

UNITED NATIONS

ECONOMIC
AND
SOCIAL COUNCIL



LIMITED

E/CEPAL/CONF.70/L.7
10 October 1979

ENGLISH
ORIGINAL: SPANISH

CEPAL

Economic Commission for Latin America

LATIN AMERICAN CONFERENCE ON HUMAN SETTLEMENTS

Mexico City, 7-10 November 1979

POLICIES ON HUMAN SETTLEMENTS IN LATIN AMERICA

79-9-2338

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Introduction

The study and interpretation of the human settlement process undertaken within the CEPAL/CIDA Project provides an essential basis for studying the problem of the policies which can be designed and applied in the countries of the region in order to improve habitat quality.

In that study, human settlement is defined as the action of occupying, organizing, developing and using space. The choice of place of residence and in general of the location of any activity is heavily influenced by the location of related or complementary activities and of the infrastructure and installations which serve the purposes of that activity. Settlement may be said to be directed when there is a deliberate attempt to attract it to particular points or avoid its implantation in others.

Human settlement, whether viewed as a spontaneous process of population movement in search of better opportunities for self-development, or as the result of the implementation of deliberate policies, acquires concrete form when coming into contact with the geographical, ecological and cultural features of a specific point in human settlements or the habitat, i.e., the metropolises, cities, towns and villages in which the population is gathered in specific forms of production and human relations. From the material and specifically local standpoint, settlement refers to the physical installations necessary for the production and distribution of goods and services, buildings for public and collective use, dwellings and the infrastructure and services necessary for human activities performed within the settlement.

This definition suggests the advantages of applying government policies to human settlement in order to secure an optimal relationship between the location of economic activity, basic social investment and the geographical distribution of the population, as well as maximize the use of local resources to improve habitat quality.

Policies of this kind are needed not only to optimize the social use of resources and incorporate the entire population of a country into its economy, but also to allow more equitable forms of distribution of the benefits of development among the entire population of the country. Internal regional

/inequalities have

inequalities have been recognized as an undesirable consequence of concentrated development, and it is admitted without reservation that even within cities the distribution of basic social investment is not geographically equitable.

Human settlement policies are policies aimed at intervening deliberately and for specific purposes in the occupation, organization, physical planning and use of space. They are public policies which differ from general social and economic policies in that, inter alia, their key-note is the spatial factor. Human settlement policies depend on social and economic policies inasmuch as the habitat largely depends on social and economic conditions which affect society as a whole. As has already been pointed out, it is impossible to imagine a satisfactory habitat in a socially unjust environment.

Thus, ultimately, human settlement policies concern the quality of the habitat, i.e., the environment in which the daily activities of men and their families are carried out. The habitat is determined by overall economic, social and spatial structural factors and is constituted by material, spatial and institutional elements which acquire concrete dimensions in a specific geographic, ecological and cultural point. The possibility of acting on these elements within the overall set of national conditioning factors is what delimits the sphere of action of habitat policies.

It must be recognized that in the region there are only exceptional examples of deliberate national human settlement policies. They are implicit in other policies. At the local level, there are frequently norms governing use of land, density of occupation and public works and services programmes, but even then it is hard to see an overall concern for settlement problems as a whole.

Settlement policies should be considered on various levels, taking into account their objectives and decision-making machinery. First, there is the national dimension which includes both general and specific settlement policies; and secondly there is the local dimension, which concerns concrete forms of the habitat. As a rule, in the countries of the region this division is not institutionally clear, even when local administrative bodies exist.

I. GENERAL POLICIES

The settlements of each country form part of more or less articulated systems of centres (human settlements) which fulfil specific functions for the population and the territory. The existence of metropolises, cities, towns and villages cannot be explained by themselves alone; their size and functions result in interdependent relationships among a country's productive, administrative and social activities. Economic and political functions cannot be carried out without them, and it would even be impossible to relate supply to demand. The system of settlement depends on the way in which the country develops, but its structure and dynamics may be more or less functional in relation to the development model in question. This is so above all because the geographical distribution of economic activity, public and private investment and population follow different rationales. Broadly speaking, changes in the system are slower than changes in the socio-economic structure, and thus there is a lag in the transformation of the system. However, this inertia is smaller within the settlements themselves, where sudden changes in economic function may be more or less rapidly accompanied by changes in settlement organization. This explains, for example, the explosive growth of centres where new industrial or agricultural activities are concentrated.

Changes in the development process may give rise to real or apparent conflicts between some features of the network and the general objectives of development. Thus, for example, the dispersion characteristic of rural settlement networks constitutes a drawback for agricultural development and national integration. Thus the characteristics of the settlement system represent an obstacle to development; but that obstacle can only be removed by the instruments at the disposal of the State for acting on the variables which cause rural dispersion. Since as a rule - except in the centrally-planned economies - the State does not possess all the means needed to change the settlement pattern in the short term, a number of instruments have to be used in combination: direct investment, fiscal incentives, changes in legislation and technical assistance to win the co-operation of the private sector.

/General human

General human settlement policies may be defined as the set of objectives and instruments aimed towards harmonizing the human settlement system with the national development processes.

In practice, human settlements policies are composed of the spatial elements of general development policies (particularly those which concern the location of economic activity) and of sectoral policies, such as those dealing with employment, income, population and social welfare. The harmonization of the spatial aspects of such policies (often not explicit) is the first step in the formulation of general human settlement policies, which amounts to introducing the spatial variable into the planning and implementation of national development plans. In the extent that settlement policies acquire their own distinctive features and are made explicit, they can become an essential element in making the development and settlement processes compatible. It is particularly important to stress the role played by basic social investment and direct public-sector intervention in key activities in inducing significant effects on the pattern of settlements. Direct observation of the recent past shows a growing trend towards State participation in such activities (investment in infrastructure and the promotion of basic industry); but as yet there is no sign of deliberate policy as regards their effects on the human settlement system.

In short, even when a number of policies have direct, complementary spatial effects, these are not integrated in a body of human settlement policies. Such policies should be explicit if they are to support a broader series of specific policies.

II. SPECIFIC POLICIES

As is pointed out in another document for this conference,^{1/} the settlement process in the region has its own specific forms which distinguish it from the experience of other regions. Chief among these features would appear to be urban concentration, particularly in the national metropolises; high rural dispersion; the explosive growth of some centres where industrial

^{1/} The human settlement process in Latin America, E/CEPAL/CONF.70/L.5.
/and agricultural

and agricultural investment is concentrated; and the makeshift nature of urban settlement for an increasing sector of the population. It would appear that these features will continue to determine specific forms of settlement which can only be changed in the long term. In attempting to improve habitat quality, it is essential to formulate and execute specific policies dealing with those forms of settlement.

1. Urban development policies

The diseconomies of scale as regards, to say the least, transportation and public services, pollution, the high cost of living, traffic congestion and increasing collective violence, do not wipe out the advantages of urban concentration for the population living in metropolitan areas. These advantages are greater for some than for others, but even the poorest groups are prepared to pay a high price for the privilege of living in the metropolis: otherwise there would be no explanation for the preference of the population for the metropolitan habitat. For the inhabitants of the rest of the country, the price of urban concentration is the lack of opportunities and stimulation and the general impoverishment of life. There is a widespread feeling of uneasiness as regards the metropolis, which frequently leads to proposals for decentralization. Some remarks are called for in this connexion. Metropolitan concentration is a typical consequence of the profound imbalances which pervade human settlements in almost all the countries of the region. The primacy of urban systems is an inevitable consequence of the concentration-dependence styles of development. Its effects are not the same in all the countries. In the smaller countries, whose economic frontier has already been reached, it would be neither necessary nor even possible to avoid a pattern of high primacy in the system, which in general behaves like a metropolitan region in which the main problems concern geographical relations rather than changes in the functions of the units. On the other hand, to maintain a city-state pattern in a large country with economically empty spaces would amount to isolating population groups and resources and thus artificially limiting the economic frontier.

/Hence the

Hence the answer to the dissatisfaction caused by the high level of concentration of population and economic activities in the metropolises does not always lie in the decentralization of functions from the centres, which is tantamount to saying that concentration is a relative condition whose effects cannot always be corrected by physical planning and reorganization. The size of the country, its relative level of economic integration and the characteristics of its economy are fundamental variables which determine the suitability of the settlement network.

It does seem plausible however, to achieve a degree of concentrated decentralization by increasing the number of national subcentres destined to receive activities transferred from the national metropolis or to develop other activities by installing new plant. The recent experience of industrial development in Latin America shows the important role played by São Paulo, Monterrey, Medellín and Guayaquil in the initial stages of the development process of their respective countries. What is necessary, however, is the private initiative, regional identification and self-determination which characterized the emergence of those subnational metropolises.

Second, it should be noted that decentralization entails high economic costs and calls for large-scale, continued support from the State. In addition, the transfer of power is always resisted by traditional bureaucracies. The decentralization of economic activities calls for the prior existence of external economies and of organizational factors, capital and human resources, which only occur in the great urban agglomerations. Thus metropolitan concentration is, dialectically speaking, a condition for decentralization. It is not by chance that in Latin America the first concentrated industrial investment made away from the traditional centres was undertaken by public sector enterprises, either alone or in association with multinational consortia. Only the large enterprises possess sufficient capital for massive investment, as well as the organizational capacity to initiate new activities on a large scale and suitably skilled personnel. It would appear that decentralization has begun to take place, and if the results from the habitat standpoint cannot be considered satisfactory, as may be seen in the case of explosive growth, this may be due to the absence of suitable policies for taking positive advantage of a possible decentralizing trend.

/To discover

To discover new roles for second-rank cities, provide them with the necessary external economies and prepare their hinterlands so as to take advantage of the expansion of the urban market, may be necessary measures in the context of development aimed at selecting the settlements with the greatest potential for accelerating a process which alone would take much longer to come into being, and avoiding the anarchy which accompanies rapid growth for which due provision has not been made.

Furthermore, it should not be forgotten that many of the problems of the metropolises depend more on the organization of space and on the utilization and development of land than on the size of the settlement. If problems such as pollution are perceived more clearly in the metropolises, this is perhaps due to local factors, such as the number of motor vehicles in relation to the population and certain unfavourable geographical conditions.^{2/} If the metropolises concentrate the best opportunities and also generate many of the obstacles preventing a wider spread of those opportunities, it may be that the problem is one of equity rather than of a lack of resources. In short, many of the developmental problems of the metropolises and large cities are related more to the unbalanced nature of urban growth than to the size of the population. Moreover, this uneven growth is not linked with the rapid growth of demand as much as with the capacity to satisfy demand, which stems basically from institutional and economic restrictions on the supply side, and the lack of suitable technology. One viable option would be the adoption of a metropolitan development policy based on the optimization of the forms of organization, physical planning and use of space.

There are various factors which can be brought to bear to reduce the drawbacks of metropolitan concentration by means of new forms of organization, physical planning and re-utilization of space. These possibilities of change lie above all in the systems of collective transportation and communications;

^{2/} The fact that the worst pollution and transportation problems arise in cities of different sizes such as Mexico, Caracas, São Paulo and Santiago, may be explained by the fact that the first three have the largest number of vehicles per thousand inhabitants in the region (8, 10 and 8 respectively), and that in the first and last geographical conditions are such as to prevent the circulation of air masses during certain periods of the year.

the distribution of functions and services; the rationalization of the use of space and time; the control of pollution; and the creation of new forms of citizen participation.

If individual transportation is replaced by efficient and comfortable systems of collective transportation, it would be possible to relieve major problems in the equality of the metropolitan habitat, including the pollution produced by internal combustion engines. Of course, this is a costly and difficult option, since it will run into strong opposition from powerful private vested interests and from the population which views the private car as a symbol of social prestige. Nevertheless, urban transport technology may offer appropriate alternatives to the costly underground railway systems, while growing congestion and fuel shortages may convince the sector of the population which uses private automobiles for their transportation that the present system is irrational.^{3/}

The adoption of more rational forms of use of land and installations could improve the transportation system by means of a reduction in travel, the relocation of urban installations, the decentralization of administrative activities and the redistribution of services, including leisure activities.

In this direction, the strategy of decentralizing a number of services to strategic points in the different areas which make up the metropolitan agglomeration may be very important. The creation of subcentres ("cities within the city") in which certain types of services (administrative, intermediate supply and commercial, public information, collective transportation and leisure) are provided, may help to reduce radically the pressure on transportation and communications, above all when urban activities are located at random and there are no alternatives close to hand for the satisfaction of many daily needs.

^{3/} In one city of the region at least, Curitiba, which has a population of over one million inhabitants, the viability was demonstrated of setting up new collective transportation systems based on buses which use reserved lanes throughout a 'structural' network. These systems have been partially applied in larger cities such as Lima, and seem to represent a suitable and cheaper alternative than the underground railway.

The organization of programmes of housing rehabilitation and services in depressed zones may be one way of mitigating the dispersion of population growth. The uncontrolled growth of metropolitan areas is largely due to the reduction in the density of occupation of the traditional centres and the low residential density of new land development. A number of studies have stressed the great population absorption potential frozen in the reservations maintained for speculative purposes in metropolitan areas.

In order to realize these and other possibilities new types of administrative organization are needed, with radically increased power and action capacity of the public sector in metropolitan areas, and new forms of intervention in the real estate market.

2. Policies concerning very rapidly growing cities

The habitat CEPAL/CIDA study gives a clear picture of a new generation of Latin American cities.^{4/} These new population centres are anarchical agglomerations of persons and productive installations rather than genuine cities. The fact is that new human settlements are established as a result of the concentration of investment and that this, while being in principle positive for a country as a whole, has negative aspects from the standpoint of habitat quality. Thought should therefore be given to strategies for the creation of new cities designed to take advantage of the economic circumstances stemming from development and secure more satisfactory habitat results.

In order to take advantage of the potential of explosive growth, while eliminating or reducing its socially undesirable aspects, a number of strategies can be put forward: (i) strategies designed to act upon the status of enclaves; (ii) strategies to stabilize the transitory and explosive nature of the phenomenon; (iii) strategies aimed at improving the material situation of the habitat. These three groups of objectives are largely interdependent.

^{4/} See The settlement process in Latin America, E/CEPAL/CONF.70/L.5; Habitat CEPAL/CIDA Project, Centres of explosive growth and CECREX, A model of explosive population growth stemming from the concentration of industrial investment.

For the purpose of increasing the linkages between the growing centres and the rest of the economy of the country, and not merely the national metropolis, it has been suggested that economic functions should be diversified and the rural periphery developed. For this purpose, new industrial and agroindustrial activities would have to be fostered, which implies the discovery of new development possibilities for the zone or region where the emerging centre is located; the preparation of profiles for new activities, by providing incentives for the private sector or undertaking them directly; and the creation of the transport and communications infrastructure needed to connect the emerging centre with its zone of influence.

In order to keep economic growth and employment opportunities in line with each other, there could be a joint programming of industrial and basic social investment in order to avoid sharp fluctuations in the demand for labour during the early years of industrial development. Displaced labour could be reabsorbed by the use of training programmes and the creation of labour information services in the metropolises and other centres of potential demand for labour. It will not be possible, however, completely to remove all disequilibrium factors in a situation of widespread employment.

In order to improve the habitat and as far as possible reduce initial drawbacks, it would appear to be essential to solve the problems stemming from the power vacuum observed in all the cases which have been studied, including those where prior planning was carried out. It may be that many of the difficulties arise from the lack of links and common interests among persons who are all immigrants and therefore do not yet identify with a new community. It must therefore be accepted that the boosting of development is certainly the best condition for success. For this purpose it may be essential to set up public enterprises with increasing local representation, to which broad powers and resources are delegated by the central government and which receive the co-operation of the enterprises responsible for industrial development.

The new cities will also require new planning methods and more appropriate technology in order to organize and develop space with the necessary rapidity. Current urban planning methods and the technologies used for the installation and construction of housing, infrastructure, and services are not adapted to the extreme speed with which the settlement is growing. These questions are studied in greater detail below and in document L.9 of this conference.^{5/}

3. Policies regarding squatter settlement

Any realistic projection of the human settlements situation must recognize that squatter settlement will continue in the future and will be one of the main forms of occupation, organization, physical planning and use of space. It would not be unreasonable to assume that this particular form of settlement will continue to grow in importance in urban zones and will become a usual form of urban growth. It will not be possible to continue for much longer turning a blind eye to the problem and therefore the definition of suitable policies seems to be an urgent need.

The social problems stemming from an irregular form of settlement in relation to the model usually accepted by society stem largely from its marginal status. The self-reliant satisfaction of its social needs by a group constitutes a principle of discrimination which favours neither the group nor society. This is all the more so when that self-help is the result of the lack of support or inputs (financing, technology, availability of land and building materials) which the other social sectors possess, and when the strategies used to substitute those elements involve additional work on the part of those who as a rule have to make a greater material effort.^{6/}

The technologies suited to the conditions of self-help housing are very different from those applied in the rest of society for the provision of housing infrastructure services (HIS). Consequently, this form of

^{5/} Human settlement technology in Latin America, E/CEPAL/CONF.70/L.9.

^{6/} See The settlement process in Latin America, E/CEPAL/CONF.70/L.5, and CEPAL/CIDA Asentamiento precario en las áreas metropolitanas, Habitat Project.

building does not benefit from the economies of scale of the production of construction materials, except in the limited extent to which it has access to them, and does not share in general technological progress. Since the forms of organization of the informal system do not resemble those of the rest of society, they continue to be handicapped in relation to the advances won by the organized labour force in the formal system. The legal difficulties involved in squatting mean that the value of the housing cannot rise and frequently the work performed is lost.

There are two major options for possible strategies in this field: the absorption of the demand for HIS in question through market mechanisms; and the improvement of the informal production of HIS.

The first calls for a substantial increase in the incomes of the poorer groups and of the resources assigned to the housing sector. Even if the second of these conditions were possible, the first would only be possible over many years during which the size of the shanty settlement would have grown to such an extent that the option would in practice be unfeasible.

Consequently, there is little doubt that the second option is more realistic. However, it implies recognition of particular forms of organization; the provision of legal and financial instruments for the running of the settlement; research into and development of suitable technologies; and ways of developing urban land which are not compatible with the free housing market.

The fact that squatter settlement has not merely continued to exist but is actually growing shows its strength and consequently the practical advantages of incorporating it as an accepted and normal form of settlement. In this connexion, however, a number of obstacles arise whose solution calls for imagination and political will, primarily because it involves planning and implementing non-discriminatory forms of articulation with the rest of society.

In the first place, a definite solution must be found to the legal problem of ownership of established settlements, and urban land must be made available for new forms of squatter settlement.

Secondly, it is necessary to tackle the problem of the recognition of forms of organization and installation which frequently contravene prevailing laws and regulations. The introduction of special legal provisions would

/involve recognizing

involve recognizing their juridical status, thus enabling the associations of inhabitants of squatter settlements as having the same right to credit and management as other co-operative organizations. This is extremely important, given the reluctance of the informal system to accept the introduction of external forms of organization. The greatest obstacle undoubtedly comes from the incompatibility between the profit motive in the formal sector and the social solidarity which represents the cementing element of the leadership groups in human settlement processes.

Thirdly, the organizations spearheading the process must have access to land, building materials and financial resources, which implies the allocation of further resources for social investment or the transfer of incentives of the kind usually provided in public sector HIS programmes which benefit other sectors of the population.

Fourth, the makeshift technology currently applied in this type of settlement possesses practical difficulties and little efficiency in the use of labour, as a result of the lack of technical renovation and the discontinuity of the construction process. Research into a development of suitable technology for shanty settlements is an activity which could be begun almost immediately. The spread of new technology in the conditions prevailing in the informal sector nevertheless call for methods of social communication which do not yet exist in construction.

Fifth, any kind of paternalism must be avoided. It should not be forgotten that organization is the most important resource of the poor, and that it is based on participation.

4. Rural settlement policies

The habitat is here much more closely linked to the different forms of production than in any other category of human settlements, and greater consideration must therefore be given to macrostructural aspects and to the characteristics of the rural economy.

A projection of the present situation does not suggest any reduction in existing social conflicts in rural areas, if current trends simply continue. The capitalization of commercial agriculture will no doubt lead to greater trade with the metropolises, but this will not necessarily favour rural zones,
/primarily because

primarily because of the growing use of industrial inputs. The changes in occupation which have occurred will continue to widen the gap separating 'modern' from subsistence agriculture, especially since seasonal labour will tend to increase in the region as a result of the high cost of extending the agricultural frontier.

The increasing transformation of the rural population into labourers and the rise in seasonal employment will somewhat increase the possibilities of concentration of the population, but this will basically be a concentration of poverty. At the other end of the scale, the wider gap between commercial and subsistence agriculture will tend to perpetuate the isolation of the rural population.

This overall situation leads to a vicious circle as regards human settlements. While on the one hand their rudimentary state, the lack of marketing channels and the distance from markets places agricultural units in an unfavourable position from the standpoint of the use of their resources, and steadily makes them poorer, their very poverty undermines the action of the populated centres as agents capable of boosting rural production.

The starting point for any strategy designed to ameliorate the deplorable conditions of the rural habitat must be to break this vicious circle. It should be borne in mind, however, that these strategies imply profound changes in economic development policies, particularly as regards agricultural activities in general and rural employment in particular.

The first major option would be to increase the urban company's capacity to absorb redundant rural labour. This option implies major changes in industrial technology, which thus shifts the problem to overall development policies and their implications for international trade. Under present conditions, it is difficult to imagine important changes of this kind, unless development becomes "inward-looking", and even then it will take a long time for such changes to lead to a considerable growth in the capacity to absorb labour.

Another option which is not necessarily incompatible with the first is to increase the capacity of rural zones to absorb rural labour. Here there are again two choices, according to whether preference is given to

/large or

large or small enterprises as a means for achieving this objective. In the first case, the problem of maintaining a form of exchange which is clearly favourable to the metropolis will remain. In addition, this possibility is linked with the growth of seasonal employment as a dominant form of rural occupation, especially because the region is apparently passing through a period in which it has reached the limits of its agricultural frontier. Studies on this matter suggest that in future seasonal occupation will predominate. In such circumstances, the trends already observed towards a concentration of the agricultural proletariat in medium-sized settlements will probably increase. The rise of the "floating" population observed in the recent past may thus lead to some spontaneous concentration due to the possibilities of combining urban and rural occupations. The problem of the low levels of remuneration of seasonal labour will persist, as will therefore the difficulty of providing basic services, even in the case of substantial growth of basic social investment by the public sector in the medium-sized rural settlements (mixed rural-urban settlements).

The possibility of increasing rural employment through the development of small, family-based agricultural enterprises largely depends on the possibilities of stepping up the land reform processes which have been taking place in the region in one form or another. These processes have not been very efficient from the economic and social standpoints. In any event, land reform with improved policies and procedures is potentially one means of changing the distribution of the agricultural population and increasing its level of concentration.

The low levels of literacy and general education of the rural population, the dispersion of that population as accentuated by the rudimentary nature of rural communications, and the lack of information are certainly adverse factors which must be overcome prior to the implementation of programmes based on any of the above options.

Another factor linked to all these options is the expansion of the agricultural frontier. It was pointed out above that, broadly speaking, the region is facing increasing difficulties in expanding cultivable land.

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This is basically due to high costs and the technology currently used, although this does not apply altogether to the tropical countries with largely unused forest and savannah areas (particularly Brazil, Colombia and Venezuela).

Whatever options the countries choose to tackle the problems of the rural habitat, they will have to take into account the need to improve the effectiveness of State action. In most cases there has been a tendency for policies to be discontinuous and programmes unstable. In the majority of countries, interesting isolated land reform, colonization and general agricultural development projects have been carried out, but there is practically no follow-up of this experience. The methods used to programme these projects have not always been systematic and have often been only partially applied. As a rule, human settlements have not been an integral part of land reform, colonization and agricultural development programmes and projects. In some exceptional cases, there have been plans for the occupation, organization and development of settlements, but there is practically no information on the practical results of these projects. This circumstance suggests the possibility of complementing land reform and colonization programmes with the deliberate physical planning of settlements.

Even in the case of general agricultural development, physical planning can help to increase the effectiveness of public sector action. Advantage might be taken, for example, of the observed tendency of the rural proletariat to concentrate in medium-sized settlements by providing them with better basic services, genuine low-cost housing programmes and, above all, labour information centres capable of orienting the floating population and helping it to shift towards centres of seasonal employment. Along the same lines, advantage might be taken of some integrated regional development projects to combine agricultural planning with population settlement plans in order to obtain the scale and diversification of functions capable of increasing urban-rural relations and offering combined agricultural and industrial employment opportunities.

/There is

There is a pressing need to define integrated development policies for rural zones not merely because of the importance of the rural sector, from the population standpoint at least, but also because the improvement of the urban situation ultimately depends on how rural problems are solved. If the present migratory trends continue, there can be no hope for any positive change in the urban situation.

5. Policies regarding housing, infrastructure and services (HIS)

The basic problems in this area stem from the gap between the growing need for HIS and society's capacity to meet them. The rapid growth of the urban population and the concomitant limitations on resources available for basic social investment have produced a gap which is growing wider rather than narrower. This circumstance is due not only to the accumulating unmet needs but also to the evolving expectations regarding the nature and quality of HIS on the part of the higher income groups. Thus there is a tendency towards higher per capita cost of settlement and housing, not to mention the cost of transport infrastructure. With lifestyles based on individual transportation, the pressure on family budgets has increased radically, which is reflected in a lower propensity to devote income and savings to housing and related services.

With urban growth rates of over 6%, problems of HIS supply inevitably arise, as was recently shown in a CELADE study. This is a concrete expression of the need to formulate policies with realistic objectives and new solutions, since the traditional answers may have been suitable in other conditions but appear inefficient in a situation characterized by exceptionally high rates of urban growth and by a low capacity for basic social investment to increase. In another document before this Conference - "The material basis of the habitat" - the process of HIS production was defined as a continuous function in which a number of bottlenecks could be identified. Thus there are areas of conflict such as the lack of fit between social needs and the HIS availability; the limited resources available in relation to those needs; high cost of land and construction in relation to the average income of the population; and the social and geographical concentration of HIS.

/The HIS

The HIS production and distribution processes in the region primarily have three types of system: the free real estate market, public sector HIS programmes, and the informal sector. It should also be added that the production and distribution of HIS in the only centrally-planned economy in the region takes place within a different system, which has little in common with the other three. The following remarks do not refer to that system.

It would appear from the above study that in the market economies the abovementioned conflicts stem from obstacles which are primarily the result of: (i) flaws in the perception of HIS needs in society; (ii) the technology applied to the production and distribution of HIS; (iii) the availability of inputs including land and building materials; and (iv) the forms of distribution of the stock of HIS. These obstacles have repercussions which vary from one system to another.

Various strategy options can be suggested to improve the efficiency of HIS production and distribution systems, but these must be drawn up and implemented systematically in a national context in which the sphere of application of each of the systems and their mutual compatibility are defined. The first condition for the success of any effort to improve the material quality of settlements would appear to be the use of planning methods which fix targets for each of those systems and allocate available resources to each of them taking into account the population sectors they serve. Experience of the implementation of partial plans for limited periods clearly suggests that this undermines any policy aimed at achieving permanent results. Even if it were possible to solve the problems experienced by various countries of the region where a succession of frequently contradictory policies have been implemented the danger of adopting partial approaches would still exist, as long as HIS problems are not examined within the context of the systems in which they arise and spread.

/The first

The first problem to be solved is that of the continuity of programmes and the integration of all the systems in the overall development plans and sectoral HIS programmes, even when government action is limited to transferring specific kinds of activities to the private sector. It should not be forgotten that while the product of each system depends on the installed capacity of each system, that capacity in turn depends upon the level of inputs (land, building materials, financing), which are by nature limited, allocated to each system.

The allocation of targets for the different systems implies a decision on how to deal with the informal sector, whose features are substantially different from those of the other two. It is a sector which calls for different policies involving a number of high-level decisions, which are generally not explicit in national development plans. This would appear to be a fundamental problem in view of the importance of the direct efforts of the poorer sectors to solve their housing and services problems in most countries of the region. This problem involves such complicated questions as the concept of ownership, technology and participation, which should be tackled within broader political contexts.

The perception of the population's HIS needs is naturally an essential condition for gearing supply to demand. As has been pointed out when examining this question, the methods used are far from efficient and seem to reflect political interests much more than the needs of the different groups. Unquestionably, a greater participation of the population would be the best means of securing an effective expression of those needs. There are ways of achieving that participation, ranging from surveys and opinion polls to the creation of new forms of local government in which the management of the habitat and decision-making power over some elements of public expenditure are delegated to local governments directly elected by the population and endowed with sufficient power and resources. What is important is to consider the perception of needs as a policy element calling for profound changes.

The problem of technology applied to the production and distribution of HIS is another critical issue which must be tackled with the utmost concern. In the past, this technology has been imported from the developed countries and has served the interests of the top-income minorities; this does not

/justify its

justify its continued use in the present circumstances, since it is inappropriate for the majority of the population. Research and development related to suitable technology is a decisive factor which can have major effects on all the systems of production and distribution of HIS, particularly for the poorer sector. Here, more than in any other sector, there is a considerable store of creativity which is limited by the lack of scientific and technological support. To speak of the technological possibilities of the informal sector, however, is not to opt for "intermediate" technology, which is recognized as having a low yield, but rather for suitable technology which would optimize the possibilities of self-help housing.

The studies undertaken within the CEPAL/UNEP programme on human settlements technology ^{7/} indicate that practically all the human settlement technology used in the region has been imported from the developed countries, where it was generated in response to very different economic, ecological and cultural conditions. Consequently it is not always suited to the region, particularly for the low-income sectors or wet tropical areas (60% of the region area). This unsuitability of technology has meant that costs have been higher than if the nature of housing and infrastructure had been different. It has been estimated that merely to provide housing and services for the population annually incorporated into urban zones in Latin America (some 10 million persons on average until the end of the century), an investment of 40 billion dollars annually would be necessary, i.e., the equivalent of all fixed investment in the region in 1970.^{8/} Obviously, given present costs it is impossible to provide housing for that population in what are considered normal conditions: decent housing, drinking water in the home, sewerage, electricity, educational and health services. This indicates the pressing need to rationalize existing standards and bring them into line with national circumstances and the real possibilities of the vast majority of the population. In addition, it would be necessary to achieve

^{7/} See Human settlement technology, E/CEPAL/CONF.70/L.9.

^{8/} Based on an investment of US\$ 2,000 per person in housing and the same amount in infrastructure and basic services.

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substantial reductions in construction costs and to improve architectural and town-planning design criteria. Installed capacity for research into human settlement technology is very limited, and what does exist is practically entirely oriented towards the design and construction of middle-class housing.

This situation is partly to be explained by the failure to recognize that technology is a variable which must be used in keeping with the economic, social, political and cultural conditions of each country. The idea that techniques are constant elements and therefore of universal application is, in fact, very widespread.

The concept of technology which is appropriate from the economic, environmental and cultural standpoints is very recent in the region and still requires to be spread further. It should not only represent much lower costs than at present, but also make for greater conditions of comfort. It should also offer specific alternatives to the informal production systems, especially in rural and tropical areas, where the demand for technology is very different from the conventional type. Some specific problems arise in the different categories of settlements, such as the need for low-cost antiseismic techniques; alternative systems for consuming less conventional energy in the production of some construction materials; alternatives for drinking water supply, for the treatment of excreta and solid residues, and for large-capacity public transport (metro system) and the utilization of new sources of energy.

It therefore seems necessary to initiate development programmes using appropriate technologies in these areas and in others which may prove to be of higher priority in certain countries. What is important is to define research and development programmes with precise goals so as to achieve national objectives. These policies should form part of the national science and technology development policies.

The problem of land is an absolutely central theme for any urban development policy. The occupation of land is not only the initial activity of any settlement process, but income from land is the main factor in the

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constitution of the urban structure. The policies applied to date to control the tendency towards a continuous increase in the value of urban land beyond the general price index have been partial and have not formed part of an integral approach to urban development nor have been considered as coming within the perspective of general development. It is possible that in order for the policies to be more effective greater familiarity with the property market and the increasing share of financial capital which has introduced more complex forms of appropriation of urban income than mere speculation in real estate will be necessary. The methods applied to date have mainly been restrictive and have been confined for the most part to rent control. The application of property taxes has not significantly affected the property market either. Similarly, the half-hearted efforts to recover part of the appreciation generated by public investment have only contributed to increasing the cost of the land.

In any case, the application of policies aimed at curbing the monopoly market and speculation has been restricted to a few formulae out of the immense repertory developed by the capitalist countries, not to mention other measures applied in the mixed economy countries. The lack of interest in experimenting in these in the region raise doubts as to the causes of the phenomenon. Some authors on the subject have pointed out, for example, that what keeps the situation out of political management are reasons connected with the structure of local power rather than structural type restrictions.

It is important to point out that the land problem must be solved as a condition for an efficient domestic policy. For this purpose, the specific form in which the property market operates and the role played by modern financial capital in each market must be examined. There are clear indications that speculation in urban land does not so much arise out of the withholding of terrain by the land-owners - whose importance has tended

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to decrease at least in the big metropolises - but out of the concentrated activities of consortia of promoters, building enterprises, and financial groups which mainly act through major housing and commercial projects. These consortia would thus seem to appropriate the income from the land to themselves and at the same time draw off a substantial share of the urban external economies.

There is in any case a series of measures which could be adopted in order to make an effective recovery of the appreciation deriving from public sector investment, so as to channel family savings into reproductive investment, protecting them from inflation, and regulate the property market through the tax system. The direct State action would also be necessary to carry out an effective control of the use of the land and to constitute stocks of property so as to be able to intervene in the property market. This type of measure, and no doubt any other, however, will require the creation of solidly-based legal and economic instruments, and this needs firm political will.

The financial resources have traditionally been considered as the most important factor in housing production. The restriction of available resources by the public sector, however, and the low average capacity of family savings keep the needs attended to through public sector financial machinery down to very modest proportions.

In recent decades an attempt has been made in several countries to create national funds with resources from the workers' pension reserves, but land and construction costs have blocked the expansion of the programmes. In some countries, however, these forms of financing have not succeeded in reducing the needs to any great extent. In one of the cases studied it was demonstrated that it was only possible to attend to 3% of the workers affiliated to one of these programmes. Another of the formulae tried out, the savings-loan system, was rapidly developed in the fifties and sixties until it reached what seems to be a ceiling imposed by the savings capacity

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of the middle-class groups it serves. For nearly two decades the region received reduced-cost external resources of the order of an average of a thousand million dollars annually, through an international co-operation programme. However, production capacity has not increased to any great extent, deficits have continued to accumulate and the housing situation cannot be said to have improved.

These circumstances would seem to indicate a chronic situation in which the instrumental options have been exhausted and which it will apparently not be possible to overcome without a change in the general development policies. In effect, the conventional market determines very high thresholds for the majority of the population, which stem from the conditions normally required for credit: a permanent job and a savings capacity which, generally speaking, only permits access to skilled workers and middle-income employees. The financing of housing has basically served to date to support the construction industry, this being explained by the advantage of this industry in absorbing a considerable proportion of low-skilled manpower. Public financing for housing thus actually forms part of the employment policies.

The fundamental challenge persisting is therefore to attend to the social groups which do not depend on regular incomes or permanent jobs and have little capacity for saving. These groups, however, do possess other resources, such as their own organization and labour, which could be incorporated in the production and distribution of public housing.

This would require the concentration of a considerable share of the resources in the informal systems for the production and distribution of housing, which requires imagination and innovative capacity since there are no proved formulae to recommend, even where the incorporation of the productive capacity of these systems is the only realistic alternative for many countries of the region.

III. MANAGEMENT POLICIES

A different category of policies emerges when human settlements are considered from the local standpoint, especially because the region's exceptional urban growth has created the need for decentralized forms of management. In order to be effective, the national policies must take the form of specific responses to the geographical, ecological, cultural and economic reality of each settlement. Under present conditions, the municipal authorities generally speaking lack the means to perform this function efficiently.

In a study made by CEPAL several years ago it was pointed out that while in only one country of the region the State and municipal authorities took the decisions on 40% of public spending, and in another on 20%, in all the remaining countries the central government took the decisions on at least 90% of all public sector expenditure.

Administrative centralization is an old regional tradition whose roots go back to the colonial ayuntamiento. The trend was accentuated following the independence as a consequence of the victory of centralism over the federalist tendencies and the consolidation of the national bureaucracies. In this way a form of administration was established which in a way ran counter to the average size of the Latin American countries and their irregular geography.

In any case, the need to have less centralized forms of administration made itself felt for practical reasons following the sudden growth of the urban population which began in the 1950s. Pressure for greater administrative autonomy basically stems from three circumstances. Firstly, the increase in the demand for urban services and generally speaking the nature and quality of the problems originating in the exceptional increase in the population. It is increasingly obvious that the central governments are experiencing growing difficulties in dealing with the problems of the administration of their urban settlements, particularly the largest-sized cities.

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Secondly, the differences in size and function among the different types of settlement have increased notably and this has created a diversity of situations which demand different administrative responses. There can be no doubt that it is a very different thing to govern a metropolitan area, a medium-sized or small city or a rural settlement.

Lastly, the participation of the population, which appears to be an indispensable condition for mobilizing local capacities, requires another type of municipal structures where the representative capacity of the authorities is wider-ranging.

New urban needs have made themselves felt forcefully in the region. In only 20 years, from 1950 to 1970, 74 million new urban inhabitants represented an increase of 185% in the population of the cities of more than 20,000 inhabitants, while the capacity for organizing and equipping the cities only increased by a fraction of the total of the new requirements. While the physical dimension of human settlements was kept relatively small, the management of public affairs could proceed with functional advantages by delegation of the central government. The rapid growth of the population and its concentration in a few points of the territory has been accompanied by a growing diversification of urban functions, which present new types of situations and problems. Traffic congestion, the rapid changes in the use of land and environmental pollution are merely a few examples of these new situations and problems stemming from substantial changes in the physical dimensions and economic functions of human settlements.

Under the traditional régime, the local authorities do not possess sufficient power to face up to the new needs, they do not have their own resources and the central government transfer payments are barely sufficient to maintain some necessary functions. In fact, the functions of the municipality have been reduced in many countries to collection of taxes, the civil registers and some minor services such as street-cleaning and the maintenance of parks and gardens.

Metropolitanization has created a new administrative dimension for which the legal and institutional structures were not prepared. Their administration cannot be efficient under the general norms created for a very different conception and scale of agglomeration. These new material factors have as a

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result of their own growth created financial and operational machinery which has considerably increased the capacity of the municipal administrations of the biggest metropolises. São Paulo, Rio de Janeiro, Buenos Aires and Mexico City have more administrative and material resources than many countries of the region; and yet the magnitude and nature of metropolitan problems are different, requiring new capacities and forms of organization for efficiency. For example, certain metropolitan agglomerations, such as Caracas, Lima, Santiago and Mexico are made up of a large number of municipalities which act more or less independently in relation to the metropolis as a whole.

It has also been possible to observe some other indications of the need for changes in the local administration. In the 1960s an interesting municipality movement made its appearance in Latin America, by which municipal financial promotion and assistance bodies were created in Brazil, Venezuela, Guatemala, Honduras, Colombia and Costa Rica, and even a regional federation of these bodies; however, the movement has not been able to advance further, apparently because of limitations of a financial nature.

In addition to these indications of pressure to bring about changes in local administration there is a need for institutional changes which will allow the people to participate. Participation is the most efficacious means of incorporating new resources into habitat management. These resources do not only include capital but most particularly the initiatives, co-operation and mobilization of collective effort. The contemporary city has come to be a group of persons rather than communities, in the strict sense of the word. The diversity of interests of the different social groups comprising it gives rise to pressure currents which far from converging prove competitive and frequently conflictive. The need for a form of arbitration thus becomes evident, as well as for greater autonomy in the creative orientation of new urban policies.

It is possible that the origin of this situation should principally be sought in the representativity of the municipal authority. Unlike the Anglosaxon countries in which the local governments are the juridical expression of the community, the municipal authorities in Latin America are delegations of central government power, even in those cases - a few - where /they are

they are directly elected by the people. It is interesting to observe developments in Cuba, where a new form of local administration has recently been created - "People's Power" - in which a wide range of resources, decision-making and control have been transferred to new authorities elected by direct vote in districts, cities and provinces.

The participation of the people is also important as a means of strengthening public control over municipal management. As a consequence of their operational limitations, the local authorities do not always have the capacity for facing up the pressures of interest groups, frequently more powerful than the municipalities themselves. This is the case with major public works in which the interests of specific economic sectors - like the construction industry - may end up by defining priorities which are not always in line with collective interests. On other occasions, the existence of national funds earmarked for specific programmes may determine distortions in local priorities. It may happen, for example, that localities with pressing problems of a specific order, such as the building of a hospital, find themselves pressured into building sports installations, simply because funds are available for programmes of this type.

Participation furthermore constitutes an efficient instrument for mobilizing resources indispensable for expanding management capacity. The initiative, co-operation and collaboration of the non-formal institutions and actual persons are indispensable for incorporating new resources, such as family savings, non-wage-earning manpower and the machinery of spontaneous organization. Without the presence of these very real factors, the possibility of increasing the action capacity of the local authorities may be doubted, even if they did possess greater material resources. Without transferring the responsibility for management, it is difficult to achieve greater efficiency in the transfers of material resources by the central government.

Just as economic centralization may be conceived as an efficient answer to production needs in the initial stages of development, although not in its later stages - when the propagation of its inductive effects is required through the sectoral and spatial decentralization of investment - administrative centralization may be considered as an inevitable

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characteristic of any political and institutional process of development. The dynamics of the process, and in this case the qualitative change in situation, require a gradual decentralization which will allow the adaptation of the administrative structures to the requirements of growth.

This is not, however, a question of setting up new autarchical administrative units. If autonomy is a necessary condition for mobilizing initiatives and local capacities, the intervention of the central government should be conceived of as a supplementary force the function of which is not only to fit local action into national policies but principally to stimulate the action of the dynamic agents of the community by means of external incentives.

The increase in the autonomy of local administration in the countries of the region has not as yet been recognized as a need, a decisive step in efforts to improve the quality of the habitat. Its probable incorporation should take place in the context of heterogeneous national situations some of which offer a valuable background of administrative efficiency. The process must be gradual in the majority of the countries in order to make it possible to bring about important changes in administrative organization, the juridical structure, legislation and the tax system. It will also require the incorporation of more advanced techniques of social communication and the training of large contingents of qualified personnel.

The initiation of the process, however, should not be postponed. The local dimension is an indispensable component in the application of any human settlement policy. In many countries there are public and private organizations which could almost immediately be incorporated into the process. The working-class sector, as has been seen, has developed a series of forms for adapting organization which may be incorporated into national management schemes. The participation of the people in local policy is a decisive factor in democratic practice and a very efficient means of political development. Without it, it is difficult to imagine how the majority of the obstacles which stand in the way of a solution to the material problems of human settlements can be obviated, or how to exercise the margin of freedom existing between the determinism of the socio-economic structures and the organization, conditioning and use of space.

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The general conception of local government, as a relatively autonomous form of power emanating directly from the people, should adopt different forms of institutionalization as the circumstances require. The specific policies which have been submitted to the governments for consideration show alternative forms of action by the public sector. In discussing urban development policies, various activities which no doubt require a powerful authority, capable of intervening on the economic level in metropolitan development, were examined. Similarly, in pointing out the need to apply policies concerned with urban centres of explosive growth, it was concluded that it would be necessary to set up development corporations capable of taking very broad powers to themselves and little by little transferring them to more permanent forms of municipal government. As regards the policies for squatters' settlements, it is obvious that the recognition of the legitimacy of the squatters' associations constitutes another form of institutionalizing habitat management. Even when not explicit in the rural settlement policies, there is an evident need to generate some form of peasant organization so as to be able to participate in the creation and improvement of the rural habitat. The fact that rural organizations exist in some countries (ejidos and indigenous communities) may offer an organizational base which could be taken advantage of for decentralizing management. These different forms of institutionalization should be considered in any policy aiming at mobilizing participation by the people for improving the quality of the habitat.

The formation of metropolitan authorities would seem to be indispensable. In order effectively to control the use of the land, create new transport and service enterprises, purchase land and construct buildings and new forms of infrastructure, decentralize functions, reorganize working hours, and carry out vast internal rehabilitation programmes, a concentration of power and resources is required which the present administrative systems do not possess.

It proves impossible to exercise adequate control over the utilization of land when, as is often the case, independent municipal authorities exist within the metropolitan area. The municipalities which share local administration sometimes belong to different States or provinces. The need for an integrating measure does not eliminate the obstacles which must

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be overcome, especially those referring to taxation. This does not, however, seem to be an insoluble problem if the good will of the central power can be counted on. The creation of a politically strong authority is facilitated when the administration of the metropolis is the direct responsibility of the central government, as is the case in some metropolitan areas which are State capitals.

Political power would not, however, be sufficient; the existence of considerable economic power, especially in the free enterprise régimes, is essential. In the circumstances, the metropolitan authority should possess the necessary means to establish public services, make large-scale investment, and be able to intervene in the land market through the formation of property reserves and active participation in the market.

Within the metropolises, however, exist sources of political and economic power which could be mobilized for a new organization of metropolitan management. In fact, the resources existing in the metropolitan areas are frequently superior to those at the disposition of all the other human settlements. They must, however, be concentrated and placed under the responsibility of new metropolitan authorities.

In the case of development corporations, referred to in the examination of explosive growth, it will possibly be necessary to invent a type of institution with sufficient power and capacity of initiative also to incorporate gradually the participation of the emerging community. The system should, of course, adjust to the peculiarities of each national situation, but in any case it should be borne in mind that it is essential to guarantee these institutions the degree of independence indispensable for negotiating with the enterprises in charge of industrial investment. In practice, the public or semipublic enterprises concerned with the creation of industrial complexes in explosive growth have in all cases replaced the incipient municipal organizations in habitat management, in constructing public works, offering some forms of social assistance and absorbing municipal deficits. These functions carried out de facto have not infrequently provoked conflicts which have been transmitted to the labour relations of the enterprise, ending up by generating a certain paternalism which inhibits the development of the community.

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This fact allows a glimpse of the possibility and at the same time the advantages of a separation between the enterprise and a public law corporation which receives a substantial delegation of power from the central government (and the State government, if there is one) to create the material base of the city and its hinterland - and at the same time gradually to establish an authentic local government - and also to develop neighbouring rural areas.

When it is a question of incorporating the squatter settlements it is possible that the squatters' associations may provide a realistic means of institutional integration. The differences in organization and style of management will most certainly cause problems of adaptation, since the groups comprising human settlements are very sensitive to the introduction of alien forms of organization. The recognition of these associations seems also to constitute the form of giving them legal personality and converting them into collective credit-worthy subjects. This could be a practical means of acquiring new forms of management and of mobilizing the effective participation of a very numerous sector of the population. The known studies stress the capacity of these organizations for representing and administering the interests of their associates.

IV. HUMAN RESOURCES POLICIES

Throughout the region there are some thirty postgraduate programmes in urban and regional development and some masters courses directly connected with human settlements. These programmes annually give academic degrees to around 200 professionals in engineering, architecture, sociology, economics and public administration. Furthermore, approximately another hundred would appear to return to the region each year after obtaining their postgraduate degrees abroad. This situation contrasts with the almost complete absence of qualified professionals for the specific tasks of planning, control and administration of urban and rural development in all human settlements except the metropolises. This shortfall has been widely recognized in several country reports. In a study made by CEPAL in Brazil between 1975 and 1976 it was demonstrated that the country's medium-sized cities had practically

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non qualified staff of this type and that this situation represented a severe limitation of their capacity for formulating projects and therefore for tapping the resources placed at the disposition of the municipal administrations by the federal governments.

A situation of contrast has thus been produced between the unsatisfied needs of the municipal administration and the wide range of available highly-qualified professionals residing in the metropolises who could take part in such activities as the formulation of national policies, but who are apparently not prepared to change their activities or places of work. Some exploratory studies would seem to indicate that these professionals give service in other sectors of public administration, especially in the private sector.

It is obvious that the implementation of human settlements policies will require a considerable number of trained professionals and technicians imbued with a philosophy of action in keeping with the objectives of the policies which the governments may decide to adopt. In fact, the lack of unity between professional and policy objectives could ruin the operational bases of any strategy.

It therefore seems evident that the adoption of national human settlement policies implies co-ordinated work in the training of human resources, since needs in this respect are very varied. Policy advisers are required, and also programme directors, planners and technicians in various disciplines (architects, engineers, public administrators, economists, sociologists) to take on specific tasks in the public sector, while middle-level technicians are also required in definitely larger proportions, who can link their activities with the great mass of the population who cannot obtain professional services through the market. This professional sector is practically non-existent. Anyone who works as a master builder or small contractor has obtained his know-how by practice and only exceptionally in craft schools.

Lastly, the habitat is a matter of general interest and not the exclusive responsibility of the government and the technicians. Habitat management should be a collective activity in which each individual should contribute some capacity. Construction, at least in its rudimentary aspects,

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should be a subject taught in general education, together with some knowledge which would allow a better understanding of the habitat and its relations with persons.

A programme of this type represents an additional effort of an order of magnitude which few countries are possibly in a position to carry out literally. To be realistic, the reform of the traditional models for the training of qualified personnel for human settlements should be tackled as a long-term plan. The observation of present training limitations and the needs which may be anticipated in the region permit of a few reflections on the needs for reform.

First of all it would be necessary to modify certain procedures currently applied to urban development planning and establish methods of rural planning, which are practically not a topic of research and teaching in the universities of the region. The planning methods applied in the region to date have not always been successful in demonstrating their efficaciousness with concrete results. This was the case, for example, when the construction of new cities was planned, in which the planning only took in part of the settlement, which has meant that alongside the new cities extensive marginal areas have grown up in which the problems of the squatter settlements are repeated.

Generally speaking, and with very few exceptions, these are cases of planning methods which have little in common with regional realities. It is a fact that nearly all the cases have been the transfer of methodologies and technocratic criteria applied in the developed countries and frequently not corresponding to the needs of the population nor the real possibilities of the public sector. In fact, practically all the regulator plans known have not been subjected to any form of consultation with the people.

In the rural areas, physical planning has only been used in some exceptional cases of agrarian reform projects in which the formation of settlements or centres of support for the peasants was considered.

These circumstances would seem to indicate that new practices are required for the planning of human settlements in order to replace concepts and methods of practically no efficiency. This situation is particularly important in the centres of explosive growth, where the circumstances in

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which the settlement is produced and grows are not compatible with the current procedures for diagnosis and planning. In the few cases in which the settlement was previously studied, the results have left much to be desired. Generally speaking, there are doubts as to the advantages of using the traditional methods of urban planning to ensure the improvement of the habitat.

As has already been pointed out, it is necessary to make a great effort to investigate and develop appropriate technologies which will gradually replace those applied up to now and reveal their lack of effectiveness in terms of economic, social and ecological criteria. These research activities should be linked to the activities of the universities and should form part of the teaching programmes. Engineers, architects, economists, sociologists and public administrators should receive more information about the habitat, and its economic, social, cultural and ecological implications. The technical courses should incorporate a greater knowledge of reality.^{9/} The knowledge imparted is frequently theoretical and is more influenced by external models than by the needs of the countries. It is easy to see, for example, the interest of many universities in the most advanced techniques of pre-stressed concrete while technical progress in simple materials like adobe or brick are ignored.

It would also be necessary to disseminate new concepts which restore to professional practice a creative content in terms of the need to innovate in conventional solutions, introducing a new rationality suited to the specific needs of the different categories of human settlements and the varied problems they present. For example, the option of incorporating the informal systems of employment, organization and conditioning of space presents a challenge to professional training and at the same time offers a specific opportunity for renovation and for increasing its social utility. But this cannot be achieved without an appropriate State policy.

^{9/} For example, only in a few cases are there courses on climatology in the schools of architecture and engineering.

Secondly, it would be necessary to train new intermediate capacities. Even if it were possible to absorb all the university-trained professionals specializing in the work of planning, implementation and administration of human settlements, they would not be enough to meet the needs of the countries, especially in terms of the need to incorporate the population currently margined from the supply of housing and services. This personnel would possibly have to be recruited outside the university and receive a different type of training which would enable them to maintain their capacity of direct communication with that sector of the population.

In brief, the training of human resources for the habitat stands between two extremes but not mutually exclusive alternatives. On the one hand, a substantial increase could be considered in the capacity of the universities for training professionals under the conventional programmes of higher education. On the other, new non-university professionals could be trained making it possible to multiply considerably the human resources available to the sector. In the first option, it would be necessary to face up to the need for equally substantial changes in the orientation and nature of the university programmes, so as to develop technological innovation and foment new methods for planning and implementing public sector programmes. In the second option, it would be necessary to tackle the mass training of new professionals, possibly in association with the general education programmes, intended to incorporate unskilled labour and make construction a non-specialized activity, at least for the substantial sector of the population comprised in the informal system of housing production.

Within these extreme positions there is a series of combinations and new alternatives. The strategic decision is difficult and implies substantial modifications in the usual methods and procedures. If any road is to be adopted a firm political will is above all required.

