

Distr. GRNERAL LC/G.1379(SES.21/24) 6 January 1986 ENGLISH ORIGINAL: SPANISH

Twenty-first session

Committee on Human Settlements

Mexico City, 17-25 April 1986

CRITICAL AREAS FOR THE FORMULATION OF POLICIES ON HUMAN SETTLEMENT IN LATIN AMERICA AND THE CARIBBEAN:

A SYNTHESIS \*/

 $<sup>\</sup>mbox{\ensuremath{\star}/}$  This document was prepared by the Joint ECLAC/UNCHS Unit on Human Settlements.

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### Summary

Among the varied and profound changes that have taken place in Latin America and the Caribbean in recent decades it is generally agreed that one of the most outstanding has been the transformation of the national networks and systems of human settlements in the countries of the region. Although these changes are invariably rooted in the level, characteristics and forms of socio-economic development in each particular case, the influence of spatial and demographic factors on the various systems and patterns of settlement cannot be ignored. factors include geographic size and mode of territorial occupation, together with some elements of population structure and dynamics, especially its size, growth rate and age structure, the composition of the economically active population, the pattern of spatial distribution and the processes of population redistribution in the territory. In view of the effect of all these elements on the existing systems and patterns of settlement, a brief descriptive survey is needed in order to make clear their implications and to forecast their impact on the future evolution of the national networks of human settlements. It must also be borne in mind that these transformations take place in temporal contexts that differ from one country to another, a circumstance which calls for an interpretation of their characteristics and trends towards change in relation to the stage of evolution reached. analysis of data will be aimed at the identification of typologies, or groups of countries sharing key features, that can be reasonably assumed to follow similar paths of human settlement development. Moreover, it has been recognized that the rate of urbanization of the region in recent decades is one of the factors determining the characteristics and trends not only of the settlement system and its component elements but also of the quality of the habitat within individual human settlements.

The present document presents, in the first part, an analysis of some of the most important factors conditioning the process of urbanization in the region and, in the second part, a more detailed examination of the main features of human settlement in Latin America and the Caribbean.

With regard to the determinants and consequences of urbanization, explicit reference is made to its demographic and spatial expressions, its most important socio-economic elements, and the most urgent problems and challenges posed by its rapid rate of growth.

Among the most notable features of the human settlement process, this study analyses metropolitanization, the socio-economic differentiation of urban space, and rural settlements, emphasizing in each case the variables that might be changed by means of the application of policies.

Finally, some guidelines are suggested for the formulation of policies, with an indication in each case of their particular importance for the achievement of their objectives, issues such as community participation, the role of local governments and appropriate technologies.

The paper summarizes and synthesizes a number of studies on the subject previously prepared by ECLAC, especially by the Joint ECLAC/UNCHS Unit on Human Settlements and by the Latin American Demographic Centre (CELADE).

#### I. INTRODUCTION

The analytical study of what is now known as the process of human settlement and, more specifically, of the rapid processes of urbanization and population concentration, so characteristic of most of the countries of Latin America and the Caribbean, is not a new undertaking in the region. In fact, as long ago as 1959, in a now historic seminar on Urbanization in Latin America, held at ECLAC headquarters in Santiago, Chile, an indication was given of the most important characteristics, the most acute problems and the main areas for the formulation of policies on these processes.

Since then numerous and important studies have been conducted in the region, from different disciplinary angles and with different theoretical and methodological approaches, which have contributed enormously to the clarification of the said phenomena, especially as regards their demographic, socio-economic and political determinants and consequences; their linkages with other processes, such as social change and development; and the variables which affect them and which may be the object of public policies.

In the time that has elapsed there have certainly been changes, sometimes important, in the overall and particular circumstances relating to the subject, and in the trends of the numerous subprocesses linked with urbanization and the concentration of the population.

The purpose of the following notes is to make a contribution to the many valuable efforts of analysis, explanation and definition of strategies and policies that are currently taking place, with renewed intensity, in various academic and government spheres in the countries of Latin America and the Caribbean.

This undertaking has been subject to serious limitations as regards the coverage and depth of the analysis, especially in relation to the very rich and varied experiences and national conditions and the vast range of theoretical frameworks and methodological approaches adopted in connection with the subject in question. The resulting text is also very generalized in its approach, partly because the analysis has been made from a regional standpoint. This certainly does not signify a lack of awareness of the high degree of heterogeneity characteristic of these problems in the different countries of the region and within each of them.

The following analysis is based on certain premises and fundamental assumptions, some of which it may be useful to explain.

In the first place, we subscribe to the current of theoretical thought which sustains that the distribution and settlement of the population are closely linked with the broader field of social change and development, with which they interact through mutual conditioning. This means that the forms of occupation, organization, habilitation and utilization of space are historically conditioned by the features of production and their implications for social structures, and that the pattern of settlement characteristic of a given society is a subproduct of the development style predominant in it.

The foregoing represents a major change in approach to the problems and solutions traditionally related to urbanization, urban growth and especially housing. The previous view, fragmented and partial, in which the predominant concern was for sectoral aspects of housing, construction and urban planning, has been replaced by an integral conception, in which these issues form part of the process of socio-economic development. From this standpoint human settlements cannot be treated independently of the factors which influence the quality of life and the achievements of development objectives; the problems of habitat, this being an expression of social processes, can only be solved within the general aims of national development. Moreover, human settlements cannot be considered as a passive consequence of socio-economic development, but as one of its most important elements; they constitute a specific subject for analysis and a major field for policy decisions, which should be understood as forms of deliberate intervention in the various processes associated with the development of these settlements, and in virtue of which their aim is to achieve objectives which are pre-established, socially accepted and democratically shared.

This point of view is particularly valid in developing countries, since in these the formulation of policies expressly concerned with settlement, both in respect of territorial organization and improvement of the habitat, has to be carried out in conditions of extreme poverty, under the pressure of extremely rapid demographic growth and urbanization and in a situation of widespread crisis characterized by a contradiction between financial and productive restraint on the one hand, and a growing demand for more equity, participation and democracy, on the other.

The above-mentioned current of theoretical thought sustains, besides, that human settlements are affected by different factors, which can be grouped into two major categories: on the one hand, the spatial repercussions of economic growth and social development, that is, the territorial component of national development; on the other, the quality of the habitat as a concrete factor and synthesizer of social well-being. The national policies on human settlements must therefore recognize these two categories in order to establish effective forms of intervention. Many of the problems of human settlements nowadays can be attributed to a lack of co-ordination between the mechanisms of decision corresponding to the two categories.

It is also sustained that, as human settlement and the control of the habitat represent two different categories of intervention, the said human settlement policies must be conceived as instruments aimed at changing the course of the processes which determine the spatial distribution of the population, and also at controlling the quality of the environment. From the former standpoint, they would need to be directed towards the rationalization of the occupation, organization, equipment and use of national territory in terms of a specific development policy; from the second point of view, they would need to improve the quality of the habitat in the various categories of size and function of the human settlements. The first case covers national policies stemming from considerations of socioeconomic development; the second applies to local policies. To co-ordinate the two areas important changes will need to be introduced into the administrative management of the settlements, which radically involve both State intervention and the participation of the population.

As already noted, the problems of the habitat in Latin America have been dealt with in fragmented form and independently of development strategies, and have been generally tackled from the viewpoint of government social-housing programmes and provision of services. Twenty years of experience have shown that this type of policy has little effect on the quality of the human habitat, which has continued to deteriorate despite the fact that a considerable proportion of investment has been concentrated in these areas, and that during the last two decades these sectors have received an appreciable flow of external resources.

Consequently there is an urgent need to rethink the problems of the habitat, to reorient national policies on human settlements and to reorganize the apparatus of administration and local management. These tasks call for a new capacity, both to adapt general concepts to a national dimension in order to formulate and apply new policies of settlement and improvement of the quality of the built-up environment, and to reorganize on an institutional basis the mechanisms and procedures of management, preparing and applying new types of programmes and projects which will represent alternatives to those of the past.

They also call for the establishment of articulated forms of intervention in the field of human settlements which, within the framework of the special features of each political system, will seek to reconcile the objectives, policies and projects of the central government with local interests in order to improve the environment and the living conditions of the territorial communities and foster community participation.

In the second place, these reflections are based on the assumption that the current crisis is not only of an economic nature; that it is largely a result of deep-seated problematic situations of a structural type, which have characterized the history of the economic, social and political development of the region, and that many of their effects will be irreversible, at least in the short and medium term, so that they must be considered in the future as conditioners of any policies adopted.

In this connection it can be sustained, even if only as a working hypothesis, that the set of phenomena which are described as critical are not transitory, and that they are rather a manifestation of the "exhaustion of the system" and therefore indicative of basic structural changes which point to new and lasting—not temporary— conditions which will have to be regarded as parameters and independent variables in the design of medium— and long—term strategies. This means that, at least in relation to territorial organization, the planning and management of human settlements and the control of the quality of the habitat, we are faced with the inescapable challenge of seeking alternative forms of action which will enable us to abandon concepts and plans originating in economic, social and cultural contexts different from those which will prevail in the future.

This effort, which calls for adequate political imagination, economic rationality and technical capacity, will not be easy and will not have aims that can be achieved in the short term, since it assumes new conceptual instruments and a greater preparation on the institutional and personnel side in order to take

advantage of the natural resources, human capacities and cultural features which are at present insufficiently used. The restructuring of settlement policies, the review of the institutional apparatus which supports the management of human settlements and the training of the agents who take part in the process represent in this context an indispensable undertaking which calls for profound conceptual and institutional changes.

At the same time the crisis has made manifest that the development models adopted during the past decades were far from being applicable to the Latin American situation. To generate sustained development in the region in the real sense it would be necessary to adopt different values from those which inspire the current models and to change and dynamically modify the structures of production and consumption in order to adapt them to the possibilities and resources of each country. It is a question of promoting a process of conceptual reconversion, in which concern for the quality of life of the whole population is bound up with housing conditions, basic sanitation, provision of basic social services and infrastructure, community equipment, security, etc., which are in the end essential components of the built-up environment. An awareness of the integration of living conditions with the built-up environment or habitat and its necessary dependence on the degree of general development, on social organization and cultural patterns in constant evolution, may be the most important lesson of this critical decade.

From this perspective the destined quality of human settlements ceases to be a merely technical question and becomes an affair of public interest which commits the civil society as well as the government; in its turn the participation of the community in matters concerning its daily existence becomes an irreplaceable instrument for deliberate intervention in social processes.

#### II. MAIN CHARACTERISTICS OF THE HUMAN SETTLEMENT PROCESS

Various studies made by the ECLAC Secretariat show that the essential characteristics of the human settlement process in the region are the rapid rate of social urbanization, a marked trend towards the concentration of the population and activities in a few cities and towards dispersion in rural areas, and the persistence of social, economic and spatial structures —especially in the large urban nuclei and in the rural areas of the population— which foment and reproduce social and economic inequalities, mainly in relation to income levels, the satisfaction of basic needs and access to land and the services. The most dramatic expression of these inequalities is found in the rise and expansion of squatter urban settlements.

# 1. The process of urbanization

As already indicated, one of the most striking features of human settlement in Latin America and the Caribbean is the marked trend towards urbanization and population concentration and towards the establishment of predominantly urban settlement systems. It is indeed a deeply-rooted process whose expressions go far back into history. Nevertheless, it has acquired particular attributes as a result of the features of its recent evolution. One of these is the rapid rate at which large social sectors are incorporated into new forms of production, consumption and management; another is the formation of large cities, metropolitan areas and urban regions, which are a feature of the national urban systems. The speed acquired by this process leads us to predict that urban settlement will soon be the predominant form of establishment in Latin America. Its evolution involves at least two concomitant phenomena, one demographic and spatial and the other socio-economic, which will not necessarily be manifest simultaneously.

There is a plentiful supply of empirical data on the acceleration of social urbanization on a global scale and on the rise of huge urban conglomerates. In various studies conducted by the United Nations it is shown that as late as 1850 barely 4.3% of the world population lived in cities of 20 000 or more inhabitants; a century later, in 1950, the inhabitants of these cities represented a fifth of the world population and, in 1970, one in every four inhabitants of the earth was living in localities of this size. Moreover, whereas in 1850 there were only three cities with a million inhabitants or more --London, Pekin and Paris--, in 1950 there were 77 cities of this size and in 1970 the figure was 160. Projections indicate that in the year 2000 there will be some 250 of these cities, 90 of which will have more than four million inhabitants and two thirds of these will be in less developed regions.

From the above figures it can be inferred that urbanization has been accelerating and has led to the rise of cities of considerable size. If this expansive rate is maintained, urban areas will continue to multiply and increase in size. Although there are signs of a slackening in the growth of the large cities in relation to those of intermediate size, the process of urbanization has given rise to new spatial forms in which the old boundaries of the cities lose their clear-cut outlines to give way to huge conglomerates or megalopolises of several million inhabitants. It does not seem an exaggeration to estimate that towards the year 2000 there may be around 10 conurbations, or urbanized regions, with more than 30 million inhabitants each.

Although the dimensions of the urbanization process have given rise to growing concern, the essential determinants and effects of this do not seem to have been sufficiently analysed. Although it is usually recognized that the rapid demographic growth, the changes in agrarian and industrial structures, the forms of external relationship of the national societies and the technological innovations --particularly as regards transport, communications and physical infrastructure-- are contributory elements in the urbanization process, our knowledge of the overall interrelations between this process and development is still meagre. Research on the repercussions of this process on the dynamics and structure of the population, the forms and scales of production, the styles and patterns of distribution and consumption, the transformations taking place in social relations, the modes of political-institutional organization and even on certain cultural and ideological dimensions, represents an enormous challenge.

Many of the studies on urbanization have consisted in the preparation of diagnoses of situations regarded as critical and which are frequently described in dramatic terms. The measures resulting from such studies have therefore been eminently corrective in nature, aiming at the halting or rechannelling of everything that has been regarded as an undesirable trend. It can be said that many of the efforts made to change these trends have had meagre results. The omission of the conditioning factors has led in practice to the application of partial remedies which, in their capacity of palliatives of the symptoms, have been beneficial on only few occasions and for periods of somewhat short duration.

From another angle, many studies of the urbanization process conceive it and its concrete expression —the city— as a historical reality which has been essential for the achievement of goals and objectives of social change and development and which constitutes a basic ecological substratum for the evolution of social life and economic activities. The analyses made from this perspective, however, have not in general contributed to the identification of key variables which might be converted into policy aims.

There is no doubt that cities have played a leading role in the generation and transmission of innovations, at the same time serving to create conditions favouring diversification in economic structures —among them access to scientific and technical knowledge, availability of physical resources, proximity to the market—which have resulted in the rise of economies of scale, of complementation and agglomeration, all of which may be regarded as a set of necessary requisites for economic growth. In the same way, cities have contributed to the structuring of patterns of social interaction which imply a growing specification of roles, a complex institutional network, an expansion of the mechanisms of communication and the establishment of multiple channels of mobility, all of which factors condition the continuous changes in social relations which represent a potential for participation and democratization in the choice of administrative options and national articulation.

Indeed, many of the aspects noted regarding the role of urbanization in the promotion of social change and possibly of development depend on the historical conditions in which they are inserted. Thus, in the experience of the less developed regions, this process has evolved in the framework of a series of insufficiencies in terms of production of goods and services, reproducing situations of social inequality which are manifested through a generally regressive income

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distribution. In such conditions it is not surprising that the cities, and especially the larger urban concentrations, show signs of deterioration and unsatisfied demands whose correction would call for huge investments, diverting scarce resources for purposes which are usually considered not directly productive. From this standpoint, the city might be regarded as an element obstructing economic and social development. Nonetheless it must be borne in mind that neither the expression of the basic needs of the population nor the conflicts caused by their lack of satisfaction is a product of urbanization in itself, or even of its acceleration, nor are they consubstantial with large human concentration. The fact is that these agglomerations bring to the fore the inequalities inherent in the socio-economic structures while at the same time providing means to externalize the pressures for their modification. It seems unarguable that the material reality of the cities is, basically, an indication both of the degree and the style of development of a given society and that, in consequence, it is not possible in the prevailing conditions to provide complete basic urban services in the cities of the less developed countries; the material base of the human settlements as a whole is a direct reflection of the predominant style of development.

To sum up, there exists, then, a relationship between development and urbanization, of such a kind that this latter process can be regarded, simultaneously, as a result and requisite of the former. If development is understood as a set of changes which redound in a sustained increase in the production of goods and services and of income per inhabitant —with a transfer of the central axis of activity from the primary sector to industry and the services— and in more equitable modes of social distribution of the fruits of technical progress, urbanization may be regarded as a prerequisite of these transformations—since cities are the setting for economic diversification and social mobility— and equally as a result of these changes in so far as they help to speed up the spatial shift of the population and give viability to urban milieux of large dimensions.

It will be seen from the foregoing that the analysis of urbanization, of its conditioners and consequences, must involve attention to the specific interactions between this process and the socio-economic framework in which it is historically inserted. Within this framework it must be emphasized that the recognition of the consequences of urbanization in terms, for example, of a widespread impairment of the environment and of the non-provision of services does not lead in itself to a search for solutions. These have to be included in the strategies of demographic settlement which may be formulated as components of more global concepts of development planning.

From this standpoint the changes in the spatial distribution of the population and specifically the process of urbanization constitute one of the most significant dimensions of the subject of human settlements. Equally, the changes of different kinds represented by this process appear indissolubly linked with the forms adopted by social change and development.

## a) Demographic and spatial expressions of urbanization

As a result of the persistence of high fertility and of major falls in mortality, made possible by the diffusion of medico-sanitary techniques of low relative cost, Latin America and the Caribbean have experienced an extraordinary /demographic growth

demographic growth, higher than that of any other region in the world. From approximately 159 million inhabitants in 1950, the population rose to 275 million in 1970 and was close on 325 million in 1980. The growth rate went on increasing until it reached a maximum of 2.8% per year in the first five years of the 1970s, to then level off gradually so that the present rate of growth is around 2.3%; nonetheless, it should be emphasized that the human population of Latin America and the Caribbean doubled in the quarter of a century prior to 1980.

Because of the rapid multiplication of its population, the demographic density of Latin America increased from eight inhabitants per km² in 1950 to around 18 in 1980. The distribution of the population in the regional space, however, reveals marked differences; the national densities fluctuated, in 1980, between five and over 200 inhabitants per km²; nevertheless, the demographic densities in Latin America continue to be relatively low in worldwide terms; the only countries which have relatively high figures are El Salvador and some of the Caribbean nations. The variations in density are still more striking within the countries; crowded areas of small size are frequently found along with vast territories which are clearly underpopulated. Even though this situation was modified between 1950 and 1980, there has been a trend towards an increase in concentration and, more recently, towards a fall in the areas of underpopulation.

The trend towards concentration of the regional population becomes manifest if we consider the evolution of the degree of urbanization. Whereas in 1950 the urban inhabitants of Latin America (around 40 million persons) represented a quarter of the total population, in 1980 close on half of all Latin Americans (some 166 million) lived in localities of 20 000 or more inhabitants. Somewhat more than two-thirds of the total growth of the regional population in the period 1950-1980 was absorbed by settlements of this size. These figures illustrate the intensity acquired by the urbanization process in Latin America as a direct result of the different patterns of total growth of the urban and rural populations.

In all the countries of Latin America the urban population grew, during the period 1950-1980, much faster than the rural population. In the region as a whole the urban growth rate was more than three times as high as the rural. What is more, in 14 countries the annual growth rate of the urban population exceeded 4%, which implies a doubling of the number of urban inhabitants in less than 20 years. Only in three countries --Argentina, Uruguay and Cuba-- were the annual rates of urban growth around 3% or less, despite which the difference between these and the rates of rural growth indicates a clearly expansive rate of urbanization.

Two factors taken together explain the rapid urban growth: a relatively high rate of natural increase of the total population — the result of the difference between a high although decreasing fertility and a continuously falling mortality, and the net transfer of population from rural to urban areas. This last factor is composed, in its turn, of two sets of elements: the existence of migratory currents between the rural and urban areas and the reclassification of the population of rural areas, whether through the physical expansion of cities that absorbs localities formerly rural or as a result of the growth of some of them which come to be urban on attaining a specific size. On the basis of indirect estimates, it can be affirmed that, as an average for Latin America, the contribution of natural growth probably represents somewhat more than half the total urban growth, while the net transfer of rural population, which accounts for the rest, seems

to be formed mainly by the migration of persons of rural origin. Apparently, according to recent United Nations studies, the relative contribution of the transfer of rural population tends to increase in the countries which have lower levels of increase of the total population. As seems obvious, the highest rates of urban growth are observed in the countries in which the growth of the total population is expressed in higher rates; nonetheless, the factor which effectively contributes to the rise in the degree of urbanization is the net transfer of rural population, whose relative weight seems to be greater in the countries with lower rates of total population growth.

Although the growth of urban areas is far higher than that of rural, which clearly indicates both the rate achieved by Latin American urbanization and the concentrative trends of the population, the distribution of the inhabitants according to category of size of the localities presents a clearer view of the concentration profile. In 1950 a fifth of the total population of only four countries, those with the highest degree of urbanization --Argentina, Cuba, Chile and Uruguay-- lived in cities of 100 000 or more inhabitants; in 1980, in contrast, there were 17 countries in which this proportion was exceeded. What is more, the large metropolitan areas, of a million or more inhabitants, concentrated 9% of the Latin American population in 1950 and more than 28% in 1980; in this latter year around half the urban inhabitants of the region resided in these great metropolitan areas. The growth of the latter has been intensified by migratory currents proceeding from the rest of the national urban systems.

The above figures reveal the intensity acquired by regional urbanization, and the growing proportion of cities of larger size. If these trends persist it is highly probable that, around the year 2000, more than two-thirds of the Latin American population will be living in some 2 000 localities of 20 000 or more inhabitants, and that more than half of this urban population will be situated in some 46 large metropolitan areas. Even in the countries which today have a relatively low degreee of urbanization, it is foreseeable that the urban inhabitants will be more numerous than the rural towards the end of the twentieth century.

As regards rural human settlements, it will be useful to point out certain features of a quantitative type. The adoption of the figure of 20 000 inhabitants as a delimitation between urban and rural localities does not signify that the latter represent a sort of undifferentiated residuum. It is possible to distinguish, at least for analytical purposes, two large categories of rural settlements: one comprising settlements of a transitional nature, known as rural-urban, and the other those of a completely rural character, the dividing-line between the two categories being fixed at 2 000 inhabitants.

It has been estimated that around 10 or 15% of the total population of Latin America lived in localities which, in 1980, had between 2 000 and 19 999 inhabitants. Between 1950 and 1970 close on 430 localities or towns of this size were incorporated into the urban systems of the countries. Since their populations were reclassified on rising above 20 000 inhabitants; this growth reflects the contribution both of natural growth and of population transfer from other localities. Notwithstanding the relative magnitude of this reclassification, it is probable that the rural towns will continue to retain a considerable proportion of the total population in the less urbanized countries.

The group of localities with fewer than 2 000 inhabitants is undoubtedly the most numerous as regards the number of settlements it comprises. growth of its population, however, has diminished, basically as a result of migration and physical absorption or annexation by the urban nuclei. Around 1980 slightly more than a third of the Latin American population lived in this type of eminently rural locality. It is of interest, however, to distinguish two groups within it. The first is composed of small centres with between 500 and 1 999 inhabitants, in which some forms of basic services and of transport and communications are usually provided, which seek to meet the demands of the surrounding population while representing points of concentration and of marketing on a small scale. These small centres comprise a quarter of the completely rural population of Latin America. A second group, which accounts for the greater part of the predominantly rural population, is composed of tiny hamlets, groups of dwellings and scattered homes. Without doubt the degree of dispersion of this population varies according to its proximity to localities of larger size or to routes of communication and represents, generally speaking, a form of precarious settlement, in terms of the satisfaction of basic needs, which has not been given sufficient study.

Despite the fact that the presentation of the demographic indicators of the spatial distribution of the population would require a deeper analysis which would help to identify the variety of situations existing in the region, the elements mentioned enable us to affirm that urbanization has been reaching a pre-eminent position. This pre-eminence will become even more evident in the next two decades. The available projections indicate that in the remaining years of the present century significant changes will occur in the patterns of human settlement. The national urban systems will become denser, with a growing proportion of cities of 100 000 or more inhabitants (in some 600 of these cities considerably more than half of the total population of the region will tend to be concentrated), with emphasis on the large concentrations and conurbations. Moreover, the smaller urban nuclei will increase in number with the reclassification of the mixed rural-urban settlements, and it is probable that in some areas which are still sparsely populated the dispersed forms of population settlement will persist.

#### b) Socio-economic expressions of urbanization

As mentioned above, the immediate explanation of the urbanization process, in its demographic aspect, recognizes the intervention of two global factors: the natural growth of the urban population and the net rural-urban transfer of population. Both factors find their determining agents in the complex of conditions which form part of the economic and social structures prevailing in the region. The precise identification of the pertinent elements and of the mechanisms of causation is a task which is mainly still to be done. Here we shall make only a brief reference to some very general indications of changes that have occurred and that can be interpreted, strictly speaking, as situations concomitant with urbanization in Latin America. As with any statement of an overall nature, that which follows is an oversimplification and should be regarded as a brief enumeration.

Although during recent decades signs of change have been observed in the traditional features of the agrarian structures of the region, it can be argued that these, many of which still persist, constitute a background to the accelerated

process of urbanization. Among the more widespread traits of these structures there is a high concentration of ownership of agricultural land which, as is known, is frequently accompanied by an extreme subdivision of the land in the areas of minifundia. These forms of tenure of this basic resource are associated with a low level of technological development and with labour relations predominantly dependent which, in view of the abundant labour supply, generate very low monetary incomes for the great majority of the population engaged in agriculture. The forms of organization of the rural economy based on these structures were compatible in the past with a relatively low rate of natural growth of the population, resulting from the persistence of very high mortality rates which tended to neutralize the effects of high fertility rates. Around the 1930s mortality began to decline at an increasing rate, and as fertility remained relatively high for a prolonged period, the rural areas experienced a marked demographic growth. Since the lack of dynamism in the prevailing rural productive order resulted in little capacity for absorption of the labour force, the demographic increase in the rural areas led to a rise in migration to the urban areas.

More or less simultaneously the great world depression of the 1930s and the interventions of the international market, motivated later on by the Second World War, generated conditions favourable for import substitution in relation to certain manufactured goods of habitual consumption. The flows of public and private investment were therefore channelled into the establishment of industries whose production was intended to satisfy domestic demand. As the larger cities guaranteed greater access to the domestic market, besides offering a series of comparative advantages, decisions on localization obviously favoured these urban centres. The concentration of industry and services both public and private in these cities contributed, as already mentioned, to the gradual rise of external economies of agglomeration. In its turn, the improvement of financial mechanisms led to an intensification of capital accumulation through net transfers coming from the remaining part of the national territories. In such conditions the cities offered apparent possibilities of diversified employment and monetary incomes which undoubtedly represented a counterpart to the restrictions of the labour market in the rural areas.

The arrival of continuous flows of migrants seeking to improve their living conditions, the expansive trends of the concentration of industries and services and the centralization of the public and private agents of management have given rise to a considerable expansion of the urban areas, especially those of larger size. As a result the national urban systems are headed by some few principal cities which have a relatively high primacy in relation to the rest, in the sense that their physical, demographic and economic magnitudes are several times higher than those of the cities which follow them in the ranking of the settlements in the countries. The concentrative and centralizing effects are reproduced, in their turn, inasmuch as the economies of agglomeration generated in the large cities create conditions that favour a higher profitability from investment. Moreover, the public sector tends to concentrate resources in these cities to meet the costs of the elements of infrastructure and the services required to ensure their functioning.

As previously stated, the agrarian structures of the Latin American countries have undergone changes in recent decades whose effects appear to have increased the pressures tending to expel the population. Thus in certain areas, as a means /of raising

of raising the profitability of capital and to obviate the effect of the agrarian reforms, technological innovations have been introduced which have led to an increasing fall in labour-intensive units and to a rise in the seasonality of the demand for labour. Moreover, many of the schemes for agrarian reform seem to have resulted in a reduction of labour opportunities, whether because they tended to assign land in preference to individuals or families or because they were introduced in the midst of a process of peasant mobilization to which the landlords responded by adopting contractual mechanisms which enabled them to prevent unionization. In one way or another, the net result of many of these changes has been a tendency to restrict the offer of jobs in the agricultural sector, an effect which has not been sufficiently offset by plans and programmes for settlement in new terrains. Consequently, on seeing their hopes of employment reduced, large contingents of the population have moved to urban areas. Additionally, the extension of educational services, and the transmission of elements of learning which promote values and motivations that cannot be satisfied in the rural area, strengthen the urge to migrate.

In their turn, the constraints on domestic demand, caused by a generally regressive distribution of income, have brought about an almost monopolistic type of supply, in which factories have been losing their national character and have been integrated as branches or subsidiary agencies of large transnational corporations, which have in many cases displaced the small producers. Outstanding among the effects of these changes is the growing application of capital-intensive technologies which have reduced the demand for labour in the urban area; as a result of this the relative surplus of economically active population in the cities has been gradually incorporated into services of the most varied kind.

Another effect has been the increase of economic concentration in the large cities, which in this way absorb human and physical resources from the remainder of the national territories. Nevertheless, as many industries depend on large volumes of imports, and as their products are destined to satisfy the demand established in these same cities, they do not help to increase the use of national natural resources, so that their dynamizing impact is slight and their capacity to absorb non-urban labour is considerably reduced.

In the light of the conditions briefly described above, it is not surprising to find that the migrants of rural origin, or coming from small towns, tend, at least as a first step, to join the lowest urban strata. These are characterized by underemployment, small and irregular incomes, lack of adequate formal education and a marked insecurity as regards their material conditions of existence. Thus the continuous inflow of migrants seems to help to maintain and, in many cases, to worsen the economic and social inequalities of the cities, especially of the largest, and also to impair the environment.

It is true that the migrants do not constitute a homogeneous or specific social stratum. Strictly speaking, they are distributed among the different layers existing in the cities, and also have access to social mobility. The fact remains, however, that a high proportion of these migrants, during the early stages of their urban residence, are integrated into the most unprivileged groups existing in the cities. Moreover, the social structures of these cities exhibit inequalities which make manifest, perhaps even more clearly, the greater or lesser lack of

equity in the national societies. Depending on the degree of these inequalities, which is probably related to the historical process of urbanization in each country, it is possible to identify different groupings of middle-income strata. The relative importance of these is dependent to some extent on the coverage of the educational services, the functioning of the labour market for professionals and technicians and the degree of openness --or of democratization-- of the systems of decision-taking. In some countries these middle layers are in process of development; in others they constitute a relatively widespread social sector, established on solid bases and clearly distinguishable as regards their aspirations and patterns of collective behaviour.

These observations are very general and simplify the complex and diversified reality of urban culture. Individuals and groups which, from the standpoint of their insertion in the productive structure, would be regarded as belonging to some of the strata mentioned, display behaviour patterns which, from the viewpoint of normal conduct, might be placed in other social sectors. Moreover, the so-called lower strata comprise very dissimilar layers, which range from the industrial wage-earning manual worker to the marginal squatter who adopts unconventional subsistence strategies.

Owing mainly to the relative importance of the economic activities that take place in them, the larger cities are distinguished by the fact that their population receives higher incomes than the national averages. At the same time the differences in their distribution among strata tend to be less marked. Obviously these comparisons are limited by a series of conditions. Among these it should be noted that whereas in the major cities monetary relations have been universalized, in a large part of the rest of the human settlements simple forms of trade persist which do not necessarily involve the use of money. Another element that should be borne in mind is that the relative cost of daily living tends to be higher in an urban area, where access to food and housing depends on formal modes of marketing. Moreover, residence in a city entails other costs for services and transport which are usually not present, or at least are not so prevalent, in rural areas. can we disregard the fact that in urban localities there are numerous mechanisms of marketing and credit which in the last resort encourage greater consumption. These conditions explain why, despite the higher monetary incomes obtained, urban inhabitants tend to have a relatively low propensity to save.

The patterns of social stratification, so summarily outlined, will be more clearly perceived when the forms of social organization of urban space are considered. Situations often arise of segregation or of markedly differentiated uses of this space deriving from styles of private appropriation and management of the medium conditioned by the existing social structures of power. Thus the institutional systems of marketing urban space, in oligopolistic conditions of supply, contribute to the development of highly speculative patterns which are prejudicial to the lower-income strata. Furthermore, the costs of the supply of certain services and physical endowments are generally absorbed by the State, without even a proportion being paid by the private agents who benefit from the public measure. This represents a type of subsidy which is paid by society as a whole and whose fruits, which redound in a differential valuation of urban space, are enjoyed by a minority. Usually the main source of the financing of these costs

consists of indirect taxes, whose administrative control is generally easier than that required by direct taxes. This procedure obviously has regressive effects on income distribution. As a result of these procedures, social inequalities tend to increase, giving rise to the emergence, within the urban framework, of homogeneous socio-spatial subsystems, separated from each other. Thus an increasing separation and qualitative gap is created in the urban sphere.

It is often argued that the differences produced by failure to satisfy the basic needs of the population represent a source of environmental deterioration. This is what has come to be called the "contamination of poverty". The set of factors which depress the quality of life in the urban sphere represent, in fact, forms of external diseconomies of agglomeration which, on the level of the most unprivileged social groups, manifest themselves as structural maladjustments between the full development of individual capacities and potentialities and the conditions imposed by the medium. The high values of land and of construction created by the operation of commercial and financial mechanisms of a speculative nature conduce to a gradual shrinkage of the available space per person.

The physical expansion of the large cities goes hand in hand with various forms of suburbanization. The upper classes settle and move continuously in search of pleasanter environments in areas fully provided with services and infrastructure. The lower-income strata squat on vacant lots which are awaiting urban appreciation and on which they build makeshift dwellings lacking in services. Moreover, the disposition of the urban structure in expansion creates conditions of congestion which represent maladjustments between the capacity of the physical systems and the magnitude of the social demands imposed on them. A large proportion of urban transport in large Latin American cities crosses the central areas, causing situations of saturation, an increase in the levels of contamination and a state of insecurity for pedestrians and passengers. The growing demand for public transport gives rise to huge public investments destined to increase the supply of vehicles and to build fast motorways and more rapid facilities for displacement.

# c) Problems and challenges posed by urbanization and urban concentration

Since Latin American urbanization, in the greater part of its evolution, has taken place before industrial development and without necessarily creating an appreciable change in agrarian productive organization, it has problematical structural attributes which affect the overall patterns of the spatial distribution of the population. These problems --now chronic -- include unemployment and underemployment, a marked expansion of tertiary activity of low productivity, small and irregular incomes, insufficient saving and investment rates, a restricted demand and a somewhat limited supply of goods and services. In addition, since the phase of industrial growth tended to favour localities in which there was already a demand, the result has been a growing concentration in the larger cities of the production and service equipment which go with them. This concentration, a pattern which has continued to be reproduced and amplified, has played an important role in the generation or accentuation of economic differences between the various territorial units of the countries. This has redounded in the formation of urban systems which are characterized by a high degree of primacy and by the lack of medium-sized cities with economic structures sufficiently diversified to generate options of localization. /Undoubtedly this

Undoubtedly this characterization would seem an oversimplification if we failed to recognize the historical roots of the styles of occupation of national spaces, which are decisively influenced by the existence of natural resources capable of being traded in the international market. We must also recognize the importance that has been invested since colonial times in the centralization of political decision—taking. Then again we must not forget the heavy external dependence of the region, which, with variants, has been manifest in economic, technological, cultural and socio—political processes. Consideration of all these elements will show that the large metropolitan areas of the Latin American countries have functioned simultaneously as central nuclei of the distribution of the population and activity within the national spaces, and as peripheral nuclei within the trading system controlled by the international macro—spaces.

Taking all these characteristics into account, we can formulate some preliminary appraisals of the conditions that might affect the future of Latin American urbanization. If the development of this region were based on an intensification of agricultural production and on a diversification of the industrial structure --in order to replace imports of intermediate products and even of capital goods-- urbanization would probably continue its rapid rate, which implies the need to face new and greater demands for infrastructure. It is possible that these conditions will compel a reformulation of the schemes of spatial organization in order to generate alternatives to the metropolitan areas through the promotion of external economies of agglomeration in other localities of the national urban There is no doubt that major adjustments of the styles of development would have to be made to incentivate substantial changes in the patterns of spatial distribution of the population and in the territorial configuration of human settlements. These adjustments, in their turn, would imply decisions that would contribute to a situation of greater social equity. In the absence of such changes, the options for the population would become increasingly restricted, and would lead to an increasing concentration in the principal city or to more conflictive pressures on the productive structures of the rural sector. The consolidation of a development style which implies a drastic concentration of income, an incentive to financial speculation, a diminution of the role of the State as agent of a redistribution of the fruits of economic growth, and an economic system essentially based on the exploitation of the so-called "comparative advantages", could lead to a deterioration in the material living conditions of the population and to a dwindling of the effective possibilities of participation in social and economic decision-taking.

It has been contended in these notes that the factors determining the deterioration of the urban environment and the deficiencies in quantity and quality in the provision of the services demanded by the population lie in structural problems of the functioning of Latin American societies. The disparity between the rate of economic growth and the patterns of distribution of the income generated have resulted in a high degree of demographic concentration in the large cities. In these the structural problems of society are more clearly visible, a fact which apparently has some relation to the size acquired by the cities and the lack of equity in the forms of social organization of the space. From an essentially technical point of view, it might be sustained that beyond certain limits of urban size —in terms of population and area— the marginal costs entailed in the satisfaction of basic needs tend to outweigh the benefits.

Therefore new schemes of urban structuring should arise based on a careful analysis of a cost-benefit type, which will cater for possible different forms of settlement. This does not mean, however, that the cause of deterioration and deficiencies in the size or speed of growth of the cities; these conditions are, as has been repeatedly stated, consequences of social change. Hence the technical analysis should reformulate the social content of the terms of cost and benefit in exploring alternatives for future developments.

In brief, the process of urbanization presents the countries of the region with an exceedingly far-reaching challenge. The apparently "inevitable" effects of population concentration in a few cities --urban deterioration, insufficiencies and lack of services, congestion, numerous forms of contamination-- call for a great effort of planning which will not be reduced to the use of palliatives, frequently very burdensome and by no means effective. It is a question of a historical challenge which demands the analysis and investigation of the inter-relations between urbanization and economic and social development, taking their effects into account and defining the criteria needed for the formulation of strategies and the selection of instruments of action.

# 2. Metropolitanization

The phenomenon of metropolitanization —in some cases of "megalopolitanization"—is particularly important for the process of population settlement. In 1980 there were 10 cities in the world with over 10 million inhabitants, among them Mexico City with 15 million, São Paulo with 13.5, Rio de Janeiro with 10.7 and Buenos Aires with 10.1. In the estimates for the year 2000 six cities of the region figure among the 35 largest in the world. These are: (1) Mexico City, with 31 million inhabitants; (2) São Paulo, with 25.8; (7) Rio de Janeiro with 19.0; (15) Buenos Aires, with 12.1; (26) Bogotá with 9.6, and (31) Lima/Callao, with 8.6 (the number in brackets indicates the place on the list).

It is estimated that between the years 1980 and 2000 the population of these six cities will grow from 59 to 109 million, the region thereby coming to have the largest human agglomerations in the world, without having yet found an answer to the challenges presented by this situation.

The growing scales of concentration of the urban population have given rise to the emergence of cities with over a million inhabitants (metropolis). The recent character of the metropolitan phenomenon becomes evident if it is considered at the beginning of the twentieth century there was not a single metropolis in Latin America; around 1960 the phenomenon was present in nine countries. It is estimated that in 1980 there were 26 metropolises in twelve countries. Between 1960 and 1980 the metropolitan population of the region rose from 31 to 100 million persons; that is, out of the total of inhabitants of the region, the metropolises contained 14.8% in 1960 and 28.5% in 1980.

For their part, the number of cities of 100 000 inhabitants and over amounted to around 300 in 1980. These cities housed some 128 million persons that year, more than doubled the number in 1960, when they had 53 million inhabitants.

The metropolitan areas referred to above embrace a major part of the industrial activities and services of the respective countries. Close on 80% of Brazilian industrial production takes place in the area comprised by the metropolitan areas of São Paulo, Rio de Janeiro and Belo Horizonte. In the metropolitan areas of Buenos Aires and Rosario around two-thirds of the industrial production of Argentina is concentrated, and considerably more than half of the industrial production of Chile and Peru is situated in the main metropolitan areas of those countries --Santiago and Lima/Callao respectively. In Venezuela, Caracas concentrates no less than 40% of industrial production. What is more, in three metropolitan areas alone ---Buenos Aires, São Paulo and Mexico City--- more than a third of the industrial production of the whole region is generated.

The concentration of industrial production coincides with the presence of large enterprises and private financial institutions, a major part of which corresponds to agencies of the transnational corporations. Thus, for example, between 50 and 60% of the financial corporations and the large industrial enterprises of Mexico and Costa Rica are situated in the Federal District and San José, respectively. In Brazil, no less than 40% of the national investments of these bodies are situated on the metropolitan axis formed by Sao Paulo and Rio de Janeiro and a similar proportion is found in Caracas in relation to the rest of Venezuela.

In parallel with the political centralization and the industrial, financial and demographic concentration, the metropolitan areas have undergone a considerable expansion of different types of services. It has been estimated that somewhat more than 50% of the product and the employment of this sector is generated in them.

The concentrative characteristics of the metropolitan settlements of Latin America are particularly revealed in the income per person and in the general wealth; the population of some metropolitan areas of the region obtains on average an income per inhabitant three times as high as the average for the respective countries.

As regards the distribution of income, this is very different in the metropolises from that observed in the respective national profiles, which is partly explained by the fact that in the large cities the families with less purchasing power have monetary incomes which in some cases are five times as high as in the rest of the respective countries, as occurs in Sao Paulo with relation to Brazil, for example. Moreover, if the share of the richest 5% of the population is compared with that of the poorest 20% in some metropolitan areas, the difference between these two strata is less than that observed in the country as a whole.

magnitude and distribution of personal income in the metropolitan areas and the parallel figures for the rest of the respective country, since the composition of production, the sectoral participation of the labour force and the formation of the categories of employment show marked differences, especially in view of the structure of costs of goods and services, along with the consumption patterns in

the metropolitan areas. Despite the fact that the supply of goods and services per inhabitant is much greater in these areas than in the other human settlements, it is probable that this supply is conditioned by the disproportionate consumption of the higher-income urban groups. Besides, it has been noted that in view of their high relative costs, food, transport and housing are the items which absorb almost the whole of the income obtained by the poorer families.

The consumption patterns, incited by market mechanisms and publicity and stimulated by credit, also reveal differences between the metropolitan areas and the remainder of the national territories. This inclination towards consumption has an adverse effect on the expectations of popular saving, as is shown by the fact that the limit of income above which the families begin to save is four or five times higher in the metropolitan areas than in the smaller urban settlements.

In brief, although the wages and monetary incomes of the metropolitan groups of the lower strata are higher than those obtained by the corresponding strata in each country as a whole, the costs of the goods and services which form the basic structure of consumption tend to neutralize these differences. If the levels of prices and wages in different metropolitan areas of the world are compared, it can be stated that the ratio between the two indexes is frankly unfavourable for workers in the large cities.

Another striking feature of the metropolitan areas is the concentration found in them of unemployed and underemployed persons, and hence of poverty and precarious settlements which reveal serious deficiencies in respect of services, infrastructure and quality of the environment. Although it is true that the metropolitan areas concentrate a very high proportion of material resources in terms of basic services and infrastructure, it is no less certain that the distribution of these elements displays a frankly regressive trend. It is often found that the residential districts of the richer groups are provided with urban services comparable to those of cities in developed countries, while the poor groups suffer severe deprivations. As numerous studies have pointed out, the problem of urban land and the system adopted by the construction sector are serious obstacles in the way of coping with the deficiencies of housing and infrastructure.

The management of the land in the metropolitan areas tends to be affected by forms of speculation which marginates the poorer sectors from the housing market. In practice, there has been a process of capital transfer from the productive sectors to real estate, where the investment risk seems minimal, since the appreciation of land values is guaranteed by a predominantly speculative process of marketing. Obviously this speculation imposes even greater restrictions on the poor sectors, who are forced to live on the peripheries of the large cities in settlements devoid of services and situated on less profitable land.

Another aspect of the quality of life in the metropolitan settlements, which is also associated with the differentiated social use of spatial structures, is the intra-metropolitan transport. It has been estimated that motorcars occupy around 68% of the public roads and carry only 5% of the passengers. The remaining 95% of these travel by public transport, for which only the remaining 32% of the

roads is available. Road works are a form of spatial building whose costs are paid by society as a whole; nevertheless, since its social use is clearly differentiated, these works represent one of the many forms of subsidy to the higher-income groups.

The high cost of urban land, the chaotic and indiscriminate use of the soil, the disorganization of metropolitum functions and the absence of efficient systems of collective transport have given rise to radical changes in the organization of the life of practically all the inhabitants of the metropolis. In studies on the use of time in metropoli an cities it has been shown that between three and four hours a day are spent in transport by manual workers, students and employees who have to live a long way from their place of work. As a result, situations have arisen in the Latin American metropolises similar to those of the "commuter" in the large American cities: pendulous flows of "daily migrants" which every 24 hours produce a pattern very similar to that of the man who has to migrate seasonally for reasons of employment.

In general, with his move to the metropolis, the migrant changes his mode of life. For the actual metropolitan resident also, the changes in the structure of consemption and of the organization of urban functions, in addition to the influence of exogenous models powerfully dynamized by commercial publicity, have impossed different life styles and new forms of satisfaction, which are mainly reflected in the change in the structure of consumption and in the use of time. New forms of employment, of provisioning and of recreation are reflected in supermarkets, commercial centres, autocinemas, etc., all of which represent the packaging for new activities for an important sector of the metropolitan population.

To sum up, diverse factors contribute to the reproduction of social and economic inequalities and to the deterioration of the environment in metropolitan areas: the social uses of metropolitan space; the regressive distribution of the services and infrastructure; the structuring of different consumption patterns; the new forms of social organization of production and the rise of different cultural styles. These, inter alia, are the conditions which define the effect of the large urban concentrations on the quality of life of their inhabitants. Thus many of the situations which tend to be defined as "critical problems" of the metropolitan population are no more than expressions of the differentiated effect of the aforesaid phenomena.

## 3. Rural settlements

The term "rural settlement" comprises types ranging from dispersed settlements, with a purely subsistence agriculture, to small towns, with up to 20 000 inhabitants, which serve as focal points in areas with a modern, highly capital-intensive agriculture. It is estimated that in 1980 around 35% of the population in Latin America lived in settlements of up to 2 000 inhabitants and around 15% in villages or towns of between 2 000 and 20 000 inhabitants.

As the demographic, social and cultural dynamics of rural settlements depends heavily on the productive structure of the agricultural sector, we must examine the changes that are occurring in this sector in order to express a view on the possible transformations that will take place in these settlements.

# a) Main characteristics of rural settlements

The rural and mixed rural-urban settlement represents today the predominant form of settlement in Latin America. Its main ecological-demographic traits, some of which have already been mentioned, are the following:

- i) The outstanding importance of the settlement pattern of dispersed population, which represents over a third of the population.
- ii) The marked predominance of the dispersed population in tiny hamlets (villorios) exceeding that which is concentrated in villages and small towns, which shows, in most cases, the weakness of the networks of rural settlement owing to their isolation in relation to the dynamic centres and to their deficient systems of communication.
- iii) The loss of practically 65% of their natural growth suffered from 1950 onwards by the rural settlements as a whole, owing to the transfer to the larger towns and urban nuclei of more than 58 million persons, which is an index of the deterioration suffered during recent decades.
- iv) The stagnation and slight loss of their natural growth to the benefit of the main cities of the mixed rural-urban settlements, small villages and towns which represent approximately 15% of the total population and a quarter of the non-urban population of the region. Their character of a bridge between the rural areas and the urban system suggests that they have a permanently changing population. On the one hand, there is an inflow coming mainly from the areas of dispersed population, and on the other, an incessant outflow of emigrants to the highly concentrated areas of the metropolises.
- v) The trends exhibited by rural settlements during recent years, together with the rapid growth of urbanization, which suggest that the exodus of the rural population to urban zones will continue unchanged in most countries in what remains of the century.

Statistics on living conditions in rural settlements are not only scarce and very inaccurate but refer to barely comparable situations. In fact, they merely serve to indicate the magnitude of the problem and the marked difference between urban areas and rural zones in respect of the satisfaction of basic needs and living conditions.

Thus, for example, although the underutilization of the labour force in the agricultural sector is declining in relative terms, the average income in urban areas is five times as high as that in cural areas. Furthermore, between 1970 and 1974 the index of illiteracy in the rural population of 15 years of age and over in 13 countries of the region was three times as high as that of the urban population (44.3% and 15%, respectively). Similarly, the indexes of water supply show a marked difference between countryside and city. Whereas in 1960 only 8% of the rural population had a piped water supply in their homes or through public sources, in 1977, 34% had access to this service; for urban inhabitants this index rose during the same period from 50 to 71%.

As regards medical attention, insurance programmes, etc., there is little empirical material to differentiate among the different rural settlements. In general some indexes indicate a serious deficit in these services, particularly among the dispersed rural population. Medical attention, for example, is a service to which there is only access in extremely urgent cases.

To sum up, the disparities between the urban and rural sectors are marked and increasing. There is also a very obvious lack of other services indispensable for the development of family, social and productive activities, such as police protection, agricultural technical assistance and credit, supply of inputs, etc. Some other services are very scattered and remote, a situation which tends to become more critical in view of the inadequacy of the lines of communication, which are frequently interrupted during long periods of the year, thus preventing expeditious communication with the urban centres.

# b) Factors conditioning rural settlements

The distribution of the population in the rural areas and the characteristics of the settlements largely depend on the forms of production and the dynamism of the agricultural sector. In Latin America two types of production mainly predominate: capitalist commercial production and peasant agriculture. Capitalist agriculture is carried out by a commercial agricultural enterprise, which uses advanced technology and paid workers and sells its products in the market at a high price in relation to production. The agriculture of the peasant economy depends in general on small landownership; it is carried on without any advanced technology; it is chiefly based on the work of the peasant and his family, and the product obtained is mainly destined for family subsistence. The farms are generally of small size and have a low productive value.

Some studies point out that the distribution of the population in the areas of capitalist agriculture is characterized by a high proportion (up to 68%) of very small localities (less than 100 inhabitants), which concentrate a small proportion of the population along with a limited number of towns of 20 000 or more inhabitants which house about half of it. The frequent existence of an urban centre of this size is a common trait of the regions of this type. Settlements of up to 2 500 inhabitants, which represent more than 98% of the total, account for 35% of the population of these areas. The peculiar characteristics of capitalist agriculture imply a population distribution of this type. The volume and high value of the output of this agriculture result in a large number of commercial transactions and call for considerable inputs of equipment and fertilizers and more complex techniques, which entail higher wages. The development of the commercial transactions demands a close linkage between these zones and the rest of the country and foreign markets, so that a system of transport is developed, which involves in its turn an increase in the administrative apparatus. These activities are centred basically in the larger nuclei of population, affording greater opportunities of employment, so that they become centres of attraction for the population emigrating from other sectors of the same area.

This concentration of activities in the cities of the areas of capitalist agriculture inhibits the development of the medium-sized settlements of between 2 500 and 20 000 inhabitants, which, even if they increase and diversify their /functions,

functions, depend in the main on the economic life of the aforesaid cities and in many cases are temporary receivers of the rural immigrants.

This pattern of population distribution varies according to the environmental conditions; in semi-arid and arid zones there is a larger proportion of localities with under 100 inhabitants, and fewer of those with a population of between 100 and 400 inhabitants. It seems that in these cases the size of the population is determined by the shortage of water both for human consumption and for agriculture.

As regards living conditions, there is a clear distinction in the supply of services, such as piped water supply, sewerage, electricity, etc. This might be explained by the fact that the smaller the size of the population of the localities, the higher the cost per inhabitant of most of the services needed. Thus investment is primarily directed to the larger localities in which, moreover, there is in general more social organization and hence greater pressure to obtain it. Consequently, the higher the proportion of population concentrated in localities of 20 000 inhabitants and over, the worse are the conditions for the rural population of the area. Similarly, the higher the proportion of population living in localities of under 1 000 inhabitants, the more deficient are those conditions. The least difference between urban and rural conditions and also the best rural conditions occur in those areas where the distribution of the population is more equal in its proportions between the different sizes of the settlements, which might be the result of a more equitable distribution of the resources employed for supplying services both to the urban and to the rural population.

In the regions where peasant economy predominates there tend to be few cities. This rural régime, coupled with the lack of economic dynamism typical of this type of agrarian structure characterized by on farm consumption and the absence of the generation of capital surpluses, does not require the existence of major cities. The limited volume of inputs required and the paucity of commercial transactions needed require only slight linkages with the rest of the country, which are provided by means of small regional centres.

Apart from the absence of major centres, there are in most cases localities of all sizes, including the largest of all, which in general does not exceed 20 000 inhabitants. Despite this circumstance, these settlements become centres of attraction for the peasant population. In these there is the greatest diversification of functions. The fact that they are the seat of the area's public administration and its greatest commercial market turns them into the centre of the limited economic activity of the area.

The proportion of localities of under 100 inhabitants is low, since here there are none of the small communities characteristic of the capitalist agricultural enterprises. In contrast, the proportion of settlements of 100 to 499 inhabitants tends to be the largest of all. From there onwards these proportions decline gradually until they reach localities of 2 500 inhabitants, which house around 75% of the population of the areas in which this type of agrarian production is the rule.

The rate of population growth in these regions is many times lower than that of the country as a whole, which is explained by the vigorous emigration which can only be avoided in cases where: a) they are near to a capitalist agricultural zone, or b) there exists a major regional city and one of some economic dynamism in the region. The low growth rates and thereby the limited density of the population hamper the development of social and cultural relations and economic activities. Thus a vicious circle is formed which condemns these regions to backwardness: because of the low density it is difficult to generate a social, cultural and economic development, which in its turn stimulates emigration from the region, making a larger settlement difficult or impossible.

With respect to services a system of ranking may be observed according to the size of the settlements, although with a more equitable distribution than in the case of capitalist agriculture. Nevertheless, the level of satisfaction of these needs generally remains below the level achieved in the regions of a market agriculture.

# c) Agricultural development policies

In the analysis of rural settlements an aspect of particular importance relates to the policies through which the State has tried to stimulate economic and social development in the agricultural sector. In general, the policies which have been most effective in the localization of the rural population are those connected with agrarian reform, rural development and colonization. These policies have changed the ratio between man and the land since they have tried in different ways to strengthen the productive activity of their beneficiaries, and at the same time have sought to make a drastic change in the living conditions of agricultural workers.

In many cases the policy of agrarian reform has fostered the formation of a class of small agricultural landowners, with possibilities of organization aimed at protecting their share of the market. It has also stimulated the formation of community and co-operative enterprises in order to avoid the division of the land, favouring a more efficient use of the land and of investments in infrastructure and attempting to create economic and social conditions which will overcome the vulnerability of the isolated small peasant farmer.

In the first case the formation of family productive units is fostered and, in the second, probably forms of productive organization which approximate to the logic of capitalist enterprises. Their effects on rural settlements correspond to those already indicated for these cases. The most important of these would be the strengthening of medium-sized centres.

The application of the agrarian reform policy has reached 22% of potential beneficiaries in the region, with very varied effects on the improvement of the living conditions of the population, since in many cases the reformed zones have been left without adequate institutional support. In other cases, the division of ownership has helped to create subfamily units or minifundia, instead of family productive units, and the peasants incorporated into community or co-operative enterprises, left to themselves without technical capacity to make the land produce or credit to work it or to maintain their family during the agricultural

year, have ended by selling the capital of the enterprise (animals, machinery, dismountable structures, etc.).

The rural development programmes probably constitute an effective instrument for modifying the features of populated places, but unfortunately it has been the custom in the region to consider as programmes of this type certain policies of a very limited and partial nature. Sometimes these policies are exclusively sectoral in character. When they are more extensive, they tend to be restricted to aspects associated with economic and social investment, without taking account of institutional or organizational elements. Recently in some countries of the region very complete diagnoses of major agricultural areas have been initiated in order to stimulate rural development programmes conceived as more integral processes. The methodology being used in these programmes, and the results obtained, should represent an important subject for discussion among the countries of the region, with a view to initiating a review and analysis of the development potential of these programmes.

The colonization programmes are those which have explicitly pursued objectives in relation to rural settlements, since they necessarily imply the relocalization of the population. In some cases, serious efforts have been made to plan these settlements in accordance with models permitting a greater concentration of the population and a better development of their activities. Examples of this are the colonization programmes which have contemplated the localization of the population in "star" or panel structures, according to which the activities converge towards a central nucleus where the supply of goods and services is concentrated. Nevertheless, these programmes often end in being pilot experiments without continuity and in many cases are abandoned. Finally mention must be made of the development programmes for specific areas. Experience in these cases indicates that the changes that have occurred in the agrarian structure frequently produce unexpected collateral effects which hamper an integral solution for the area.

The assessment of a number of projects for certain areas through which it is proposed to achieve their integral and harmonious development, the solution of social problems and the improvement of communications, indicates that, although they have achieved a greater concentration of the population and an improvement in education, housing and the environment, the social levels attained are below the average level for the country. Moreover, the transformations in the agrarian structure have tended to turn the peasant into an agricultural proletarian, increasing the use of seasonal labour. In its turn, the system of production implanted in these cases has not created a diversification of the local economy, but has constricted the labour market. At the same time the lack of employment opportunities has fostered the emigration of the population in the productive age groups.

## d) Changes in agricultural activity and outlook for human settlements

The co-existence of a variety of forms of agricultural productive organization, in their diverse relations with the settlement of the rural population, produces different patterns of occupation of the rural space. An examination of the trends of agricultural development in the region leads to certain conclusions on the structuring and consolidation of a number of prevalent forms of settlement.

During recent decades most of the countries of the region have had to face the necessity of coping with the growing domestic demand for food and of increasing agricultural exports in order to revitalize the external sector, in itself critical in the Latin American economies. The effort to increase agricultural production has resulted in greater capitalization and in a better distribution of the land. In general it might be said that the fruits of the first of these efforts is more visible and carries more weight in the present situation of the regional agricultural sector.

In fact, one of the more outstanding traits of the transformations undergone by Latin American agriculture is the dynamism displayed by the technological factor, as is indicated by the fact that the population active in agriculture multiplied 1.4 times in the last 25 years and the land cultivated 1.7 times. During the same period, the volume of fertilizers increased twelvefold and the number of tractors fivefold.

The importance of technological change for the transformations in agriculture becomes more understandable if it is borne in mind that the increase in agricultural production traditionally depended on the increase in the surface cultivated. The possibilities of incorporating new land in economically profitable conditions have diminished, there being an increase of only 25% in area under crops in the 1970s instead of the 80% recorded in the 1950s. In fact, in that period the area cultivated increased by 20 million hectares, in the 1960s by 14 million and in the 1970s by 10 million.

Thus the maintenance of the growth rate of production now depends increasingly on the technological factor.

The intensification of the use of technology brings with it two opposed trends in relation to rural settlements. On the one hand, it marks the beginning of a stage in which the expansion of the agricultural frontier comes to an end. In the future, the growth of the agricultural population will tend to be concentrated in the area actually under cultivation, which implies a greater concentration of the population in agriculture. On the other hand, the labour force replaced by technology, unemployed or underemployed, may increase the migratory flows, transferring part of the natural growth of the rural population and diminishing the pressure on the land.

It is very difficult, however, to formulate long-term projections. Researches carried out in the industrialized countries show a marked fall in the fertility of the land as a result of its intensive exploitation, which --together with the impact of erosion-- entails necessary and increasing investment in fertilizers. It should be noted that the ecosystems of the region are in the main more fragile than those of the industrialized countries. Particularly important among the ecological effects of intensive agriculture are those produced by the deforestation of some regions. These factors could delay the increase of the use of advanced technology and the intensive exploitation of the land.

Similarly a decline in the creation of very large agricultural enterprises is to be expected. In some economic studies made by agricultural enterprises in the United States it is pointed out that farms of up to 300 hectares make better use of economies of scale and that in enterprises with more than 500 or 700 hectares these tend to decline to the extent of becoming negative economies. /The evolution

The evolution of agricultural development provides guidelines for the future dynamics of rural settlements. In the first place, emphasis should be laid on the importance of technology for agricultural employment, for the study of the settlement of the rural population and particularly for the characteristics of the settled areas. The two processes have different effects on the settlement of the population and the characteristics of the settled areas. On the one hand, proletarianization may give rise to a certain concentration of the population and to an activation of the economies of the settled areas, since it develops trade, even in food products. On the other hand, the workers ousted from permanent agricultural tasks tend to settle precariously at the side of roads, on vacant public land or in places assigned to colonization. In some countries this type of localization of the rural population has acquired considerable proportions and in general tends to reproduce the pattern of dispersed settlement.

In the second place, special mention should be made of the importance of capitalization in agriculture and the tendency of the productive units that generate surpluses to adopt capitalist forms of activity. In practice, this trend implies increased trading between agricultural and industrial products.

The changes in employment and the growing capitalization of agricultural productive organization create a polarization between a majority sector based on subsistence, underemployment and low income, and another sector consisting of permanent manual workers, with medium incomes, who work in areas of crops destined for export or specialized in production for the domestic market, in which a considerable volume of industrial inputs is used. On the one hand, this polarization seems to be creating conditions for the permanent economic stagnation of the small rural villages and towns and, on the other, for the channelling of the more dynamic sectors of the agricultural economy towards the cities or large metropolises, through links with the urban network of commerce and services.

At all events, it may be concluded that the rural population will maintain a system of settlement in which dispersion and the small rural village will have a relatively equal or greater weight in the distribution of the rural population, without much variation in their actual living conditions.

This conclusion merely serves to corroborate, from another angle, the view that the transformations occurring in the agricultural sector, while they might give rise to a greater economic development, seem at the same time to be causing the exclusion of vast sectors of the agricultural population in Latin America from the social and economic development taking place in the countries of the region.

# 4. The socio-economic differentiation of urban space: the precarious urban settlements

To clarify the subject of the precarious settlements, some basic aspects must be mentioned.

It is worth noting in the first place that the term precarious urban settlement refers to a group of buildings --mainly intended for housing-- constructed by their occupants with unconventional techniques and methods, on land generally occupied illegally, with deficient environmental conditions, lacking in services of

/infrastructure and

infrastructure and community equipment and inhabited by a subgroup of urban population living in a state of poverty with a high degree of insecurity and non-satisfaction as regards living standards and basic needs. It is a complex sociospatial phenomenon inserted in wider historical societal processes, generically known as social change. It is from this integral standpoint that the analysis of the precarious urban settlements and the quest for solutions to their problems should be undertaken.

It is important to note, at the same time, that the efforts made hitherto to find solutions have on the whole been insufficient and that the problem not only persists but, as will be seen, is increasing.

It must also be underlined that the so-called precarious urban settlements are not a new phenomenon; in fact, insufficiency as regards living conditions, satisfaction of basic needs, access to land, provision of services, environmental conditions, etc., seems to have been a constant characteristic of vast sectors of the urban population throughout history. Furthermore, taking society as a whole, it is certainly not wrong to contend that the indicators of the quality of life --according to the criteria of assessment universally accepted today-- have shown a clear and steady improvement.

Hence the phenomenon is not only not new, but in general terms there has also been an evident improvement, mainly due to scientific and technological progress.

What can certainly be identified as new phenomena are, on the one hand, the rapid increase in the differences between the quality of life of those who have greater possibilities of access to the benefits of the aforesaid scientific and technological development, to knowledge and information, and the quality of life of those who do not enjoy these benefits, and, on the other hand, the growing absolute dimension of those who constitute this second group, who might be generically designated as the urban poor, a term which has been adopted despite its imprecision, since it does not take into account the important differences found in this socioeconomic group within a country and from one country to another.

In fact, whereas between the 1950s and the 1960s the gross domestic product and per capita income in Latin America grew at an annual average rate of 5% and 2.3% respectively, and between 1960 and 1970 these rates were 5.6% and 2.6% and, finally between 1970 and 1977 they amounted to 6.1% and 3.3% respectively, the distribution of income was regressive, at least for the poorest 20% of the population, the share of the poorest 50% in the total income remaining practically unchanged.

Moreover, although it is true that between 1960 and 1970 the population of Latin America which lived in poverty and indigence declined as a percentage --from 51% to 40% in the first case, and from 26% to 19% in the second, it is estimated that in absolute terms this population increased in the same decade from some 113 million up to close on 130 or even 140 million.

With regard to urban poverty as such, some studies indicate that the population living in this condition in the metropolitan areas of the region amounts to 40% of the population of these same areas and grows at a rate double that of the rest of the metropolitan population. This means that around the year 2000, if this trend persists, approximately two-thirds of the inhabitants of the large cities of Latin America will be living in poverty.

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But not only economic and demographic factors affect the rise and expansion of precarious urban settlements. This phenomenon is part of the rapid urbanization of the population and of economic activities and of the accelerated growth of the metropolitan areas of the region, processes which have been referred to previously.

The most important features of the precarious settlements may be grouped according to the following criteria: a) localization in the urban area; b) social organization; c) progressive equipment; d) illegal occupation of the land, and e) use of self-help in construction and unconventional building techniques and materials.

As to its localization, the precarious settlement is normally found on land which according to traditional criteria of habitability has been considered unsuitable for residential use or which has been regarded as of little productive value in the real estate market. Hence it is a question of land which has neither infrastructure nor the necessary minimum basic services.

In the case of social organization, even though there is a great diversity in this respect, it can be said in general that these squatter settlements are distinguished from other forms of settlement by a tendency towards cohesion and solidarity and by the existence of hierarchical and functional structures defined in terms of the achievement of the objectives established by the community as regards the satisfaction of their needs. These structures are in most cases the so-called settlers' associations or territorial communities which largely perform the functions of local governments and manage the affairs of the settlement.

Contrary to what might be supposed, the equipping, the provision of basic services and the building of vehicular and pedestrian infrastructure are commonly carried out in accordance with plans generally made by the settlers' association, frequently with the assistance of professionals. These plans take into account priority criteria and are carried out progressively, considerable attention being paid to the availability of resources and manpower and to the corresponding rate of construction.

One of the most influential factors in the rise of the squatter settlements is the absolute impossibility that these social groups --given their meagre incomes and inability to save-- should obtain access to land through the existing real estate market and in accordance with the legal norms in force. Hence the <u>de facto</u> occupation of land is perhaps the feature of this type of settlement which best reflects the socio-economic and legal situation on which the phenomenon is based.

It should be noted, however, that unauthorized occupation is not the only form of access to land by the above-mentioned groups. Very frequently a precarious settlement arises with the participation of illegal land salesmen whose promises to install services are rarely fulfilled. This gives rise to the so-called "pirate lots", a phenomenon which has reached alarming proportions in many of the large cities of the countries of the region.

There is a third form of access to land, which may be termed "progressive infiltration" and which consists of gradual invasion by small groups of persons, families or even individuals who, in the course of the years, as they become aware

of the lack of reaction by the State or landlords, settle in area and often come to occupy it in conditions of truly alarming congestion.

As may be appreciated, the question of urban land and the degree of access to it of the urban poor is undoubtedly a question of fundamental importance in explaining the emergence of precarious settlements and in formulating alternative proposals for action.

A key element in the definition of precarious settlements is the type of technology applied to the construction of housing and the features of the community buildings and works of infrastructure. The basic traits are the use of the labour of the settlers themselves and of unconventional construction materials and techniques. These are gradual and cumulative processes which make use of free time and are due to the families' very limited capacity to save.

One of the main causes of the growth of precarious settlements is the process of urbanization and metropolitanization. This process had many causes, of which the following three may be termed the main ones:

- a) The characteristics of the agrarian structures of the region, among which are the land-tenure structure and the predominant technological patterns, together with the labour relations which create both relatively low monetary incomes for the majority of the population connected with agricultural activities and the low labour absorption capacity.
- b) The intensification of industrial development aimed at import substitution, which, having occurred in periods when world conditions were favourable, led to the growing channelling of investment into urban zones and to the concentration of administrative, financial, service and cultural activities, which in their turn generated favourable conditions for a new wave of concentration. The resulting economies of scale and agglomeration encouraged more concentration and especially the rural-urban migration of groups of people who believed they would find better living conditions in the cities.
- c) The technological changes of recent decades, which have created two additional phenomena:
  - i) in agricultural activity, a lower labour absorption, leading to a greater expulsion of population, and
  - ii) in industrial activity, greater productivity, the so-called "opening up" and transnationalization have led to a marked relative expulsion of labour from this sector.

Despite the strong incidence of the processes noted above on the emergence of precarious urban settlements, it should be stressed that the element which lies at the root of the phenomenon is the structural incapacity of the production systems and the urban socio-cultural structure prevailing in the countries of the region to integrate the entire population economically and socially. In fact, the figures indicate that, far from there being any signs of progress in the solving of the problems raised, the situation with regard to the living conditions of the vast majority of the poor in Latin America has deteriorated, largely owing to the insufficient generation of employment, the accelerated demographic growth and the

rural-urban migrations already indicated, on the one hand, and, on the other, to the amount of resources required to satisfy basic needs in this field, to the indiscriminate application of technologies and models of institutional and financial organization designed to represent realities different from those prevailing in the region, and to the existence of development schemes which tend to produce spatial and economic concentration.

This phenomenon, together with other socio-economic processes, has led to a state of acute social and spatial stratification in the cities, which manifests itself in the co-existence of urban situations of an absolutely differentiated social, economic, cultural and physical nature.

Indeed, the social space of the Latin American cities, especially in the medium-sized cities and the metropolitan areas, is not so much a single cultural system as a series of differentiated subsystems whose integration depends on the functioning of mechanisms of appropriation and negotiation. The marked stratification of the city as regards settlement areas, use of physical resources, provision of services, distribution of income and the fruits of development —in short, as regards the manifold dimensions of the quality of life and the environment— makes manifest the inequalities of the countries' social structures.

It should nevertheless be noted that the situation described above is not exclusively a result of the great urban concentrations. They simply emphasize the inequalities inherent in the prevailing socio-economic structures, and provide more means of exerting pressure for their modification.

At all events, the cities of the countries of the region --especially the larger cities-- contain two parallel and interrelated systems of access, ownership, use and equipment of urban land.

At one extreme there is the so-called "formal" sector, which obtains access to the land by operating within the market and making use of private financial systems in which the State intervenes, sometimes merely establishing general norms. The user acquires, according to the laws that apply in each case, either the legal ownership of the land he occupies or the right to its use through payment of a rent. At the same time, he uses the land in compliance, at least formally, with the norms established for its use and obtains the services of professionals who are expert in "modern" construction, generally at a high cost, in which use is made of imported materials or materials made locally with a high degree of imported inputs.

The "informal" sector, at the other extreme, largely obtains access to the land either by illegal occupation or by means which involve total legal insecurity as regards ownership. The user has no regard for standard techniques but resorts to labour-intensive procedures and uses materials of the most varied origin which are locally available. The importance of this latter sector is clearly established by the fact that, according to some studies made on the Latin American metropolises, the "dwellings" built by the informal sector amount to 60% of the total urban construction of these cities.

Another element which should be borne in mind in the analysis and in the proposals for alternative action in this field is the extraordinary heterogeneity of the phenomenon not only between countries and cities, but also within a single city and in the makeshift settlements themselves.

In an earlier study by ECLAC the precarious settlement was regarded as a manifestation of the survival strategies adopted by the groups marginated from the processes of production and consumption, to ensure their subsistence in extremely adverse conditions. From this standpoint, the squatter settlement can be regarded as a response to the unsatisfied demands for housing and basic services on the part of rural migrants and the poor urban strata, for which the real estate market offers no alternative except the slum.

The survival strategies applied to the precarious settlement are not only expressed in the above-mentioned new forms of association, take-over of land and use of empirical technologies, family labour and largely "recycled" materials, but also in an economic organization which has given rise to peculiar forms of domestic production, of the loan of personal services and of mechanisms of barter which replace the conventional market.

To some extent these strategies represent the counterpart of the strategies developed by the sectors fully incorporated into the urban economy, which have an exclusive character for these sectors and help to preserve the spatial segregation which characterizes the ecology of the large city.

In this connection the regulating function of the State has no practical effects for the popular sector; in fact, the current forms of intervention of the public sector are reduced to the assignment of subsidies and direct construction of dwellings for the groups which have permanent employment and a capacity for saving in relation to housing of low cost, although conceived and built according to conventional models. This type of supply remains, however, beyond the reach of the popular sector and therefore does not represent an alternative to the makeshift settlement. The lack of collective transport, of basic services and of social assistance is the result of regressive forms of distribution of the investments of basic social capital and complete the picture of margination which imposes strategies of self-sufficiency as the only viable option for the survival of the popular sector.

The unauthorized occupation of the land of others, the organization of settlers' associations, the gradual equipment of the settlement and the self-help housing construction with gradual and cumulative methods are, in fact, adaptive products reflecting a will to live and a considerable creative capacity which are not always fully utilized. The mere fact that the popular sector, also called informal, contributes the production of 60% of the urban dwellings built annually in the region fully demonstrates this sector's real capacity to change the relation of the factors of the traditional systems of production and distribution of habitational goods and services, to reduce the deficiencies of these services and

enhance the value of the elements potentially available to them. These are the conditions and capacities that should be taken into account, rather than the deficiencies observed in the squatter settlements, to appreciate the potential of the phenomenon as a positive and available social force.

How to make use of this potential within a global social scheme is one of the practical problems of greatest political importance for the future. To use the productive capacity found in the precarious settlement to maintain unjust forms of distribution of opportunities and social assistance would be unacceptable from a democratic point of view. The full incorporation of the potential of the marginated groups first requires a structural change which could not be limited to a slow process of evolution without worsening the quality of the built-up habitat and, quite possibly, without provoking an increase in violence and other manifestations of social crisis.

From this angle some elements take on special importance, and the attitude adopted towards them should be an innovative one which abandons schemes that have failed and considers solutions that go beyond the mere quest for greater financial resources, which will always be insufficient, and the use of palliatives which are generally burdensome and ineffective.

Outstanding among these elements are the reconceptualization and reactivation of the role to be played by municipal governments; the mobilization of resources currently underemployed, a task in which community participation plays a decisive role; the solution of the problems of the access of the urban poor to land and services and, finally, investigation and development of technologies more suited to the material and socio-cultural reality of each specific case.

The elements briefly described in the preceding notes indicate the social, economic and political importance of the phenomenon of precarious settlements and the urgency of thoroughly studying them and searching for ways of bringing about, albeit only partially at the outset, the increasing satisfaction of the legitimate aspirations and needs of these large sectors of population in the countries of the region.

# III. SOME KEY SUBJECTS FOR THE FORMULATION OF POLICIES ON HUMAN SETTLEMENT

The very brief description that has been given of some phenomena characteristic of the process of human settlement and of the resulting urban system, along with their interrelations with economic and social elements linked with the prevailing development styles, makes manifest the existence of a series of critical situations of a structural nature which throughout history have had an adverse effect on the quality of life and of the habitat of the population of the countries of the region.

The evidence of the persistence and in many cases the accentuation of these critical situations is a proof of the ineffectiveness of the policies and instruments utilized. Moreover, it gives cause for insisting that the measures adopted should be related to the economic, social and cultural determinants that are at the root of the problems to be solved. The structural nature of the situations referred to make it essential that the specific policies defined should, to be effective, be inserted in wider strategies of social change, and contribute to the aims of development.

In this connection some concerts already mentioned must be underlined.

From the practically universal recognition that the present crisis ——both in its general expressions and in those core related to the sphere of human settlements— is tooted in elements of a structural exture which have chronically affected the development of the countries, it is clear that the proposed solutions should go beyond the conjunctural situation, inasmuch as the way out of the crisis will by no means be found in a return to the situation existing before the present decade. Many, if not all, of the effects of the crisis will probably persist as intrinsic elements of a new reality. From this standpoint, the crisis represents a transitional stage between an exhausted socio—economic and political system and this new reality.

Hence it would be essential to consider the need for new forms of organization of city life, in place of those in force, which run counter to the alternative development scyle that will probably arise when the present crisis is surmounted.

As regards human settlements, it has become obvious that the model that has hitherto prevailed is no longer an adequate response to the urban problems of the societies of the Third World in general and of Latin America in particular.

It should be noted in this respect that one of the social consequences of the prevalent development model in the countries of the region in recent decades has been a more than proportionate increase in the consumption of the higher-income sectors, accompanied by a reduction in the capacity of the public sector to meet the housing needs of the lower-income groups.

The trends observed in the urbanization of Latin America, along with its consequences, make it a priority task to direct the aims of policies concerning human settlement, and specifically urban settlements, from the broader aspect of their insertion in the processes of social change and development.

In this connection it must also be borne in mind that the public policies concerning settlements are only a part of the total number of decisions that affect the structure and functioning of the settlement system of a country at a given point in time. In fact, the decisions taken by enterprises and families may have a greater impact than those of the public agents on the shaping of the migratory flows and on the determination of the pattern of settlement and of urban structure. These decisions depend, among other considerations, on situations of the market, on the location of natural resources and the perception of opportunities tending to have a short-term horizon; the overall and longer-term spatial, economic, social and political effects are not necessarily taken into account. The measures adopted by the public authority should, however, at least in theory, be submitted to criteria of a general and long-term nature, resulting from the application of a model of the total functioning of the social system; similarly, its action should be adjusted to the dictates of a development strategy which would lead to the achievement of global and sectoral goals and objectives.

It often happens that the decisions adopted by private agents —in terms of the speed with which they are applied, their relative irreversibility and the segmentation of the field of action they cover—enter into conflict, or at least do not link up appropriately, with the channels of decision of the public sector. The lack of communication and integration between the two types of agents hampers the foactioning of the national planning system and leads the governments into de facto situations that can only be tackled by ex post action, which calls for a continuing effort, no less burdensome than inadequate, to "solve" the problems created by private agents. This lack of integration stems in no small measure from the rigidity or the somewhat routine character of the legislation and institutionality in force.

Several of the Latin American countries have formulated, at different times in recent decades, some type of policy closely concerned with the settlement of the population, urbanization, and the structure and functioning of some large-sized urban settlements. These, however, here generally been of a sectoral nature and, as already argued, have been basically corrective of situations regarded as problematical. For example, there is the varied range of programmed approaches, sometimes endowed with solid technical bases, aimed at solving the housing problem of the large cities or making good the deficiencies in urban transport and roadways.

In some countries policies have been envisaged to counteract the concentrative trends in the large cities, for which legal instruments have been employed such as those which seek to forbid the establishment of new industries in certain places or to incentivate, through tax advantages and the habilitation of physical resources, their installation in specific regions or cities. In its turn, the agrarian sector has been the object of a series of programmes such as those of agrarian reform which, with numerous variants, have been put into practice in different countries of the region; there have also been colonization plans and projects to develop agroindustrial activities.

Notwithstanding, and even though considerable political importance has been given in some countries to the national planning of human settlements and to the protection of the environment, it is still exceptional to find overall policies of urbanization and urban development integrated in national development strategies.

It would be difficult to attempt an assessment of the policies applied, even though there is apparently a widespread dissatisfaction with their results. Indeed, the modification of the existing order of things is an extremely difficult task, not only because of the insufficient knowledge of the determining factors and the variables that affect the process of urbanization and the spatial distribution of the population, but also because of the conditions governing the forms of intervention in socio-economic and spatial affairs. The pressures exerted by the different interest groups, the institutional patterns which rule the forms of appropriation, the component of inertia implicit in the investments made, the absence of clearly defined development strategies, the seriousness of the massive deficiencies in respect of housing and services and the instability of political mechanisms, are only a few of the many elements which in most cases hamper the adoption of measures which might be something more than palliatives for problems reflecting situations of a structural nature.

Within the proposed perspective, it is understood that the policies concerned with human settlement in its widest sense must relate to the way in which this process is associated with the productive, social, political and even ideological structures. The scientific analysis of these policies should be carried out, therefore, on the assumption that they constitute norms of public conduct inserted in the global strategies of change. Consequently, emphasis must be laid on the importance of the study of the relations between the process of settlement and development, as being a priority task for the formulation, execution and assessment of policies which will form part of the planning for development.

In considering public policies on human settlement, some basic questions inevitably arise. The first of these has to do with the real possibilities of intervening usefully in such a complex phenomenon that derives from national policies of general development, employment, population, distribution of the product and social well-being, each of which has its own conceptual and operational difficulties.

Another important aspect concerns the content and scope of the policies on human settlement. If these have to reconcile in the geographical sphere general development policies and sectoral policies —for employment, income distribution, population, social well-being, etc.— it may be asked how far it is possible, with only sectoral policy instruments, to modify the trends of the location of economic activity and the spatial distribution of investments of basic social capital with a view to the deliberate creation of new concentrations of public and private investment to direct the distribution of the population.

It would also be necessary to examine the real possibilities of reorienting, in the local sphere, the housing, infrastructure and service programmes in order to adapt the allocations of the central government more effectively to the specific needs of each place. The way in which the community is organized for the satisfaction of its housing, infrastructure and service needs and the way in which these goods and services are produced are two aspects of human activity which can only be effected in contact with the specific ecological and cultural conditions of each geographical area. The national policies of human settlement could not by themselves alone offer appropriate solutions for the diverse climates, topographies

and cultures which make up the national mosaic. Thus the settlement policies contain, implicitly or explicitly, a local dimension.

In Latin America there is a centralist tradition of local administration and an inveterate custom of applying imported techniques of management of the habitat which in general do not accord with the needs and peculiarities of the population, at least of its immense majority.

This situation, which is closely linked with the concentrated and dependent development style characteristic of most of the countries of the region should not, however, be projected into the future. It would be difficult to conceive a real attempt at economic and cultural liberation without a strengthening of political participation on the level of the local community. Hence the intervention of the population in questions which directly affect their quality of life and relate to the construction and rehabilitation of the habitat is indispensable not only to ensure a balance between supply and demand in respect of housing goods and services, but also and mainly to mobilize the creative and organizational forces of the community. In this way a greater identification of the population with its habitat will be achieved —and thereby with the country— and it will also be possible to stimulate in the various communities a collective awareness of self-determination and of self-reliance, two of the conditions for an autonomous development.

The free play of local initiatives with national determinants is a major part of a real democratic structure; a policy of decentralized management of the habitat is, similarly, a complementary element of human settlement policies at national level. The degree of development of the countries of the region seems to require this local dimension, hitherto absent or very limited, particularly if it is understood that development is basically social and not only the growth of the product.

If human settlement —in the singular— is defined as the process of occupying, organizing, equipping and utilizing land to adapt it to the needs of the population, the action of the public sector will be seen as a set of deliberate interventions in the "spontaneous" course of settlement with a view to adjusting it to the strategies of development and social well-being of the country. These interventions would in this way form part of policies of territorial organization, the main element of which would be the geographical distribution of the population and of economic activity.

If human settlements —in the plural— are understood as the physical and environmental manifestations of the development process within specific geographical, historical and cultural contexts, the policies acquire a different meaning, not only as regards the scale of their field of application, but also as regards their content. From this standpoint, it would not be so much a question of interfering with social phenomena, such as migrations, for example, which are beyond local control, as of creating an environment —habitat— in keeping with the social objectives of development, controlling its quality throughout time. In this sense there would be an attempt to optimize, in a defined territorial context and with the participation of the community, the relations between the local society and their natural and cultural environment. The local interventions and hence their planning

would thus be aimed at the improvement of the quality of the habitat, with the participation of the local community in the definition of their needs, in their satisfaction through a collective effort and in the management of the contributions of the central government.

Accepting the foregoing definitions, the policies of human settlement —in the singular— will have different features from those of human settlements, in the plural. The former should aim at the organization of the national territory in terms of a particular style of development, while the orderly construction of the human habitat and the control of its quality should be the aim of the latter.

The first consequence of those initial reflections is the conceptual and practical separation of two areas of methodological work: the planning of human settlement as a basic component of national strategies of social and economic development, and the local planning of the habitat. The former relates to forms of intervention in the settlement processes; the second to the orderly construction of the local environment and the quality of life of the territorial communities. The former corresponds to the centres of national decision and has mainly to do with the State; the latter belongs to the field of competence of the municipalities and higher ranking local governments, and relates to the nation.

## 1. Some areas of specific policies

It has already been stated that the process of settlement adopts certain modalities in the region which are characterized by a strong tendency towards the concentration of the population and of economic activities, especially in the national metropolises; by widespread rural dispersion; by a scarcity of medium-sized cities; and by the precarious nature of urban settlement for a growing sector of the population.

Since the aforesaid phenomena can only be modified in the long term, in view of their origin in more global social processes, it is only the problems that are inherent in them that can be tackled by short- and medium-term settlement policies.

### a) Concentrated urban development

Metropolitan concentration is perhaps the most critical expression of the profound imbalances which characterize human settlements in almost all the countries of the region, in which, moreover, they are a practically inevitable result of the development styles involving concentration and dependence.

In fact, the large cities of the region present acute problems of diseconomies of scale, of traffic congestion, of high living costs, physical deterioration, shortage and precariousness of services, growing inefficiency in administration, alienation, social disintegration, progressive social and economic differentiation, etc., which, though they do not seem to annul the advantages of urban concentration for the population living in the metropolitan areas, have produced a widespread feeling of disquiet with regard to these large cities.

Frequently, in terms of formulation of policies, this disquiet has resulted in various proposals for decentralization, a subject on which some comments may be made.

In the first place it must be noted that the concept of decentralization cannot be indiscriminately applied. In the smaller countries, whose economic frontier has already been taken up, it would not be convenient or even possible to avoid a pattern of high primacy in the system, which in general performs like that of a metropolitan region where the main problems are concerned with geography and not with a change in functions of the units of the urban system. On the other hand, to maintain a pattern of city-state in a large country, with economically vacant spaces, would be equivalent to isolating population and resources and hence to putting an artificial limit on the economic frontier.

Hence the dissatisfaction with the high degree of concentration of the population and of economic activities in the larger metropolises could not be remedied in every case by a decentralization of functions; in other words, concentration is a relative condition, whose effects cannot always be corrected by changes in the disposition of the territory. The size of the country, its relative degree of economic integration and the characteristics of its economy are, interalia, the fundamental variables which determine the ranking of the settlements of the urban system.

Secondly, it should be noted that decentralization entails high economic costs and demands the massive and continued support of the State. Since the decentralization of economic activities requires the existence of external economies and factors of organization, capital and human resources, it is not fortuitous that the initial concentrations of industrial investment made outside the traditional centres in Latin America have been carried out by enterprises of the public sector, in isolated cases and in association with multinational consortia. Only large enterprises have sufficient capital resources to make substantial investments, the organizational capacity to initiate new activities on a large scale, and adequately qualified personnel.

It should not be forgotten, moreover, that many of the problems of the metropolises are due more to the organization of the space, the utilization of the soil and their equipment than to the size of the settlement. Many of the development problems of the metropolises and large cities are more related to the unevenness of their development than to the size of their population. What is more, this uneven development is not so much associated with the rapid growth of demand but with the capacity to meet it, which derives basically both from institutional and economic constraints on the supply side and on a lack of appropriate technologies.

There is, as a matter of fact, a series of instruments that might be used to reduce the disadvantages of metropolitan concentration through new forms of organization, reconditioning and reutilization of the space. These possibilities of change relate in particular to the systems of collective transport and communications, to the distribution of functions and services, to the rationalization of the use of space and time, to the control of environmental pollution and to the creation of new forms of citizen participation.

If individual transport were replaced by efficient systems of collective transport, problems of major importance for the quality of the metropolitan habitat might be alleviated, including the contamination produced by motor vehicles of internal combustion.

If, in addition, more rational forms of soil use and of installations were adopted, the transport situation could be improved by the shortening of journeys, the relocation of urban equipment, the decentralization of administrative activities and the redistribution of services, including those of recreation.

In this latter connection, it is important to consider strategies for decentralizing certain services towards strategic points in the districts that form part of the metropolitan agglomeration. The creation of subcentres ("cities within the city"), in which certain types of administrative services, of supply and intermediary trade, public information, collective transport and public recreational facilities, might contribute to a drastic reduction of the pressure on transport and communications, above all when urban activities have been localized without control and there are no near alternatives to satisfy many of the daily needs.

The organization of programmes for the rehabilitation of housing and services in depressed zones might be an alternative to palliate the dispersion of the population growth. In fact, the disorderly expansion of metropolitan areas largely originates in the diminished density of occupation of traditional centres and the low residential density of the newly reclaimed land. Several studies have drawn attention to the great capacity for potential population absorption which is frozen in the reserves retained for speculative purposes in the metropolitan areas.

In order to make these and other potential options possible there is however a need for a new type of administrative organization resulting in a radical increase in the power and capacity for action of the public sector in metropolitan areas and in new forms of intervention in the real estate market.

### b) The medium-sized cities

Another set of policies for deconcentration relates to the creation or strengthening of medium-sized cities, it being understood that with these measures the problem attributed to concentration of the population and economic activities would be solved by the establishment of "more balanced" territorial systems.

It is of interest to mention some of the arguments usually put forward in support of a planned action regarding human settlements of medium size:

- i) First it is postulated that the importance of the planning of human settlements derives from the need to halt the explosive metropolitan growth, with its concomitant of qualitative increases in the social costs of urbanization and the threat to its associated natural ecosystems;
- ii) Next, it is contended that medium-sized cities would be capable of sustaining forms of development --with diverse degrees of self-sufficiency-- in

peripheral regional systems, internalizing important economies of scale, external and territorial, at least sufficient to create a national territorial order implying a more homogeneous and geopolitically more stable occupation;

- iii) Similarly, stress is laid on the need to overcome the phenomena associated with the dispersion of the rural population and the dynamics of the prevalent forms of agricultural production, which would also involve an ordered ranking of human settlements;
- iv) It is contended, finally, that in the area of influence of the mediumsized cities there are more possibilities for the installation of effective systems of participation of the organized social base, a condition which is increasingly regarded as indispensable for the establishment and maintenance of democratic processes and as a basis for designing strategies and projects.

With regard to recommendations for the formulation of policies concerned with medium-sized cities, it must first be emphasized that the heterogeneity of the countries of the region imposes on the propositions made in this field the character of suggestions of a general type which will have a different validity in the different situations of human settlement.

Some basic principles for the definition of policies on medium-sized settlements are the following:

i) What is wanted is a global strategy to form a national system of human settlement that will establish the desired type of spatial articulation between population, natural resources and productive activities as a whole. This implies the designing, at least as a theoretical alternative, of a scenario involving drastic changes in the predominantly concentrative model of the present styles of development in the region, and which is based on a view of territorial organization in terms of a central objective of social equilibrium and substantial improvement in the access of the neglected majorities to the satisfaction of their basic needs. Moreover, the disposition of the territory should aim at the complete utilization of the real advantages of the countries, especially their endowment of natural resources and the rest of the factors that constitute their development potential. To achieve this it seems necessary to make major changes in the present concentrated distribution of the population and the growing trends towards metropolitanization. The current trends in this respect must also be overcome in order to escape from the spiral of increasing costs of urbanization --predominantly metropolitan-- with the ensuing deterioration in the quality of life and habitat of the greater part of the population.

In this context the settlements of intermediate size offer a feasible strategic alternative --at least in the medium and long run, which is when the major changes in the distribution of population and economic activities take effect-- for the modification of the human settlement, utilizing the present endowments of infrastructure and the economies of scale and external economies that they offer.

- ii) The elimination of the precarious living conditions of the social majorities should constitute the main objective of the policies fomenting the development of the medium-sized cities, introducing measures relating to the production of goods and services which will meet the basic needs of the social majorities, particularly in respect of the priority creation of productive jobs in the non-specialized field and in informal economies, and adopting programmes directly designed to improve the quality of life, of social infrastructure and habitat. The concrete policies should aim at an effective social redistribution of opportunities, which should also take effect through the use of methodologies for evaluating investment projects which take into account socially differentiated indicators of cost-benefit.
- iii) In the formulation and execution of policies on human settlements of medium size an important role should be assigned to the State. It is a question of reaffirming the strategic role of public policies in modifying the disposition of national social space, particularly in the subsystems of human settlements with a predominance of those in the middle range. The absence of a productive private sector with sufficient capacity, the volumes of resources needed in the major investment projects, the need for a permanent co-ordination of measures, and all the technical, professional and institutional requirements, are factors which call for more significant State involvement in the strategies for medium-sized human settlements.
- iv) To carry out an effective policy of priority for medium-sized human settlements an essential condition is an effective decentralization of government. This institutional readjustment should signify a major transfer of responsibilities from the central sectoral spheres, along with the strengthening of the local governments and the creation of regional corporations with appreciable degrees of autonomy. This calls for a national budgetary allocation which takes into account the effective priority of the regional and subregional subsystems of human settlements, on the one hand and, on the other, the establishment of the corresponding autonomy in the use of these decentralized budgets. The decentralization policies should embrace measures to put into practice effective democratic measures which fully recognize the social organizations and motivate the participation of the activating forces existing in the medium-sized settlements. A new institutional and legal framework should support these initiatives; this should incorporate various mechanisms for the social control of the decentralizing process.
- v) The activation of medium-sized human settlements largely depends on the effective recognition of the leading role of the population in the definition, execution and control of programmes and projects. The organization of the community is a key factor in the adoption of innovative methods of planning in socio-spatial contexts. A fundamental element is the autonomy of social movements as a basis for a solid participation in the entire management of programmes and projects, along with a full recognition of these base organizations as direct agents of planning. The local level ——in particular in the actual sphere of medium-sized settlements—is especially fitted for canalizing the different forms of participation into effective modes of planning.

vi) The policies of activation of medium-sized human settlements should utilize the full range of available resources, especially the non-conventional. Various considerations lead to this basic principle in the proposals for policy: chiefly, the recognition of the marked underutilization of resources known as non-conventional --certain material inputs, some specific productive techniques, popular organization itself, forms of solidary work and others-- which are absolutely indispensable in restrictive contexts of material and financial resources, which constitute the most probable future situation of Latin America. It is particularly necessary to foster the idea that a major part of the essential needs of housing and habitat of large percentages of the population in the medium-sized settlements are met by the mechanisms of the informal economy itself, which demonstrates that these procedures are supported by a considerable endowment of material resources, social organization and technologies, all of which are available to put into effect substantive lines of policy.

vii) The development policies for medium-sized human settlements should take increasingly into account the question of the protection of the natural ecosystems, so as to establish the subject of the environment as an important aspect of the planning of medium-sized settlements. The marked urbanization of fertile agricultural land, the intensive and selective consumption of non-renewable natural resources, the high degree of contamination of water and air and the notable depletion of the quality of soil, are all aspects of environmental deterioration which should have priority consideration in the planning and management of medium-sized human settlements.

## c) Rural settlements

The projection of the present situation makes it clear that the mere evolution of current trends will not reduce the contradictions and conflicts existing in rural areas. Although it is true that the growing capitalization of agriculture will undoubtedly result in a greater interchange with the metropolis, it is no less certain that this interchange will not necessarily favour the rural areas. Moreover, the changes observed in employment will continue to widen the gap which separates "modern" agriculture from the peasant sectors which depend on subsistence agriculture, especially since the employment of seasonal labour will tend to increase in the region owing to the high costs of the expansion of the agricultural frontier. The growing transformation of peasants into wage-earners and the rise in seasonal employment increase to some extent the possibilities of population concentration, but this concentration is basically one of poverty. At the other extreme, the amplification of separation between commercial agriculture and subsistence agriculture will tend to keep the rural population in permanent isolation.

This general situation creates a vicious circle for rural human settlements. Whereas on the one hand the precariousness of their equipment, the lack of marketing channels and the distance to the markets place agricultural units at a disadvantage in the exploitation of their resources, thus gradually increasing their impoverishment, on the other hand the activity of the populated centres as dynamizing agents of rural production is weakened.

The breaking of this vicious circle is probably the starting point for any strategy which aims at overcoming the deplorable conditions of the rural habitat. But it should be noted that these strategies involve radical changes in the policies of economic development, especially in relation to agricultural activities in general and rural employment in particular.

The first important option to be considered is an increase in the capacity of urban economies to absorb redundant rural labour. This option would involve major modifications in the technology applied to industrial production, which transfers the problem to the general development policies and their consequences for international trade. In present circumstances, it seems difficult to imagine major changes in this sense unless development is oriented "inwards", and even so these changes would take a long time to produce a considerable increase in the capacity for labour absorption.

A different option, but not necessarily excluding the foregoing, consists in increasing the capacity of absorption of peasant labour in the rural areas. Here there is once again a choice of two options: the large enterprise or the small one as a means of achieving this objective. In the former case there would remain the problem of maintaining a form of trade which entirely favours the metropolis. This option is linked, besides, with the expansion of seasonal employment as the dominant form of rural occupation, especially since the region is apparently passing through a stage of depletion of its agricultural frontier. The studies that have been made on the subject indicate that this form of employment will possibly predominate in the future.

In these conditions it is possible that there will be an intensification of the already observable trends towards the concentration of the agricultural proletariat in medium-sized settlements, and that the increase in the "floating" rural population that has been noted in the recent past will give rise to a certain spontaneous concentration caused by the possibilities of combining forms of urban and rural employment. The problem of low wage levels for seasonal occupation will persist, with the resulting difficulty of offering this population basic services, even assuming a substantial increase in the public sector's investments of basic social capital.

The alternative of increasing rural employment through the development of small family-based agricultural enterprises largely depends on the opportunities for intensifying agrarian reform, which, improved in respect of policies and procedures, is potentially a useful mechanism for changing the distribution of the agricultural population through an increase in its concentration.

The low indexes of literacy and general education in the rural areas, the dispersion of the population, intensified by the precariousness of rural communications, and the lack of information, will undoubtedly be adverse factors which will need to be changed before applying programmes based on any of the abovementioned options.

Whatever may be the options adopted by the countries to solve the problems of rural habitat, it should be borne in mind that the efficacy of State action must be

improved; in most of the national experiences there is a tendency to discontinue policies, along with a lack of stability in the programmes. Generally speaking, the human settlement has not formed an integral part of the programmes and projects of rural development.

Territorial planning should help to raise the efficacy of public sector intervention in the rural sphere. For example, advantage could be taken of the tendency of the agrarian proletariat to concentrate in towns of medium size in order to endow these settlements with better basic services, carry out housing programmes at a really low cost and create labour information centres to direct the location of the floating population and facilitate their shifts towards the centres of seasonal labour. In the same way, some experiences of integrated regional development might be utilized to combine agricultural planning with schemes for population settlement, in order to obtain the conditions of scale and diversification of functions which will increase urban-rural relations and offer job opportunities conducive to agricultural and industrial production. The need to define policies for the integrated development of rural areas is urgent, not only because of the importance of the rural sector but also because the improvement of the urban zones depends in the end on the form in which rural problems are tackled. If the present migratory trend continues, no positive transformation of the urban situation can be expected.

## d) Housing, infrastructure and services

The problems in this area derive mainly from a maladjustment between the growth of housing, infrastructure and service needs and the social capacity to satisfy them. On the one hand, the rapid growth of the urban population and, on the other, the limitations of resources available for investments of basic social capital, have created a gap which, far from diminishing, seems to be increasing. This circumstance is due not only to the balance of unsatisfied needs that is gradually accumulating, but also to the evolution of the nature and quality of the demand for housing, infrastructure and services and to the trend towards a rise in the cost of settlement and per capita housing.

An assessment of the experiments carried out in relation to programmes and projects in this field clearly shows that the measures adopted have been insufficient and that the goals established have not been reached. This fact makes it essential to work out policies with realistic objectives and to abandon traditional solutions which, although they may be useful in other conditions, are not efficient, as stated above, in a situation characterized by unusual rates of urban growth and a low capacity for expansion in the investments of basic social capital.

In other studies by the Secretariat the provision of housing, infrastructure and services was defined as a continuing function in which several bottlenecks can be identified. Areas of conflict could be determined such as the lack of relationship between social needs and the supplies available; the limitation of available resources in relation to the needs; the high prices of land and construction in relation to the average income of the population, and the social and geographical concentration of the supply of housing, infrastructure and services.

The production and distribution of housing, infrastructure and services are primarily conducted in the region through three types of systems: the free real estate market, the respective public sector programmes, and the informal sector.

Various strategic options can be suggested for improving the efficiency of the production and distribution systems mentioned above, but they should be conceived and applied in a systematic manner within a national framework in which the field of operation of each of these systems and their mutual compatibility are defined. The use of planning methods which indicate goals for each of these systems and assign the available resources to each of them in terms of the population sectors which they serve seems to be an initial condition for the success of any effort to improve the material quality of the settlements. Even if a solution could be found to the problem experienced by several countries in the region, in which a succession of policies, at times contradictory, has been applied, there would still be the danger of the employment of incomplete approaches as long as these problems are not examined within the context of the systems in which they are produced and distributed.

The first problem that should be solved relates to the continuity of the programmes and the integration of all the systems into the global development plans and the sectoral programmes of housing infrastructure and services.

The integration of the different systems and the determination of goals for each one calls for decisions on the method of dealing with the informal sector, whose characteristics differ substantially from those of the other two, especially in view of the importance that has been acquired in most of the countries by the direct production of the popular sector in the solution of their housing and service problems.

The quantification and qualification of the population's needs in respect of housing, infrastructure and services is naturally an essential condition for the adequacy of the supply. As has been obvious in the examination of this subject, the methods applied for this purpose are far from being efficient. There is no doubt that a greater participation by the population would be the best way of effectively ensuring the expression of these needs. There are, in fact, ways of incorporating this participation ranging from surveys and soundings of opinion to the establishment of new forms of government, in which the management of the habitat and certain mechanisms for decision-taking on public expenditure are transferred to local governments directly elected by the population and endowed with sufficient power and resources.

The problem of the technology applied to the production and distribution of housing, infrastructure and services is another critical aspect which should be gone into with the utmost care. The investigation and development of appropriate technologies is a decisive factor that can have major effects on all the systems of production and distribution, especially in the popular sector. In this sector, possibly more than in any other, there is a considerable reserve of creativity which is limited by lack of scientific and technological support.

The studies conducted on technology for human settlements indicate that practically all the technology applied to human settlements in the region has been imported from the developed countries, where it was created in response to very different economic, ecological and cultural conditions. Unsuitable technology contributes to the very high costs of construction.

It has been estimated that to provide housing and services for the population that is annually incorporated into the urban areas of Latin America ——some ten million persons on average up to the end of the century— an investment of US\$ 40 billion per year would be needed, that is, the equivalent of all the fixed investment of the region in 1970. With the costs and standards of the present day it would certainly not be possible to house this population in suitable conditions. This circumstance indicates the imperative need to rationalize existing norms in order to adjust them to national characteristics and to the real possibilities of the inmense majority of the population. Besides, there will have to be substantial reductions in the cost of construction, along with an improvement in the criteria of architectural and urbanistic design. Nevertheless, the installed capacity in respect of technological research applied to human settlement is very small, and that which exists is virtually totally oriented to the design and construction of middle—class housing.

The land problem is an absolutely central issue for any urban development policy. The occupation of the soil is not only the initial activity of every settlement process, but also the income from the land is the main factor in the constitution of the urban structure. The policies hitherto applied to control the trend towards a continuous rise in the value of urban lots above the general price index have been partial and have not formed part of an integral approach to urban development or been considered within the perspective of general development. The methods hitherto applied have been mainly restrictive and have been largely confined to the control of leasing. The application of surcharges on property has also failed to have an appreciable effect on the real estate market. In the same way, the scant efforts to recover in part the increased value generated by public investment have merely helped to raise the price of land.

At all events, the application of policies destined to curb the monopoly market and speculation has been limited to a few formulas within the vast repertory developed by the capitalist countries, not to mention other measures applied in the countries with a mixed economy. The lack of interest in their experimentation in the region raises doubts regarding the causes of the phenomenon. Some authors have stated, for example, that the reasons are linked with the structure of local power rather than restrictions of a structural nature, which keeps the subject outside the area of political administration.

It must be stressed that the solution of the so-called land problem is an essential condition for an effective urban policy. To achieve it, it seems necessary to analyse the specific form in which the real estate market operates, together with the role adopted by modern financial capital within each market. There are clear indications that speculation in urban land does not derive so much from the retention of land by the landowners --whose importance has tended to diminish, at least in the large metropolises-- as from the concerted action of consortia of promoters,

construction enterprises and financial groups which act mainly through large housing and commercial projects.

In any case, there is a series of measures that might be adopted to achieve an effective recovery of the increased value derived from the investments of the public sector, in order to channel family savings into reproductive investments, protecting them from inflation, and to regulate the real estate market through the taxation system. Direct action by the State would also be necessary for the effective control of the use of the soil and for creating reserves of land in such a way as to intervene in the real estate market. Nonetheless, this type of measure, and certainly any other, would require the creation of solid, legal and economic instruments, which entails a decided political will.

Financial resources have been traditionally regarded as the most important factor in housing production. However, the limitation of resources available to the public sector and the low average capacity of family saving keep down to very modest proportions the needs met by financial mechanisms of the public sector.

In recent decades attempts have been made in several countries to create national funds with resources stemming from the reserves of workers' pensions, but the high costs of building and of the land have hindered the expansion of the programmes and no considerable reduction in unsatisfied needs has been achieved. Another formula attempted, the system of saving and loans, developed rapidly in the 1950s and 1960s until it reached what appears to be a ceiling imposed by the saving capacity of the middle-class groups which it serves.

It should be noted that, although for almost two decades the region received external resources at a reduced cost (of the order of a billion dollars per year on average) through a programme of international co-operation, its capacity for production has not appreciably increased and the deficits have continued to accumulate.

These circumstances seem to indicate a chronic situation whose instrumental options have been exhausted and which could not be overcome without a change in the general policies of development.

## e) The precarious settlement

Any realistic projection of the situation of human settlements must recognize that, in present conditions, the precarious settlement will persist in the future as one of the main forms of occupation, organization, equipment and utilization of urban space. It is not too much to assume that this particular form of settlement will become a habitual type of city growth. It will not be possible, therefore, to continue to tackle this problem in the way it has been done hitherto.

The strategies that may be conceived in relation to the precarious settlement fall under two main headings which are not mutually exclusive: the absorption of the demands of the groups in these settlements by means of market mechanisms, and support for the activities which in this respect are carried out by the informal sector.

The first of these options requires a substantial increase both in the income of the poorer groups and in the public resources assigned to the housing sector. Even if the second condition were possible, there would still remain the first, which could not be made effective except in the long term. During this period, the situation would have intensified to such an extent that the option indicated would be practically inviable.

Consequently, there can be little doubt that the second option seems to be the more realistic. This implies, however, the recognition of particular forms of organization, the provision of legal and financial instruments to permit the local management of the settlement, investigation and development of appropriate technologies, and the establishment of forms of habilitation of land which provide alternatives to the formal real estate market.

In this context there would first have to be a permanent solution to the problem of the ownership of the land of the settlements already established and urban land would be needed for new settlements, a subject to which reference has already been made.

In the second place, it would be necessary to tackle the problem of recognition of forms of organization and equipment which frequently run counter to existing laws and regulations. This assumes, inter alia, the granting of legal personality to the associations of dwellers in squatter settlements so as to make them eligible for credit and management in the same way as other co-operative organizations.

Thirdly, it would be necessary to place land, building materials and financial resources at the disposal of the organizations in charge of the process, which assumes the allocation of additional resources of social investment or the transfer of subsidies of the type that are usually granted to the housing, infrastructure and service programmes of the public sector and which benefit other sectors of the population.

In the fourth place, the empirical technologies currently applied in this type of settlement create practical difficulties and show little efficiency in the use of the labour force, in consequence of the lack of technical renovation and of the discontinuity of construction. The investigation and development of technologies suited to the precarious settlement is an activity which should be embarked on without delay. More specifically, the policies relating to precarious settlements should contemplate five fundamental groups of subjects:

i) Community participation. There can apparently be no doubt that any sustained and systematic effort to improve the quality of the habitat must be based on popular participation, for two reasons at least. The first and most important is that one of the basic needs of a human being is precisely to participate. The second is based on the fact that, in practice, it may be a decisive factor for the execution of programmes and projects, that through popular participation it is possible to plan, decide, execute and administer programmes and projects related to the habitat which will really satisfy the genuine needs of the inhabitants, especially in reference to the squatter settlements.

Nevertheless it often happens that policies, plans and projects for such settlements are decided, designed, executed and put into operation without any consideration for the setting up of mechanisms of participation.

Frequently the planners --often unconnected with the daily life of the type of socio-spatial entity represented by these settlements-- find it difficult to understand the various types of organization that their inhabitants create to obtain participation, and much less can they promote new forms and methodologies of planning which incorporate the population in the different stages of the process.

To formulate viable policies in this field more knowledge must be obtained in relation to subjects such as: i) The prevalent forms of organization for participation, especially of inhabitants of precarious settlements; ii) the obstacles usually found in the way of greater participation, including those stemming from the lack of methodologies for participative planning; iii) the real possibilities of participation in the local politico-administrative processes, or in matters relating to the satisfaction of needs such as housing, water, light, sewerage, land, locomotion, etc.; iv) the attributes of the organizations which have shown most efficiency as instruments of participation; v) the way to promote participation; vi) the definition of the spheres of participation (e.g. municipal, by towns, by block, etc.), and vii) the need and characteristics of a structure which will link the organized participation in relation to the habitat with that exercised in other sectors of the society.

ii) The role of the local government. From the administrative-political standpoint, the local government should be set up as a fundamental agent for the assumption of the responsibility of dealing with the problems of the precarious settlements, since its proximity to the problem places it in a position of vantage.

Nonetheless, what generally happens in Latin America is that, because of the growing trend towards centralization (among other reasons), the role that the local governments play in the solution of real problems in their communities is almost negligible.

The demands of the inhabitants of precarious settlements tend to be represented in centralized bodies (ministries, etc.) in view of the political and financial incapacity of the local organizations to give them adequate satisfaction.

In many of the cases in which these organizations have been granted sufficient capacity to assume faculties which previously belonged to other bodies of a centralized type, these faculties have been exercised in politico-administrative and economic contexts which, because of their centralist nature, have blocked the possibility of their becoming valid spokesmen for the demands of the precarious settlements. As a matter of fact, the local governments have not been capable of replacing the action of the central institutions, mainly because of the marked administrative, financial and political differences pre-existing between them, which have tended to become more acute.

The local sphere being accepted as a recourse for planning --a measure of great importance for the construction of the habitat-- there must be a summary debate

on the precise capacity of the local authorities to take action on the different problems of the precarious urban settlements. This subject is often closely linked with the institutional decentralization of the planning systems and with the participative dynamics of the organized social base.

As regards the local governments, it seems opportune to analyse a number of subjects such as: i) the socio-economic and political framework as a factor affecting the action of the local governments; ii) the relation between the central and local bodies to ensure an efficient and effective local management; iii) the types of relationship that may be established between the inhabitants of the precarious settlements and the local government, and iv) the forms which the inhabitants of the settlements have developed to incorporate themselves into the management of the urban environment and the activities destined to satisfy their basic needs.

iii) Access to the land and to social services and infrastructure. It was stated above that the real possibilities of access to land are a basic determinant of the settlement process and of the socio-economic and spatial structures in which it takes place.

Indeed, one of the most important determinants of the rise of squatter settlements is the fact that it is absolutely impossible in practice for the lower-income groups to have access to land which has been adequately equipped and integrated into the social and economic sphere of the cities, by means of the market and in accordance with existing legal norms.

The various solutions that have been tried imply, with some exceptions, forms of settlement of high densities --if not of crowding-- and serious deficits of equipment and infrastructure, and have led to the ecological margination and concentration of large contingents of population in extreme poverty.

Thus it seems important to identify elements for an active land and infrastructure policy, for which it would be important to enquire into the following: i) the magnitude of the demand for land to solve the housing deficit; ii) the possible forms of creating an efficient system of access to land on the part of the urban poor; iii) technical and legal criteria and basic elements for the design of land policies, and iv) criteria and norms for the design of infrastructure policies.

iv) Mobilization of resources, employment and forms of financing. The activities aimed at the construction, improvement and conservation of the habitat or at the satisfaction of basic needs or social services are carried on by means of investments which come from the private sector (basically families) or from the allocation of part of its income made by the government for this purpose. The amount of the former is in direct relation to individual incomes, with the access that this income permits to public or private credit, and to consumption patterns closely linked to the insertion of these persons in the socio-economic spectrum. The amount of the second depends, in like manner, on the volume of governmental income, which, in its turn, depends on the productive system of the economy as a whole, and also on the predominant development style and the form adopted for the sectoral distribution of resources.

The combined effect of the general conditions alluded to above has created a structurally critical situation in which investments in housing, infrastructure and services are clearly insufficient in relation to the needs, there being also a strong tendency for this relationship to worsen. The situation described is particularly critical in the precarious settlements, where the global volume of mobilized resources is appreciably reduced.

In view of the foregoing it is essential to make new approaches to the problem which will give rise to alternative proposals for action and a definition of policies which should be based on the efficient use of personal and collective capacities and on material and technological resources at present underutilized.

In these circumstances inquiries need to be made on such topics as: the national and sectoral priority for the allocation of public financial resources for urban precarious settlements; government and private practices as regards financing systems, programmes and instruments; options for the financial incorporation of marginated sectors into formal programmes; possible alternative methods of financing for the marginated sectors; methods applied by the affected groups themselves; alternatives for the mobilization of non-monetary resources in specific lines of action, and new forms of financing and international collaboration.

v) Technology for the construction of the habitat and the provision of services. The technical elements of housing and infrastructure programmes are closely linked with economic factors and social and cultural dimensions. This is mainly because these programmes, as is known, do not relate solely to the material aspects of the habitat, but also to those concerned with the interests, aspirations, and social and cultural needs associated with the efforts to obtain a better quality of family and community life, especially as regards conditions of work, health, education and solidarity, and the perspectives of organized community action. From this standpoint the design of an effective technological policy cannot be based exclusively on the use of conventional technologies, whose costs can often not be met by those concerned and which are frequently ecologically predatory and socially disruptive.

Mainly for this reason the groups affected by situations of precarious habitat and low living standards have been developing, often without the support of experts, a set of technological initiatives which may be described as more appropriate from the cultural, financial and environmental point of view. In this respect the government bodies (central and local), the universities, the community organizations themselves and research centres have an important role to play in assessment, regularization and promotion.

The rejection of a search for alternative technologies --understood as another form of social change-- is often based on two contentions. One is that the alternative or appropriate technology can only be applied on a very limited scale; the second derives from the first, and sustains that this technology, in view of the scale of its application, cannot be "socialized" and only serves for those who operate individually in small groups.

With regard to technologies, proposals should be formulated on subjects such as: possible new criteria for the technological selection of projects of housing construction, improvement of the environment in the precarious settlements and allocation of services, along with social projects; the possibility of a mass application of appropriate technologies; the socio-economic consequences of the mass use of appropriate technology in precarious settlements, and the alternative technologies as strategies for survival and the satisfaction of basic needs.

The application of the measures which have been suggested in summary and schematic form in relation to key subjects for the formulation of policies constitutes a task which is complex in itself and of far-reaching implications. It involves a scientific challenge and calls for a new awareness on the part of the authorities and specialists of Latin America who have before them the exacting responsibility of explaining the social and economic processes while providing criteria for their modification. It is undoubtedly a question of a set of measures which transcend the sphere of theoretical and technical practice and reach a political dimension of wider range. The success of the enterprise will depend not only on the recognition of the inescapable need for the analyses to probe more deeply, but also on the no less imperative need to link them closely with the concrete problems faced by the majority of the inhabitants of the region.

#### Annex

#### DOCUMENTS USED IN THIS SYNTHESIS

- CELADE, La población y el desarrollo. Hechos y reflexiones, Santiago, Chile, May 1985, mimeographed. , Características y tendencias de la distribución espacial de la población en América Latina y el Caribe, CPRD-8/34, Santiago, Chile, 1984. ECLAC, Dinámica y estructura del proceso de asentamiento humano en América Latina y el Caribe. Principales áreas críticas, E/CEPAL/SES.20/G.13, Santiago, Chile, 22 March 1984. , Perspectivas para la planificación municipal en América Latina, E/CEPAL/ SES.20/G.12, Santiago, Chile, 21 February 1984. , La urbanización, el crecimiento urbano y la concentración en el proceso de asentamiento en América Latina. Una visión general, E/CEPAL/SES.20/G.9, Santiago, Chile, 16 December 1983. , Población, urbanización y asentamientos humanos en América Latina. Situación actual y tendencias futuras (1950-2000), E/CEPAL/CONF.70/L.4, Santiago, Chile, 10 October 1979. , El proceso de asentamiento humano en América Latina, E/CEPAL/CONF.70/L.5. Santiago, Chile, 25 October 1979. , La base material del hábitat, E/CEPAL/CONF.70/L.6, Santiago, Chile, 19 October 1979. \_\_\_\_\_, Políticas de asentamientos humanos en América Latina, E/CEPAL/CONF.70/L.7, Santiago, Chile, 11 October 1979. , El rol de la CEPAL en relación a los asentamientos humanos, E/CEPAL/IN.18. , Planificación de los asentamientos humanos en América Latina y el Caribe: teorías y metodologías, E/CEPAL/L.288, Santiago, Chile, 27 July 1983. \_\_\_\_\_, Población y desarrollo en América Latina, E/CEPAL/CEGAN/POB.2/L.3, Santiago, Chile, 13 October 1983.
- Herrera, Ligia, Los asentamientos rurales; Proyecto CEPAL/CIDA, Mexico D.F., 1979, mimeographed.
- Jordan, Ricardo, Notas introductorias al estudio de los asentamientos precarios urbanos. Santiago, Chile, October 1983, mimeographed.
- Jordan Squella, Ricardo, Sergio Galilea Ocón and Ricardo Jordan Fuchs, El rol de las ciudades intermedias en las estrategias alternativas de ocupación del territorio y de reorganización de los sistemas nacionales de asentamientos en América Latina y el Caribe, FNUAP, June 1985, mimeographed.
- Sabatini, Francisco and Ricardo Jordan Fuchs, Public Land Acquisition in Latin America, Instituto de Estudios Urbanos, UNCHS, Santiago, Chile, April 1985, mimeographed.
- Sunkel, Osvaldo, Ricardo Jordan Fuchs and Francisco Sabatini, La crisis urbana; elementos conceptuales para una aproximación ambiental, UNCHS, Santiago, Chile, September 1984, mimeographed.