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ECONOMIC COMMISSION FOR LATIN AMERICA
CEPAL/CELADE JOINT PROGRAMME ON HUMAN SETTLEMENTS

LATIN AMERICAN SURVEY ON HUMAN SETTLEMENTS TRAINING.
ANALYSIS OF PRESENT SITUATION AND PROPOSALS FOR A REGIONAL
PROGRAMME */

Santiago, Chile

July, 1983

*/ Prepared by the CEPAL/CELADE Joint Programme on Human Settlements, in collaboration with the United Nations Centre for Human Settlements (UNCHS).

I. THE PRESENT SITUATION

1. Sources of information

The present report has been prepared with data accumulated since 1978, when a preliminary survey on training capacities in the field of human settlements was attempted within the framework of two ECLA collaboration projects^{1/} and on the basis of new information gathered through a questionnaire that was originally sent to 266 government institutions, universities and training and research centres in the region in April 1983. Some data contained in a preliminary study undertaken in 1971 by the Organization of American States (OAS) and the Latin American Social Sciences Council (CLACSO) were also used.

As the 1978 preliminary report was intended neither as a qualitative analysis of training programmes nor as a quantitative evaluation of the personnel trained, most of the information it contained was based on sample surveys existing at the ECLA offices, as well as on the personal experience of some members of the Human Settlements Unit, engaged in the past as professors and research fellows in urban and regional training activities in Peru, Venezuela, Brazil and Chile. The 30-year-long training experience of ECLA and ILPES (the Latin American Institute for Economic and Social Planning which is part of the ECLA system) provides, however, a good basis for evaluation of training in economic and regional planning, and the information contained in the answers to the 1983 questionnaire referred to above allowed a somewhat more in-depth analysis of the situation.

^{1/} ECLA/CIDA: The Human Habitat in Latin America and the Caribbean (1977-78) and ECLA/UNEP: Human Settlements Technology (1977-79).

2. Main types of training activities

The information gathered shows an array of training activities being undertaken in the countries of the region in each of the categories chosen by UNCHS for the classification of said activities in the global training survey.^{2/}

"Grass roots"-level agents

In principle, between the mass of the people and the institutions dealing with public administration in the human settlements field, a layer of intermediary personnel fulfil political functions of two sorts. On the one hand they convey to urban authorities the needs of the community and their views on environmental improvement, and on the other they promote and organize action programmes on behalf of the same community or the authority (central or local). They are community leaders and project promoters.

In general terms, training programmes for intermediary personnel in Latin America and the Caribbean are more likely to be found in rural areas and small urban communities than in larger cities; at all events, the government community development programmes that were very much in vogue in the 1960s are now losing importance, partly as a consequence of the critical economic situation which has led to serious restrictions on the scope and number of social programmes in the region, and partly because of the sectoralization of government action, which is in contradiction to the integral approach to problem-solving inherent in community development projects, and the rigid centralized decision-making process.

Although the recent survey is not completely representative precisely because it is difficult to gather information about training programmes in rural areas and small cities, it confirms the above statement. Only four of 26 evaluated institutions offer training exclusively for the grass roots-level: the Comisión Honoraria Pro-erradicación de la Vivienda Insalubre Rural in Uruguay, the Asociación Vivienda Económica (AVE) in Córdoba, Argentina, the

^{2/} Some reservations could be made as to the applicability to Latin America and the Caribbean of the global survey categories.

Servicio Ecuatoriano de Capacitación Profesional (SECAP) with its programme of Capacitación y Desarrollo de las Areas Suburbanas de Guayaquil, and the Instituto Técnico de Capacitación y Productividad (INTECAP) in Guatemala.

Perhaps precisely because of this, apart from the urban community improvement programmes undertaken by FUNDACOMUN in Venezuela and by the recently-created People's Training Unit (Unidad de Capacitación Popular) of the Human Settlements and Housing Ministry of Nicaragua, the training of community leaders and project promoters has been primarily the concern of some United Nations organizations, such as UNICEF, ILO and FAO.

Nevertheless it should be considered that a great part of training at the grass roots-level is done by social and religious organizations which quite often undertake programmes with components of training in human settlements. In some cases these are linked with actions developed by poor urban or rural population organizations. Unfortunately because of restrictions of time and resources this type of work could not be evaluated in the 1983 survey.

UNICEF has recently conducted some training programmes in Ecuador, Colombia and Mexico where an innovative participatory planning methodology has been tentatively and, reportedly, successfully applied. This methodology, which is based on the notion that no planning can really be undertaken with success if the community does not participate actively and with the support of the government in all stages of the planning process, represents an extremely important precedent for shaping new training programmes for community planning directed towards the training of the population for organized and efficient participation.

Other agencies, specifically FAO and ILO, have organized (in collaboration with national institutions dealing with agrarian reform and rural development) some training projects such as COPERA (Training for Agrarian Reform Organization, Production and Employment), undertaken by UNDP, ILO and the National Agrarian Reform Institute (INRA) of the Government of Nicaragua. These courses are addressed to community leaders, extend over a three-week

period, and take place in selected rural communities according to a previously approved schedule. Training methods are based on the direct experience of the community in decision-making processes.

In the governmental sphere, a permanent training programme for grass roots-level agents is to be found in Nicaragua, where in 1982 the Human Settlement and Housing Ministry of that country, with the assistance of ECLA and UNICEF, established a People's Training Unit. The Unit currently organizes training activities for the Ministry's staff and community leaders.

In Bolivia the Ministry of Social Security and Public Health implemented a project about participation of rural women and their families in health programmes with a system of supervisors and monitors in fifty rural communities.

In Ecuador the above mentioned SECAP works in the slums of Guayaquil, but it does not have a countrywide program at the grass roots-level.

FUNDACOMUN, the Foundation for Community and Municipal Development of Venezuela, gives primary attention to programmes for upgrading slums and squatter communities. In the framework of these programmes the Foundation organizes training activities for promoters as well as for the community leaders participating in them.

Administrators and public servants^{3/}

Administrators and public servants, as well as programme managers, are not viewed as clearly distinct categories for training purposes in current training programmes. With a few exceptions, these programmes are not tailored to respond to concrete practical needs; this is especially true of training activities at the university level. As a consequence, in general, the training of the different categories of staff required at the central and local levels for the management of human settlements and the improvement of the quality of

^{3/} Administrators and public servants are taken as synonymous for the purpose of the present report. Project managers engaged in urban and rural development programmes and projects have been included in this category as well.

life is left to a few non-university institutions and to international co-operation agencies. Short courses, seminars and workshops are typically the training activities being accomplished by these institutions.

Three exceptions should be mentioned, however; although they are undergraduate university programmes, their specific orientation towards human settlements makes them notable. A small School of Municipal Engineering has existed in Mexico for a long time, although without great significance for the country as a whole. More recently a new institution, the Universidad Autónoma Metropolitana (in Mexico City), created a four-year curriculum leading to a bachelor's degree (licenciado) in the design of human settlements. Because of the character of this new programme, employment opportunities for its graduates are offered primarily in the Ministry of Human Settlements and Public Works.^{4/} Another exception is the undergraduate programme on urbanism established in the early 1970s by the Universidad Simón Bolívar in Caracas, Venezuela. This is also a four-year programme leading to a bachelor's degree. As in the other cases, prospective employment opportunities for graduates lie in the public sector, which was enlarged after the creation of the new Urban Development Ministry.

The Brazilian Institute for Municipal Administration (IBAM) is the pioneering non-university institution in this field and still the leading one in the region. IBAM offers regular courses for clerks and administrative personnel on matters such as accounting, budgeting, taxation, management, surveying, etc. It also provides technical courses on municipal planning and engineering. Some of these courses are directed to personnel with academic degrees. In 1981 IBAM offered eleven municipal courses of different types, 2 postgraduate courses and 5 workshops. 200 municipal officials and 21 foreign students attended these courses, while another 7.000 participated in three correspondence courses. IBAM has also assisted several national and municipal organizations in establishing staff training activities in Costa Rica, Colombia, Peru, Ecuador and other countries.

^{4/} Created in January 1983, this branch of the government has been recently transformed into the Secretaría de Desarrollo Urbano y Ecología.

The governmental Centro de Treinamento para o Desenvolvimento Econômico (CENDEC) in Brasilia, together with international organizations organizes courses in sectors like electric energy and urban transport.

Among the Brazilian State governments which have created support and training centres for their local authorities, São Paulo is perhaps the most outstanding example. CEPAM (Centro de Estudos e Pesquisas de Administração Municipal) runs regular courses for municipal clerks and supporting technical personnel of the municipalities of the State of São Paulo.

The Metropolitan Planning Corporation of greater São Paulo (EMPLASA) organizes seminars on planning, programming, coordination and control of public metropolitan services.

The Ministry of Health in Montevideo, Uruguay, offers a regular training programme in sanitation not only for professionals but also for auxiliary staff from the communities.

UNESCO and the Latin American Faculty of Social Science (FLACSO) held in recent years a joint training programme for urban managers in several South American countries. In 1981 a two-week seminar was held by UNESCO/FLACSO in collaboration with the Organization of American States and the Universidad Autónoma de Monterrey (Mexico). The seminar (Integrated Human Settlement Management in a Regional Framework), which was specifically addressed to public sector officials, approached urban management from a regional perspective.

UNESCO and FLACSO hold regular courses (6 to 7 per year) of a duration of two weeks on Management of Human Settlements in various countries of the region, which include trainers training with the purpose of maximizing the multiplier effect.

International co-operation plays an active part in improving managerial and technical skills in the field of human settlements. In addition to courses organized by UNESCO and the International Centre for Environmental Sciences - CIFCA (a joint UNEP/Spanish Government institution which has supported in the

past training programmes in Latin America and the Caribbean in collaboration with regional organizations) UNCHS recently organized, in collaboration with the World Bank, a series of courses on urban management in Bogota, Lima and Buenos Aires.

The Panamerican Centre for Sanitary Engineering and Sciences of the Environment (CEPIS) organizes a whole range of training activities concerning problems of drinking water, liquid and solid waste disposal and water treatment.

Regional organizations such as ECLA and OAS have also been active. ECLA is currently running a series of two-week workshops on appropriate human settlement technologies. Up to now, five workshops have taken place in Mexico City, Havana, Managua, Lima and São Paulo. Two more are being prepared for 1983 in Brazil and Colombia. Teaching materials and instructors for these workshops are provided by ECLA, following an on-going revision of the documents originally prepared by the Human Settlements Unit as a result of the joint ECLA/UNEP research project on human settlements technology, which ended in 1979. Other areas of knowledge, such as urban planning and urban environmental forecasting, are being considered for future workshops of the same type.

OAS has organized, through the Inter-American Centre for Regional Development (CINDER), several seminars on regional development which have dealt with regional development techniques, regionalization of development, institutional co-ordination, and municipal organization. Other training activities are included in the OAS integrated rural development programme and in a series of urban development projects in Argentina, Brazil, Peru and Venezuela.

OAS also created, in collaboration with the Universidad Nacional de Colombia, a research centre on housing (CINVA) which later, in 1977, served as the basis for the creation of the Servicio Interdisciplinario de Información en Desarrollo Urbano (SIINDU), also a joint endeavour of OAS and the Universidad Nacional.

Later OAS, together with the Universidad de Ingeniería, Lima, Peru, established PIAPUR, a postgraduate programme on urban and regional planning which functioned very successfully for a good number of years.

Programme managers and planners^{5/}

The training of specialized personnel in human settlements is almost completely restricted to urban and regional planning. Although the differences between the fields covered by different programmes are not quite clear (especially in the two first categories), ECLA differentiates post-graduate programmes in regional, urban and regional, and urban planning (or development).

These programmes generally imply full-time attendance for at least one year and full-time dedication to this sphere. With the exception of those provided by international organizations and one private foundation, all specialization programmes are of university level.

Regional planning is the subject of a series of international and university training activities. ECLA/ILPES has long experience in the training of economic and regional planners. Since 1952, when the Basic Course in Planning and Economic Policy was first established, some 8.500 professionals from almost all of the countries of the region have received training through international, national, regular or special courses organized and sponsored by ECLA. In 1970, ILPES initiated a regular 15 to 30-week regional planning course which has been repeated every year since then. Over the period 1970-1982 a total of 39 courses have been held in 11 countries: 14 international and 25 national. The course is addressed to staff members of national planning institutions and university professors and is focussed on the analysis, both qualitative and quantitative, of regional (sub-national) differences and the study of policy instruments conducive to the reduction of such differences. Spatial organization, regional growth theory, regional analysis techniques, regional planning methods, urban development, project analysis and regional investment planning are the central subjects being taught. As a result of these courses, 1.000

^{5/} This section deals only with the training of planners.

professionals from the ECLA member countries have been trained in regional planning since 1970. Additionally, in some countries special arrangements have been made to set up regular courses, such as the one offered yearly by CECADE^{6/} in Mexico.

Regional planning is also the subject of intensive postgraduate courses in other international and national institutions. The Inter-American Centre for Regional Development (CINDER), located in Maracaibo and sponsored by the Organization of American States and the Government of Venezuela, offers a six-month intensive training course for professional staff members of regional development corporations. From 1976 to 1980, an average of 20 participants per year obtained diplomas in regional development.

In the same country, the Centre for Development Studies (CENDES), an interdisciplinary research and training institution belonging to the Universidad Central de Venezuela, offers an option in regional planning within its regular two-year intensive course in development planning. CENDES was established in 1960 and enjoys high prestige as an advanced development research centre, which has trained up to date more than 500 professionals in economic and regional planning.

More recently, the Regional Development and Planning Centre (CEDEPLAR), a public non-university organization of Belo Horizonte, Brazil, initiated a course in regional planning.

Urban and regional planning postgraduate programmes are being provided by at least seven universities in Brazil, Colombia, Ecuador, Mexico and Chile. Some metropolitan, federal or private institutions offer training similar to the one offered by the above mentioned CENDEC and the Empresa Metropolitana de Planejamento da Grande São Paulo, the Instituto de Desarrollo Económico y Social in Brazil and the Consejo Federal de Inversiones in Argentina. Despite

^{6/} CECADE, the Centro de Capacitación para el Desarrollo of the Secretaría de Programación y Presupuesto, trained 925 professionals in regional planning from 1973 to 1982.

the fact that no systematic analysis of their syllabuses has been attempted, it may be said that this category does not show a clear differentiation between urban planning and regional planning.

Urban planning is most clearly differentiated from regional planning in the predominantly qualitative nature of the analysis methods applied in most cases. The nature and character of urban planning (or development) postgraduate programmes may be judged by examining one of them, the Master in Urban Development of the Universidad Católica of Chile, perhaps the most intellectually sophisticated of the group. The objective of the programme is "to study the relationship between space and society and the forms, both public and private, of managing urban space in view of the technical and ethical objectives of development". The syllabus includes the following subjects: development and spatial structure, planning theories and methods, locational theories, spatial analysis, urban impact of territorial projects, urban planning and urban development.

A few positions deviating from the dominant pattern could perhaps be identified. At least two programmes (the FIPE and the Getulio Vargas Foundation programmes, both in São Paulo) are oriented towards an urban economics approach. Explicit environmental elements can be identified in the University of São Paulo's postgraduate programme on environmental structures, as well as in the Zulia University's programme on environmental planning (acondicionamiento ambiental). Finally, the research orientation of the CEUR programme (in Buenos Aires, Argentina) fulfils a complementary function: the training of research fellows, which has a great regional potential. Fellows from several Latin American countries have participated in this programme, which provides training periods of one to two years.

3. Manpower supply and demand

The relationship between the actual demand and the current supply of graduate planners from the university programmes is largely unbalanced. Although there is no precise information available on the number of planners graduating every year and their actual occupations, one could assume an output of some 200 per year. In addition, about 50 postgraduates from extraregional universities come back every year with Masters and Ph.D. degree. Of these, only around 20% find employment in urban planning agencies. In fact, actual employment opportunities for planners are currently very limited in almost all Latin American countries. Only two countries of the region, Mexico and Venezuela, have created (between 1976 and 1977) new central governmental agencies in the field of human settlements and urban development. There are grounds for estimating that a good proportion of graduate planners engage in private practice as real estate and construction enterprise consultants, or enter other branches of public administration activity. An important group enters universities as lecturers and researchers.

The overwhelming majority of postgraduate planners are concentrated in the national capitals and in a few metropolitan agglomerations, although not necessarily engaged in human settlements planning and management. At the same time, "the persons who work as planners are not necessarily those who have received formal training in economic, social, spatial or development planning. Often, too, their official posts are not specifically denoted as carrying planning responsibilities. Many times, their roles are synonymous with or overlap those of senior administrators". This statement, taken from the UNCHS seminar on training for improving low-income settlements (Enschede, 1978), is particularly true in Latin America and denotes a contradiction: big interest in planning as postgraduate training is accompanied by quite limited employment opportunities in posts which do not always require planning qualifications. To what extent, therefore, is urban and regional planning training, as conceived in most university programmes, meeting a real social need?. In any case, it seems that observation of the regional reality supports the idea, also in

agreement with the Enschede report, that the training of planners at post-graduate level is not a priority need in Latin America and the Caribbean.

Instead, areas of training activity in the region should be related primarily to middle-level community leaders, project promoters and local staffs, and to the improvement of the education of architects, engineers and other professional habitat builders. Not least, general education in the field of human settlements is a necessity for the improvement of the quality of life.

4. Some substantive observation

The information available at ECLA and the evidence being collected on frequent field trips, at recent expert meetings and by the 1983 survey reveals a situation which seems to require a change of conventional patterns more than the reinforcement of the present training trends. The analysis of that information shows that:

- i) the larger part of the actors and agents in the settlement process do not take an active part in most of the present training programmes either as trainers or trainees. This is particularly true at the intermediate (technicians, municipal clerks, etc.) and the grass roots levels.
- ii) training of the intermediate level agents is concentrated in metropolitan areas. For rural agglomerations, small and medium sized cities training capacities are totally insufficient.
- iii) special training in human settlements for all levels in relatively less developed countries is scarce, especially in Central America and the Caribbean. Quite often professionals receive training in the U.S.A.
- iv) most of the present training programmes have a tendency to be alienated from reality, especially in relation to the lower-income population groups and their needs in terms of quality of life and services;

v) basic professional training, especially in architecture and engineering, does not enable practitioners to deal with the delicate and complex nature of the social and environmental questions which lie behind the material aspects of the human habitat. Specifically, there is little in the training programmes for architects and engineers that would qualify them as the key professionals to deal with human settlements;

vi) the training of planners as a means of providing new professional capacities may be questioned in view of the experience of the last thirty years. To a very large extent, planning as it is conceived in many Latin American universities is an intellectual substitute for real policy making and for the concrete implementation of human settlements development actions;

vii) most of these deficiencies stem from the uncritical transfer of basic concepts and training schemes from developed countries to a situation which is characterized by an increasing imbalance between the rate of growth of the population and its concentration, on the one hand, and the capability of developing countries to provide the capital and management required by conventional ways of dealing with the organization, equipment and use of human settlements, on the other.

In some countries of the region training at the intermediate and grass roots-level including the promotion of a real and active communal participation is not supported by the authorities which in some cases seem to regard them as potential instruments for the promotion of social unrest.

It is worth noting that similar conclusions were reached in the already mentioned seminar sponsored by UNCHS and the Government of Holland at Enschede in 1978: "There will have to be drastic changes in the scope and nature of training in human settlements, as the current situation of training in developing countries is woefully inadequate"... "the training is not only irrelevant to the actual situation in the developing countries but is definitely not

oriented towards the reality of low-income settlements in these countries. At present, most of the imported teaching methods are not at all appropriate".^{7/}

Some clear implications for training patterns derive from the Enschede report as well as from the substantive approach reflected in the present ECLA Human Settlements Training Programme; in both first priority is assigned to the training of trainers: "It can not any longer be assumed that a formal academic education is sufficient for instructing others in the novel and dynamic field of human settlements improvement. On the contrary, training those who are responsible for implementing low-income settlements improvement programmes requires its own special knowledge and skills". As for the relative importance of planners in the specific training schemes directed towards the improvement of low-income settlements, the Enschede Report is very clear: "The group of experts felt that, in the effort to focus national and international attention on the training needs of the various groups of actors that intervene significantly in the settlement improvement process, the training of persons to serve as planners is not a matter of priority".^{8/}

^{7/} UNCHS: "Training for improving Low-income Settlements", Report of the Ad-Hoc Meeting of Experts on a Training Programme for the Improvement of Slums and Squatter Areas in Urban and Rural Communities, Enschede, The Netherlands, 22-30 August 1978.

^{8/} UNCHS, Enschede Report, op.cit.

II. PROPOSALS FOR A REGIONAL HUMAN SETTLEMENTS TRAINING PROGRAMME

1. Needs for a change in education trends

Latin America is not repeating the history of the industrialized countries as far as urbanization is concerned. The rural population continues to grow at an extremely high rate, urban growth has not been preceded by industrialization, nor has the speed of that growth gone down in the four decades since the urban explosion began in the 1940s. In brief, over the last 40 year the distribution of the population over the territory and the characteristics of human settlements have changed in such a manner in Latin America that traditional concepts regarding housing and urban development have lost much of their significance.

In the first place, the unprecedented growth of the urban population and the unusually large size of the metropolitan agglomerations has imposed an effective limitation on the capacity for planning, equipping and managing human settlements. The insufficiency of the economic resources and human and organizational capacity available to the central governments for carrying out these functions will contribute, possible more than any other circumstance, to the development of policies of administrative decentralization which will make it possible to share responsibilities with the local authorities and promote the participation of the population.

The transfer of development control functions to the local authorities, which has already begun in some countries, will make it necessary -for practical reasons rather than considerations of principle- to have officials and technicians capable of acting with greater autonomy and in more direct contact with the local communities.

Secondly, the migratory flows from rural areas observed since the 1940s, which are still as strong as ever, have made makeshift settlement a normal form of urbanization for a considerable sector of the population. Nevertheless, and in spite of the legal, economic and social problems which this phenomenon brings with it, it is a form of urbanization which (if properly guided), as has been

widely recognized, can complement rather than take the place of the capacity of the State to resettle the 10 million persons entering the urban areas of the region every year according to current estimates. A political strategy of this type, however, requires new forms of relations with the institutionally peripheral communities to which regular forms of technical and financial assistance are not available.

Thirdly, mention must be made of the presence -increasingly frequent in some countries of the region- of a new form of civil organization known as "urban movements". These movements are organized among neighbours and communities to further local demands and seem to point to a new collective attitude whereby residents are seeking to take upon themselves the settlement of problems which until now were the exclusive concern of the political authorities.

These circumstances clearly indicate the need for conceptual, institutional and political changes. This situation was explicitly recognized at the United Nations Conference on Human Settlements (Vancouver, 1976), where it was recommended, inter alia, that:

- the objectives and purposes of national development should be specified in spatial terms;

- priorities should be established regarding the location of investments of basic social capital and the satisfaction of the needs of the different social groups;

- the planning of settlements should be in keeping with the conditions of the countries and should not follow models taken from abroad;

- national human settlements policies should be firmly based on the investigation and development of the most appropriate techniques for the planning and management of settlements;

- technical assistance should be offered to developing countries which request support in education and training for applied research into human settlements, and

- an effort should be made at both the world and regional levels to mobilize co-operation from universities and research institutions.

In order to achieve these objectives, the Vancouver Plan of Action proposes combines efforts by the countries and United Nations agencies, aimed mainly at replacing traditionally sectoral approaches with new, more global, concepts in which the improvement of the quality of the human habitat is a social objective going hand in hand with that of economic development.

The formulation of new human settlements policies, the institutional changes demanded by a new system of decentralized management, the design of strategies aimed at achieving greater local participation in the improvement of the habitat, and the incorporation of the capabilities of the informal sectors represent profound transformations which call for new knowledge and attitudes on the part of political leaders, public officials, specialized planners and professional constructors of habitat.

In reality, the capacity for training professional personnel in the field of human settlements in Latin America and the Caribbean has lagged behind with respect to the new needs. Furthermore, in most of the countries of Latin America professional training with regard to human settlements is unrealistic as far as urban and rural development needs are concerned. This fact has been widely recognized by the governments of the region, which have expressed their desire that training should be given top priority in programmes of international co-operation.^{9/}

^{9/} ECLA resolutions in Guatemala City, 1977 and Montevideo, 1981. Resolutions of the Latin American Regional Meeting on Human Settlements (Mexico City, 1976) and the Latin American Conference on Human Settlements (Mexico City, 1979).

A general examination of the situation as regards human settlements training in Latin America carried out by ECLA confirms, as already noted, that there is a basic contradiction in the region: whereas most of the countries train urban and regional planners through post-graduate specialization courses, the vast majority of the human settlements of the region do not have any technical personnel in the municipalities and State or provincial governments who can take care of the tasks of the planning, control and administration of urban development. It is also clear that the expectations of graduate planners as regards status and wages oblige them to settle in the largest cities and seek management posts in central government political bodies rather than working at the local level. As the demand for high-level officials in ministries of housing and human settlements is relatively small, these graduate specialists are absorbed by other activities in public administration and the private sector, usually unconnected with the knowledge they have acquired on the specialization courses.

A study carried out by ECLA at the request of the Brazilian Government between 1975 and 1976 brought out many of the problems faced by local authorities in controlling urban development. In this study, which was carried out in 10 cities with around 100.000 inhabitants, field evidence such as the following was collected:

"With few exceptions, there was observed to be a generalized shortage of technical information, whether viewed as a complementary instrument for the perception and recording of the needs of the population, or as a basis for planning and project preparation. In the first case, the lack of technical records further limits the possibility of a proper view of the situation by the local government. Although such records do exist in some cases, they are not always up to date. This may be due to shortcomings in administrative procedures and lack of experience in the use of information as the basis for planning.

Furthermore, in most cases there was observed to be a lack of planning capacity, understood as the capacity to define priorities and prepare programmes of work covering a period of several years. This shortcoming is mainly due to the inadequacy of human resources in quantitative and qualitative terms.

Finally, it is observed that urban services which have institutional links with federal programmes display fewer shortcomings than services which depend on municipalities. It should be noted, however, that (in these cases) the planned response does not (always) correspond to the needs of the population or the financial capacity of the municipality".^{10/}

The survey in question also reveals, as already noted, that formal education on matters directly connected with habitat is highly concentrated, at the university level, in post-graduate training for urban and regional planning. There are only three university courses leading to a bachelor's degree, which produce no more than about 50 professionals per year, in "design of human settlements" (Mexico), "urbanism" (Venezuela) and "municipal engineering" (Mexico).

At the non-university level, in contrast, the situation is different. As already noted, the Brazilian Institute of Municipal Administration (IBAM) in Rio de Janeiro and some State centres, and the Centre for Studies and Research on Municipal Administration (CEPAM) in São Paulo, Brazil offer courses of various durations for municipal officials. Furthermore, as we already saw, a limited number of national and international institutions periodically offer seminars and training workshops for professionals, technicians and community leaders directly involved in sectoral programmes and urban and rural development projects.

The concentration at the post-graduate level is partly due to a distortion of human settlements training systems which seems to stem from an idealized view of the political process of the formulation of development policies and a

^{10/} ECLA, "Sistema Financeiro Nacional para Investimentos Urbanos: a demanda e oferta de serviços urbanos nas cidades de porto medio no Brasil", Rio de Janeiro, 1976.

technocratic concept of the participation of planners in it. Consequently, those who have been trained under these systems do not normally meet the requirements as regards knowledge and experience which are called for by actual conditions. Indeed, possession of a specialized degree in planning is not a hard and fast requisite for exercising management or advisory functions in public administration bodies, and much less so in private practice. The report of the Enschede seminar already referred to fully concides with the actual conditions of Latin America and the Caribbean in this respect:

"The persons who work as planners are not necessarily those who have received formal training in economic, social, spatial or development planning. Often, too, their official posts are not specifically denoted as carrying planning responsibilities. Many times, their roles are synonymous with or overlap those of the senior administrators. On other occasions their positions are synonymous with those of "development officers". However, regardless of the titles of their positions, they have a synthesizing role involving the rationalization of objectives with available resources. Therefore, whether or not they have been formally educated as economists, geographers, physical planners, engineers or some other related profession, they are expected to operate in a multisectoral manner and to piece together myriad complex relationships".^{11/}

This capacity for synthesis and the simultaneous handling of multisectoral information is not, however, a methodological concern of the formal training given to urban planners and is only found partially, as regards the conceptualization and handling of quantitative methods, in regional planning, especially in the courses given by CIDU-IPU of the Catholic University of Chile, the ECLA/ILPES courses, and those given by CENDES and CINDER, the latter two located in Venezuela.

Architects, civil engineers and some other university graduates carry out tasks directly related with the construction and expansion of the material and institutional structure of the habitat and represent the disciplines from which

^{11/} UNCHS, op.cit.

the vast majority of the professionals and technicians working in public administration and private real estate and construction firms are recruited. In addition, architects, engineers and constructors work independently as builders and designers of dwellings, buildings in general and the urban infrastructure. Usually, however, the syllabuses for these university courses only cover the formal systems of construction and leave out the knowledge needed to grasp the complex and delicate nature of the economic and social problems which lie behind the material structures with which these professionals are directly concerned. Thus, only in exceptional cases do regular university syllabuses for these courses include subjects connected with technology, cultural anthropology and ecology, which would make possible, inter alia, a better understanding both of the phenomena connected with human settlements and the effects of particular techniques on social, cultural and economic structures and on the environment.

Professional training is generally strongly dominated by an ideal and abstract view of reality which has very little factual backing based on actual conditions. Noteworthy in this respect are the absence of such subjects as climatology and geography in general, and information on the production of construction materials, appropriate technologies, and the institutional machinery for administering urban systems and public urban development policies. In these circumstances, it is difficult to accept that architects, designers and engineers are professionals who are sufficiently well trained to take part in the tasks of the construction and improvement of human settlements.

Together with this tendency towards abstractness in university training, there is the absence of forms of formal training of middle-level cadres and non-university technicians, although the majority of actual activities in the field of habitat are carried out by foremen and self-builders and the vast majority of municipal officials are recruited in practice from persons without previous qualifications. The foregoing seems to make it clear that the present formal education is quantitatively and qualitatively inadequate for the actual conditions of human settlements in Latin America and the Caribbean. In these circumstances, any attempt to expand the present system without a thorough-going revision could only lead to the worsening of the situation.

2. A paradigmatic approach

Several countries of the region display an important set of signs of a tendency -sometimes quite pronounced- towards the establishment of political and administrative systems or regimes based on innovative concepts of the role of local governments and their relations with the central government; participation by the community in all stages of the process of taking decision which affect it; the role of technology; the use of non-conventional resources, and forms and procedures of financing.

In short, what are involved are articulated systems of intervention in the field of human settlements which are designed, within the context of the particular characteristics of each political system, to harmonize the objectives, policies and projects of the central government with local interests in the improvement of the environment and the living conditions of territorial communities, as well as to promote community participation.

This harmonization and unification of interests is made possible in part by the division and specialization of the spheres of political decision-taking, resulting from prolonged societal processes in which the activities of professionalists in various fields of knowledge play an important role as an agent of change.

The preparation of the actors for efficient and simultaneous social action for the introduction of innovations, against such a background, must be integrated into flexible training systems conceived with clear and realistic objectives. What are involved are essentially systems of training for change, and not for continuation of the status quo.

In these circumstances, the roles of the agents involved in these processes must be changed, and this calls for new knowledge and capacities. These agents may be grouped in the following categories:

i) middle-level cadres and community leaders and promoters, capable of guiding the population in the definition of its needs, mobilizing popular participation, and articulating community activities with the policies of the local authorities and the central government;

ii) public officials and technicians who are capable of conceiving, formulating and running locally-managed projects, whether they stem from the municipalities or from popular initiatives;

iii) professionals -especially architects and engineers- who are capable of anticipating the social and environmental effects of the application of constructional and institutional techniques conceiving appropriate technologies for local conditions and incorporating them in suitable architectonic and urbanistic designs;

iv) regional planners who can conceive and propose realistic policies for territorial development which are coherent with national development strategies, and

v) professional training experts who are capable of making innovations as regards the prevailing professional paradigms^{12/} and training the categories mentioned earlier by formal and informal means, as well as contributing to the education of the population in general as regards the human habitat.

It has to be indicated that the training activities in the field of human settlements undertaken in relatively less developed countries should be given especial consideration. The same applies to small and intermediate cities.

3. Programme description

The regional training programme in the field of human settlements proposed by ECLA consists of the following elements:

^{12/} "Professional paradigms" means the set of ideas, concepts and prejudices which grow up over time within professional groups with regard to their own social practice and professional training.

- i) training of middle-level cadres;
- ii) training of professional practitioners;
- iii) training of trainers, and
- iv) research and extension work

Each of these elements or subprogrammes has been conceived within broad margins of flexibility, so that they can be adapted without difficulty to the particular conditions of each country, since it is planned that practically all the activities will be carried out in the countries themselves, in co-operation with national centres with which collaboration agreements may be concluded.

Just as each subprogramme is flexible within certain general principles, the Programme as a whole is flexible as regards its execution, which depends to a large extent on external factors, although a small amount of own resources are available for promoting a limited number of activities each year. At all events, it is hoped that the Programme will gradually be transferred to national centres within a reasonable length of time.

The subprogrammes are designed to be put into practice through projects made up of a set of mutually complementary activities whose details will depend on the above-mentioned co-operation agreements negotiated with the national centres acting as counterpart bodies.

In principle, each project begins with a preparatory period which should not last for more than six months and is designed to update the mass of necessary knowledge, bring together a group of researcher-instructors, and adapt the available material to the specific requirements of each project. The personnel responsible for each project form a co-operation working team made up of regional resources -from the international co-operation agencies operating in the region- and national counterpart resources.

The training stage proper is variable, within the general criteria laid down for each of the subprogrammes. Thus, it is considered that the training of middle-level cadres calls for a trainers' training course which will include

a period of theoretical training lasting four weeks and a period of practical exercises of the same length, during which several groups of middle-level cadres should be trained under the supervision of personnel from the working team of the Programme. Professional practitioners will be trained in full-time workshops lasting from two to four weeks. It is planned that the training of university professors should last from three months to one year, seeking to take advantage of university vacations and sabbatical years when these exist. During these periods, the professors would be incorporated into the working team of the Programme and would participate in its activities, while at the same time carrying out a programme of studies and preparing at least one study connected with teaching methods and procedures and communication techniques.

a) Training of middle-level cadres

This activity is aimed at the training of persons carrying out middle-level functions in the human settlements process, either in public sector bodies or in formal or informal community organizations. The latter, although located outside or on the periphery of the regular institutional order, are responsible in effect for a large part of the activities of occupation, organization and installation of human settlements.

The term "middle-level cadres" is understood to cover three groups of persons: a) community leaders, whether "natural" or elected by the social groups which they represent; b) subordinate local government officials who carry out functions of design, control and management of urban and rural development programmes or projects, and c) social promoters and public sector agents who work directly with the community, either as project chiefs or as field co-ordinators.

At present, with a few exceptions, the only institutional systems which are really to some extent in a position to use middle-level cadres are the local governments, especially if they are organized as hierarchical systems in which the district-level municipal councils are dependent on others of a higher category, or if there are political and administrative bodies above the municipalities. In administrative systems of this type it is easy to visualize

functions of technical and even financial assistance, as well, perhaps, of training or assistance functions in which the higher bodies would be responsible for the training of teams of middle-level cadres from the lower administrations.

It could also be visualized that in highly centralized systems the central government could establish operational services for training and assistance, designed to back up the community action of informal groups or neighbourhood associations interested in solving the problems of their habitat with the aid of the public sector. In this respect, in 1977-78 ECLA carried out an interesting experiment in collaboration with the Mexican Government within the framework of the ECLA/UNEP joint programme on human settlements technology.

As already noted, the trainers of the middle-level cadres would pass through two stages: in the first, they would receive theoretical training, while in the second they would carry out practical work in the field, where they would assume full responsibility for the training of national middle-level cadres.

In principle, it has been estimated that in the first phase the Programme personnel will be able to train approximately 40 instructor-supervisors on each centralized course, of which about three could be held each year. In the second phase, these trainers, grouped together in teams, can carry out the national courses under the supervision of Programme personnel.

The subjects in which theoretical instruction would be given and which would also be the areas of practical work in the field would be the following.

i) Perception of social needs. Development of the capacity to perceive community needs in general and housing needs in particular (housing, infrastructure and services), which form the material basis of the habitat and around which the action of the community must be organized.

Development of the capacity to work within the community to define image-objectives capable of orienting collective effort and participation in the long term. The training would include methods of interaction, handling of simple opinion surveying techniques of social surveys, etc.

ii) Local management. Conceptualization of local administration as an exercise in conceiving concrete projects based on the work of social perception and articulated into local development plans coherent with the long-term image-objective and the available resources, while at the same time capable of forming the basis for a medium-term action strategy which involves community action. The training should include the necessary tools for evaluating the organizational, economic and social aspects of the project in the simplest possible terms and for identifying the inputs of external origin and ways of obtaining them.

iii) Collective participation. Development of the capacity to organize the community around the objectives proposed by the local development plan, especially as regards concrete tasks which the community decides to undertake as a way of realizing specific projects. For this purpose, it will be necessary to have the capacity to recognize the material resources and human skills which the community possesses, the possibilities of developing them, and the ways of maximizing their application through the action of the community leaders.

iv) Project operation. Knowledge of and capacity to inform the local public sector authorities and community leaders regarding the legislation and institutional organization in force at the national level, in order to facilitate the articulation of plans and projects with the upper levels of governments; knowledge of and capacity to modify the local administrative practices in order to improve the effectiveness of methods and procedures and maximize the use of local capacities; knowledge of simple surveying and accounting techniques and other support tools.

v) Methods of communication. Training in simple teaching methods and modern communication techniques in order to maximize the effectiveness of the work of the instructors; introduction to modern methods of audiovisual communication and practical experience in group dynamics, etc.; development of the capacity to apply such methods and action techniques.

The trainers of the middle-level cadres will be selected from technically qualified personnel with a modicum of experience in teaching and, especially, public service. It is hoped that the instructors, after finishing the training period, will join middle-level cadre training schemes or mechanisms within the countries.

The selection of the personnel for the instructor training courses will be carried out jointly by the Programme and by those in charge of the national counterpart body. The selection of participants for the middle-level cadre training courses will be the responsibility of the national instructors, as part of the practical application of the training received.

b) Professional practitioners' training

This subprogramme has been designed with the aim of completing the training of professionals working in the public service, both at the level of central and local government. An effort will be made to train working officials, in short periods, in techniques and procedures which do not normally form part of regular university courses in architecture, civil engineering, public administration and some branches of the social sciences.

To this end, the Programme must offer workshops for professional upgrading designed to bring about substantial changes in the performance of public officials in specific fields such as the planning of urban development, the selection of appropriate technologies for human settlements, the formulation of locally managed projects and ecological planning.

These workshops are based on teaching methods in which the interaction among participants, directed discussion, the use of modern audiovisual communications methods and practical exercises are the main elements in a practical

form of full participation which takes the place of the passive role of students under the methods traditionally applies in professional extension seminars. The subject of the practical exercises in each workshop will be selected in the light of important real problems of the country where the course is being held.

The normal length of the workshop will be from two to four weeks, part of which is devoted to complementation of knowledge not imparted in university education, and part to a practical exercise designed to develop the capacity of the participants for synthesis and creativity.

Each of these workshops will be preceded by a preparatory period of about three months during which the procedures and texts must be adapted to the conditions of the country in which the workshop is to be held. It is also necessary in this period to prepare the practical exercises and select the participants, as well as taking care of the logistic aspects of the workshop. As in the case of the training of middle-level cadres, these workshops will be carried out in collaboration with national bodies -executive organs of the public sector or universities- through co-operation agreements.

In each case, the national counterpart body must designate a coordinator who takes responsibility for the execution of the workshop, participates in its preparation, organizes the selection of participants, and looks after the logistic needs in connection with it.

Five series of workshops are planned. The first of them, on appropriate technologies for human settlements, is based on the experience built up in five experiments already carried out by ECLA.^{13/} A second series, on urban development planning, is now in course of preparation on the basis of a research project carried out in co-operation with UNCHS. Preparation of the last three series will begin in 1984.

^{13/} Mexico City, Havana, Managua, Lima and São Paulo.

The contents of the workshops in the series on appropriate technologies for human settlements are organized in each case around the following subjects: the conceptual framework and the relations between technology and society; evaluation of the social and environmental effects of the application of techniques for the production of housing goods and services; selection of appropriate technologies in line with general and specific criteria, and information on alternative technologies for building, water supply, basic sanitation, road access, generation of non-conventional energy, etc.

The series on urban development planning will be aimed at working officials of municipal administration and central bodies -ministries of housing and human settlements- operating in direct relation with the appropriate authorities on the formulation and administration of development programmes and projects in the field of human settlements, with emphasis on those at the local level. The training will include comparative evaluation procedures, execution and control procedures for development plans (preferably at the local level), the presentation and critical appraisal of regional experience, etc.

The third series, on municipal and community projects, will be aimed at architects, municipal engineers and other professionals and advisors responsible for the preparation or execution of locally managed projects, whether they are the initiative of the local authorities or of organized communities. In these workshops the participants will discuss diagnostic methods (perceptions of collective needs and appraisal of available local resources), methods of project formulation, collective participation and external management, and project evaluation and administration. The workshops will be complemented with information on the existing technical and financial assistance systems and mechanisms and with practical exercises especially designed for each case.

It is also planned to design a fourth series of workshops on the subject of precarious settlements and the role of local governments and community participation in this matters, which is undoubtedly one of the most important issues as regards control of the quality of the environment, the provision of housing (in its broad sense) for those most in need, and the promotion of better and more equitable living conditions.

Finally, the series on ecological planning will be designed for the participation of officials and consultants responsible for evaluating the probable impact of large-scale investments on local ecosystems and preparing plans for the utilization of natural resources and the exploitation of local environmental conditions for physical planning. The series will impart general ecological knowledge and will deal with methods of diagnostic analysis of local ecosystems and the maximization of the use of natural resources and human capacities in planning the development of microregions. As in the foregoing cases, the workshops will be illustrated through the critical analysis of concrete cases and experiences.

The workshops for professional practitioners will be organized on a co-operative basis with the national counterpart institutions, which will carry out the selection of the participants. At all events, the workshops will be open to participation by public officials and university professors with professional training in public administration, urban and regional planning, architecture, engineering or social sciences. These officials should have specific responsibilities in their work, with clear practical implications, for the design and operation of human settlement programmes and projects.

c) Trainers' training

The training of trainers is a key element in the Programme. In this respect, there is complete agreement with the report of the Enschede seminar, which states:

"It cannot any longer be assumed that a formal academic education is sufficient to instruct others in the novel and dynamic field of human settlement improvement. On the contrary, training those who are responsible for implementing low-income settlement improvement programmes requires its own special knowledge and skills".^{14/}

In addition to this substantive reason, the fact that a special sub-programme is devoted to the training of trainers is designed to offer a temporary alternative to the training of planners. It is considered, as already stated, that (at least for the moment) the latter activity should not be given high priority in Latin America.

^{14/} UNCHS, op.cit.

The eventual contribution of a new generation of university professors to the region's training centres not only represents a considerable multiplier in the training of professional staff, but will also make it possible to examine more closely the question of post-university training and, presumably, often new means for conceiving and perhaps initiating new courses in the field of human settlements. Meanwhile, the installed capacity in the region for the training of planners is sufficient to cover present needs.

The training of university professors would be carried out fundamentally in two ways: through periods of study for professors from centres of instruction which form part of the Programme, where they will carry out special programmes of work which include the preparation of studies on specific aspects of training, and through seminars and intensive courses carried out in a university training centre in line with the Programme.

The periods of study would vary from three months to one year, taking advantage of the holiday periods and the sabbatical years of working professors.

The programmes to be carried out during the periods when the professors are studying in the Programme will be prepared especially in each case, in agreement with the training centres from which the participants come. The latter will, however, have to integrate themselves fully into the activities of the Programme and carry out a plan of work which will include, among other subjects, a selection of those offered in the subprogrammes mentioned earlier, basic knowledge on communication sciences, the handling of teaching methods, and the preparation and use of audiovisual material.

d) Research and extension

The execution of a Programme like that which is proposed assumes a continuous line of research and the preparation of means for the transmission and dissemination of knowledge in order to back up the training activities.

Unfortunately, generally speaking no texts are available which can be used directly, and the existing documentation has to be modified, where applicable, to serve as a suitable source of knowledge in a particular country. Moreover, the widely demonstrated effectiveness of audiovisual media for the

dissemination of knowledge points to the desirability of preparing material of this type, both for the teaching proposes of the Programme and for supporting dissemination activities through national networks and systems. The supply of texts and audiovisual material is in itself a powerful training medium.

This subprogramme thus has three different but complementary objectives: (i) deepening of the necessary knowledge through research; (ii) the preparation of working material for the other subprogrammes, and (iii) the preparation of material on the human habitat for dissemination and general education proposes.

The research activities will be designed basically to provide inputs for the training subprogrammes, and should give rise to knowledge which will be materialized in the form of texts, graphic material, audiovisual material, etc. They will thus produce the texts required by the Programme and will convert the product of the research into material of an instructional nature in line with the specific training needs.

e) Implementation strategy

The implementation of a Programme of this magnitude by reason of the severe limitation of resources makes necessary the design of a strategy which is flexible and can be adapted to the degree of availability of external resources of the most varied origin.

It also calls for action to concert the efforts of the different co-operation agencies operating in the region, such as ECLA, UNCHS, UNICEF, UNESCO, the Inter-American Development Bank, the World Bank, etc., In addition, it calls for the establishment of very close contacts, leading to collaboration agreements, with government, university and municipal bodies, without whose co-operation it does not seem possible to carry out an initiative of this nature satisfactorily.

It means, in essence, establishing a regional training system which brings together on a collaborative basis the various institutions of different kinds which are interested in this subject, for the purpose of carrying out varied tasks and roles.

More specifically, it may be envisaged that the joint work carried out by UNCHS and ECLA in the region should be focused to a substantial extent on the implementation and development of such a regional system of training in subjects connected with the process of human settlements and the control of quality of the habitat, as well as with the promotion of better and more equitable living conditions and the organized participation of the community.