patches of open space, sufficient to satisfy developmental needs of community residents.

d) State and local government regulations could assure that adequate public accessways are well constructed and established prior to granting permission for development of private property adjacent to public recreation space such as parks, beaches and waterfronts.

f) There should be protection of public open space from diversion to other public use or if need be provision for replacement by land of comparable monetary value.

g) There should be protection of privately owned open space which has prospects for being engulfed in urban expansion. This could be achieved by either advisory owners to give up or sell part of their property rights or alternatively by requiring owners to regulate their development and maintain them as they are.

h) Plans and decisions to provide public services should be governed by the measure or extent to which these undertakings will stimulate or discourage the development of the designated open spaces. This calls for co-ordination between state and local planning objectives.
i) Where incentives involving a trade-off to the landowner have been employed to elicit the desired response (donating urbanization rights), care must be taken to assure that public benefits and public cost are commensurate.

Since land is in the market competing for the consumer's money, decisions to purchase or sell it are instigated by the opportunities for maximizing return from a transaction of the land commodity in the market. Paramount in the interacting forces which determine the uses land is put into, are the forces of supply and demand, which according to the classical equilibrium theory has the price as both a function of the costs of rendering the land production and a function of net income realizable on the investment. The value of land lies in its potential to produce income in the future.

"The value of land is the sum of all the net land incomes that will accrue in perpetuity discounted for the period of time that will elapse before they are received. Since incomes due one hundred years in the future have only a negligible value today, the valuation of land involves a prophecy as to the net income of the land for the next thirty or forty years".

Chapin, F.S., Urban Land Use Planning
University of Illinois Press, Chicago. 1972 pp. 8 - 9

The Land Use Pattern

It is of crucial importance when discussing urban growth and development to view the land structure and values as a whole and attempt to determine the relationship between land values and uses in the aggregate. The land economist has recourse to the classical rent theory and equilibrium models for the analysis of the relationships of supply and demand and the pricing of land in the market. If the total pattern of land use is the cumulative result of a sorting process of the various market place decisions over a long period of time, the complexity and magnitude of these transactions suggest that future theoretical research will increasingly employ models geared for use in a high-speed computer.
"A typical model states that the value of land is the expected aggregate net annual return of the land expressed as a percentage of the annual rate at which the total investment is estimated to be amortized annually. Expressing the expected net annual return as the difference between gross revenue and expected costs, Wendeit has stated the general model as follows."

\[
\text{LAND VALUE} = \frac{\text{(AGGREGATE GROSS REVENUES) MINUS (TOTAL EXPECTED COSTS)}}{\text{CAPITALIZATION RATE}}.
\]


For matters of conciseness and clarity, the formula above can be expressed as

\[
A = \frac{B - C}{D}
\]

where \( B \) =
1. Size of market
2. Expenditure for services within market
3. Urban areas competitive pull
4. Supply of competitive urban land
5. Prospective investment in improvements

\( C \) =
1. Local property taxes
2. Operating costs
3. Interest on capital invested in present and future investments
4. Depreciation allowances for these improvements

\( D \) =
1. Interest rates
2. Allowances of anticipated risks
3. Expectations concerning capital gains

Users of land bid for sites in response to what will maximize their profits and minimize their costs. The land with the highest value is that which goes to retail business and services. Knos, in his study of Topeka found that land values, rather than vary inversely with the distance from the city centre, actually vary inversely with the reciprocal of the distance and also major radial thoroughfares converging on it.

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THE THREE SPACE ORGANIZATION CONCEPTS

A. THE CONCENTRIC ZONE CONCEPT

1. Central Business District
2. Zone of Transition
3. Zone of Working men's homes houses.
4. Zone of Better Residences
5. Commuter's Zone

This concept was developed by Burgess in early twenties to explain the ecological process where the city fans out concentrically from a central business district or "loop."

B. THE SECTOR CONCEPT

1. Central Business District
2. Wholesale Light Manufacturing
3. Low-class Residential
4. Medium-class Residential
5. High-class Residential

Coming a decade after Burgess, this concept by Homer Hoyt patterns land use in terms of wedge-shaped sectors radial to the city's centre along established lines of transportation.

C. THE MULTIPLE NUCLEI CONCEPT
In addition to the five subdistricts of the sector concept are:
6. Heavy Industry
7. Outlying Business District
8. Residential suburb
9. Industrial suburb

This concept was first suggested by McKenzie and is built around the observation that frequently there are a series of nuclei in patterning urban land use rather than a single central core of the previous two concepts.

Of these theories of urban growth, it is worthwhile to examine in greater detail one of the earliest to evolve, viz that by Ernest W. Burgess in 1923. His has come to be known as the zonal hypothesis of urban growth. The city assumes the form of five concentric, symmetrical rings or zones of development. The innermost ring is zone 1 which is the business district and are of most community activity. Concentric around it is a transitional area, heavily populated by low-income groups with high personal and social disorganization. Then there's Zone 3 which is an area of working men's homes such as clerks and factory workers. Zone 4 is the residential zone of single family dwellings and local business districts or inner suburbia, roughly 15 to 20 minutes by public transport from Zone 1. Zone 5 is located beyond city limits as is the commuter zone, 30 to 60 minutes by transit from central city and is the residence for high-income persons. Interesting in this lay out is the location close to the city centre of low-income groups where land rates are highest.

Non-western cities have experienced the greatest part of growth in situations where they were subjected to less rigid controls than western ones and so they have known no zoning ordinances, subdivision regulations, building height controls or limits and control over site coverage. They have had a heavy dose of unauthorized or squatter settlements providing the variety of growth peculiar to most of them. This growth has been anarchic and defies official controls. LDCs' city growth patterns have skipped certain stages common to western urbanization such as tram-ways and mass transit network facilities.
The urban land market operates under the same principles as those in the agricultural setting as postulated by Ricardo and Malthus. Attempts to formulate a theory of the urban land market and urban locations had their beginning in the work of J. Von Thunen (1826) and further explored in greater depth by R.M. Hurd (1903) and R.M. Haig (1927), with special application to the urban land market in America. However, the theory failed to take into consideration residences, which comprise the predominant land use in urban areas. Nonetheless it investigated the paradox of the cities whereby: the poor live near the centre, on expensive land, and the rich on the periphery, on cheap land.

In any one transaction, the purchaser acquires land and location, for the combination of which he makes only one payment. In the analysis, encountered are: negative good = distance
positive good = accessibility
negative costs = lost savings in commuting costs
positive costs = savings in commuting costs.

As discovered earlier on, the price of the commodity is determined by the supply – demand relations at the market. Thus the equilibrium rent at any location is found comparing the bids of the various potential users and choosing the highest.

A business – man makes his decisions as to maximize profit, and his bid rent curve will be along which profits are the same irrespective of the location of the business along such a curve.
Profit can be defined as the remainder from the volume of business after operating costs and land costs and land costs have been deducted. The slope of the bid rent curve (dollars per unit of land) will be equal to the rate of change in the volume of business minus the rate of change in the operating costs, divided by the area occupied by the business establishment. The higher the bid rent curve, the lower the profits, since land is more expensive. There will be the highest curve where profits will be zero. At higher land rents, the business could only operate at a loss.

A residential household has satisfaction rather than profits as a criterion of optimal location. The bid rent curve will be such that the individual is satisfied at every location at the price set by the curve. The higher the curve, the less the satisfaction because at high prices, the individual affords less land and other goods.

Thus, if the curves of the business firm are steeper than those of residences, and the residential curves steeper than the agricultural, there will be business at the centre of the city, surrounded by the residential section beyond which will lie the agricultural land. The poor, will tend to central location on expensive land and the rich to the cheaper land on the periphery; the reason for this not being that the poor have a greater purchasing power but because they have steeper bid rent curves. Actual densities, prices and locations cannot be determined by these curves. Their determination is embedded in the method that consists if assuming a price of land at the city centre, and deciding the prices at all other locations by the competitive bidding of the potential users of land in relation to this price.

The model chosen in the discussion above was that of a single-centre city, on a featureless plain with transportation fanning out in various directions. The analogy can be extended to cities with several centres. The model can also shed some light on effects of economic development, zoning regulations, changes in patterns, tax policies etc.

The problem of land for housing low-income groups is of such tremendous importance and central to the human settlements issue, so much so that it was decided by UNCHS's fifth session in Nairobi in 1982 to make the subject
the main theme for the UNCHS's sixth session held at Helsinki in 1983. The land need for housing of the low-income group becomes a problem as settlements in the metropolitan areas of developing countries grow and expand. Land constitutes the nucleus of the housing problem and most of it is made available to low-income groups by means of informal processes, with governments playing a marginal role. The informal arrangements are increasingly coming under pressure and constraints which are in dire need of relief.

The disadvantaged groups get excluded from legitimate housing due to their inability to pay for legitimate housing on legitimately procured land, since these purchases gnaw heavily into the households incomes.

"In the early 1970s, the proportion of residents unable to afford even the cheapest conventional housing was 47% in Bogota, 63% in Madras, 64% in Ahmedabad and 63% in Nairobi...... Such residents then, have turned to other means of obtaining affordable housing."

HABITAT NEWS, Vol. 5 No. 1 April - May 83 p. 4

In certain cases, popular settlements gain access to land through non-commercial arrangements without any costs incurred. Invasion is one means of occupying vacant land and is often sudden and dramatic whilst encroachment on peripheral land is usually gradual and less expressed visually. The other non-commercial means is settlement on customary lands and alienation of public land reserves.

Informal commercial arrangements are of the kind where land is made available to the disadvantaged groups through illegal sales of public land involving bribery and illegal transactions. Another arrangement is substandard land subdivision (often unserviced). Furthermore, there is land rental by public and/or private landlords of "vacant" land. Lastly, there is the arrangement of land fragmentation in existing settlements involving sale or rental of plots.

Without saying, such processes of land acquisition have inbuilt into them the element of insecurity in land tenure and dread for imminent eviction on the part of the entrepreneur, resulting in houses that tend
to be of poor standard and poorly maintained. The more secure the land tenure is, the more consolidated the houses tend to be – as studies in Santiago and Karachi reveal.

Informal arrangements create problems for both the residents and the government. The former in addition to insecurity are subject to environmental hazards such as fires, plagues and cave ins, also discomfort and inconvenience. The latter cannot easily enforce law and order and implement land-use scheme, zoning ordinances and construction codes.

Land tenure plays an important role in ones security and privacy and despite increasing urbanization tenure still remains fundamental to public policy formulation. The drive towards cities and people in need of shelter near their workplaces has led to upheavals and invocation of regulation with state intervention and participation. These upheavals have sometimes meant confiscations or expropriations, redistributions of tenure, break-up of concentrated ownership and reparceling of fragmented holdings. Owners' rights entitle him to personal discretion over the use of his land, whether to sell, mortgage or bequeath it to heirs. In other situations however, there has been a complete disappearance of private land ownership, curtailment of development rights, sometimes without compensations.

Throughout ages, beginning with the code of Hammurabi, 4000 years ago prescribing capital penalty for a contractor whose house collapsed and killed the owner, there has been a cumulative body of legislation enacted to check the excesses of the speculative builder. Regulations prescribe materials to be used for construction, minimum and maximum heights, uses for which land is to be committed, improving existing buildings, design of new houses, types of walls, gutters, sanitary and safety precautions, density limits, decency of housing and all manner of requirements to be satisfied and complied with in connection to tenure and development.

Restrictions alone are incapable of improving the urban environment and produce tolerable housing for the disadvantaged. Raising dwelling standards has the consequence of raising the costs the builder has to charge for his product and the rents the consumer can afford to pay for it. Regulations cannot afford to become so severe as to force the owners to
vacate or demolish them thus aggravating the housing problems of the
low income group or at most divert his amenities to the higher income
group to cover costs and make profit.

Urbanization and industrialization in LDCs has been more dramatic
and rapid with the effect that emergency measures have not been that
considerate of private rights due to pressure of in-migration and scarcity
of housing. Nevertheless land owners and developers put up a great deal
of resistance to governmental intrusion over existing rights, property
tax rates, rent control and maintenance.

At the beginning of this study, it was stated that a global view
of the urbanization process would best serve to find remedies to the
problem of the LDCs. At this juncture then, it would be appropriate to
trace the historical legacy of urbanization trend with particular emphasis
to the rise of modern housing and city planning in Western Europe. As
housing shortage became increasingly acute, public funds were employed
to promote construction of housing units for the poor groups. The builder
could no longer cope with the need and the worker could not build for
himself. In 1887, Denmark's government formulated a housing policy
providing cheap loans to co-operative building societies in order to
construct low cost dwellings for workers. A decade later, Belgium and
Sweden had their governments also offering aid through enactment of
laws. The municipalities of Germany and Austria built popular tenements
and housing aid forms were given by Netherlands, Norway, Switzerland and
the United Kingdom. Housing projects were built by co-operatives and
non-profit making organizations with infusion of public aid getting
incrementally substantive in proportion over a period of time and
expanding significantly between the two World Wars. Local authorities
had jurisdiction over acquisition of building sites, tax grants, financial
subsidies to reduce building costs. If need be, they could acquire reserve
land by compulsory purchase. Most agreements were however voluntary.

Although there was a new upsurge in city planning after World War
II, a post war survey revealed that 17 European countries had a housing
deficiency of over 14 million units to absorbing migrants into cities from
rural areas. There is no indication that this situation is any better
40 years later, illustrating that the fundamental human requirements are
the same everywhere.
The vast in-migration into the cities in LDCs has been examined. Given that there is commensurate out-migration to counter the influx and increase in housing facilities, it is left to one's imagination the amount of competition for public services such as schools, hospitals, waterlines, utilities and transportation conduits these hordes engender. Most appalling are the crowding conditions where 10 persons in a room 10 by 15 feet in size are not unusual. In Calcutta, Bombay and Ahmadabad in India, over 60% of the low-income group families live in single rooms and population density can reach up to 1200 to 1500 per acre. In Panama, 20 individuals in a 15 by 15 feet room are not altogether unknown. Ventilation is the poorest imaginable, rodents abound and the insanitary squalor renders the vicinities rife in morbidity.

Large numbers of the population in most LDCs' urban areas do not occupy the status of "permanent residents" as might be the case in DCs. A great proportion of the population are likely to be in the squatter/slam category in semi-permanent structures. The problem becomes that of providing space for residences for the swelling population.

Land uses are associated with land values which vary according to the nature of operations that take place on it. In most LDCs, land has long been considered to be community property but there have been property transfers with the advent of nationhood, which tend to be complex because of shared or hereditary ownership of particular pieces of property. Absentee ownership of land permits a considerable degree of tolerance of squatter settlement on land not in permanent occupation or use. Nevertheless it is the government that is apt to own large parts of an urban area which can make possible occupancy by squatter population. The advantage in this is not reservation of property temporarily prevents any development which might result if it were privately owned. It provides potential for controlling the rate and direction in which development may take place.

It is apparent that the favourable process which gave rise to relative occupational mobility in the Western cities due to expanding employment opportunities is certainly not being repeated in LDCs at least not to the same scale and extent. The opportunities were bound up with the growth of industrialization and modernization of agriculture which freed the agricultural labour force to move into urban areas. The slowness of industrialization and the impoverishment of the rural areas in LDCs has caused a situation of economic stagnation unfavourable to occupational mobility. It is in the face of these formidable conundrums that the developmental effort in the Third World has to surge ahead and urban
land use patterns have a great deal to offer toward the solution to them.
CHAPTER III

THE UNCONVOLUTIONAL TRIAD

In the following survey on urbanization and its impact on the housing situation among the low-income group, an effort will be made to analyse the three fundamental requirements that are central and crucial to any conceivable methodology, hence its optimization or alleviation. They fall broadly speaking into a tri-partite lattice of financial resource mobilization, technical expertise enhancement and estate procurement for mass-housing construction.

A. HOUSING FINANCE SYSTEMS AND ECONOMIC DEVELOPMENT

The growth in population coupled with migration to urban areas at an accelerated rate in developing countries, has created burdens and responsibilities that cannot be easily satisfied by the public agencies in these lands. The phenomenon of urbanization had had its most expressed impact on housing especially with regards to acute shortage and dire need among the low-income group. An ideal approach to the problem of housing would be the one that seeks to negate the rationale that is incipient to the low-income/high-income dichotomy in housing, also extendable to other wide ranging material resources. This entails resource allocation pattern within a socioeconomic order that is directed towards an equitable income distribution, that narrows the gap between the rich and the poor, increases the income per capita within the poorest 40% bracket and adjusts the poverty line. At current rates of population growth, 13 million new jobs are needed per year in South Asia alone. As it is 20 to 30 per cent of the eligible working populations in LDCs is either unemployed or severely underemployed. It is in the light of this statistic that housing finance systems and economic development can be accorded a proper perspective; their place in the context of economic and social progress and their relationship to the public, private and international sectors. For the housing finance policies to be effective in their purports, they should be responsive to the individual LDCs stage of economic development, resource availability and peculiarity of socio-economic characteristics and patterns.

In certain instances due to the deficit in housing stock, authorities have instituted rules designed to curb speculation and exploitation which in turn have led to the worsening of the situation. These can be in the
form of rent control, minimum housing standards and offering units for housing at rates below economic levels. As incomes rise middle and high-income people shift to other areas with a higher level of organized monetary resources. There has been and continues to be a tendance of a financial system in LDCs that ignores or even tax the lowest income groups in order to promote middle and upper income housing, which is a meager proportion of the population. Housing for the substantial low-income proportion can only be tackled meaningfully through infusion of a large scale public funding and its relative success depends on the degree of commitment. Not so successful are other methods such as private or quasi-public housing finance institutions, stockexchanges, investment trusts, mortgage banks, secondary mortgage market agencies and other long-term capital markets, which still have to gain ground in LDCs. Their lack of success lies primarily on the fact that they require that the potential borrower have an adequate income to afford regular mortgage payment. (Monthly income at least four times mortgage payment). They have high down payments, restrictive credit and loan terms. Also untenable are terms for loan maturities, land tenure, literacy and interest rate. Cooperative ventures aimed at the low-income group have benefited the high-income group who have the advantage of comprehending their mechanisms. These systems are bent on recovery of the capital invested in land, infrastructure and housing units and have minimal incentives related to low-income housing. In future, the effectiveness and efficiency would be better served if their role in this respect is increased. For this purpose, governments could provide funds through credit to financial institutions to promote economically efficient housing projects that are cost effective. The central bank as a central financial authority can play a vital role in management coordination and support of housing finance institutions. However, due to lack of resources and information in most LDCs, the primary source of housing and housing finance remains the informal sector.

The formal financial sector has to consider risks of mortgage lending and housing credits.

The efforts of governments alone are not enough in providing a solution to LDCs' housing needs among the low-income category. To overcome this, "minimum shelter" and site and service programme that meet the
minimum standards of its beneficiaries, are designed to improve the shelter program by organized self-help of private individuals as one measure to control the expansion of squatter settlements and slums. If families are provided with technical and financial help, the number of adequate housing units available for the poor can be substantially increased. Where established squatter settlements are located near centres of work and already have a developed infrastructure, the minimum shelter approach may not be the priority but rather the general upgrading of the community by way of legalizing the land tenure, reducing density, improving streets and lighting. Credit and technical help for self-help improvements would naturally then follow.

Fitting with traditional social patterns of many LDCs are cooperative techniques in solving the housing problems. The problems include chronic deficiency in units, high rates of rent and loan delinquency, lack of credit for improvements, lack of community services and entrepreneurial specialization. The advantages of cooperatives are manyfold. They allow for organized democratic decision-making processes to beneficiaries, individually and collectively. The Foundation for Cooperative Housing has aided in the development of over 50,000 units of shelter and training of more than 500 housing technicians in over 30 countries in the developing world. These cooperatives are non-profit organizations whose members have a mutual ownership of a housing project. The four types of cooperatives are the "Limited Objective", "Mutual - ownership", "Multiple - mortgage" and "Tenant" cooperatives. Housing cooperatives are popular in the US, Scandanavia and Latin America. They are rising in popularity in other areas as well. As both the UNCHS and FCH have considered, an institutional base is essential for development to occur in the way of technical cooperation projects to improve shelter and community services for the urban poor. Credit cooperative unions form the nucleus around which such programs can coalesce and focus their functions.

FINANCING THE INFORMAL SECTOR

The informal sector has activities that have a considerable contribution to the supply of goods and services, housing inclusive. The contribution of this sector to the economy is in its generation of
employment and absorption of in-migrant labour and it is within this that
the demand for housing stock by the low-income groups is effectively met.
This informal housing market is perhaps the largest urban submarket and
therefore there is an emerging policy shift towards instituting basic
shelter delivery systems to boost processes indigenous to it whilst the
demand side of the delivery system could to a certain extent be met,
the supply side, namely land, infrastructure and credit would be a
problem. Credit systems designed to suit the needs of low-income groups
are as yet inadequate. Housing finance policies intended for the formal
sector, are not wholly applicable in the informal sector where lending
practices governing the size of loans, maturity, means of payment and
eligibility requirements are different. More than just aiming at
capturing the savings of the low-income households, finance mechanisms
should be geared toward making credit available to promote investment
in housing. Three factors would present a problem in this exercise.
First, it is not easy to determine the proportion of income the informal
household allocates to housing investment due to the peculiarity of the
employment patterns in the sector. Second, the rate of accumulation of
household savings is rather slow to permit economies of scale, which
would mean that materials or services are purchased in small quantities
at higher cost. Third, the sectors financial resources are highly localized
and access to formal credit limited to mobilized savings.

Institutional regulations governing land property and building
standards are not existent in the informal sector mortgage credit
relies on tile to land for collateral which this low income group does
not possess. Their incomes do not easily meet the minimum size for
loans. The incomes allow for small scale resources that are fluctuating
and irregular, thus not amenable to loan granting prerequisites.
The long-term nature of loans limits access to credit due to extended indebtedness though at low fixed-level amortization. Short-term small-size loans are not a general lending practice of formal housing finance institutions which leaves the informal operator in the cold. The formal sector assesses "creditworthiness" on the basis of inappropriate criteria and terms that do not apply to the low-income group.

Low-income groups are well poised to mobilize savings and resources that can be invested in the improvement of their shelter conditions. This essentially is the basic assumption sustaining programs such as sites and services, core housing and squatter upgrading. The World Bank corroborates this presumption in its disclosure that construction activity on many projects went ahead at a remarkable pace due chiefly to investment and mobilization of financial resources far outstripping those indicated by earnings level or credit extended. The low-income people reduce other forms of consumption and sacrifice in order to accumulate savings for purposes of housing construction and there is a high marginal propensity to invest windfall profits and unexpected income. Rotating credit societies are common throughout Africa and other developing countries, that serve to enforce the habit of saving among a group of people known to each other. Within one of these societies installments of 7\% of monthly income, generates interest of about 4\% per month. Access to credit within the informal sector is not uniform but prime sources are loans extended by relatives and friends.

Other types of informal credit markets are found in the informal sector. Their chief characteristics are that their funds are limited due to small scale operation, short durability and are largely unsecured. Loan delinquency and default on pay are rare due to familiarity of both the lender and the borrower with each other. One such market is that presided over by the small-scale contractor whose terms are a payment of 20\% of total costs and monthly payments of balance over 4-5 years. The other is the landlord of sub parcelled land who extends to purchases 20\% of total price as down payment and the balance paid over a period of 5-6 years.

In order to promote provision of shelter on an incremental basis, a mode that is conducive to the consumptive trends prevalent in the low-income group and makes possible sites and services upgrading and core unit
housing, there should be a modification in current policies and new
techniques for financing ushered in. Prominent among them are to:

1) Make available non-collateralised loans for home
   improvement and extensions.

2) Make available incremental loans or open-ended mortgages
   that can accommodate fluctuating amounts of debt assumed
   at a given time, according to subjective household
   requirements.

3) Make permissible group loans, assumed by a single
   mortgage cooperative. Coextensive is also group
   endorsement of individual liability.

4) Make permissible the pledging of personal property as
   collateral.

These measures would help forge a linkage between the formal and
informal sectors and sever the duality that pervades the LDCs' urban
status quo.
E. - TECHNICAL RESOURCES AND SKILLS

From time immemorial, to build one's own home has been the natural order of things. Ancient societies used the rule and so do most present day rural communities where family groups build agglomerations hut by hut making use of natural materials and local labours.

This trend however diminishes in importance and prevalence in the case of the cities, where the source of materials gets further away from the built-up areas and there's an established division of labour. Complex building requirements involve task specialization. A town dweller in need of a house has to turn to the construction industry which has materials and workers. Construction companies can be contracted for building services at a specific cost. Depending on the extent and scale of the building project a home builder has at his disposal both the small and big contractors. To satisfy the needs of the low-income groups' shelter requirements, their resources can only permit them recourse to the services of the small contractor. Short of this the only way out is to be one's own architect as in the squatter situation. The focus of this discussion envisages a state whereby there's relative security in tenure to permit property reconstruction or upgrading, abetted self-help construction and unit expansion undertaken by the low-income group members. The labour and materials provided by the small contractors plays an important role in the overall housing effort for the disadvantaged group in various developing countries.

For small contractors, the labour force is mobile and includes carpenters, roffitters, painters, tilers, masons, plumbers, electricians and labourers. In case the contractor undertakes multiple assignments, he must hire a site foreman of each one, since he is rarely present to direct the actual work himself because he is constantly developing new business to ensure future contracts.
Aspects of Labour

The small contractor’s labour force consists of workers who receive their training on the job and apprenticeship lasts three or four years. Often times, they receive an End of Apprenticeship Certificate, or some variant that can achieve universal acceptance. Except for manual labourers and apprentices, the rest of the labour force is expected to be qualified at project commencement. Flexibility can be exercised on the basis of past experience and special references. The custom is that incompetent workers are isolated and replaced on the job site, since it might be less costly than loss of materials due to inefficiency.

An entrepreneur calculates labour costs based on total construction costs, fixed by the contract, although the contracts can apply his price to the quantity estimated ignoring details in the bidding documents depending on the client. Normally the contractor collects a comparable price as the entrepreneur based on the cost of square meter of wall area. Labour costs are usually about 30% – 40% of total construction but will vary according to the amount of imported materials, and fabricating materials using local artisanal methods such as mud brick, thatch roofing and so on. Occasionally a contractor slows down work or abandons the job site if and when he discovers that labour costs are incompatible with target accomplishment. Therefore it is essential to obtain a detailed estimate of labour costs from the contractor or acquire multiple estimates for comparison in order to make the best choice, before making any arrangements. Reduction in costs can be obtained when building many units of the same type. Subcontracting also alters labour cost proportions.

Labour considerations alter radically in the case of self-help construction. In contrast to contracted labour in self-help are three categories of workers on the job site. Construction workers who are future property owners, unqualified workers and workers paid for their participation, who form 50% of participants. The labour costs are determined by hourly work rate, reduction of costs of materials, job site expenses, taxes and entrepreneur charges for his own contribution to labour.
EXAMPLE

The construction of a modest sized housing unit of a modest sized housing unit of 65 m² requires 24,000 man-hours to accomplish the work. This includes 15 workers providing 160 man-hours each. The 15 workers are 6 skilled and 9 helpers. The former provide 960 hours, and the latter 1440 hours.

If the hourly cost of a skilled worker is 78.75 units and that of a helper 59 units, the total cost of labour for any given building is:

\[ 960 \times 78.75 + 1,440 \times 59 = 160,560 \text{ units (monetary)} \]

This amount represents approximately 20% of the total costs of the finished house constructed by an entrepreneur. It does not include the amortization of the equipment and the tools nor the profit of the entrepreneur which is approximately 20% of the value on the housing unit.

This added value is:

\[ (160,560 \div 20) \times 100 = \text{802,800 units}. \]

In self-help operation of a few hundred housing units, the monetary expenses are as follows:

- Labour costs: 20%
- Taxes: 10%
- Profit margin for entrepreneur: 3.6%
- Discount: 3.5%

Total: 47.1%

Source: Sixth conference on Housing in Africa, 1979, pp. 136-137.

The percentages are savings which can be realized if self-help resources are entirely mobilized, that is reduction in participation of specialized personal and input for job materials. Paying specialists such as roofer or plumbers reduces the percentage by 2 units lowering it to 45.1%.
To avoid this specialists can double-up on activities, a carpenter serving as a roofer etc. Equipment and tools must be purchased and amortized during the period of construction with larger equipment being rented. Workers should also acquire or fabricate small materials themselves.

**Material and Technical Aspects**

The most expensive portion of building is represented by construction materials, the high cost of which is the most important stumbling block to the poor urban population in developing countries acquiring decent housing. Three types of building materials are found viz; locally available materials, and totally imported materials.

1. **Locally available Materials**

They are simple in composition and use natural materials. Among these materials are the following:

- wood used for roofing materials
- locally processed wood used for doors, windows etc.
- clay bricks fired or unfired
- large rocks used for foundations and basements
- whitewash used for painting walls
- gravel and sand used in mortar and cement
- marble
- locally produced tiles

These materials are produced by the artisan sector and their cost is comparatively very low more so in remote towns. Lack of sand and cement makes use of such alternatives as crushed stone and fired bricks popular despite expenses.
2. Locally manufactured materials using components partially or Totally Imported

Among these are the following:
- Portland cement requiring imported clinker and lime
- reinforced rod
- mortar and concrete
- cement bricks
- non-compressible stabilized bricks
- artificial stones bound with Portland or white cement
- acrylic paints

Imported materials tend to cost more with the prices determined by whether the products are manufactured by contractors or large enterprises.

3. Imported Materials

The proportion of imported material input in construction even of low income housing is quite substantial. They include the following:
- Commercial grade wood
- Plywood, lathes, plaster board
- Galvanized aluminium or cement based roofing material
- Sandstone tiles
- Hardware
- Water pipes

These materials tend to be very expensive and prices increase with each shipment. Most times they are out of stock necessitating purchases from neighbouring countries which has a net effect of inflating prices from 10 to 30%.

It is cheaper to produce certain building materials locally than to import them and moreover establishment of such facilities creates employment as well as develop entrepreneurial skills, generating a cash flow that can subsidize diversified activities.
Material and self-sufficiency help toward attainment of economic autonomy that development in LDCs should work towards. The foreign exchange saved in the process can thus be channeled to other areas more needy of it. Low-income housing will be helped a great deal by the integration among the various parts that interact such as labour, skilled or unskilled, tools and equipment, building materials, site infrastructure, community and technical assistance. In most countries, low cost housing programs are carried out with the help of permanent, local technical service organizations (TSO). They provide a wide range of skills that include site selection, land acquisition, physical planning and design, general contracting and construction inspection and control, legal services, promotion of savings programs among members, education and training, general management, accounting and book-keeping, maintenance, auditing, social aspects of community development and others.

The technical co-operation programme of the UNCHS comprises over 70 projects in 46 developing countries. Its objective is to expand the programme and make services available to those developing countries that request assistance in policy formulation, management and institutional improvements, education and training, and applied research appertaining to human settlements. The UNCHS has the capacity to fund projects through its financial arm, the Habitat and Human Settlements Foundation, which specializes in project appraisal and fund management. The UNCHS has among its functions and responsibilities the execution of human settlements projects funded by the United Nations Development Programme (UNDP).

C. ESTATE PROCURER FOR AFFORDABLE HOUSING

Availability of land at reasonable cost, amounts and at the proper time is basic to low cost housing. Its planning, control and resolution is highly specified to individual countries and communities, though the issues themselves have a certain universality through out the developing world where cities are undergoing rapid growth. In competition for the limited urban land resources, utilities, and services, are such contenders as industry, offices, state, housing, commercial concerns, education, recreation and informal sector. Due to land's fiscal and symbolic importance, its disposition has a significant impact on economic growth and thus is accompanied by stringent institutional mechanisms.
The problems of providing shelter for the urban poor have bearing on the availability and cost of land. The low-income group lacks the financial resources and the institutional influence to successfully compete with other interests demanding accessibility. As a result, this group has tended to be concentrated in the city centre at high densities, if not, then on leftover pieces of land that are difficult or undesirable to use for other purposes, usually at the edges of the cities where squatters occupy land but in lower densities. These conditions of housing, where utilities and services are meagre, pose a serious problem to public health, orderly development, and tenure patterns.

Finding solutions to these issues is not an easy task. Among those that have been attempted are upgrading of settlements whereby present occupying is accepted and the objective becomes that of providing vital services of water, electricity, sanitation etc., an infrastructure base that will permit the reconstruction of neighbourhoods over time. Security of tenure induces upgrading of living environments; therefore, long-term leasehold arrangements that allow for ultimate ownership is another shelter solution. Community involvement in self-help units can be promoted by allocation of regularised plots, with financial and material assistance incorporated into the scheme. Low cost transportation can compensate in part for inadequate housing. Low income housing can be placed on sites immediately accessible to employment and services or alternatively a cross-subsidy approach to ease the reimbursement burden can be applied whereby a low income settlement is mixed with industry undertakings and higher income housing which has an effect of enabling the disadvantaged group, to bear proportionally larger costs of land and services.

Land Control and Land Policies.

The powers of governments are the same but differ in their application and aims for which they are involved. With regards to land, regulatory or planning powers have been employed to achieve the following aims:
I. To guide the use of land to promote development that is advantageous to the community (factory, residential, commercial, parking etc).

II. To curb the misuse of land is a manner injurious to the interests of the community (unnecessarily intense development, control of slum expansion).

III. To prevent the abuse of land (abortive subdivisions, subparcelling, cut-over land).

IV. To regulate the non-use or dis-use of land (taxation to enforce development, clearing and speculation).

V. To guide the re-use of land for more appropriate purposes (urban redevelopment, slum clearance and rehousing).

The land policies are also sought to accomplish one or more of the following specific aims:

1) Control excessive land prices and urban land speculation.
2) Make use of land to homeless, migrants, squatters and government employees.
3) Remove slums, blight conditions, overcrowding and insanitation threatening health.
4) Redevelop land for more profitable and desirable uses including reparcelling of fragmented holdings.
5) Rebuild devastated areas.
6) Set in motion a more equitable distribution of land tenure and curtail concentration of ownership.
7) Promote development of undeveloped or under-developed land.
8) Decentralize cities or construct new towns to achieve better distribution of population and industries.
9) Improve the beauty of cities and neighbourhoods.
10) Encourage industrial settlement in industrially depressed areas.
11) Prevent undesirable urban sprawl.
12) Integrate land into more rational plans.
13) Stabilize rents to forestall inflation and economic hardship.
14) Break down jurisdictional obstructions to development.
15) Improve family life and encourage family enlargement.
16) Provide homes for special groups such as the aged, large families, single persons etc.
17) Preserve home ownership values and structures.
18) Encourage formation and expansion of lending institutions and discourage usury.
19) Stabilize tenure, real estate and mortgage values.
20) Insure affordable prices for sites to builders and developers.
21) Boost employment through land development and home building.
22) Disengage land from titles and restrictions preventing development.
23) Stimulate cooperative, private, self-help or public enterprises towards greater production.
24) Encourage prefabrication.
25) Preserve increment in value for the community.
26) Improve public revenues through proper land development.
27) Enable more efficient land acquisition for public ownership or development.
28) Abolish private ownership of real estate.
29) Carry out national policies governing public and private land ownership.
30) Provide housing accommodation for military purposes.

Therefore, to minimize unfair land policy practices that the low-income group are likely to fall prey to from time to time to give way to high-income groups and prevention of their access to land, a concerted effort is needed on both national and international levels to generate means to meet the well-located and affordable land to meet the housing requirement of the low-income group. Public - housing delivery has not of necessity provided a full proof solution to the housing needs of the low-income group. On the contrary, fastest developments in housing have been witnessed where these groups are given access to land, given land tenure and thus able to effectively to take part in the housing process. Land can be appropriated for housing the disadvantaged by purchases at market prices with cross-subsidies of various kinds to reduce the cost of land to the target group.
Prices can also be set on the basis of the present productive income from the land. It can be appropriated in lieu of taxes on inherited land or through development gains tax in which case the purchase price will be the market value less the development gains tax. By land-pooling, authorities can assemble land for settlement development, working in conjunction with landowners and private developers. The cost would be reduced through cross-subsidies in development projects. The supply of land to the low-income group can be promoted by effecting realistic standards for land subdivisions as in sites and services.

Developers can be channeled or directed toward meeting public objectives either by regulations or incentives, with infrastructure as a necessary component of the venture. A cooperative land development scheme could be geared to a tenure system whereby the community owns the land and the individuals own the improvements on it.

As noted earlier on, upgrading and improvement of existing low-income facilities might be a more practicable solution than erecting new housing units, an activity which is not so easy to undertake concretely. Regularization of tenure gives security essential to induce improvement of living conditions. Legitimizing and confirmation of rights of tenure can be an incentive for progress. Regulations forbidding demolition where there’s no follow-up replacement can safeguard the low-income members from being rendered homeless without adequate provision for shelter replacement. Where security of tenure has precipitated, granted along with it could be a selection of rights such as freehold tenure, long-term lease, short-term lease followed by freehold or a two-tiered tenure like that of cooperatives.

Most importantly is the question of financing land development among the low-income residents. This can be carried out in various forms of savings and loan scheme, such as special long-term credit and contributions by employers. In the cases of cooperatives where land can be pledged as collateral, gaining access to credit is better facilitated. Through instilling discipline among its members a cooperative can enable loan recovery from beneficiaries and keep the rates of default low.
CHAPTER IV

CASE STUDIES

The case studies will attempt to reveal in concrete terms various efforts that are being put into practice in selected developing countries of Africa, Asia and Latin America to provide housing facilities for the low-income group. Each case has an objective of illustrating how the unique characteristics found in a given country contribute to housing policy formulation and the brand of implementation strategy subsequently embarked upon.

Whereas most of the schemes that are cited for illustrative purposes in the following case studies were conceived or got underway in the 1970s, it is certainly during the 1980s period that what was initially projected in plan formulation is attaining maturity and crystallization.

BOTSWANA: AN IDEAL CASE STUDY OF SELF-HELP LOW-INCOME HOUSING SOLUTION

The following is an account of how the Government of Botswana has encouraged and assisted the low-income population to build their own shelter. To develop a viable self-help system of housing, the government has been assisted by foreign donor funds and technical aid together with local talent also playing a major role. Technical assistance has been provided by the Foundation for Cooperative Housing (FCH) funded by a grant from the United States Agency for International Development (USAID).

Within the past two decades Botswana has experienced a significant movement of her people from the rural areas into the centres, most of whom it has meant abandonment of pastoralism and assumption of cash-income work in towns. For that matter, low-income housing is new for Botswana. Although the growth rate of the Capital Gaborone is 12%, human density there and in other towns has not yet assumed catastrophic proportions found in other LDC towns. National and development policies are geared toward curtailing rural-urban migration through laws that fix property taxes in such a way that makes speculation on undeveloped land an expensive undertaking. Graded tax systems help narrow the rich-poor gap. An attempt to achieve social integration is envisaged in the mixing of different income groups in the new communities.
The state controls most of the land and as a result a workable low-income housing program has evolved. The Gaberone Town Council self-help Housing Agency (SHHA) in conjunction with FCH and AID's Office of Housing (Housing Guaranty Program), have delivered more than 5000 prepared plots together with loans and technical know-how the Gaberone program has also been supported by the government and other international donors. Most of this assistance has been in the way of financial input for crucial parts of the program, start-up and development costs and individual loans. The energetic local staff and the poor for whom the houses are being built form the rest of the participants of the housing project.

Funds directed toward construction of new low-income settlements were made available to the Gaberone SHHA in the 1978 AID loan to Botswana which provided for roads, drainage, sanitation, construction supervision, individual Building Material Loans and equipment for G-SHHA. Other notable contributors of finances were the Botswana government, the European Development Fund (EDF), Canadian International Development Agency (CIDA) and the United Kingdom's Overseas Development Administration (ODA).

Donors

Government of Botswana - Grant $5 million
USAID - Office of Housing $2.6 million
(Housing Guaranty Funds and technical assistance)

Canadian Overseas Development Agency - Grant $2.5 million

UN Overseas Development Administration - Grant $3 million

European Development Fund - Grant $2 million

Coordination of a complex network of donors in a single program is no small task and is one of the unique intricacies of a low-cost housing atmosphere. Such large scale international participation was triggered...
by the government's policy to promote rural development as a means of slowing urban over-migration. It was agreed that house plots developed with AID assistance would be specifically designated for families whose income was in a certain range below the median and initially would benefit 2000 families. It was envisioned that by the year 1990 when the population of Caberone would be three or four times the present size, the beneficiaries would number 20,000.

For a long period of time, there was no easy clear-cut way for SHHA to decide who was most in need of a plot. With infusion of more and more foreign financial and technical assistance, this issue needed greater exactness and preciseness. A numerically-weighted point system was set up so as to determine the eligibility of applicants.

Besides the income measures as basis for selection, also included were such factors as number of persons in household, shared or non-shared accommodation, rented or owned; years in Caberone, location from essential infrastructures such as water supply sewage system in home and age disability. For income, $1,800 (annual per capita income) was set as the maximum. The applicant would be required to pay the monthly service charge of $5.50. Preference was given to applicants who had been assured of a fair compensation to household who had been displaced which included a developed garden, trees, hedges, fencing, outside toilet and a "disturbance allowance".

The Adjudication Tribunal made up of the District Commissioner, Town Clerk, Urban Development Coordinator with ward Councillors advising, handles land ownership questions that have arisen in some squatter upgrade areas. Though the Tribunals findings are decisive, appeal to the Ministry of Local Government and Lands is possible.

Applicants who qualify for plots are issued with a Certificate of Rights which bestows on him inheritable rights to tenancy on the land. The conditions are that the plot holder competes erection of a durable one-room (expandable core) house within the first year that is in compliance with the building code. (Assistant Works Foreman elaborates clauses). The certificate also commits holder to pay a monthly service charge for public services. Original certificates contained clauses
7 (a) which provided for repossession by SHHA of a plot by delinquent holders. With the subsequent improvement in payment on service charges and loans, the clause was modified to limit repossession to cases where a plot holder can not produce a one-room house, the reason being that if he did not build, he deprived someone else of a serviced plot.

Soon after, award of the certificate, a "Unit Development Process" gets under way with the household, a community worker and works foreman determining the families construction needs and the degree to which they can meet requirement of the building material loan.

SHHA keeps track of the plot holders record on a computer accounting storage machine placed in each of the three ward offices, coupled to a stripdex file list with plot holders names and addresses. Reports are sent to donors monthly. SHHA has a human touch in its dealing with the clients and hence the secret behind its success. Their personal and professional convictions aid the management and accounting systems in furthering the goal of providing shelter to the disadvantaged urban group.

Highlighted in the foregoing low-cost housing scheme in Botswana are certain important aspects in the self-help approach as the traditional house building method for the below-the-median-income population in the developing world and its potential in providing housing for that part of the world's growing urban population. One aspect is that self-help builders have an insight into the real costs involved and they are this in a realistic position to accept what they can afford. Self-help develops the country's most abundant and valuable resources, their human resources and promotes the human urge to improve one's own living conditions.

By supplying raw land, contracting appropriate implementing agencies, establishing realistic housing standards ensuring fair play in plot allocation according to objective deserts of individual applicants, the authorities encourage to maintain an adequate level of production and system management efficiency that guarantees project cost recovery and therefore continued international financial and technical cooperation and assistance.
THE PHILIPPINES: The Metro Manila Development Plan and the National Housing Program in Relation to the Tondo Foreshore Urban Squatter and Slum Communities.

The Setting:

The Tondo Foreshore is a slum within the Metro Manila area and is the largest single contiguous squatter community in the whole of the Philippines, also Southeast Asia as well. It is one of the most densely populated slum areas of that part of the world, estimated in 1974 to be 1239 persons per hectare, with 27,847 households occupying 23,078 dwelling units. Two or more households are found in a single dwelling unit. 72% of the structure are the single-detached housing unit type. Extensions are sometimes made to accommodate more occupants. Apartments, duplex and accessoria constitute the other types. The area is divided into nine zones and four urban villages. The population is about 156,000 persons, with more than half of it below 19 years of age.

Both light and strong materials are used for dwelling construction including galvanized iron, wood and salvaged materials, scavanged from demolition and garbage dump sites. In estimating house values, materials, labour and other component were considered vis a vis a professionally built house. The quality of the homes increases with the size of the dwelling. Old and light materials are replaced in favour of new and strong materials. Through a period of many years a house can be built from a single roomed one to an eight roomed one. Further improvements were barred by the Tondo Foreshore Development Authority (TFDA) in 1975 to prevent additional investment on structures which might have to be demolished.

The Tondo Foreshore lot tenure and dwelling tenure is of three kinis viz; owner-occupancy, renting and rent-free occupancy. 75% of household of the third status since most of Foreshore is still largely public land. 13% are not owners and 12% pay rent. 62% own their dwellings, 26% rent the units and 12% dwell rent-free. In addition to the units being living quarters, other income-generating activities such as rental business, dressmaking and beautician engagements take place.
Utilities and Services

The Roads are classified by the TFDA as being in good condition (11% - 3.6 Km), fair condition (7% - 2.5 Km) and bad condition (82% - 28.2 Km).

The Algeciras service reservoir and booster pumping installations serve a population of 1.1 million Tondo's inclusive. The majority of the households (63%) buys its drinking water from street vendors and 17% from neighbours with piped water. The rest of the 9% uses the only public well or the public or private pump wells. The proposed Municipal Water works and TFDA plan will boost the water supply with secondary and tertiary mains.

Transportation is mostly by passenger jitneys (matatus), taxicabs and to a less extent by private automobiles. Most inhabitants considered the transportation system adequate.

An open-drainage leads waste water out of 64% of households, 11% have covered the drainage into the main depository while 8% uses partially covered. The proposed drainage will help solve the flooding conditions at times of high rainfall. It will consist of an underground reinforced concrete drainage system with outfalls leading toward Manila Bay.

The total sewage flow of the Tondo Foreshore area and the villages is 14 cubic feet per second (CFS) with the stations total capacity being 166 cfs. In the proposed improvements Tondo will have a network of interceptors and laterals of its own and areas in the vicinity theirs separately. Whilst the majority (85%) of the Tondo population disposed the garbage through the Municipal collecting facilities, the rest burn, dump or use other means to achieve the same. Most households (47%) have toilet facilities in their homes water-sealed but manually flushed. Only 4% of households use the automatic flush type while the other 49% use a private closed pit, "wrap and throw" method, open pit and public toilets.

Electricity is the most common type of lighting (70%), many tapping for a fee from those with the facility. The rest use kerosene, oil or candles.
For cooking, the majority use kerosene (50%) whilst the rest use wood, gas and charcoal in that order of proportion.

Five elementary schools, four health centres and four other multipurpose centres form the communities' facilities. The NHA - TDDA plans to upgrade the existing facilities and construct new ones including a new high school, a 25-bed health clinic and multipurpose centres. Play grounds and vocational training centres are also envisaged in the new plan.

The commercial activities stem from the goods outflow emanating from the nearby harbour and the Divisoria to the South of the area, where a 3172 stall complex sells goods and foodstuffs at low retail and wholesale prices. Also temporary markets or taliapapa flourish from which 60% of households buy their food supply in makeshift structures that spring up in the morning as vendors pour in and fizzle off early as they vacate the lots. The rest buy food outside Foreshore but still within the Tondo district or from the neighbourhoods small general stores, peddlers and hawkers.

**Economic Activities**

The 1903 population of Tondo Foreshore indicated only 39,043 persons living in the district. The rapid in-migration was enhanced by the proximity of the area to the region of employment, the availability of unoccupied public land and proximity to Divisoria and transport terminals where there was employment outlets for the poor 72% households in 1974 were first-generation migrants born in provinces outside Metro Manila. 47% have changed location once since arrival while 38% have not. 15% have changed residences several times.

In Tondo Foreshore, 52% of those 10 years and over form the labour force, 40% employed and 12% unemployed. Unemployment rate is 23% and higher than that of Manila. Employed male households-head labour force is higher than employed female head.
Primary occupations, namely sales form the bulk of employment for house holds and secondary employment namely blue collar work in the docks and municipal public works forms the second category. Transportation and communication works constitute the tertiary category. Only a minority of workers are in agriculture and fishery. Self-employment is characteristic within the informal sector engages in service trade, merchandise, retail, social, community, recreational and personal services. A Tondo socioeconomic survey identified both cash and non-cash incomes derived from wages, salaries, earnings from self-employment, entrepreneurial activities, property rentals, interest and dividends accrued to members of households from various economic activities. There is evident a wide disparity in income within Tondo Foreshore with the two-thirds of total income earned by the upper 30% of household the remaining one-third by the rest.

Economic development programs provide vocational training in skills and cottage industries. Improvement of public utilities is done with labour recruited from Tondo residents themselves with the NHA - Tondo staff monitoring and supervising their activities. Through agreements with the Philippine National Bank, NHA makes available bank loans for small business, the amount of which is based on the business project, paying capacity and loan value of collateral pledged. For acquisition of capital assets or working capital, the amount can not exceed $13,656 and to payable in a period not exceeding seven years in equal monthly or quarterly amortizations which is determined by the debt-servicing capacity of the business. Collateral consists of "first mortgage on titled or untitled real estate, buildings, machinery and equipment or other mortgageable assets already acquired or yet to be acquired by use of loan. The sanction for default is confiscation and loss of earlier installments. Credit facilities and resources to the low-income group of Tondo Foreshore help to break the cycle of poverty.

Housing and Land: Policies and Programs.

In seeking solutions to housing problems, the NHA policies consist in construction of new housing units and the improvement of sites and services. NHA also undertakes relocation and resettlement for inhabitants of hazardous areas as creeks, esteros and railroad tracks.
It also provides community services in health, nutrition, sanitation, education and socio-economic programs to boost employment opportunities and regularize land tenure. The proposals of the NHA Development Program involving $273 million aimed to provide settlement sites for displaced households and persons, areas, slums and communities in the way of direct benefits and through subsidy — generating activities to evolve other housing plans. The NHA secures funds and materials to develop housing through:

1. "financial intermediaries" who share credit risk with the Authority.
2. Construction corporations, public and private.
3. Government entities such as the local government and parastatal agencies.

The NHA’s land policies are with respect to "Land assembly" and "Land banking". Through the first, the government acquires land through expropriation and develops it according to an integrated land-use plan. Through the second, the government acquires land well in advance of the time of proposed development. The joint effect is that land development costs are considerably reduced. At the same time the policy discourages land speculation through artificially created scarcity.

With the World Bank funded NHA - Tondo program, the land problem is being given renewed attention. The TIFDA classified land into five zones of uses or activities, which it owns and manages. These zones for developmental control purposes are the following: Residential, Commercial and Industrial, Recreational, Institutional, Infrastructure and Utilities zones.

The Tondo Foreshore is government land with the NHA granted authority to lease land to occupants for a period of 25 years, renewable for another basic period of 25 years. Five years of initial leasehold entitles the occupant to purchase of land and the Bureau of Lands issues the land title. Presidential Decree 814 created a citizens committee to preside over and process requests for transfer of land rights and subletting of dwelling units.
The committee has a chairman and four one-yearly elected members. Vacant and untitled land can be disposed of through leasehold with or without an option to purchase leasehold without an option to purchase is 25 years and renewable for another 25 years. Lease hold with option to purchase is 5 years. In implementing government policies, the NHA officiates through the local administration entity called the barangay. Other entities are the Ugnayan and private non-profit organizations. This encourages the active participation of the people, working with formal and informal entities in projects aimed at improving community condition and achieve manpower training.

CENTRAL AMERICA: COOPERATIVE HOUSING IN PANAMA AND HONDURAS

A. The Panama National Cooperative Housing Program

Two institutions have been instrumental in obtaining financial aid from international sources for their housing programs. They are the Panamanian Foundation for Cooperative Housing (FUNDAVICO) and the Nuevo Chorrillo Housing Cooperative. They've had their assistance provided primarily by the Agency for International Development (AID).

Established in 1967, FUNDAVICO is a private, non-profit foundation that was founded through financing by AID and technical assistance provided by FGH. A loan of $3.5 million from AID helped FUNDAVICO to develop an urban and rural housing cooperative program. Its urban program has 602 units consisting of four separate projects, two in Panama, one in David and one in Colon. The rural program consists of 375 units involving fourteen cooperative in nine provinces. FUNDAVICO has managed to make their payments to the lender institution through good property management, effective maintenance and cautious deployment of the cooperatives' reserve funds.

Established in 1973, the Nuevo Chorrillo Housing Cooperative came into being as a response to demand for shelter by families living in Chorrilla, an inner-city tenement district of Panama city. Prior to that, it had existed as a community organization as far back as 1966.
Their program comprises many activities including the construction of the housing project, a centre for the production of building materials and a transportation cooperative for families in the cooperative's project. With financing from AID's Housing Investment Guaranty Program, the cooperative is nearing completion the initial stage consisting of 700 units. It is in the process of securing additional financing to proceed with its 2100 unit program.

B. The Honduran Cooperative Housing Movement

The year 1954 saw the chartering of the first Honduran housing cooperative formed by the employees of the National Development Bank. It was followed in 1959 by a second one organized by the employees of the Internal Revenue Service. In 1963, these two cooperatives of the capital city, Tegucigalpa, amalgamated with two others on the Caribbean Coast of the country and formed the Honduran Federation of Housing Cooperatives (FEHCOVIL) and had technical assistance provided by FHC. In its capacity as both a housing cooperative and a Technical Service Organization (TSO), FEHCOVIL obtained a $2 million loan from AID in 1965 with which it financed the construction of housing projects for two of its affiliates, the COLVISULA of San Pedro Sula and the El Sauce housing Cooperatives of La Ceiba. In 1971, it obtained again from AID a $2.2 million dollar guaranteed loan to finance the construction of a housing project a lower income cooperative in Tegucigalpa, the 400 member El Hogar Housing Cooperative.

FEHCOVIL has since consolidated its reputation as an effective and properly managed TSO. Their management expertise has been contracted for by its affiliates. Funding has been obtained from CARE and the Central American Bank for Economic Integration (CABEI) FEHCOVIL has assisted in the organization and construction of twelve cooperatives in Honduran rural and urban areas consisting of 1200 shelter units, besides the ones mentioned earlier, 600 of which are destined for households within the 15th income percentiles, an incontestable attestation to FEHCOVIL's continuing movement down the income scale to serve the needs of the urban poor.

The following is a report by the UNCHS mission, which was compiled after it had concluded a project identification assignment at the request of the Seychelles Government. The focus was on the problems related to housing funds management and formulation of a definitive project. UNCHS and UNDP team members met with the Seychelles authorities in May 1979.

The mission was provided with extensive information on the economy, housing policy, strategy, fund and problems in the housing sector. The UNDP team discussed the priorities attached to various requests and arranged in Category I and Category II for use of a small IPP totaling $1.6 million for the period 1977 to 1981. The balance for 1977 – 31 was $0.37 million leaving agriculture and civil aviation with the highest priority and other sectors including education were given lower priority and relegated to Category II. In June 1977, Seychelles had become a member of the IMF and later the World Bank and therefore it was felt that the Bank or IMF would take up some IPP projects and release UNDP resources for others. In the field of housing, the World Bank could be requested to finance site and service schemes and other low cost housing schemes.

The Seychelles has a population of only 64,000 inhabitants with however a per capita income of US $1,444 in 1979 higher than most LDCs. The Seychelles Archipelago comprises 92 islands over a land area of 171 sq. miles but the population is concentrated on the largest island of Mahé - 33%. The islands are rocky and mountainous and render the developmental effort difficult. Tourism, agriculture, fishery, copra and cinnamon are the mainstay of the economy. Large deficits were recorded on the trade balance equivalent to £109 million and £134 million in 1977 and 1978 respectively. With the economic uprating of later 79, there were improvements due mainly to the increasing absorptive capacity, improved tourism and private capital inflows. Domestic revenue increased from £76 million to £140 million in 1977 and 1978 respectively, underlying which was increase in tax revenue and introduction of PAYE system.
of income tax collection. Non-tax revenues also rose sharply, coming from US satellite tracking station and revised port fees.

There's no evidence of demand-pull inflation due to expansion in money supply and credit. Price-control measures reduced the inflationary rate.

Seychelles gives high priority to housing and the housing policy strategy was formulated in 1973. It had been determined according to resolutions of the Habitat Vancouver Conference that Seychelles needed external assistance on institutions and management in the UNCHS objective framework whose classifications are in the following manner:

1. to formulate a national policy and strategy
2. settlement planning
3. shelter, infrastructure and services
4. land
5. public participation
6. settlement institutions and management

The policy evolved was that within the following 10 years, all the people would be housed in buildings of durable material with access to services and social amenities. The government would provide assistance to the lowest income levels whilst requesting maximum effort through self-help programmes. Of the 5200 houses needed over the 10 years 25% will be built without government assistance. The Home Ownership Fund would assist low-income groups while the Housing Loans would enable middle-income groups. In the private sector the government would encourage the transfer of ownership from the land lords to the tenants. Of the new houses during 1972-83 period, a total of 2,300 houses were built, 44% of the 10-year target. 1000 units under the Housing Loans Scheme and 1000 units under the Home Ownership Scheme and the New Village, a model government project, with 300 houses. With the Housing Improvement Loans and Grants, 250 loans and grant will be made each year at an average cost of £2500. The New Village will have housing available to all income groups, the Seychelles dream of the future.
Tenure in Seychelles is based on the Napoleonic Code giving absolute title to landowners and over the generations, plots of land have accumulated a multiplicity of inherited ownerships. Transferability is very difficult although present legislation empowers the government to progressively acquire more land to mitigate against exploitation by landowners. For site and service schemes, the government provides developed sites together with technical guidance. The UNCHS provided two architects who assist house builders.

The mission recommended that the UNDP program be finalized and IMF/World Bank discussion would find a workable strategy to alleviate UNDP resource strains. The United Nations Disaster Relief would assist in providing shelter (10 - 20 units) for yearly disaster victims and would be located where residents could be usefully employed. For Home Ownership Scheme, the tenure of the two architects would be extended and effort would be made to identify local counterparts to assume their responsibilities at the same or comparable level of skill and experience. Financial advisors would be appointed with a background in mortgage operations, handling of loans and training of local accountants. The mission finally recommended consolidation of the functions involved in management of housing funds under a single authority if possible. A Housing Finance institution, in collaboration with senior government officials could enhance efficiency in day to day operations, processing and disbursement and recovery of housing loans.
CONCLUSION

Demographic postulates envision that the population of the developing countries will have doubled in the year 2000, with prospects of a continual movement of population into the urban areas and consequently more problems of low-cost human settlements in cities. The blight areas in the cities of the developing countries have come about mostly due to the bulk of the population being left to themselves to devise means of housing with the result that though they may be vital social enclaves sharing a cohesive community identity, they virtually face short in infrastructural and social facilities. The deficit in low cost housing stock is not only due to lack of resources but sometimes also due to lack of appropriate institutions and as such, the weaving of a low-income housing programme, planning and implementation projects, where problems are physical, social and economic, entails integration and coordination in the far flung functions of the administrators, architects, engineers, social workers and the beneficiaries themselves. The backlog of low cost housing need can be encountered by a methodology that seeks to harness the financial manpower and material resources for the maximum use by agencies for implementation with an end toward the betterment of the living conditions of the majority. The resources consisting of land, labour and human enterprise can be largely furthered in their mobilization by adoption of a self-financing principle in which capital outlay is in part provided also by those it helps to house.

The urban development programme can best be served by a housing strategy whose basic objectives are to meet the housing needs of city inhabitants, at a reasonably adequate level within both the country's and the housebuilder or households resources. Where feasible, the destruction of existing housing assets should be avoided or reduced to a minimum. The use of new resources can come in handy in the renewal of what may be regarded as blatantly unacceptable inadequacies within blight areas and their upliftment to desirable standards in a cost effective manner likely to recoup capital outlay and afford the highest return to the housing programme.
There has been a considerable demonstration among the low-income group, of great initiative in providing their own shelter, a willingness to contribute in cash to their housing. This self-help, self-financing ability lies at the root of an effective low-income housing programme, considering that public sector assistance or formal resources are not always forthcoming in sufficient amounts to meet the housing backlog needed house the bulk of the population. This initiative once recognized, can be assisted with the effect that public resources can be economized to boost the sector's capacity to borrow and raise additional funds for the housing programme.

One factor commonly overlooked in low cost housing situation is the non-uniformity in the income potential among the low-income group. Within its upper reaches exists a range of households whose income level is too high to exploit public sector assistance yet at the same time not within reach of the private sector. A realistic housing programme would attempt to match the resources and the needs of different income group ranges, requiring other sets of housing standards that are catered for by an institutional system capable of responding to their needs in the absence of subsidies and non-profit schemes extended to households in the bottom range by the public sector. A reasonably equitable distribution of available housing resources between various income groups can be ensured by a more even distribution of credit to a broader span of income groups.

Whether the objective is the relief of overcrowding in existing dwelling areas, the removal of severely blighted areas or the upgrading and renewal of existing substandard housing areas, the housing programme invariably consists of the analytical, development and proposal stages, a sequential pattern in which a hypothetical microcosm is adjusted according to available resources to assume the desirable ultimate physical outcome. That desired outcome is the provision of affordable housing, most particularly to the low-income group. Realization of this phenomenal task can only be brought about by the harmonious interplay and integration of the interdisciplinary multivariate analysis this paper has sought to enumerate.
BIBLIOGRAPHY

Gorman W. and N. Glazer, THE URBAN PREDICAMENT,
The Urban Institute, Washington DC, 1976.

Gelfand M.I. A NATION OF CITIES
Oxford University Press, 1975

Colman H. CITY PLANNING,
World Publishing Times Mirror, 1970

Clark, K.B., and Hopkins Jeannette,
A RELEVANT WAR AGAINST POVERTY,

Caminos H. and R. Goethert, URBANIZATION PRIMER,
Massachusetts Institute of Technology, Boston, 1978

Ferguson Francis, ARCHITECTURE, CITIES AND THE SYSTEMS

URBAN AMERICA POLICIES AND PROBLEMS CONGRESSIONAL QUARTERLY INC.

Breeze G. URBANIZATION IN NEWLY DEVELOPING COUNTRIES,
Princeton University, New Jersey, 1966.

McGhee T.C., THE URBANIZATION PROCESS IN THE THIRD WORLD,

HABITAT, REPORT OF A MISSION TO THE SEYCHELLES, 1979.

Sembrano M. Et alia. CASE STUDIES ON THE IMPROVEMENT OF THE
PHILLIPINES, Quezon City, 1977.

Stewart M., THE CITY: PROBLEMS OF PLANNING
Middlesex, 1972.


22. AID, SIXTH CONFERENCE ON HOUSING IN AFRICA Office of Housing, 1979.
