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THE PROCESS OF HUMAN SETTLEMENT IN LATIN AMERICA

24 Oct 1979

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent and reliable data collection processes to ensure the validity of the findings.

3. The third part of the document provides a detailed overview of the results of the study. It includes a summary of the key findings and a discussion of their implications for the organization's future strategy and operations.

4. The fourth part of the document discusses the limitations of the study and the potential areas for future research. It acknowledges that while the study provides valuable insights, there are still several areas that require further exploration.

5. The fifth part of the document provides a conclusion and a list of recommendations. It summarizes the main points of the study and offers practical advice on how to implement the findings in the organization's daily operations.

6. The sixth part of the document includes a list of references and a list of appendices. The references provide a list of sources used in the study, and the appendices contain additional data and information that support the study's findings.

7. The seventh part of the document provides a list of figures and tables. These visual aids are used to present the data in a clear and concise manner, making it easier for the reader to understand the study's results.

8. The eighth part of the document provides a list of abbreviations and a list of symbols. This section is used to define the terms and symbols used throughout the document, ensuring that the reader can understand the document's content.

9. The ninth part of the document provides a list of footnotes and a list of endnotes. These notes provide additional information and references that are not included in the main text of the document.

10. The tenth part of the document provides a list of appendices. These appendices contain additional data and information that support the study's findings and are used to provide a more complete picture of the study's results.

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The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for ensuring transparency and accountability in financial management. This section also outlines the various methods and tools that can be used to collect and analyze data effectively.

Next, the document addresses the challenges associated with data collection and analysis. It highlights the need for standardized procedures and protocols to ensure the reliability and consistency of the data. Additionally, it discusses the importance of regularly updating and reviewing the data to reflect any changes or developments in the field.

The following section focuses on the application of the collected data. It describes how the data can be used to identify trends, patterns, and anomalies, which can then be used to inform decision-making and strategic planning. This section also provides examples of how the data has been used in previous studies and projects.

Finally, the document concludes with a summary of the key findings and recommendations. It reiterates the importance of maintaining accurate records and emphasizes the need for ongoing monitoring and evaluation. The document also provides a list of references for further reading and research.

### Introduction

For historical reasons the settlement of the population in the region adopted a pattern of high urban concentration, especially in the national metropolises, and widespread rural dispersion, with a marked absence of intermediate centres. In the course of this process there has been increasing evidence of the instability of the settlement of a large part of the population and, more recently, of the explosive growth of some settlements as a result of the concentration of investment in places different from the traditional centres.

These characteristics, which will apparently continue to predominate in the foreseeable future, have been at the same time cause and effect of major transformations in the demographic pattern, in the process of cultural change and in human ecology. Accordingly, the whole process is developing an increasing dynamism, which in some of its manifestations may provoke serious social crises in the near future.

The pattern of human settlement inherited from the colonial era, in which there was a marked concentration in the centres of collection and points of dispatch of the products for export, accentuated the primacy of the national networks or systems of human settlement during the evolution of the national States.

The centralism of these systems was again strengthened by the location of the industries stemming from the introduction of import substitution, a phenomenon which developed in the region after the second world war. Indeed, the national metropolitan centres claimed the greater part of the industry and commerce generated by the incipient industrialization.

This historical process, with its natural variations from country to country, has derived from a special development style of internal accumulation and external dependence. In those countries which have undergone profound modifications in their socioeconomic structure, the inertia characteristic of the material side of human settlements delays the perception of physical change, despite substantial transformations in the social milieu, which set their seal on the whole of society and directly affect the non-material elements of the human environment.

/Nonetheless, there

Nonetheless, there have been incipient signs of a possible decentralizing trend through the explosive growth of some nuclei which serve as support to the development of commercial agriculture, and which have attracted a considerable volume of industrial investment prompted by the expansion of metropolitan industry and the evolution of non-traditional exports. This development is connected with the new role of the State in the construction of important works of infrastructure and the setting up of basic industries, and also with the growing participation of major transnational enterprises in the industrializing process.

Both in the metropolitan areas and in the "boom towns", the sectors of the population which have no access to the land and housing market are obliged to build their own homes and provide the necessary services. These activities appear to form part of a set of survival strategies which find expression in very unusual types of spontaneous organization. The squatter settlement is a response of the marginal groups to the alternative of the slum, which is offered on the market to meet a low-income demand. Thus the squatter has come to be the normal mode of occupation, organization and habilitation of urban land by a growing sector of the population, especially in the great cities and the booming industrial centres.

Dispersion is the characteristic form of settlement for a large proportion (40%) of the population of rural areas. This population is scattered over areas of subsistence economy which have very little contact with the rest of the country. Occasionally they find paid work in commercial agriculture, especially during the periods of sowing and harvesting. They have had little opportunity of acquiring land except through the limited agrarian reforms carried out in various countries of the region, which have not always implied a guarantee of satisfactory production. Settlements a little less dispersed, of up to 20,000 inhabitants, account for 15% of the regional population, whose situation depends on the potential of modern agricultural development. The advances in commercial agriculture have led to some colonization which offers new prospects of employment to a rural proletariat that increases through migrations from the dispersion areas, a phenomenon which might produce a certain degree of concentration in view of the rapid growth of some mixed urban-rural communities.

At all events, the integration of the rural population is proceeding at a very slow pace in comparison with demographic growth and hitherto it has not had any appreciable effect on the migratory flows, which continue to stream mainly into the metropolitan centres. If this trend persists, it will be clearly impossible for the urban economy to absorb the surplus rural population. It seems unreasonable, therefore, to hope for a solution of urban problems without first solving those of the rural areas.

#### A. URBAN CONCENTRATION AND GROWTH OF METROPOLISES

##### 1. Characteristics of metropolitan concentration

It is often said that one of the most distinctive traits of human settlement in Latin America is the heavy concentration of the population in a small number of large cities. Despite the fact that the number of urban centres has considerably increased, somewhat more than three-quarters of their population lives in settlements of 100,000 or more inhabitants. This trait is common to all the countries in the region, being most evident in those which have reached a high degree of urbanization. It is noticeable, moreover, that as the urban proportion of the total population rises there is a corresponding increase in the importance of the major cities.

A particularly striking feature of this concentration is the formation of agglomerations which, in view of their magnitude, constitute metropolitan areas. This modality has been intensifying throughout recent decades, as can be seen from the fact that the population of the cities of one million or more inhabitants increased from approximately 15 million in 1950 to almost 55 million in 1970. The growth of the major cities has caused the proportion of the Latin American population resident in them to rise from 9.6% in 1950 to 20% in 1970. As the number of settlements of this size grew from 6 in 1950 to 17 in 1970, it is evident that the demographic growth which occurred during this period has already increased the relative importance of the "millionaire cities" within the total group of human settlements.<sup>1/</sup> If this trend continues, it is probable that towards the year 2000 the great cities will have no less than 220 million inhabitants, i.e., 37% of the total estimated population of Latin American at that date.

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<sup>1/</sup> See Population, urbanization and human settlements in Latin America, E/CEPAL/CONF.70/L.4.

The marked pre-eminence of the metropolitan areas in number of inhabitants is all the more striking when compared with the settlements that come next in size, which in most of the countries have much smaller populations. This can be assessed by means of a primacy index, which indicates the relationship between the population of a principal city and the combined total of inhabitants of the three centres next in line. In most of the countries there is a wide gap between the principal city and the rest, which creates a pattern of intense concentration of the urban population. This general situation of primacy has persisted through the years and in the few countries which are exceptions, such as Brazil and Ecuador, it is noticeable that the two chief metropolitan areas are considerably larger than the other urban centres.

In addition, a large number of the metropolitan areas of Latin America are national political capitals and are the seat both of the central administration and of various official and semi-official enterprises. Given the extreme centralization of government institutions in the region it is not surprising that the status of the national political capital gives rise to a considerable volume of direct and indirect employment, which has an obvious incidence on the size of the population. The importance of the central administration is clearly demonstrated in the case of Brasilia, which, despite its relatively recent origin, has become a large-scale city (around 700,000 inhabitants in 1978), whose raison d'être is to be the seat of the central machinery of government of Brazil.

Furthermore, the metropolitan areas capture a high proportion of the industrial and service activities of the respective countries. About 80% of industry in Brazil is situated in the region covered by the metropolitan areas of São Paulo, Rio de Janeiro and Belo Horizonte. In the metropolitan areas of Buenos Aires and Rosario about two-thirds of the industry of Argentina is concentrated, and considerably more than half of the industrial production of Chile and Peru is located in the chief metropolitan areas of these countries (Santiago and Lima-Callao, respectively). Similarly, no less than 40% of Venezuelan industry is concentrated in Caracas. The foregoing leads to the conclusion that a small group of metropolitan centres /embraces the



embraces the larger part of the industrial capacity of the Latin American countries. What is more, in three of them alone (Buenos Aires, São Paulo and Mexico City) more than a third of the industrial production of the region takes place.

The concentration of industrial production is associated with the presence of large-scale enterprises and private finance bodies, many of which are agencies of the transnational corporations. Thus, for example, between 50 and 60% of the finance corporations and the great industrial enterprises of Mexico and Costa Rica are situated in the Federal District and in San José respectively. In Brazil no less than 40% of the national investments of these enterprises are established in the metropolitan axis comprising São Paulo and Rio de Janeiro; a similar proportion is found in Caracas in relation to the rest of Venezuela. Along with political centralization and the concentration of industry, finance and population, there has been a considerable expansion in different types of services in the metropolitan areas. It has been estimated that somewhat more than 50% of the product and employment in this sector pertains to them. In fact, most of the services of an institutional nature are situated in the principal cities of the region, such as those which are concerned with education or health, or are associated with marketing and distribution, or have functions auxiliary to production (research, accounting, etc.). In addition to their marked diversity, these are high-level services involving higher degrees of specialization than those found in other sectors. At the same time the metropolitan areas of Latin America are noted for a multiplicity of personal services, which employ a considerable proportion of the labour force. The qualifications of those who perform these services are very varied; a numerous subgroup is engaged in what has come to be known as "street economy".

The concentrative traits of the metropolitan centres of Latin America are particularly evident in relation to individual incomes and wealth in general. Indeed, it is clear that the participation of the major cities in the generation of the total national product is greater than that of the rest of the population. A study made by CEPAL indicates that the /population of

population of six metropolitan areas has an average per capita income three times as high as the average income of the respective countries. A similar situation occurs in respect of the concentration of wealth, though it is probable that the value attached to real estate and to the industrial plant situated in the metropolitan areas makes the contrast in this case even greater than that observed in terms of income.

The distribution of income in the metropolitan areas differs from the national pattern. This difference is clearly illustrated by the fact that in the major cities the families with the least purchasing power have monetary incomes which are sometimes five times as high as in the rest of the country, as in the case of São Paulo compared with the rest of Brazil. In particular, according to the above-mentioned CEPAL report, if the incomes of the richest 5% are compared with those of the poorest 20% of the inhabitants of the metropolitan areas, the difference between these strata is less than that which applies in the country as a whole (see table 1).

It is illogical, however, to establish a direct ratio between the size and distribution of personal incomes in the metropolitan areas and those of the rest of the country, since there are great differences in the composition of the product, the sectoral participation of the labour force and the constitution of the categories of employment, especially if the cost structure of the goods and services and the consumption patterns of the metropolitan areas are taken into account. Despite the fact that in the latter the supply of goods and services per inhabitant is usually much greater than in the remaining settlements, it is probable that this is conditioned by the disproportionate consumption of the high-income urban groups. Additionally, it has been noted that, in view of their relatively high cost, food, transport and housing are items which absorb practically the whole of the income of the poor families.

Although it is true that the metropolitan areas command a very high proportion of the national resources in terms of basic services and infrastructure, it is no less certain that the distribution of these elements reveals a frankly retrogressive trend. It is usual to find the residential suburbs of the highest-income groups with the best urban services,

Table 1

LATIN AMERICA: RATIO BETWEEN THE PERSONAL INCOME LEVELS  
IN SIX METROPOLISES AND IN THE WHOLE OF THEIR  
RESPECTIVE COUNTRIES a/

	In the metropolises (1)	In the whole country (2)	Ratio (3)=(2)/(1)
Río de Janeiro	4.54	7.9	1.60
São Paulo	5.60		
Santiago	4.59	6.1	1.33
San José	5.20	7.0	1.35
Mexico, D.F.	5.20	5.8	1.12
Caracas	4.00	5.4	1.35

Source: Estimates based on data supplied by CEPAL, 1973.

a/ Income of the richest 5% divided by the income of the poorest 20%.

/while there

while there are serious shortages among the poorer groups. Moreover, as numerous studies have pointed out, the problem of urban land and the modus operandi of the construction sector are serious obstacles to the solution of the deficit in housing and infrastructure. In 1962 the value of a square metre of land was between 4 and 18 times as high in Caracas as in Maracaibo and Valencia, while the cost of a square metre of built-up land in the first-mentioned city was about 50% higher than in the rest of the country.

Consumption patterns, influenced by the mechanisms of marketing and propaganda and stimulated by credit, are also different in the metropolitan areas compared with the rest of the country. Thus, for example, statistics show that families in São Paulo began to buy private cars when their income level was only a quarter of that of the families which bought cars in Recife. This trend of consumption has a negative effect on the saving prospects of the population, as can be seen by the fact that the minimum income level at which families begin to save is 4 or 5 times as high in the metropolitan areas as in the smaller urban centres.

To sum up, despite the fact that the wages and salaries of the lowest strata in the metropolitan sectors are higher than those of the corresponding strata in the rest of each country, the cost of the basic goods and services tends to neutralize these differences. A recent study which compares the levels of prices and wages in different metropolitan areas of the world, including seven in Latin America, shows that the relation between the two indexes is frankly unfavourable for the metropolitan workers in the region.

## 2. Decisive factors in metropolitan concentration

The characteristics of metropolitan concentration in the region have deep historical roots, which have been analysed in detail in another document for this Conference.<sup>2/</sup> Many of the present metropolitan areas in

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<sup>2/</sup> See Human Settlements in the Development of Latin America, E/CEPAL/CONF.70/L.3.

Latin America have arisen from ancient settlements which already in the colonial period had political and economic pre-eminence apart from being the principal nuclei of population concentration. They operated as focal points linking directly productive areas with the central machinery of political power, constituting genuine drainage valves for the transference of market surpluses to the European powers. This linkage, functioning within the framework of a basically monoproduktive system exporting abroad, did not undergo any significant change with the political emancipation of the Latin American countries, since these continued to maintain ties of cultural and economic dependence on the centres of power outside the region.

A new stimulus to concentration began to function from the first quarter of the twentieth century as a result of the "substitute forms" of industrialization. The disturbances which affected the system of international relations, especially the two world wars and the crisis of the nineteen thirties, created a situation which led to the replacement of some imported goods by production destined to meet domestic demand. Since an important proportion of this demand, together with basic infrastructure and financial resources, was settled in the principal cities, the new manufacturing industries tended to become established in the traditional centres of concentration. Moreover, these cities were the seat of the central body of political power, which enabled the entrepreneurs to exercise a direct influence on matters of fiscal policies, tariffs, credits and salaries. They were also the seat of foreign trade organizations, which helped to guarantee the future importation of inputs.

The concentration of industrial activities and their concomitant services gave rise to external economies and those of agglomeration. This situation gradually converted the principal cities into metropolitan areas which offered corresponding advantages for the location of new industries, and these in their turn contributed to the increased profitability of investment. At the same time there was an increase in the operative efficiency of the systems of financial intermediation, thereby intensifying the accumulation of capital in these great cities. Gradually, there arose a need for investment to increase and improve the quality of the

/services and

services and infrastructure. Here the finance bodies and fiscal taxation systems operated as instruments for channelling resources deriving from primary exports produced in the rest of the national territories. Thus the centralization of the national economies was intensified, creating a diversification in the productive functions of the metropolitan areas and an accentuation of productive specialization in the other regions of the countries.

With the strengthening of concentration and the diversification of production and consumption, the metropolitan areas acquired a growing influence over the rest of the national territories. The limited employment opportunities in the rural areas, sharpened by the introduction of capital-intensive production, along with the scant dynamism of productive activities in the smaller urban centres, have reinforced the concentrative population trends through the migratory flows, which are largely directed towards the metropolitan areas. It is probable that the uprooting of the rural population has been stimulated in some countries by the defects of the programmes for agrarian reform or regional development; this population would tend to migrate to the neighbouring cities where the restrictions of the labour market would lead them to migrate again, this time to the great centres of urban concentration.

A large part of the population growth in the metropolitan areas is attributable to immigration. It has been estimated that between 25 and 50% of the total growth of the population in the metropolitan areas during the period 1950-1970 was due to these migrations. Various studies on the subject co-ordinated by CELADE lead to the conclusion that the great cities are the goals of a high proportion of migrants from other urban centres. Obviously this migratory flow is the more important in proportion to the level of urbanization of a country.

In considering the balance of the sexes among the migrants bound for the major cities it has been found that women predominate, especially when they are coming from rural areas. In addition to this selectivity by sex, it has been found that in general the migrants are young adults, among whom the women are usually younger than the men. A peculiarity in /civil status

civil status has also been observed, the proportion of married and united couples being smaller than in their home town. Another characteristic of migration to the metropolitan centres is that it comes from all regions of the country, even from the most distant parts.

The volume of migration to the metropolitan areas strengthens, therefore, the concentrative and centralizing pattern of these cities in relation to the rest of the human settlements in the countries of the region. It should be noted, too, that the contribution of the migrants is not only quantitative but also qualitative in a striking way. The human resources which are being absorbed into the metropolitan areas are in general of a higher educational level than those left behind in the areas of origin. This educational selectivity is closely related to occupational selectivity, expressed by the proportion of non-manual and non-agricultural workers, which would appear to reflect a certain adaptation of the migrants to employment possibilities in the metropolitan areas. It can be deduced from the foregoing that the absorption of the better qualified manpower accentuates the differences between the metropolitan area and the rest of the country. Recently, however, there has been a decline in the educational selectivity of the migrants to the principal cities, which might be due to the following factors: that the attraction of these areas has spread to a wider range of social strata; that educational opportunity has been increased in the countries; and lastly that there has been a relative fall in the opportunities of employment provided by the metropolitan areas, as is shown by the high levels of unemployment and marginal employment found in them.

Although a knowledge of the factors determining migration to the metropolitan areas is still fragmentary, some observations may be made which have profound implications for the demographic concentration occurring in the human settlements of the region. In general, the various studies which have been carried out reveal that the factors which have the most direct influence on this migration are the differences in income, the opportunities of employment, the prospects of improving the level of education and the contacts with relatives or friends who live in the /metropolises. Although

metropolises. Although these factors are directly connected with migration they depend on the general trends of development and the inequalities which this creates in the course of time. There is no doubt that the location of industry and the patterns of sectoral and regional development have a strong influence on the individual attitudes of those who decide to migrate to the metropolitan areas. The limited openings for employment in the rural areas, which have practically no alternative to primary production, produce forms of unemployment or of seasonal occupation of the labour force. Furthermore, the scant dynamism of the economic activities in most of the smaller urban settlements gives rise to a far from flexible labour market and little opportunity to employ additional labour.

Accordingly, the metropolitan areas have represented the best options for those who find no hope of employment or improvement in income or education in the other settlements in the region. As various studies have shown, the immigrants have been able in one way or another to integrate themselves in the metropolitan patterns of production and consumption, even though in precarious situations which force them to devise rudimentary strategies of survival. Many of these migrants move to the great city and wait a long time for more favourable openings as they find no acceptable alternative elsewhere. Thus the centralization of national development and productive specialization in the rest of the country reinforce each other through the concentration of the population and the orientation of a substantial part of the migration.

### 3. Effects of metropolitan concentration on the quality of life of the population

It is often affirmed that the metropolitan centres create subsystems of relationship and organization which have individual features in each country. There is no doubt that the pre-eminence of the metropolitan centres in the national processes of management, production and distribution, together with the heavy concentration of population, has given rise to labour relations, special forms of social organization and consumption patterns different from those in the other settlements in the region.

/It has



It has already been mentioned that, despite higher per capita incomes, the great majority of the inhabitants of metropolitan centres find themselves obliged to allocate a considerable proportion of their monetary resources to the satisfaction of basic needs. In contrast, the higher-income groups adopt consumption patterns similar to those of the upper classes of the more developed countries. An example of the contrast between the two groups is given in a study by CEPAL where it is estimated that 5% of the families with greater purchasing power spends 42 times as much as the poorest 20% on items connected with health, education, recreation and personal care. By their very nature, concentrations of the metropolitan type generate housing, infrastructure and service needs not only in greater quantity than in the smaller centres but with qualitative differences in the supply. In other words, apart from the higher costs implicit in the expansion of population, economy and space, there are the further costs of development involved in the transformation of the supply of land, construction and networks.

The administration of the land in the metropolitan areas is usually affected by forms of speculation which results in the exclusion of the lower-income sectors from the housing market. In practice there has been a transference of capital from the productive sectors into real estate, where investment risks would appear to be minimal, since the appreciation of the land is guaranteed by a process of commercialization involving both absolute and differential rents and the costs of financing, publicity and in many cases construction. Obviously these speculative practices place even greater restrictions on the poor sectors, which are obliged to establish themselves in the outskirts of the great cities in squatter settlements without services and situated in less expensive areas.

Another aspect of the quality of life in metropolitan centres which is also related to the differentiated social use of spatial structures is transportation within the city. It has been estimated that motor-cars occupy around 85% of the public roads and carry only 15% of the travelling public. The remaining 85% travels in forms of collective transport such as omnibuses, for which only 15% of the road space is left. Road construction represents a form of creation of spatial structures of which the cost is

/defrayed by

defrayed by the whole society, but since its social use is clearly differentiated, these works are one of the many forms of subsidizing the higher-income groups. The effect of the limitations placed on collective transport is the congestion of the central roads, which prolongs the travelling time of the great majority of the population and consequently the working day of those who are obliged to travel in omnibuses. (In São Paulo, Rio de Janeiro and Mexico City travelling times of up to four hours have been recorded.) Another effect of the use of the motor-car on the quality of life in metropolitan centres is the increase in air pollution and noise.

The number of cars in the metropolitan areas has increased at a rate which doubles and even trebles the growth rate of the population. This growth rate is largely explained by the fact that the higher-income groups now own not only one vehicle per family but one for each member of the family. Moreover, the expansion of road space has grown at a much lower rate, as is seen in the case of Caracas (see table 2). What is more, the increase in the number of cars has caused the physical expansion of the metropolitan centres, contributing to the rise in the profits from real estate capital and causing greater pressures on the public sector, which finds itself obliged to channel its investments into networks which serve only a very small proportion of the metropolitan population. In other cases an attempt has been made to cope with the problems of congestion by the construction of costly underground railways, which, however, do not seem to have affected the circulation of cars, since the users of the underground railways are generally the middle-income sectors of metropolises. Finally, the increase in the number of metropolitan cars has been largely responsible for the increase in consumption of petroleum products.

/Table 2

Table 2

VENEZUELA: VEHICLES IN CIRCULATION AND EXPANSION OF THE ROAD NETWORK IN THE METROPOLITAN AREA OF CARACAS

Year	Number of vehicles	Growth rate	Paved roads (km)	Growth rate
1968	210 845			
1969	241 795	15.0	30 433	
1970	266 443	10.0	31 906	4.0
1971	312 894	17.0	31 990	0.3
1972	333 228	6.0	31 918	0.2

Source: Ministry of Public Works (MOP), Department of Land Transport.  
Memoria del Ministerio de Obras Públicas, Caracas, 1973.

/To sum

To sum up, various factors contribute to the reproduction of social and economic inequalities in the metropolitan areas: the social uses of metropolitan space, the retrogressive distribution of services and infrastructure, the structuring of different patterns of consumption and social organization of production, and the emergence of different styles of culture. These are the elements which constitute the effect of the great urban concentrations on the quality of life of their inhabitants. Many of the situations which are customarily defined as "critical problems" of metropolitan populations are merely expressions of those inequalities which, though present in one form or another in human settlements in general, are more marked in the areas of concentration. There are also other aspects of intervention in the natural environment which have an undeniable impact on the quality of life of metropolitan residents and which could be tackled by policies of urban rationalization. This applies, for example, to the damage done to vegetation - through the effect of indiscriminate speculation in the urban land - or to the contamination of air and rivers as a result of the unsuitable location of certain industries which do not take protective measures, or of the deficiencies of the sewage disposal systems. The most serious aspect of this is that all these phenomena, which are closely linked with administrative processes, generally result in an intensification of social inequalities.

/B. CENTRES

## B. CENTRES OF EXPLOSIVE GROWTH

The notable growth of the urban population in Latin America during recent decades is one of the most striking features of the changes which are taking place in the human settlements in the region. A large part of this growth, in absolute terms, has been absorbed by the metropolitan areas, while another portion of the increase represents the statistical reclassification of small nuclei in the category of urban centres. Thus there is a noticeable trend towards the polarization of human settlements: on the one hand, the concentration of the population in a few large cities and on the other, the demographic dispersion among a growing number of small settlements. In consequence of this modality of distribution there is a relative dearth of cities of medium size.

Nonetheless, there are certain agglomerations which, although they are less important in respect of size, are qualitatively significant and may lead in the long run to a new modality of concentration outside the traditional metropolitan areas. They are what are called centres of explosive growth or "boom towns". This denotes those urban localities which have been created or incentivated to promote the decentralization of industrial investment, or the utilization of particularly attractive natural conditions for tourist purposes, or as a result of the transformation and modernization of agriculture. In some instances it is a case of boosting settlements which already exist; in others it takes the form of deliberately establishing new urban centres. Both cases involve modifications of the original productive structure which give rise to dynamic forms of activity and to population growth rates which are exceptionally high (very much above the national averages, at least for a certain period).

The category of boom towns does not include those localities which develop on the immediate periphery of the great cities, forming satellites of these or modalities of decentralization which become part of the spatial expansion of the metropolitan areas. An example of this kind of growth stemming from the location of basic industries in the metropolitan areas is the Petrochemical Complex of Camaçari, in the Reconcavo Bahiano (metropolitan area of Salvador in Brazil). However, these developments

/will not

will not be included among the "boom towns", since they are considered manifestations of metropolitan concentration.

1. Characteristics and modalities of the boom towns

In their initial phase the boom towns generally experience a very rapid rise in population, which slackens subsequently, once a certain size has been reached. This depends on the volume of the needs imposed by the industries operating in these settlements. In many cases during this first phase of expansion, the rates of demographic growth exceed 10%, as a result of which the population doubles in a matter of five to eight years. It is probable, however, that after this initial impetus - which in some cases lasts less than a decade - the growth rates diminish to about the average recorded in the other settlements of the same size in the respective countries.

Most of the population growth in the initial phase is due to immigrants, consisting mainly of young people of working age, a circumstance which brings about an age structure very different from the pyramid formed by the total urban population of the country. In the case of new settlements deliberately created in response to a decision on location of investments, this migratory flow is usually composed of men who are unmarried or temporarily separated from their families; they lack special skills and take part in work connected with the building of houses and infrastructure, and they live in shacks of a temporary nature (encampments). Later the immigration of labour tends to become more varied, with the increasing need for workers with more diversified skills relating to the nature of the activities taking place in the centre, although the irregularities in the distribution of age and sex will continue for a long time. Many of those who took part in the building operations during the initial phase and who did not obtain permanent employment continue living in the centre and developing survival strategies characteristic of the squatter settlements.

This pattern of evolution of the boom towns is a very general formula which will naturally vary according to the nature of the factors determining the rise of each centre. Thus, for example, it seems that

/the factor

the factor of initial expansion is less marked in the settlements connected with agriculture than in those concerned with industry or tourism. Existing knowledge on this type of settlement is still very fragmentary, so that the descriptions which follow are essentially hypothetical, based on the analysis of some actual cases carried out as part of the HABITAT CEPAL/CIDA project, and also on current research in CEPAL and CELADE.

Outstanding among the boom towns are those arising in agricultural areas which have experienced major changes as a result of the establishment of capitalistic enterprises. Although a usual feature of these enterprises is low-density occupation, their employees generally receive remunerations which are comparatively higher than those of workers in other forms of organization of the agricultural and livestock industry. Moreover, the implantation of these enterprises creates a model of economic and spatial structure which acquires the character of a genuine enclave. This is the case, for example, with the great tropical plantations, with cultivation systems oriented to export or, to a degree by no means negligible, specializing in products which constitute inputs for industrial activities. Since this type of production is not destined to satisfy local demand many of the commercial and financial links are established directly with urban centres, which are larger and more diversified than the traditional rural settlements. Similarly, since the demand for goods and services of the workers in these enterprises cannot be satisfied by the limited supply of the small rural localities, it is channelled towards the urban centres. In addition, owing to the introduction of capital-intensive technologies and the specialization in crops, it is probable that these same centres become points of "refuge" for the floating population which carries out seasonal agricultural work.

In this way the capitalistic transformation of agriculture is combined with the strengthening of some few settlements relatively far apart, which take on the character of boom towns. These settlements act as centres of service and redistribution; their population, once the initial stage is over, is often less than 100,000 inhabitants or even less than 50,000. An example of this is Santo Domingo de los Colorados, on the coast of Ecuador, whose population grew at a rate of 13.7% between 1960 and 1970.

The existence of concentrations of this type have been discovered in areas of recent penetration, where the opening of the agricultural frontier has followed the rationale of capitalistic enterprise, as in the case of some places in Goiás, the Matto Grosso and the North of Brazil, in the High Western Plains of Venezuela, in coastal sectors of Ecuador and in some regions of Colombia and Panama. Frequently the demographic concentration in these centres becomes an element of attraction for the location of agro-industrial enterprises. A good illustration of this is Imperatriz (Maranhão), in Brazil, which grew between 1950 and 1960 at a rate of 22.4%, continued at a rate of 14.4% in the following decade, to reach around 35,000 inhabitants in 1970.

A second group of boom towns originates in the siting of industries at a distance from metropolitan centres. In their occupational structure there is a marked incidence of the secondary sector and a gradual expansion of employment in the commercial and service sectors. Usually the decisions on the location of investments, which are behind the creation or stimulation of these centres, are in line with projects defined by the State with a view to decentralizing industry or generating intermediate goods with natural resources which have been insufficiently developed. In some cases the State participates directly as the sole or majority promoter of the establishment of complexes of basic industries (iron and steel, metal processing, petrochemistry, oil-refining). In others, the State takes part by offering special facilities in the field of taxation, credit and tariffs or providing the basic infrastructure to promote the establishment outside the metropolitan areas of assembly industries (electronics, motor-vehicles) which are controlled totally or partially by the transnational enterprises.

The activities in the new industrial centres form part of entrepreneurial complexes which usually extend beyond the boundaries of the domestic markets and are obviously directed to a demand originating outside the area where they are situated. Indeed, most of these centres form enclaves within the individual countries and the enterprises which operate in them seek their links outside these areas, especially in the metropolitan centres. Although the effort involved in the geographic shift of activities which

/normally take



normally take place in the traditional concentrations implies high costs - given the need for capital accumulation and trained manpower - the shift itself tends to have very little effect on the areas concerned. This happens despite the emergence of an urban market, formed by employees with per capita incomes higher than the national average, which would represent in principle the creation of a demand for agricultural products (especially foodstuffs) and consequently a powerful incentive for the expansion of agricultural industries of some coverage. Nevertheless, various studies show that these expected results do not materialize, at least in the short run.

Table 3 gives some examples of boom towns based on industry. One of the cases most frequently mentioned in studies on regional planning is that of Guayana City in Venezuela, which is a settlement deliberately established by the State through the Corporación Venezolana de la Guayana in an area of scant agricultural potential, situated more than 500 kilometres from Caracas, which was practically uninhabited up to the 1950s. The objectives pursued tended in essence to stimulate national economic growth through the exploitation of natural resources in the area not utilized before (iron, aluminium, hydroelectric power), in order to provide a diversification of exports. The use of basic resources through an industrial iron and steel complex contributed to the rapid economic and demographic growth of Guayana City, which had a population of over 150,000 in 1970. Its orientation towards an external demand, however, has had only slight repercussions on the surrounding territory, so that it has created a situation of extreme primacy in that zone.

Another case of a different type is the city of Arica in Chile, situated 2,000 kilometres from Santiago in a desert region near the frontiers of Peru and Bolivia. Towards the end of the 1950s the Central Government decided to confer on this city the status of "free port" in order to promote its expansion. The initial effect of this resolution was a considerable expansion in commercial activities directed to capture the demand of the population resident in the central regions of the country. Subsequently the State invested large sums in infrastructure and basic services, at the same time bringing into effect a special statute of tax and tariff guarantees designed to promote the setting up of industrial

Table 3

LATIN AMERICA: SOME INDUSTRIAL "BOOM TOWNS" BETWEEN  
1950 AND 1970.

City and basic industry	Population in 1970	Growth rates	
		1950-1960	1960-1970
Puerto Medryn-Trelew (Argentina) (Shipyards, aluminium)	72 900		7.3
Chimbote (Peru) (Iron and steel, fishmeal)	157 338	13.4	9.3
Ciudad Guayana (Venezuela) (Iron and steel, aluminium)	153 540	21.9	16.7
Punto Filo (Venezuela) (Oil-refining)	55 483	10.9	23.4
Poza Rica (Mexico) (Oil-refining)	132 600	-	21.1
Coatzacoalcos-Minatitlán (Mexico) (Oil-refining, petrochemistry)	147 300	6.8	6.7
Lázaro Cárdenas (Mexico) (Iron and steel)	138 150	5.7	6.9
San Pedro Sula (Honduras) (Agro-industry, paper pulp)	148 082	9.9	7.6

/activities. As

activities. As a result of this policy, Arica gradually became the seat of assembly plants, especially motor-vehicle and electronic, which benefited from tariff exemptions for the import of inputs. In some of these enterprises there was joint participation by the State and multinational associations, many of them directing their products to the domestic market, which was mainly situated around the metropolitan area of Santiago. When the special concessions and exemptions were restricted many of these enterprises, especially the motor-vehicle plants, reestablished themselves in the central region of the country.

In spite of the obvious differences between the two cases cited above, the process of change in the settlements followed the trends already mentioned (an initial stage of explosive demographic growth which then slowed down), although Guayana City has had a more sustained and dynamic phase of expansion. Both cities received considerable flows of in-migration consisting of skilled workers, technicians and executives coming from their respective metropolitan areas, and of a large number of poorly qualified people from other parts of the country where employment opportunities were lacking. In both cases the changes referred to above took place in age structures and occupational profiles. Despite the partial character of these data it is probable that they can be extrapolated to other situations where boom towns with an industrial base have arisen.

A third type of boom town is connected with the expansion of tourism in some parts of the region, particularly in islands or along the coast. In these cases the tendency has been to take advantage of certain natural attractions through the development of hotels and places of recreation. There are numerous examples in the Caribbean countries where tourist activities are mainly directed to the North American and European markets. These activities are usually controlled by foreign enterprises which own or administer, through different types of agreement, the principal hotels and marketing and transport networks, which usually reduces the revenues that the countries could obtain direct from tourist development. Considering the type of activity it is not surprising that these towns should have a lineal type of structure with segregating uses of space and that in many cases sharp contrasts are produced between the luxurious installations

destined for the tourists and the precarious environmental conditions of the permanent inhabitants of these towns. These contrasts are also found in the sphere of employment and income, since the higher-ranking posts are normally held by foreigners, while the national workers do the less skilled and less important work.

The investments made by the State in infrastructure in the tourist centres are apt to be extremely onerous for some national economies and involve the reorientation of public resources to cater for a floating and seasonal population which, as mentioned above, is normally foreign. An example often quoted is the tourist centre of Montego Bay in Jamaica, where a costly international airport has been built although there is another in Kingston. Various parts of Mexico have also felt the effects of tourist invasion, a typical case being Acapulco, which, after experiencing a growth rate of 14% in the period 1960-1970, achieved a population of around 175,000 in 1970.

To sum up, the boom towns seem to be a feature of qualitative importance in the Latin American countries. Although similar cases have been noted in other regions of the Third World, they do not acquire the same intensity and frequency as in Latin America. This form of growth presents particular features according to the type of settlement: (i) urban centres closely linked with agricultural modernization; (ii) industrial centres created by public investment, or private investment with official incentives, especially in the basic and occasionally the dynamic industries; and (iii) centres devoted to tourism, especially of an international type. Obviously this list is incomplete, as situations exist in which different activities combine to create a boom, as has occurred, for example in Puerto Presidente Stroessner in Paraguay owing to the expansion of the agricultural frontier and the building of the Itaipu dam. Something similar has taken place in the Rio Negro valley and in the expansion of the city of Neuquén in Argentina. There are also signs of similar results from the establishment of commercial networks connected with transnational enterprises interested in expanding the domestic market for their products, as would appear to be occurring in Brazil with the promotion of subnational distribution networks.

/Although the

Although the change introduced by the emergence of these centres might be interpreted as designed to produce an "equilibrated" territorial development through the expansion of urban settlements of medium size, their repercussion on the subnational territories is very slight. Some concrete cases <sup>3/</sup> were analysed in the HABITAT CEPAL/CIDA project by means of the experimental application of a formal descriptive model (CEREX), which provide some background data for the assessment of the decisive factors and results of explosive growth.

2. The boom towns and their effects on the quality of life of the population

The boom towns arise in some areas relatively distant from the centres of metropolitan concentration as a result of the intervention of various elements of change, which can appear in isolation or combination. Among the more usual factors are agricultural modernization, the intensification of import substitution, and the exploitation of tourist resources.

As regards the centres based on industry studied in the HABITAT CEPAL/CIDA project it has been possible to identify some more specific agents determining the rise and evolution of this modality of settlement. Their recent emergence in Latin America seems to be due to the "substitution" of imports and the increase in exports, activities undertaken by the State in isolation or in conjunction with transnational enterprises. The expansion of manufactures situated in the metropolitan areas gave rise to an increased demand for capital goods and intermediate products, whose production could not always be established in those same areas because of the particular location of primary inputs and certain needs such as electricity. The greater profitability of the exploitation of natural resources required by industry, the availability of low-cost labour and the existence of a barely utilized energy potential made it advantageous to set up basic industries in places relatively far from the metropolises. Moreover, the participation of the State in the provision of infrastructure or the granting of special concessions was an added advantage in cases of this type.

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<sup>3/</sup> Poza Rica, Lázaro Cárdenas and Coatzacoalcos-Minatitlán in Mexico and in less detail, Guayana City in Venezuela and Puerto Madryn-Trelew in Argentina.

The combination of the above elements ensured the profitability of new and relatively large investments which contributed to the mobilization of part of the accumulated capital, together with the mechanisms of organization and trained manpower coming from the metropolitan areas. Thus the centres in which the basic industries are set up begin to function as enclaves in the subnational territories. Their most frequent contacts are established within the industrial sector of the metropolitan areas or, alternatively, are made direct with the external market. The direct or indirect participation of the State in the promotion of these centres is based on national political objectives such as the increase of the economic growth rates, the improved utilization of natural resources, and geopolitical strategies of land settlement and national defence.

In view of all these factors a process of socioeconomic and spatial organization emerges which materializes in the structuring of a new form of human settlement. Sometimes this process takes place in previously settled areas, whereas at other times it occurs in totally virgin territory. Even though these situations are different at the outset, it is possible to make some generalizations about their results.

In the first place, there is a marked specialization in the activities of the settlement compared with other centres in the national system. Usually the industrial pivot is a major enterprise, which sets a seal of vulnerability on the town, since it is subject to the vicissitudes of the development of this enterprise. In addition, the hegemony of the central industry is associated with a pattern of social stratification which follows the line of the technical division of labour and affects every aspect of the life of those who live in the settlement, thus creating a situation similar to that prevalent in the "company towns", or encampments, established by the large transnational enterprises for the exploitation of mining resources.

A second feature common to the boom towns based on industry is the formation of a very distorted employment profile as a result of the productive activities of the dominant enterprise; at the same time there are very high rates of unemployment. In describing the characteristics of these settlements reference was made to two phases in their demographic

/evolution which

evolution which affect the employment pattern in the centres and determine their variations. During the first stage the main task is the setting up of the industrial infrastructure, for which two different groups of workers are required: teams of technicians and skilled workers on the one hand and unskilled labour for the building operations on the other. The second stage marks the entry into production of the industry, which implies the gradual departure of the building technicians and their replacement by other teams concerned with the production processes; workers with different degrees of skill are also incorporated. The transition between these two phases is usually too sudden to allow for the training of the labour force engaged in the building process, which results in their exclusion from the productive process. Thus the boom towns become nuclei of unemployment or underemployment and persist as such for a long time. Moreover, during the phase of initial production and consolidation of the industry the centre becomes a magnet for migrants attracted by the needs of the population for commerce and services, a circumstance which gives rise to another source of unemployment or underemployment. These conditions are exacerbated by the vulnerability of the central economy, so that the labour situation becomes increasingly precarious and unstable in the short and medium term.

A third aspect of these centres of rapid growth based on industry is a set of interrelated factors: the lack, often acute, of infrastructure and services, a chronic dearth of housing, insufficiencies in communal administrative arrangements, high indexes of violence and criminality and serious deficiencies in various forms of organization. In general there is a marked imbalance between the pace of demographic growth and the supply of the necessary physical installations, which because of their magnitude imply costly outlays which can only be partially met by the enterprises that have introduced the industry. The result is a high degree of insecurity in the town, which does not provide even minimal conditions for the well-being of the people. The situation is aggravated by the variable inflows of migrants which hamper the development of efficient forms of planning. In addition, in many of the places analysed there are houses which are permanently unoccupied, either because their prices are very high in relation to the income levels of the population, or because their

/designs and

designs and locations do not conform to the sociocultural and environmental conditions. Frequently the work of the State in this field has been far from flexible and noticeably slow. Furthermore, the industrial enterprises invest in housing and services for the sole purpose of meeting the collective needs of their workers.

The aspects described above are due to the lack of community administration and forms of social organization, the effects of which are not offset by the paternalistic attitude of the enterprise, which is inspired by a strategy designed to suppress conflict. Thus the use of the urban land has a spontaneous character which, through lack of a clear-cut plan, can only be described as chaotic. The absence of regular procedures and precise rules has produced decisional styles which reflect improvisation and carelessness, especially in view of the possible effects of some decisions for the future. As a result, many settlements have developed in a far from organic style, which hampers the provision of infrastructure and services. These centres are also affected by speculation in land and buildings. On the other hand, the participation of the population in local administration is obstructed by the predominance of the leading company and by the prevalence of the transient encampments of immigrants.

In brief, there is a clear preponderance of the squatter settlement as a form of occupation, organization and equipment of the residential areas, where the population devises rudimentary survival strategies, which possibly indicate a standard of living even lower than that of the marginal areas of the traditional metropolitan cities.

A fourth effect of the evolution of the industrial boom towns on the quality of life is the contamination of the environment. As mentioned above, many of these centres are created through the establishment of basic industries such as iron and steel, cement, petrochemistry and cellulose, in which the indexes of air, water and soil pollution are usually reported to be the highest in the industrial sector. The less effective the measures of control and prevention of waste discharge and effluvia, the higher will these indexes be. Control measures of this type are not usually applied in the boom towns, thus causing not only conditions of discomfort but also very high risks of disease. The effects of the pollution are naturally

/greater in



greater in the centres themselves, where they are combined with noise and disagreeable odours, but they are also felt in the surrounding areas, affecting the population and other types of activity. The characteristic effects of industrial contamination are obviously accentuated by the dearth and deficiency of infrastructure, such as the non-existence of sewage treatment plants and the lack of a piped water supply for a large part of the population.

As a fifth aspect, a further reference may be made to the slight relationship between the boom towns and the surrounding area, on which they normally have no dynamic effect. Nor do the surpluses of the high-productivity industries appear to benefit the populations of the surrounding towns and their potential spheres of influence. In fact, the establishment of the basic industries has not fostered the development of the neighbouring areas, but has tended to strengthen the effects of the traditional nuclei of concentration and to intensify the inequalities and heterogeneity within the individual countries. Indeed, the companies which have established themselves outside the metropolitan areas, profiting by the absolute and relative advantages of location described above, maintain a functional dependence on the administrative headquarters in the metropolises or on the representatives (affiliates) of parent companies outside the country. The greater part of the food inputs, services and other consumer goods comes directly from the metropolitan areas, which causes a modality of "interregional import" of products which produces much higher living costs for the population of these enclaves than for that of the largest cities. Despite the fact that the workers directly associated with the industrial enterprises appear to receive incomes above the national averages, the increased cost of goods and services, sometimes induced by monopsonic relationships in trade and transport, neutralizes these relative benefits.

It must be recognized also that in some cases the boom towns are located in areas which are not in a position to respond to the demand which they create. This happens when the industries are set up in subregions which lack ecological conditions suitable for agriculture or when the predominant activities in these territories are subsistence

/agriculture or

agriculture or plantation régimes concerned with export. A final point is that in many cases the irruption of the boom towns takes place in such a way that it dislocates the earlier pattern of settlement.

A sixth aspect of the effects of these dynamic centres concerns their evolution and gradual assimilation into the national settlement network. It may be that after a relatively long period of activity these industrial centres tend to become like other centres of similar size in the same country.<sup>4/</sup> This happens, for example, with the age and sex structure, the employment profiles and the physical-spatial physiomy, all of which gradually approximate to the pattern of earlier settlements. This observation, however, is only tentative and will obviously depend on the dynamic of other activities which might develop outside the orbit of the industrial enterprise that created the centre.

The foregoing observations induce speculation as to the importance of the boom towns, especially those with between 50,000 and 100,000 inhabitants, in their character of potential settlements of medium size and mechanisms of articulation in the national territories. It may be sustained as a hypothesis that these centres could be the means of incorporating new populations in certain forms of production which depend on the exploitation of basic resources which have been barely utilized in the past. Nevertheless, it seems evident that to obtain such objectives it will be necessary to introduce substantial changes in the present processes and trends. Only by redefining the modus operandi of the development agent, whether this be directly or indirectly controlled by the State, will it be possible to apply guidelines for regulating the evolution of the centres and their relations with the surrounding areas. The fact that this did not happen in the exceptional cases in which the settlement was planned at the same time as the industry was established (as in the case of Guayana City, before the central agency created SIDOR, the iron and steel enterprise

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<sup>4/</sup> This has been the case with Poza Rica, Chimbote and the eastern shore of Lake Maracaibo.

which controls the leading industry), constitutes an admonition to undertake a study of the methods used, their critical assessment and a search for alternative procedures.

In the course of this document it has been shown that the character of indisguised enclave adopted by the boom towns results from the way in which they are created, which in its turn obstructs the propagation of dynamic effects in the surrounding areas. Most of these limitations are due to the specialized nature of the industry. One way in which the boom towns might have a positive influence on their surrounding areas could be the economic diversification of the centre, together with the planning of complementary activities which could be set up in these areas. This would foster a decentralized modality of economic growth which would maintain the attributes of concentration. Obviously this spatial rearrangement of the economy does not necessarily imply the eradication of social inequalities, but even so it is doubtful that the political situation would permit the application of such a strategy. It appears that the boom towns still represent a very elementary modality of decentralization if they are compared with the processes which have recently sprung up in the areas of influence immediately surrounding the metropolitan centres, as illustrated by the relatively diversified "industrial corridors" linked with São Paulo, Mexico City and Buenos Aires.

C. RURAL DISPERSION

In spite of the magnitude and pace of urbanization in Latin America during recent decades, the rural population is still predominant. In 1978 approximately 53% of the regional population lived in rural areas, creating in some cases a pattern of dispersed settlement consisting of thousands of hamlets and small villorrios and, in others, concentrating in numerous larger villages and towns, some of them of a mixed rural-urban type.

Despite the importance of the rural habitat for the region, the Governments have concentrated their attention and effort, and the research-workers their interest, mainly on the urban areas. In recent years there have been many works on urbanization and its consequences, frequently neglecting the study of those factors which affect the dynamics of the rural settlements and the exodus of the population from the rural areas, together with the measures taken by the governments to cope with these problems. A factor contributing to this situation has been the shortage of information on the location of the population at this level of disaggregation and on agricultural activity and rural development.

This same shortage has led us to deal with this problem in an indirect way. After analysing the background of rural settlements and suggesting the decisive factors in their formation, the changes which are occurring in the agricultural and livestock sector are reviewed in order to deduce from these the transformations which will take place in the rural settlements.

Among the aspects of the organization of agricultural production in the region, both the traditional productive structures and the present transformations in the sector have been reviewed. It is thought that, since the settlement of the rural population developed in accordance with these traditional modes of production, the agents of change - whether they come from the same agricultural sector or from others - must recognize that these traditions will have a continuing effect on the future development of the settlements.

/1. Chief

1. Chief characteristics of rural settlements

Rural and mixed rural-urban settlement is at the present time the predominant mode of settlement in Latin America. Its chief ecological and demographic traits are as follows:

(a) The supreme importance of the dispersion pattern of settlement, which accounts for more than a third of the population.

(b) The marked predominance of the population dispersed in hamlets and villorrios over that which is concentrated in small towns and villages, a circumstance which in most cases reveals the weakness of the rural settlement networks owing to their distance from the dynamic centres and their deficient lines of communication.

(c) The loss, since 1950, of practically 65% of the natural growth of the rural settlements, through the transfer to the larger towns and urban centres of over 58 million people, an indication of the extent of rural deterioration during the past decades.

(d) The stagnation of the mixed rural-urban settlements, country towns and villages which represent about 15% of the total population and a quarter of the non-urban population of the region, together with a slight loss of their natural growth to the larger cities. Their character as bridge between the rural areas and the urban system suggests that they have a continuous turnover of population, their being on the one hand an inflow mainly from the dispersion areas, and on the other an unceasing outflow to the metropolitan concentrations.

(e) The trends observed in rural settlements during recent years, together with the rapid pace of urbanization, which suggest that the drain of the rural population into the urban areas will continue unchanged in most countries during the remainder of the century. Only Uruguay, Argentina, Chile, Venezuela and Cuba may be regarded as exceptions. The first four are passing through the final phase of their respective urbanization cycles and show clear signs of stabilizing their rural population at a figure of between 20 and 25%. Cuba, as a result of a centralized planning system and efforts directed towards rural development, is succeeding in reducing to a large extent the rural-urban migrations, so that rural settlements will

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presumably be stabilized at a percentage higher than in the previous cases. In the other countries a high degree of rural-urban migration will probably continue until the end of the century. In some of them it is likely that there will also be a further deterioration in dispersed rural settlement.

The great differences in the geographical conditions and development of the Latin American countries make it difficult to generalize about the conditions of life in the rural areas in the different countries and types of settlement. Various socio-economic indicators, however, repeatedly stress the enormous difference in levels of well-being between the rural areas and the metropolitan concentrations. The varied symptoms of the serious restrictions affecting the rural population in the satisfaction of their immediate needs may be illustrated as follows:

(a) The average income in the urban areas is five times as high as the average income in rural areas, according to a recent study on income distribution in nine countries of the region. Moreover the rural population predominates in the lower half of the income levels, there being a greater relative inequality in the urban areas.

(b) The index of illiteracy in the population of 15 years of age and over shows still more clearly the rural-urban differentials. The information available for thirteen countries during the period 1970-1974 indicates that the average rate of the index for rural areas is three times as high as that for urban areas (44.3 and 15.0%, respectively).

(c) With regard to other social indicators, such as the number of beds per thousand inhabitants, the figures show that in seventeen countries, during the period 1971-1977, the endowment of the principal city was on average three and a half times as high as that of the rest of the country. In some countries the differences are much greater, ranging from 8 to 10 times as high.

(d) In some indicators of the general state of housing, such as the availability of electric lighting, piped water in the houses and sanitation, there are sharp contrasts between the urban and the rural areas. In seventeen countries during the last decade the average proportion of the rural population studied which had electric light and piped water was

/six times

six times lower than the urban average in respect of light and ten times lower in respect of sanitary services. In general the supply of these basic services in private dwellings reaches only about 10% of the rural population living in settlements of less than 2 thousand inhabitants. Other indicators relating to the number of persons per room and the quality of the housing construction reveal appreciable differences with respect to the urban sector, although less pronounced than the foregoing.

(e) The distribution of the rural population in small hamlets, villorrios and villages does not usually form a network of interaction between them. Within each small centre there is a degree of cohesion which contributes to their individuality. Nevertheless, they generally remain isolated one from another, a circumstance which favours the maintenance of particular patterns and modes of life which are part of the local tradition, and which prevent rural-urban integration and the development of attitudes conducive to change. In brief, the disparities between the urban and rural sectors are acute and increasing, especially through the lack of such services as electric lighting, piped water and sanitation. Additionally, there is a notable lack of other services essential to the development of family, social and productive activities, such as police protection, technical agricultural help, and credit assistance, health services, the supply of inputs, etc. Some other services are very dispersed and distant, a situation which tends to become more critical in view of the scarcity and deficiencies of the lines of communication, which are frequently interrupted during large periods of the year, thus obstructing rapid communication with the urban sectors.

## 2. The determinants of rural settlements

### (a) The organization of production in agriculture

Rural settlements in the region are closely linked to the factors of agricultural production and its forms of organization, which give rise to various kinds of production units. The relationship between agricultural production units and the settlement of the rural population is established primarily through various characteristics of the units themselves (such as the amount of land in the unit, the degree of use of technology and the volume of production) and various characteristics of the labour force, above all income levels and form of settlement.

The size of the unit affects the geographical form of rural settlements, while the use of technology affects the employment of labour. Technology and the volume of output affect the demand for services and its characteristics, and the relations established between the units and the market. The income level of the agricultural labour force and its possibilities of settling determine consumption patterns and the form in which those are channelled towards certain markets. All these factors together affect the pattern and economic and social characteristics of rural settlement.

At present, different forms of agricultural production coexist in the region, varying from country to country in accordance with specific local natural resources and the historical development of the national economies. A cursory review of the major forms existing in the region will allow a clearer view of these relationships in order to understand the structure and dynamics of rural settlements.

The latifundio is historically the most characteristic type of production unit in the region. Its origins go back to the large agricultural estates of the colonial period resulting from different forms of land grants, from which it inherited the amalgam of typical functions in which production is less important than the political and social role of land ownership. Hence the features of the latifundio: large size, inadequate use of physical and technological resources, low employment of labour in relation to size of the estate, and low productivity.

/Agricultural work



Agricultural work on the latifundio usually takes place through precarious forms of land tenure (share-cropping, colonization, etc.) and using permanent and/or temporary labour (according to the varying level of agricultural activity). Permanent labourers receive a low wage and bonuses or presents in the form of use of a plot of land, housing, and bread or other forms of payment in kind. These bonuses provide the agricultural labourer with a large part of the part of the goods necessary for feeding his family, and the small cash wage he receives, as well as any possible surplus from the products received as presents, generate his low level of demand for manufactured goods.

This type of land ownership accounts for a very large part of the region's agricultural areas. A study by the Inter-American Committee for Agricultural Development (ICAD) on the situation in seven countries of the region indicates that these large multifamily estates represented over 50% of the agricultural areas in almost all the countries considered, during the period covered by the study, and as much as 82% in some of them. Most of these estates take the form of cattle ranches, agricultural estates, neocolonial plantations, etc.

In the latifundio dwellings are scattered, located strategically to maintain boundaries or gathered in small hamlets which share some agricultural tasks or infrastructure. As a result of the characteristics of this settlement, the dwellings usually lack basic services. Around the latifundio there are usually small rural centres in which the squatters and share-croppers reside, as well as some of the temporary labour force. These centres have an incipient commercial system.

The low level of agricultural activity of the latifundio, in relation to its size and population, has little impact on the economic activity of the neighbouring populated centres. While the marketing of its output and the technological inputs it uses call for some transportation services, usually provided by the inhabitants of the neighbouring centres, its production and demand for inputs are directed towards larger urban centres.

/Hence it

Hence it may be seen that the latifundio structure establishes a pattern of dispersed population with some hamlets and small populated centres which carry on a low level of economic activity resulting in an overall state of stagnation.

Closely linked with the precarious forms of land tenure of the latifundio and its need for temporary labour is the minifundio, resulting from the subdivision of land caused by the growth of the rural population.

This type of production unit is numerically the largest in the region, although it does not account for an important fraction of agricultural land. According to the data given in the above-mentioned study by the Inter-American Committee for Agricultural Development, smallholdings of this kind have come to account for as much as 90% of all agricultural units in some countries.

The minifundio is characteristically small in size, unable to generate production surpluses for the market or absorb the labour force available in the family group residing in it.

The form of population settlement is once again usually dispersed, but in this case grouped in villages and hamlets surrounding the latifundios. A number of studies on these zones show that the smallholding population is the factor which allows greater functional diversification in those centres, with the supply of a wider range of services. Due to the economic depression stemming from low agricultural output and the excess labour in these zones, the economic activity of these areas is very often supplemented by artisanal activities.

It has been found that the housing conditions of these zones are extremely rudimentary and that the situation is extremely bad from the standpoint of most social indicators. The available information suggests that the income of the minifundio amounts to half the income of a squatter or share-cropper. In addition, the smallholder constitutes the lowest stratum of the rural social structure. A number of surveys undertaken in these zones have found that it is this group of agricultural workers which is most dissatisfied with its lot. Perhaps this is not unrelated to the fact that in these zones the growth rate of the population is much lower than the national averages, and is declining through emigration.

/The modern

The modern capitalist enterprise in agriculture emerged hand in hand with the participation of the Latin American economies in international trade and the growth of their agricultural exports during the last quarter of the nineteenth century. Land ownership then began to be linked directly to entrepreneurial rationalization and the intensive, balanced use of capital according to the physical and labour resources. Since the 1950s this type of enterprise has become steadily more important in the region. Some of the latifundios have shifted to a varying degree towards this type of enterprise. The capitalist enterprise operates in a variety of situations, such as enclave plantations, large-scale production for export and specialization in production for domestic markets.

The intensive use of technology calls for a small permanent labour force and generates seasonal employment according to harvesting needs. The labour force thus employed must resort to local markets of goods and services for its needs. Since their income level allows a greater diversification of demand which cannot always be satisfied by the commercial network of the rural populated centres, it tends to be channelled towards the neighbouring urban centres. Some studies show that the distribution of the population in various zones where this type of estate predominates is characterized by a high proportion of small rural settlements (95% of the total) in which 45% of the population reside, and a limited number of large towns, usually one, with a high concentration of activities. The small settlements correspond to the location of the agricultural enterprises.

The existence of capitalist enterprises often leads to the creation of agroindustries which tend to concentrate population in intermediate rural centres, thus consolidating a network in which rural and urban settlements are better integrated. In addition, conditions in these zones make it possible to retain the population relatively better than in other rural areas, above all when intermediate rural centres exist.

Another type of agricultural unit is the family production unit. This differs from the minifundio in that it is sufficiently large to provide employment for the family labour force and generate small production surpluses for the market.

/Units of

Units of this kind are common in rural zones around large cities, in the zones where national frontiers are being extended and, broadly speaking, wherever colonization or land reform programmes are underway.

The family production units close to urban centres ("farm belts") usually have good land, go in for intensive cultivation allowing two or more harvests annually and achieve high levels of productivity. In view of these characteristics, they may be considered small agricultural enterprises. Their population and production are directly integrated in the urban markets for goods and sometimes also for services.

On the other hand, the family production units situated in agricultural frontier zones and resulting from spontaneous colonization have very unstable labour conditions, low quality land, very rudimentary dwellings and no basic infrastructure. These units often survive at the cost of deterioration of national resources (primarily forests), without generating large volumes of output for the market. The standard of living of their population is much lower than in the previous case. The living conditions of these frontier zones do not favour the development of populated centres of any degree of complexity. In the absence of any development plan for the zone, these families become itinerant, remaining in one place only as long as the land will produce a yield without investment and then moving on to other frontier zones, which contributes to the fragility of the populated centres established there.

When family production units created by colonization and land reform programmes are not left to their own fate, they also tend to constitute small capitalist enterprises. The commercial relations of these family units are usually with intermediate populated centres and smaller urban nuclei. As in the case of agroindustries, the existence of these family production units, probably strengthens the intermediate rural centres by creating bases for the formation of centres which gradually integrate rural and urban settlements.

/The last

The last type of production unit of major importance in the region consists of the alternatives to the traditional forms of land tenure. In many cases these units are related to pre-colonial forms of labour (indigenous communities) and in others to the direct action of the State (forms of land reform settlement such as the ejido). Even though it seems impossible to generalize, it may be argued that the situation of such settlements is largely dependent on the availability of suitable land and access to credit and technical assistance.

(b) Agricultural development policies

One aspect of particular importance in connexion with rural settlements is the policies through which the State has attempted to promote the economic and social development of the agricultural sector. As a rule, the policies which have had the greatest effect on the location of the rural population are those dealing with land reform, rural development and colonization. These policies have changed the relationship between man and the land since they have attempted in different ways to strengthen the productive activity of their beneficiaries while at the same time attempting to bring about radical changes in the living conditions of the rural population.

Land reform policy has promoted the formation of a class of small agricultural landowners with organizational possibilities, which protects their participation in the market. It has also fostered the formation of community and co-operative enterprises in order to avoid land division, favouring a more efficient use of the land and of infrastructure investment, and seeking to create the economic and social conditions which will put an end to the vulnerability to the isolated smallholder.

In the first case, the formation of family production units is encouraged, and in the second, probably, forms of organization of production which are more assimilated to the logic of capitalist enterprises. Their effects on rural settlements correspond to those already indicated for those two cases, chief among them being the strengthening of intermediate centres.

/The implementation

The implementation of land reform policy in the region has affected 22% of potential beneficiaries, with very varied effects from the standpoint of improving the living conditions of the population, since often the reformed zones have been left without suitable institutional support. In other cases, the division of land has led to subfamily units or minifundios rather than family production units; and the persons brought together in community or co-operative enterprises, left to their own fate without the technical ability to make their land adequately productive and without the credit to work their holdings and keep their families during the agricultural year, have ended up by selling the capital of the enterprise (animals, machinery, constructions capable of being disassembled, etc.).

The rural development programmes are probably an effective means of changing the characteristics of populated areas, but unfortunately it has been customary in the region to view programmes of this kind as very limited and partial policies. Sometimes these are exclusively sectoral. When they are broader, they are frequently limited to aspects of economic and social investment, without touching on institutional and organizational questions. Recently, some countries of the region have begun very wide-ranging analyses of large agricultural zones to promote integrated rural development programmes. The methodology used in these programmes and the results obtained from them should constitute an important topic for exchange of information among countries of the region in order to begin a review and analysis on the development potential of these programmes.

Colonization programmes have explicit objectives from the standpoint of rural settlements, since they necessarily involve the relocation of the population. In some cases, serious efforts have been made to plan these settlements in accordance with models allowing a greater concentration of the population and better development of their activities. An example of this is the colonization programmes involving the settlement of the population following a star-shaped pattern, or honeycomb structures in which activities converge upon a central nucleus where the supply of goods and services is concentrated. Often, however, these programmes end up as

/pilot experiments

pilot experiments without any follow-up, and they are very often abandoned. Finally, there are the development programmes for specific zones. Experience in these cases indicates that the changes which have taken place in the rural structure often have unexpected side-effects which hinder an overall solution for the zone.

The evaluation of some projects which have aimed at the integral and harmonious development of certain areas and at solving their social and communications problems indicate that while they have brought about a higher concentration of the population and improved educational, housing and environmental conditions, the social levels achieved are lower than those attained by the average for the country. In addition, the changes in the agrarian structure have tended to lead to the proletarianization of the rural population, increasing the use of seasonal labour. In turn, the production system established in these cases has not led to a diversification of the local economy, with the narrowing of the labour market. At the same time, the lack of job opportunities has encouraged emigration of the population of working age.

### 3. Changes in agricultural activity and the outlook for human settlements

The coexistence of a number of different forms of organization of agricultural production and their varying relations with the settlement of the rural population produce different patterns of occupation of rural space. A review of agricultural development trends in the region suggest some conclusions about the structure and consolidation of some prevailing forms of settlement.

In recent decades, most countries of the region have had to tackle the need to satisfy the growing domestic demand for food and increase agricultural exports in order to revitalize the external sector, a critical element in the Latin American economies. The effort to boost agricultural production has led to greater capitalization and a better distribution of land. In general, it may be said that the result of the first of these efforts is more visible and more important in the present state of regional agriculture.

/One of

One of the striking features of the changes in Latin American agriculture is the dynamism of the technology factor, as shown by the fact that the active population employed in agriculture went up 1.4 times over the last 25 years, and the cultivated land area 1.7 times. During this period the volume of fertilizers rose 12 times and the number of tractors 5 times.

The importance of technological change for the transformation of agriculture is all the more important if it is borne in mind that the growth of agricultural output has traditionally depended on increasing the cultivated area. The possibilities of securing new land on economically viable terms has dropped, and in the 1970s such lands have been responsible for only 25% of the increase in harvests, as opposed to 80% in the 1950s. In the 1950s the harvested area rose by 20 million hectares; in the 1960s by 14 million; and by 8 million hectares in the present decade so far. Thus technology is currently and to an ever greater extent responsible for keeping up the growth rate of production.

The intensification of the use of technology implies two contrary trends from the standpoint of rural settlements. On the one hand, it marks the beginning of a period in which the expansion of the agricultural frontier has reached an end. In future, the growth of the agricultural population will tend to be concentrated in the area already cultivated, which implies greater concentration of the population in agriculture. On the other hand, the labour force replaced by technology - underemployed or unemployed - may swell the flow of migrants, thus shifting part of the natural growth of the rural population and reducing the pressure on agricultural land.

The agricultural labour force is shrinking in most countries of the region even though there is a clear labour surplus. Most studies of employment in agriculture consider that the problem of open unemployment and underemployment, already acute, is tending to increase, and it is estimated that in the region in the early 1970s some 20% of the agricultural labour force were in this situation, in the proportions of one-third in open unemployment and the remainder in underemployment. However,

/various factors



various factors suggest that the figure for underemployment at least is too low. The resulting decline in rural incomes affects the commercial activities and services provided in populated centres and reduces the possibilities of self-sustained growth.

The mechanization of production and the increase in labour productivity for some crops has altered the pattern of employment in the enterprises. Cases where a fixed number of workers are employed are tending to decline substantially. Agricultural manpower has come to be seasonal in nature, employed as the crops require, and this has meant a sharp increase in the numbers of seasonal/day labourers in agriculture. In many cases these labourers, affected by insecurity of employment and by underemployment, survive by combining agricultural and non-agricultural activities (especially road-building or itinerant trading). Itinerant trading generates a floating rural-urban population which is altering the location and habits of this population and the objects of its consumption. This phenomenon has been studied very little, and it is difficult to foresee its effect on rural settlements, although it may be said to be a factor which destabilizes the existing pattern of settlement.

The magnitude of the changes in the employment situation can be appreciated if it is illustrated with a few figures. The mechanization of rice cultivation, the fifth most important crop in the region, has led to a reduction of between 25 and 60 man/days per hectare in some irrigated areas. For other crops, such as coffee, permanent workers have been replaced by equal numbers of temporary workers at the time of the harvest. In some countries, temporary workers in agriculture make up 42% of the total economically active work force and 69% of the economically active population in the agricultural sector.

This change in the way in which the labour force is employed, as has already been pointed out, directly affects rural settlements, forming characteristic types of problems. In the Central American region occurs the problem of seasonal demand for labour for export crops, which, to the extent that the various crops and harvests succeed each other in time, enables the seasonal worker to survive as long as the cycle continues.

In general,

In general, when this happens, as in the case of coffee, cotton and sugar, they provide work for three months in the year and cause migratory flows which sometimes encompass two countries or more, with the day labourer extending the cycle in that way.

These migratory flows create a new type of floating rural population which, at least in some Central American countries, lives in small holdings. In these cases, the peasant works his property with the help of his family. When seasonal rural-rural, rural-urban migration combine agricultural with non-agricultural work, there is a change in the flows between the place where the income is generated and the location of consumption, and in the demand for specific services by a growing proportion of the rural population.

The "rural-rural" movement also has an influence in the places where the smallholding is established. It has been observed that seasonal work by the peasant causes the output of his farm to diminish. In this way, the peasants are increasingly converted into a new agricultural proletariat, modifying their demand for consumption. According to some studies, there is apparently no increase in income in this situation and, in the medium term, as the peasant is not protected from inflation by his commercial output, his level of living deteriorates. For rural settlements, this is reflected in stagnation and a probable stagnation of the local network of trade in foodstuffs to the detriment of trade in manufactured goods.

In the Andean countries, the major movements of labour most frequently form part of substantial rural-urban migratory movements by virtue of the association of the structure of smallholdings with temporary employment located in the area of residence. This situation corresponds to what is usually known as the minifundio-latifundio duality. Obviously, the effects of this situation on the local rural settlements do not differ greatly from those already explained for the areas where the smallholding is combined with "rural-rural" migration. If a difference exists, it is this: the fact that the peasant lives and works in the same locality maintains the stability of the present pattern of settlement to a greater extent. It should be added that the income of agricultural workers is very low. It is frequently stated that the average agricultural wage in the region represents a fifth of the wage of the urban manual worker,

The study by the Inter-American Committee for Agricultural Development, mentioned above, states that in the 1950s 75% of the agricultural population had an income of less than US\$ 100 a year. Other studies confirm that the peasant population receive very low incomes. A LAFTA study (1965) states that in the countries of the Andean Pact 60% of agricultural workers had an income of less than US\$ 300 a year, and estimated that those peasants, after subtracting expenditure on food, were left with only US\$ 15 per person per year. Despite the growth in the national economies, a substantial increase in peasant income seems very unlikely.

The tendencies in agricultural employment indicate that underemployment especially in the form of temporary employment, is showing a tendency to increase progressively at the expense of permanent employment. Concerning the effect of this tendency on agricultural wages, the data reveal that the abundance of rural manpower directly affects the average level of wages: the more underemployment or unemployment there is, the lower wages are. It is not necessary to belabour the fact that the lower incomes of agricultural workers weaken the economic structure of the rural population centres.

Meanwhile, the insecurity of the subsistence economies, and in many cases of family enterprises, the absence of marketing channels and the distance from markets for buying and selling goods mean that the agricultural units continue to suffer from poor conditions in attempting to use their resources advantageously. This gives rise to a sort of vicious circle, where the decline in the incomes of agricultural workers weakens activity in the populated centres, which in turn helps to worsen the workers' situation still more.

In this way, possibilities for an increase in peasant agricultural income will not increase in the region in accordance with the present trends in agricultural development. From this view point, given the present trends in the agricultural sector it cannot be hoped that agricultural income will be a mechanism which will stimulate the populated centres; on the contrary, all the data indicate that it will have the opposite effect.

/The evolution

The evolution of agricultural development has followed a pattern which makes it possible to foresee the future dynamic of rural settlements. In the first place, mention should be made of the importance of technology for agricultural employment, and the significance of this for the study of the settlement of the rural population, and especially for the characteristics of the populated centres. In the case of underemployment and agricultural proletarianization, for example, these processes have different effects on the settlement of the population and the characteristics of the populated centres. Firstly, the process of proletarianization may tend to promote a certain concentration of the population and to stimulate the economies in the populated centres, developing trade, including trade in food products. Secondly, the workers displaced from permanent agricultural work tend to settle as temporary occupants on the roadside, unoccupied public land or settlement zones. In some countries, this type of location of the rural population has assumed considerable proportions and, in general, is tending to reproduce the dispersed pattern of settlement.

In the second place, special emphasis should be laid on the importance of capitalization in agriculture and the tendency of the production units which generate surpluses to evolve towards arrangements with a capitalist orientation. In practice, this evolution denotes greater exchanges between agricultural and industrial goods. In recent years there has been greater commercial output in agriculture and a greater number of agricultural wage earners who, since they own no means of production, have been obliged to enter the market to purchase goods. As far as the industrial sector is concerned, the rise in agricultural mechanization has taken place exclusively with industrial inputs. However, the greatest exchanges are not evenly distributed throughout the various areas and between different strata of enterprises and population, as an important proportion of them are concentrated in the major urban centres and metropolises.

The changes in employment and the growing capitalization of the productive organization in agriculture generate a polarization between the majority subsistence sector, underemployed and with low incomes, and another sector made up of permanent workers with higher average incomes, who work in areas of cultivation destined for export or specializing in production for the domestic market, where a substantial volume of industrial inputs is used.

/This polarization

This polarization would appear to be creating conditions whereby small rural hamlets or villages are maintained, practically in a state of economic stagnation, while the most dynamic sectors in the agricultural economy are channelled towards the cities or large metropolises, where they come to form part of the complex urban network of trade and services.

This polarization involves a considerable gap between the rural settlements linked to the subsistence sector and the centres to which the most dynamic activities in the agricultural sector are channelled. This phenomenon signifies the growing interaction between a sector of the rural population and the urban area, in contrast with another which remains practically isolated. In this way, some sectors of the rural population which in all likelihood will enjoy opportunities of receiving some benefits of economic and social development remain separate from others which will fail to enjoy those benefits.

At all events, it may be concluded that, to the extent that the proportion of the rural population is numerically maintained, in view of the characteristics of agricultural development and its pattern of concentrating investment and income in increasingly smaller proportions of the labour force, the rural population will retain a system of settlement in which dispersal and the small rural village will have equal or greater relative weight in the distribution of the rural population, without any significant change in their present living conditions.

This conclusion does no more than corroborate, from another viewpoint, the opinion that the changes which are occurring in the agricultural sector, while achieving greater economic development, would seem to be provoking a process of marginalization of large sectors of the Latin American agricultural population which will not be incorporated in the process of social and economic development which is taking place in the countries of the region.

D. SHANTY

#### D. SHANTY SETTLEMENT

One of the characteristic features of the process of settlement of the Latin American population in recent decades is the emergence and rapid growth of certain large and rapidly growing urban nuclei, on the margin of the regular procedures for urban development and State control. This form of settlement has been described in various ways in various countries: "favelas", "villas miserias", "callampas", "barriadas", "ranchos", "pueblos jóvenes", "colonias proletarias", "ciudades perdidas", and so on, terms which refer to the most visible physical and social aspects of these shanty settlements. They involve, in general, housing constructed by the occupants themselves, with primitive methods, on illegally occupied land, with poor environmental conditions, located on the edge of towns, lacking basic services and infrastructure, at least in their initial phases, and containing a substantial proportion of the poorest urban population.

As an object of study, the shanty settlement is very complex and difficult to define, because of the overlapping of economic and ecological dimensions of poverty which encompass many aspects and indicators of the "quality of life". Furthermore, their quantitative parameters are constantly being modified because of the rapid changes caused by the internal migrations which characterize the most recent phase of urbanization in Latin America.

An examination of the numerous works on this phenomenon in the region prepared in recent years shows a wide variety of theoretical and methodological approaches, which have given rise to various definitions of the concept of shanty settlement. It is sufficient to note some of the descriptions used in the specialized studies. They all mention the aspects which are regarded as basic for an understanding of this form of settlement: settlements which are "temporary", "unregulated", "spontaneous", "marginal", "uncontrolled", "established by illegal settlers", "shanties", and so on.

There is agreement that this phenomenon is of extensive scope, that it has undergone rapid growth in recent years and that, in general, it is becoming irreversible in the short term. The figures available for a few metropolitan areas confirm the above statements. It may be seen from table 4

Table 4

LATIN AMERICA: PROPORTION OF THE POPULATION IN SHANTY SETTLEMENTS  
AND SLUMS IN SOME CITIES

Country	City	Year	Population living in slums and shanty settlements (percentages)
Brazil	Belo Horizonte	1965	14
	Brasilia	1962	41
	Recife	1961	50
	Río de Janeiro	1970	30
Colombia	Bogotá	1969	60
	Cali	1969	30
	Buenaventura	1969	80
Chile	Santiago	1964	25
Ecuador	Guayaquil	1969	49
Guatemala	Guatemala City	1971	30
Honduras	Tegucigalpa	1970	25
Mexico	Mexico City	1970	46
Peru	Arequipa	1961	40
	Chimbote	1961	67
	Lima	1970	40
Venezuela	Caracas	1974	42
	Barquisimeto	1975	43
	Maracaibo	1975	51
	Maracay	1975	68

Sources: United Nations, "Global review of human settlements", Statistical Annex, A/CONF.70/A/L/1/Add.1 (Vancouver, 1976), and Ministerio de Obras Públicas de Venezuela (MOP), División de Investigaciones Básicas, Las áreas marginales en Venezuela (1975).

/that, on

that, on average, about 40% of the population of the metropolitan areas of Latin America live in slums and shanty settlements. In addition, it has been observed that their rate of growth is much more intense than that of the urban population. Some recent studies have estimated that they are growing at over 10% a year, twice as fast as the urban population.

Despite the sparseness of the data, it may be said that the growth of this form of settlement has still not reached a peak in the region. It is estimated that, if the tendencies which have emerged in recent decades are maintained, by the year 2000 at least half of the metropolitan population will live in this type of settlement, and in many cities this proportion will be greater, close to or higher than two thirds of total urban residents.

A good example of this rapid expansion in the phenomenon is the case of Caracas, where in 1950 the "ranchos" occupied 750 hectares of the urban area (13.5%). In 1959, the area occupied had increased to 1,200 hectares (15%); in 1966 the area made up 18% of the built-up area and occupied 2,000 hectares; finally, in 1973 it covered 3,000 hectares, 26% of the total urban area, and contained about 40% of the population of the metropolitan area.

It should be noted that the information provided in table 3 covers in aggregate form the population living in slums and shanty settlements, which, though they have some different characteristics - as will be seen below - offer some common features, in so far as they contain the sectors with lowest incomes in very poor-quality housing. In addition, the slums cover only a small proportion of the marginalized urban population.

#### 1. Characteristics of shanty settlement

This form of settlement has frequently tended to be defined on the basis of its most visible external characteristics, which reflect poverty, insalubrity and overcrowding to various extents. However, the distinguishing features are related to a different form of occupying, organizing, equipping and using urban space by low-income groups who do not find in the traditional property market options which are appropriate to their needs and their capacity to pay. The lack of correspondence between the type of and machinery for the supply of "housing solutions" prevailing in the market and the

/effective capacity



effective capacity of the lowest-income groups to gain access to them is the principal factor which explains the emergence and rapid growth of shanty settlements.

As is well known, the possibility of securing an urban plot, housing and the related basic services in a market economy depends fundamentally on the feasibility of obtaining from the family income a monetary surplus to be applied to these ends. Furthermore, in these economies when inflationary trends are combined with regressive forms of income distribution a deterioration takes place in the power of real consumption, which means that the lowest income groups have to devote the whole or most of the family income to buy food.

Generally speaking, available data estimate that in most of the countries of the region the minimum dwelling unit, provided with modest hygienic installations, would at present appear to have an indicative cost of over 4,000 dollars. Consequently, it is not surprising that the studies referring to the structure of the family consumption of the lowest income groups, and the possibilities and terms of access to housing, arrive at discouraging conclusions.

In view of the meagre savings capacity of vast sectors of the population, it may be estimated that more than 40% of the lowest income households are kept outside the housing market by the enormous difficulties or even the impossibility of purchasing houses, with payment periods of 25 years and annual interest rates of 10%.

It must also be considered that the gap between the savings capacity of the population and the cost of the housing solutions offered on the market is increased by the high index of dependence to be found in these strata, in which the proportion of children under 15 for each income-generating adult affects still further the limited capacity for saving.

Mainly as a result of this gap, and in addition to the high costs of land, a system of appropriation and use of urban land of a dualist nature is produced, in which a "formal" sector, controlled by capitalist-type market forces, and an "informal" sector governed by popular demand operate simultaneously. The importance of this latter sector can be seen in studies

carried out in the metropolitan areas of some countries, in which it is estimated that the production of housing by the "informal" sector has accounted for more than 60% of urban construction. The main response of the lowest income groups to this exclusion from the formal housing market takes the form of the squatter settlements.

The first characteristic of the squatter settlement is that it is a product of practically "spontaneous" activity arising out of the initiative of the users and apart from the action of the authorities and of any planning process. In many cases, it is the result of a long phase of preparation carried out by numerous groups of families previously united by solid organization. In other cases, it constitutes a spontaneous response by certain family groups to the impossibility of continuing to share a dwelling with relations or friends, or of earmarking a large share of the income required for their food for paying rent. Both situations characterize a decision which lies outside the control of the authorities and the normal channels of the housing or urban land market.

The second characteristic of this type of settlement is its "process of invasion" nature, i.e., the de facto occupation of other people's land without paying the owner. However, if this process has been organized collectively it sometimes includes payment for the right to take part in it. In other cases, such as that of the illegal subdivisions, also called "phantom lots", in which the seller is not the legal owner of the land, a deferred payment is assumed which may include a promise of the provision of essential services in the future. In both situations the occupier does not actually obtain the rights of legal ownership of the land, and this brings with it a type of insecure land-holding which constitutes squatter occupation.

The third characteristic of the squatter settlement stems from the already existing conditions and location of the land occupied, which since it has not previously been habilitated lacks infrastructure, transport systems and the basic services indispensable for urban residential use. This is usually waste land which has remained so owing to the unattractiveness of the site and the unfavourable quality of the environment. The

/peripheral location,

peripheral location, far from the dynamic centres of the city, together with its environmental characteristics (slopes of hills, beds of rivers, marshy and insalubrious areas) turns these areas into land-reserves of relatively easy access for these processes of spontaneous occupation. It should be added that as pressure on non-urbanized land increases and technological progress and advances in transport infrastructure enable changes to be made in unfavourable conditions of habitability and location, this land is integrated into the formal market, increases in value and moves out of the range of the lowest income groups. Because of the growth of the demand for land these groups are progressively pushed out to increasingly greater distances from the centre of the city.

Other characteristics of the squatter settlements are the forms of adaptation, organization and use of space, and involve forms of production and improvement of housing, infrastructure and related services.

First, the space is adapted for use by its own occupants, using family manpower or some other type of organization without monetary compensation. When the occupation process results from the action of organized groups, it is common to observe distinct forms of organizing the different uses of space in accordance with varied needs: residential, social, commercial and recreational. Generally speaking, this experience coincides with the formation of specialized groups, according to their skills, in order to go ahead with the stage of land-adaptation, consisting in the construction of dwellings and the minimum infrastructure required for their habilitation (drinking water networks, roads for circulating and an electricity system).

Secondly, a rudimentary technology is applied and non-conventional construction materials used, generally speaking, waste materials combined with elements of industrial production. These circumstances, together with the lack of resources, mean that the quality and size of the constructions are not in line with all the habitational norms and standards in force. Some recent studies on the subject have recorded overcrowding averages of up to 8 persons per room in some countries.

Thirdly, the equipping of the family and society is progressive. The basic nucleus of the dwelling is used immediately and is expanded and

/improved in

improved in the course of the years in a construction process which goes on for remarkably lengthy periods, owing to the chronic scarcity of material resources, combined with uncertainty as regards ownership of the land. However, this slow and progressive building has the advantage of being in line with the real economic possibilities of the occupants, mainly determined by the fluctuation in family incomes, and this constitutes a good indicator of a rational use of their scanty economic and time resources in the improvement of their dwellings.

Fourthly, the emergence of the organizational capacity of the squatters no doubt constitutes the most important aspect. Various types of associations are created which are involved in the genesis, development and consolidation of the settlements. The organization of the group, developed through the settlement process, is now directed at exercising pressure on the authorities so as to obtain the installation of the basic social services or solutions to problems relating to land drainage, transport services, police vigilance, etc. In addition, the squatters set up mutual social assistance associations lacking among other groups margined from production and consumption.

Another housing alternative for the lowest income groups is the slum, which is markedly different from the squatter settlements, in that it corresponds to occupation by the renting of living spaces situated in the central areas of cities and possessing infrastructure and basic services. The areas where these slums are to be found are the result of processes of degeneration of the urban structure and of speculation activities by many proprietors, who in some cases subdivide dwellings which have become deteriorated or depreciated through changes in their use, and in other cases construct residential structures which do not conform to the regulations in central sites unsuitable for renting to lower income family groups. Generally speaking, the slums constitute groups of living cells made up of one or two rooms with a high degree of overcrowding and poor conditions of hygiene and maintenance. The popular terms for the slums vary according to the countries: (cantegriles, callejones, conventillos, carrés, casas de vecindad).

/It has

It has frequently been upheld that the central areas which have become slums would seem to constitute the normal place taking in migrants arriving in the big cities during the first phase of their adaptation, in view of the advantages in their provision of services and infrastructure and their central situation. Later, when their occupants become acquainted with more advantageous residential alternatives, they move to other urban areas which require lower expenditure and the possibility of a more stable form of ownership. In some cases, these transitory occupants of the central slums become incorporated after a time into organized groups which illegally occupy peripheral areas.

## 2. Survival strategies in the squatter settlements

The most recent studies on squatter settlements incline to the view that they constitute a rational response from the low-income social groups, both because their immediate minimal demands for housing have been excluded from the regular market and because of the speculation in urban land on the part of some monopolistic financial groups.

From this standpoint, the formation of the squatter settlement is the result of conflicting interests. On the one hand, there are the poor groups which develop survival strategies and seek the satisfaction of their need of space, housing and services through informal systems of housing production and distribution outside the regular market. On the other hand, there are the activities of certain private sector groups which respond to strategies of capital accumulation, manipulating the demand for space, housing and services through the mechanisms of the market. Finally, there is the public sector which has the responsibility of regulating the urban processes and reconciling these mutually exclusive and conflicting objectives. The practical solutions adopted by the State in this field will reflect the pressures to which it is subjected by the interests of both groups.

As mentioned earlier, the strategies adopted by those family groups whose productive roles do not permit an adequate solution of their housing problems have consisted at times in a take-over of raw land on the periphery and at other times in residing in the more central slum areas. These

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strategies include techniques and forms of organization designed to solve the problems of shelter and basic services. Within the squatter groups, which consist mainly of unemployed and underemployed, there is a large contingent of immigrants who have previously lived in the slums or have been given shelter by groups of relatives or by people from their home community.

In opposition to these survival strategies, some private groups develop strategies of accumulation and segregation in alliance with the interests of the medium- and high-income groups. Indeed, the speculation in real estate and the tendency to form high-cost residential enclaves may be considered accumulation strategies, since investment in land is a very efficient means of capital formation, just as the enclaves constitute a useful method of preserving the social prestige of the high-income groups. It is mainly to organizations of foreign capital that speculation in urban land offers the possibility of increasing profits without excessive risks and without the complexity of industrial investment.

Although the historic pattern of land appropriation has created the conditions for its concentration in a few hands, the spectacular and increasing wealth currently obtained through speculation in the metropolitan areas has accentuated this trend, establishing the conditions for its monopolistic control and thus considerably affecting the access to land and housing of the poorest groups. This situation, linked with the equally monopolistic control of the basic materials of construction, such as cement and steel, the controlled prices of which guarantee large profit margins for the producers, increases the costs of construction and results in the exclusion of the majorities from access to land and conventional housing.

These strategies become even more competitive in respect of urban space, housing, infrastructure and services with the increase in demand stemming from population growth; there is also an increase in aspirations caused by social mobility, so that it becomes necessary to renovate part of the material structures of the city.

The State intervenes in these competitive demands by adjusting the market in real estate and regulating the habilitation of urban land. The

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former intervention consists in subsidizing the groups whose incomes are steady but not sufficient to enter the real-estate market without help, and in the production and distribution of low-cost housing to eligible sectors of the population. These measures, however, are very limited in scope since they exclude direct intervention in the control of urban land and in the production and distribution of building materials, both factors being subject to monopolistic and speculative manoeuvres. In the second case the State controls the habilitation of urban land by means of regulations, but these have failed to control the growing formation of squatter settlements.

Finally, it can be said that the squatter settlement, which at the outset was merely regarded as "marginal", in reference to ecological forms of social organization outside the law and official regulations, has come to be recognized by sociologists as a process of adaptation to the condition of poverty which constitutes a strategy of survival.

The need to subsist in unfavourable conditions imposes on the poorest groups the social necessity of creating new forms of organization which will change the relation of the factors observed in the traditional social systems, in order to reduce the importance of those which are lacking or in short supply, and to maximize the importance of those which are more readily available.

Similar manifestations of the adaptive capacity of the poor groups which may be considered as forming part of survival strategies are: the geographic mobility of the population which migrates in search of better employment and income opportunities; the increase in size of the nuclear family in an attempt to broaden the income-earning base; the prevalence of the "extended family" and other forms of social relationship which constitute a method of expanding the scale of operations for the provision of food and services, giving rise to networks of interchange and mutual aid, and, finally, certain forms of trading often called "street economy".

It should be borne in mind that in the squatter settlement the occupation, organization, grouping and utilization of the space is carried out by different methods of "internalization" of inputs: public or private

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land is "invaded"; empirical production procedures are applied instead of traditional technologies; and organizational systems are created which are applicable to the aims of mutual aid and pressure, and forms of social distribution different from those of the real-estate market.

This adaptive process of the urban poverty groups reveals a set of undeniable values, including a great capacity for organization, initiative and creativity; a rational use of available resources; and the adaptation of their own cultural patterns, both in design and in the application of new technologies to the construction of their dwellings. All these aspects encourage a more optimistic attitude towards the irreversible character of the squatter settlement in the Latin America of today and prompt an exploration of new ways of assisting the development of these potentials to produce an improvement in the standard of living of the lower-income social groups.

### 3. Participation of the State in the improvement of human settlements

Every measure to improve the squatter settlements undertaken with State participation is based on two assumptions: first, there must be a recognition of the right of these settlements to exist in view of the absence of viable alternatives, at least in the short term; second, there must be a manifest will to maintain a progressive improvement carried out by the inhabitants themselves with all the resources and instruments available to the State. Of course the improvement potential of the squatter settlements is determined in the last analysis by the opportunities of the lower-income groups to participate effectively in the expanding urban economies. Nevertheless, given the serious environmental privations of these settlements - although they vary according to their age, the climatic conditions, the physical features of the region, the level of income and economic activity of the inhabitants, their access to urban services and the economic growth rates of the urban area - the public authorities should apply efficient measures without delay.

It may be helpful to recapitulate some of the chief basic deficiencies of the squatter settlements: difficulty of access to water, its high cost and frequent pollution; lack of adequate sewage disposal services; dearth



of open spaces and of protection against adverse climatic conditions; lack of privacy, or overcrowding; difficulties of transport and access to other parts of the city; difficulty or impossibility of sharing in the basic services of health, education and recreation; deficient sanitary conditions, etc.

Taking all this into account, the improvement of the squatter settlements and illegal subdivisions will be the result both of the efforts of their occupants (progressive substitution of the material of their dwellings, expansion of the initial nucleus and construction of the basic infrastructure) and the provision of government assistance, which will be mainly oriented to the legalization of ownership and the supply of services and infrastructure.

In the case of the former, these activities are initially conditioned by the economic capacity of the residents, which can vary a great deal within the different settlements. Moreover, their location, usually on the periphery, introduces an implicit contradiction. On the one hand, the occupation of these areas removed from the central sectors constitutes the only possibility of acquiring future ownership rights over a portion of land. On the other hand, its very distance implies higher living costs owing to the increased costs of transport and domestic provisioning, all of which reduces the family income and thereby the possibility of improving the home.

In the second case, the improvement deriving from the installation of infrastructure and services depends on the assistance of government bodies, even when the community can supply the manpower required for its material implementation. This assistance, however, is subject to the legalization of property rights. The experience of the "new towns" in Peru seems to have demonstrated that the security of owning the land encourages the families to spend money on improving the state of their dwellings. With the assurance of not losing their investment, the occupants will increase their efforts to achieve a final solution to their housing problem.

Nonetheless, the legalization of ownership is not always a sufficient condition for this improvement, if the family income does not permit it, or when the improvement involves a considerable monetary outlay. The same

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occurs with the public provision of services which, apart from the cost in hours of work, could mean an additional monetary cost, which would have different effects on the population of the squatter settlements according to their economic position. In the case of the lower-income family groups, the cost of legalization and services could mean the partition of their property in order to obtain additional income, or to the entire abandonment of the property. In so far as public assistance implies monetary costs, this constitutes an extension of the housing market and, as such, tends to eliminate or expel those who cannot pay, thus perpetuating the reactive character of the process of adaptation to poverty.

The foregoing observations show that the solution of the problem of squatter settlements cannot be confined to the improvement of the physical aspects of the settlement in the course of time, since this transformation, because of its cost, can lead to the exclusion of the most needy, who would be forced to seek a new place of settlement, thus starting the same cycle in another area.

Since a large proportion of the metropolitan population does not constitute an effective demand for housing and urban services, official measures to achieve an adequate standard of settlement for the population would imply the allocation of additional resources destined to the execution of these objectives. Public funds, however, are known to be limited, which constitutes for some the greatest obstacle to improving urban conditions. Nevertheless, along with the deterioration of the habitat for the great majorities, the growth of the metropolitan areas as a result of a growing concentration of population and the rising value of urban property, has produced the conditions for the appropriation of the unearned increment and a great accumulation of capital by the private enterprises connected with urban development. These benefit from the works of infrastructure carried out by the State and the growing demand for scarce urban land.

Accordingly, both the amount of public funds and the consequent creation of conditions for achieving an adequate standard of settlement seem to depend in the first instance on the possibility of transferring part of the benefits of urban growth to the public sector, thus increasing the amount

of available funds, and, in the second place, enlarging the objective and utilization of these resources, with a view to reducing the gap between the needs to be satisfied and the limited resources.

Since urbanization will maintain its dynamism for a long time in most of the countries, along with trends of population concentration in the major metropolitan areas, and since the mode of recent development in the Latin American economies excludes large segments of the urban population from the land and housing market, the question for the future is whether the continuing growth of squatter settlement areas can be guided and converted into a positive factor of development, or whether it will maintain its characteristics of environmental deterioration and insecurity of tenure.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data. The second part of the document provides a detailed breakdown of the financial data for the quarter. It includes a table showing the revenue generated from various sources, as well as the associated costs and expenses. The final part of the document concludes with a summary of the overall financial performance and provides recommendations for future actions to improve efficiency and profitability.