

A UNITED NATIONS
ECONOMIC
AND
SOCIAL COUNCIL



Distr.
LIMITED

ST/ECLA/CONF.9/L.30
10 August 1962

ENGLISH
ORIGINAL: SPANISH

LATIN AMERICAN SEMINAR ON HOUSING STATISTICS AND PROGRAMMES

2-25 September 1962
Copenhagen, Denmark
Item 4.0 of the tentative programme

THE ROLE OF STATISTICS IN HOUSING PLANS

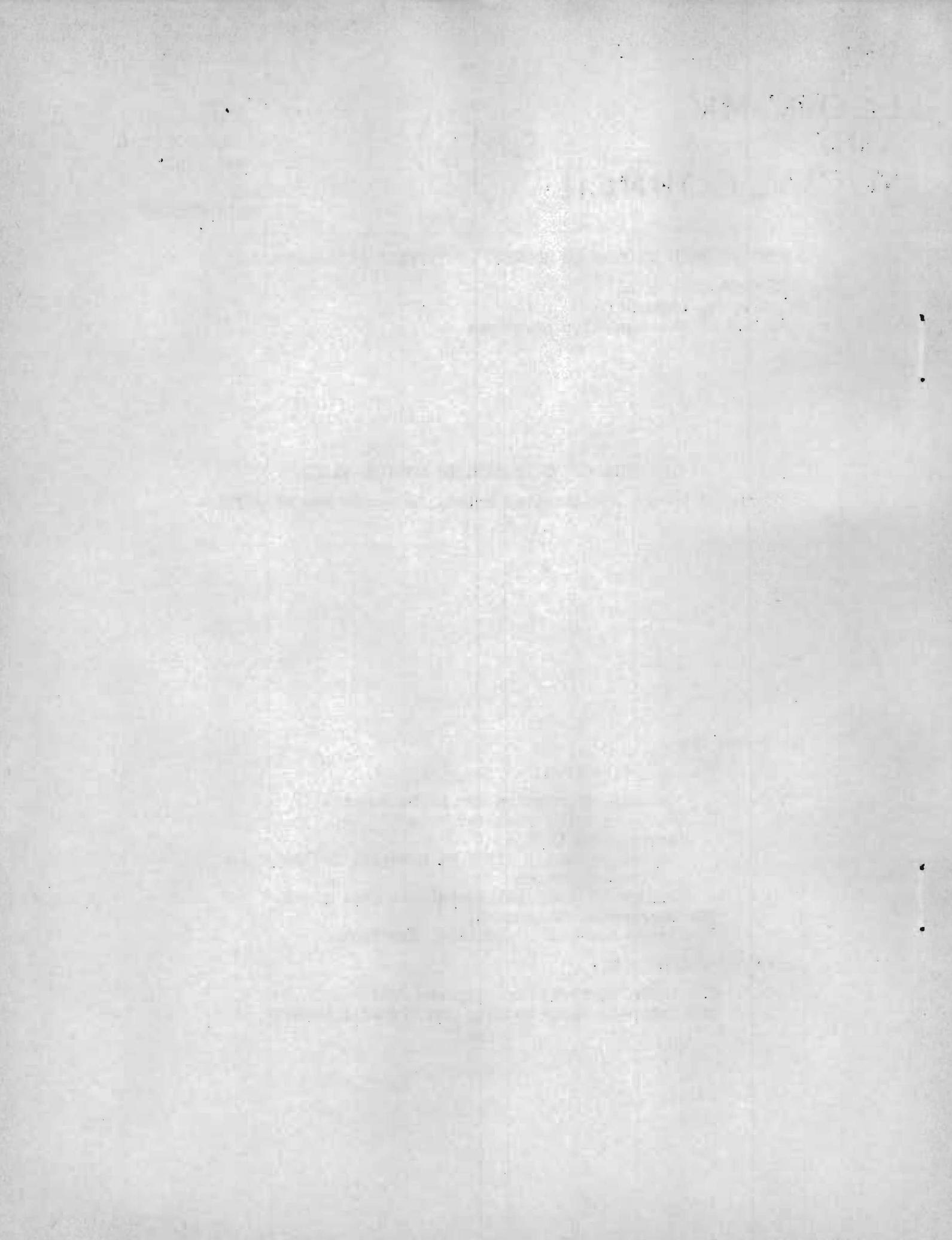
Prepared by the Pan American Union, Bureau of Social Affairs

Sponsored by:

The United Nations
Economic Commission for Latin America
Economic Commission for Europe
Statistical Office
Bureau of Social Affairs: Housing, Building and
Planning Branch
Bureau of Technical Assistance Operations
The Government of Denmark
The Inter-American Statistical Institute

In collaboration with:

The Latin American Demographic Centre
The Inter-American Housing and Planning Centre



1. Introduction

The variety and size of the Latin American region and the disparity of levels of its social-economic structure make it difficult to study and adopt methodologies applicable to the programming of plans to remedy the housing shortage in the Latin American countries.

Because of the close connexion between housing and the social and cultural traditions of the environment, virtually all phases of the planning process must be taken into account in housing programming, and it would be illogical in trying to solve the problem, to single out only one of the aspects involved, whether economic, financial, social, public health, governmental or architectural, etc.

Bearing this in mind, the different technical conferences and congresses held under the auspices of the Organization of American States^{1/} have endeavoured to lay down the basic principles of a housing policy and to determine the factors that play a part in housing programming.

It has been recognized as a fundamental principle that the location of housing is a factor whose evolution should be an integral part of the various phases of national programming for economic and social development.^{2/}

The OAS Advisory Committee on Housing in Latin America, which met at Bogotá in 1961, adopted criteria establishing the categories of and procedures for obtaining the data and information needed for a critical appraisal of housing conditions in Latin America with a view to providing realistic bases for the preparation of national housing programmes; for obtaining the data and information needed for the preparation of long-term

1/ XXIV Congreso de la Habitación Popular de la Séptima Conferencia Internacional Americana, Montevideo, 3-26 December 1933; Pan American Congress of Low-Cost Housing, Buenos Aires, 2-7 October 1939; First Inter-American Meeting of Housing and Planning Experts, Huampani, Peru, 18-26 November 1958. In addition, the Pan American Union Department of Social Affairs has organized an Advisory Committee on Housing in Latin America to discuss, and make recommendations on, the necessary research for housing programming.

2/ Organization of American States, Second Inter-American Meeting of Housing and Planning Experts, Huampani, Peru, 18-26 November 1958.

housing plans and their incorporation in national socio-economic programmes; and for determining the permanent mechanisms needed in each country for the compilation, analysis and use of the data and information.^{3/}

Most of the Latin American countries have already created, or are in the process of creating and building up, institutions for the organization and administration of national housing programmes. Their efforts may, however, come to nought, mainly because of the dearth of housing statistics and information and the lack of methodologies for programming.

The competition for investment capital - of which there is little enough anyway, considering the magnitude of the economic problem in regard to Latin America's development plans - makes it necessary to have more accurate information on the direct and indirect repercussions of a housing construction programme. Such information could indicate the importance of this kind of investment as a political measure to speed up the over-all process of economic and social development.

Ignorance of the real and monetary factors in the mechanism of the housing market - and failure to distinguish clearly between them - has made it more difficult to mobilize systematically the real and financial resources that could help to remedy the housing deficit. With respect to the price mechanism, there is a need to study, on the supply side, such factors as the proportion of the main determinants of production costs; production capacity; the principal sources of the factors of production (domestic and foreign); the advantages and disadvantages of the different production structures in the Latin American countries for the implementation of a housing investment plan; the technology adopted and its influence on costs. Similarly, in regard to the monetary factors connected with supply, very little is known in these countries about the sources of financing (internal and external) of the industries producing building materials and other inputs for housing, and nothing about the effects of changes in the prices of these intermediate goods and of housing itself.

3/ Pan American Union, Department of Social Affairs, OAS Advisory Committee on Housing in Latin America, Proceedings, Washington, D.C., 1962. (See annexes A and B.)

To analyse the market mechanism it is essential to have a better understanding of the way in which changes in productivity (real income) affect housing demand, as well as of variations in tastes that are concomitant with social and economic development. Similarly, the characteristics of the present housing stock and changes in population trends are real factors affecting the level of housing requirements. As regards monetary matters and financing, statistics are needed on the volume of credit and savings handled by the institutions that specialize in housing; the participation of these agencies in the capital market; the effects of inflation on the composition of housing demand; and finally the influence of monetary demand on the housing sector.

2. Preliminary data

However, the differences in the stage of economic and social development reached by the individual Latin American countries, the degree of interest taken in planning the allocation of their scanty resources and the emergence of plans to expedite their development on a regional scale,^{4/} seriously hamper the institutions concerned with improving statistics and making recommendations on the supply of housing.

Along with food, health and education, housing is one of the elements that comprise the people's level of living, and it can therefore be measured by statistical indicators such as the percentage of the population living in a certain type of dwelling and the average number of persons per room in such dwellings.

^{4/} The supplementary resources offered through the programme of the Alliance for Progress are already beginning to make a positive contribution towards the solution of the housing problem in Latin America. The ninth objective of the Charter of Punta del Este is specifically: "To increase the construction of low-cost houses for low-income families in order to replace inadequate and deficient housing and to reduce housing shortages; and to provide necessary public services to both urban and rural centers of population". Charter of Punta del Este, Montevideo, Uruguay. The efforts to achieve economic integration in the Central American countries and the projected Latin American Common Market are other factors which have already begun to influence the volume of production of the building materials industry (see section 2).

Although a body of definitions is already available for carrying out comparable housing censuses in different countries,^{5/} and thus estimating the present shortage, in a number of countries they have not yet been applied. If the problem were solely one of calculating surplus demand in the housing market the statistical difficulties would not be so great as in calculating housing requirements on the basis not only of cost and rent but also of specific minimum conditions to ensure that the population will be adequately housed. These two factors are interdependent, but the availability of housing and the ability to pay for it are none the less influential in the creation of households.

To overcome the obstacles facing any attempt to determine the proper priority for housing in the investment plans of the Latin American economies, measures should be taken without delay to improve information on the problems to be tackled; to define the objectives aimed at; to evaluate the resources needed for attaining them;^{6/} and to formulate a plan of action. Moreover, there is such a dearth of basic information in some countries that there are no complete data on national income, capital formation, financial sources and uses or the volume of building and its composition, etc. As a result it is hard to obtain a satisfactory picture of the situation of the national accounts and the over-all trends of the economy during a given period.

^{5/} Pan American Union, Housing Census, Inter-American Statistical Institute, Washington, D.C., 1956.

^{6/} This evaluation relates essentially to the increase in employment which takes place in the economy as a result of greater investment in housing, or to the redistribution of human, technical and administrative resources, capital and raw materials, etc. if the level of employment in the economy is very high or in the exceptional event of full employment. As indicated later in this paper, this is not applicable to Latin America where there is considerable disguised unemployment, and an unskilled labour surplus in the labour market which cannot be absorbed because of technological progress. Furthermore, many production processes - especially in the industrial sector - are restrictive, or if not restrictive, operate within very narrow limits in order to combine production factors in a way that is more compatible with the resources available in the country or region. The combination of factors also depends on the composition of demand, which would be different if the market mechanism functioned better.

Information on these factors should be supplemented by data on income-elasticity, population growth and urbanization and minimum housing standards to put the task of programming a larger housing supply on a former basis, and to ascertain the share which housing plans should have in the whole body of investments competing for the real and financial resources of the economy.

The proportion of investment in housing, according to the 1956 national accounts for Latin America, is 3.9 per cent of the gross national product. During the same year gross investment in housing constituted 25 per cent^{7/} of gross investment in fixed assets and 50 per cent of gross investment in construction.^{8/} Although the rate of total investment is 17 per cent of the regional gross product, the major part of these savings invested by the Latin American economies is tied up in the effort to industrialize and to increase the basic social capital, thus leaving a relatively small margin for investment in housing. Given this situation, a housing plan would necessarily require more investment, in other words a higher rate of formation of domestic capital, which might be supplemented by foreign investment in the region. It is unlikely, however, that a large volume of voluntary savings will be channelled towards low-cost housing in view of the level of per capita income, which is 286 dollars at 1956 prices, and the uneven distribution of the gross regional product. What further adds to the unlikelihood of this is the continued inflation - varying

7/ The degree of deviation from the average of 25 per cent varies from one country to another, depending on its level of economic development, on the availability or otherwise of machinery for channelling savings towards housing, on the lack of opportunity for investing in other activities and, without a doubt, on the marked nature of the inflationary process in the various countries which makes investment in housing both safe and lucrative. For example, investment in housing construction in Chile is 33.3 per cent, in Colombia it is 18 per cent, in Ecuador 12.8 per cent and in Honduras 24.0 per cent.

8/ United Nations Bureau of Social Affairs, La Vivienda en el Desarrollo Económico de América Latina, New York, March 1959. Report prepared for the Pan American Union Seminario sobre Financiamiento de la Vivienda y Servicios Públicos en la América Latina.

in degree according to the country concerned - which reduces real wages and hence the possibility of saving. This is a point which needs to be considered in relation to housing and the general incentive to save, with due regard to the fact that the resources obtainable for housing are mainly domestic in origin, although it is very probable that the external assistance and foreign private capital given for certain types of construction will shortly increase the funds available for expanding the housing stock.

However, there is little prospect of an improvement in the situation, according to information supplied by ECLA^{9/} in 1958, which indicates that the gradual decline in the rate of growth of the product - 2.9 in that year - was continuing and becoming even sharper owing to persistently adverse terms of trade with the rest of the world. The lagging rate of growth is even more evident if considered in terms of an annual population growth estimated at 2.6 per cent. The gross domestic product per capita thus rose by very little - scarcely 0.3 per cent - and was at times even less than the rate of increase in prices generally. From the foregoing figures, it can thus be inferred that a housing plan to reduce the deficit would have to be financed from sources other than voluntary savings (e.g. compulsory savings or funds from abroad) or by incentives in the form of higher returns on private capital for making more housing available, with a period of amortization by the recipient which would have to be fairly long in comparison with the writing-off schedule for other types of investment.

The housing situation in Latin America is ample proof that unless more decisive steps are taken to remedy the deficit, it will continue to deteriorate in both quantity and quality. With the aid of various statistical devices, some comparisons can be made which show that the volume of residential building during 1950 to 1960 probably was far below the minimum required simply to house the population increment.^{10/}

^{9/} ECLA, Economic Survey of Latin America, 1959 (E/CN.12/541), June 1960, p.xvi.

^{10/} The figures available suggest that in some countries from 20 to 50 per cent more dwellings should be constructed than were built in the last decade simply to maintain the status quo (see footnote 11).

During that period, some 960 000 standard family dwellings (630 000 in towns and 330 000 in rural areas) would have had to be built every year at the very least solely to absorb the population increment and replace existing housing units. These numbers represent a total of 5.5 new dwellings per thousand inhabitants, i.e. 8.6 and 3.3 in urban and rural areas respectively.^{11/} Whatever the real housing deficit, it has to be borne in mind for projection purposes that there is a great disparity between investment in housing and the requirements actually covered, because of the large volume of luxury building in Latin America.^{12/}

From an examination of future prospects in respect of housing investment and the relative scarcity of this at present, it is clear that the solution of the housing problem in Latin America during the next few years will very largely depend on economic measures aimed at intensifying saving and on the strengthening of financial institutions through more active participation in the money and capital markets with a view to channelling more savings towards housing construction. The problem is not a simple one, but it is hoped that a clearer understanding of what adequate housing signifies in terms of well-being will increase voluntary saving while the development of credit sources will reduce the population-housing ratio more effectively.

^{11/} These requirements are expected to increase by 3.1 to 5.4 per cent annually between 1960 and 1975, which means that the number of new dwellings needed per year by 1975 will range from 1.8 to 2.6 million. See ECLA, Necesidades mínimas de construcción anual de viviendas en los países latinoamericanos. Estimaciones para 1950-60 y proyecciones para 1975, Santiago, Chile, 1961, pp.4 et seq.

^{12/} It has been calculated that the total number of housing units in Latin America is 31 million, of which 20 million are sub-standard. See Mora-Rubio, Rafael, Aspectos sanitarios de la vivienda en América Latina, Pan American Union, Department of Social Affairs - CINVA, Bogotá, p.13.

3. Housing and statistics

The statistics quoted in section 1 are those required for an evaluation of the housing deficit in so far as the lack of adequate dwellings is concerned and/or for calculating housing demand in the real estate market.

The targets in a plan for reducing the housing shortage and/or lowering the cost of related services are specifically determined by such information. However, an increase in supply - in this case of housing - involves a study of the development potential of the building and building materials industries. An economic analysis of the building industry and building activities should be based on its performance or influence within the economic context of the country or region. One way of making such a study is to use the technique of specific complementary tables for the economic sectors and/or principal industries annexed to national accounting systems; these tables have been very little used up to now, yet they have provided most of the information available in Latin America on the economic activities under consideration.

Another way of obtaining more information for an analysis of the construction industry and building activities is to use tables of inter-industrial relationships; this is the technique used for studying the interdependence of the different productive activities in an economy. The system of input-output or matrices tables, as they are also called, is widely applied today in the countries that have sufficient statistics to enable such tables to be drawn up, and the results are undeniably valuable as far as the programming of the various sectors of the economy is concerned. In Latin America the only input-output matrices that have been prepared relate to the principal economic sectors in a few countries, where there is a high degree of aggregation, and in one or two instances the method has also been used by individual industries anxious to know about the technology they apply. It would be possible to undertake a study of the building industry in Latin America along these lines, provided that the statistical time series to be supplied by the enterprises making up the building industry are first put on a homogeneous basis.

/As will

As will be seen below, the background data currently available in Latin America are very limited, so that an analysis such as that suggested in the present paper can offer only the merest indication of statistical requirements for the study of the building industry.

If this industry is regarded as the whole body of firms composing it in a given country, its income is the value, at market prices, of the projects constructed during a specific period, the length of this being determined by the intervals at which ad hoc questionnaires sent out to firms or enterprises can conveniently be dealt with. Such information simply represents inputs in building projects, which are registered in a system of national accounts as components of gross investment.^{13/} The firms concerned - the industry in other words - not only produce goods but also purchase production factor services, pay taxes and buy raw materials. These concepts are summed up in the applications, or allocations, or uses of the funds acquired by the industry as a whole. Specifically, the calculation of applications comprises the sum of: (a) the value of the net remuneration, after deduction of taxes, paid by the whole industry to its personnel in the period under consideration; (b) the amount represented by social security contributions; (c) expenditure on purchases of raw materials from other industries, including inputs obtained from the major sectors, for example, cement, fuel, power, steel products, earthenware etc.; and (d) the value added by the building materials industry, under which head should be estimated amortization expenditure, this in turn enabling the net value added to be calculated, as well as taxes, self-financing, distribution of profits, etc.

^{13/} To prevent duplication in the collection of data, the questionnaire sent out to firms might omit all such information as can be obtained in the offices furnishing statistics in each country, i.e., the housing departments of Ministries of Public Works, planning offices, builders' associations and other institutions concerned with the technical and financial problems of housing and of the building industry. As the collection of statistical information in each individual country improves, the questionnaire will be gradually simplified, until the data needed for the table of inter-industrial relationships are incorporated in the statistical time series published by a specialized institution.

Every well-organized firm possesses most of the information indicated in the foregoing paragraphs, and to record it in the questionnaires is simply a matter of transferring it from the ledgers after each statement of accounts. Nevertheless, the task of initiating the regular processing of statistics entails not only a great deal of work by experts and strict systematization but also co-operation on the part of the firms themselves, which are thus provided with an instrument of analysis making for sounder production plans.

On the basis of tables of inter-industrial relationships (or input-output matrices), it is also possible, by comparing income and applications, to deduce technical coefficients as an instrument whereby the requisite building capacity for the implementation of a housing plan can be projected.

Undoubtedly, the centralization of data for the whole of the industry would be facilitated if the firms concerned were given an assurance that the information they supplied would be treated as confidential. The reason is that, grouped as they are on monopolistic, oligopolistic or competitively unsound bases, these firms would be afraid of losing their individual share in the market if others selling rival products were to get to know the details of their production structure.

Within the over-all framework of housing statistics, those relating to the building industry enable the development of its activity to be followed closely, and constitute a necessary element in the determination of its production capacity when a new building programme is to be put into effect. The presentation of data on the building industry as suggested in this paper is essential in view of the sector's importance as a determinant of economic equilibrium, recession or expansion. In this sense, such information is a vital factor in the programming and execution of an economic development plan,^{14/} and estimates of housing

^{14/} Ministry of Housing, Technical Secretariat, Información Estadística de la Industria de la Construcción (Arquitectura, Urbanismo y Vivienda en España), (2) April and May, 1961, Document No.110/61 (160), Series V, No. 14/61 (22), Madrid, 9 November 1961, pp. 2 and 3.

requirements can serve as a guide to the future development or expansion prospects of the industries and services connected with the production of building materials.

4. Feasibility of implementation of plans

In addition to the low personal savings coefficient, the embryonic state of the capital and money markets, whose degree of development varies greatly from one country to another, and the deficiencies of both housing and building industry statistics, there are other factors, attributable to the present characteristics of the Latin American economy which put a curb on housing plans.

In the first place, the building industry is making very slow progress in the application of a technology which will enable it to reduce production costs. Although the industry is characterized by the use of a labour-intensive technology, calculated to exploit the advantages of a manpower surplus, the labour force lacks the necessary training to prevent waste and mismanagement during the execution of a project. In this activity there are substantial possibilities of improving productivity through the training of personnel, which would enable the industry to keep pace with the upward trend of investment in basic social capital and other construction projects.^{15/}

Secondly the mechanization of the building materials industry is making only slow progress. Prefabrication, especially as regards building materials, is practised on a small scale, and the use of mechanical equipment to speed up the construction process is also limited. These disadvantages, combined with the lack of skilled labour,^{16/} prevent

^{15/} Pan American Union/Inter-American Economic and Social Council, Ad Hoc Committee for the Study of Low-Cost Housing, The Problem of Low-Cost Housing in Latin America, Washington, D.C., 1954.

^{16/} The productivity of the labour force, which is extremely low when there is disguised or overt unemployment, would improve if an expansion of building activities took place. Thus, even if the factor which is in relatively short supply in the Latin American economies - capital - were used to promote the building of dwellings, a field in which its productivity, or output-capital coefficient, is comparatively low, one of the aims of economic development would be fulfilled: i.e., the product per worker employed would be increased.

productivity in the building industry from improving enough to stabilize prices of materials and labour, or at least curb their steady upward movement. This rising price trend, brought about by inflationary pressures, by building programmes that are out of proportion to the supply of materials, and by unsatisfactory methods of financing, aggravates the disparity between the capacity for payment and the building costs involved in housing projects, as well as hampering the development of public works and construction in general.

More intensive effort towards adapting new methods of construction and standardizing materials is needed, in order to expedite any expansion of the market which will help to reduce costs and establish plants of optimum dimensions.

The possibility of increased integration in the building materials industry is dependent upon the scale of demand for such products; the installed capacity of domestic sources of supply; the structure of the industries concerned; local transport costs; costs and prices of building materials; relative prices of imported and domestically-produced inputs; and the level of tariff protection. The shortage and high cost of transport is, and will continue to be in the immediate future, the greatest obstacle to a significant expansion of the market for building materials.^{17/} However, the Committee of the Latin American Free-Trade Association in Montevideo constitutes a source of information on the situation in the building materials industry, and it is hoped that fuller knowledge of international supply and demand conditions will help to speed up the integration process. An improvement in the technological and organizational aspects of the building and building materials industries will shorten the time it takes for investments to mature, and will thus lessen the inflationary pressures deriving from a housing plan. This in turn, by enabling the housing sector to reduce its

^{17/} This is simply because at the present stage of development of many Latin American countries no substantial effort can be made to divert compulsory savings, through government channels, into investment in basic social capital projects, and the development of such projects is dependent mainly upon loans and assistance from abroad.

capital-output coefficient, should give it an opportunity to strengthen its position in relation to other activities competing for investment funds.

A third factor affecting the implementation of housing plans is the economic structure of each of the individual Latin American countries and the level of employment. An increase in demand for housing would raise the productivity of the industry manufacturing the inputs concerned if its installed capacity happened to be under-utilized. This is not the case, however, in the Latin American economies, to which limited monetary demand can hardly be imputed;^{18/} employment levels in the building materials industry are high, except in occasional instances where installed capacity is out of proportion to the size of the market, with the result that prices are high. The most serious bottlenecks created by an expansion of demand would be the supply of skilled labour, and imported inputs whose purchase is dependent upon available supplies of foreign exchange (or the level of the exchange rate if this is fluctuating).

Lastly, the balance-of-payments situation in the Latin American countries and the stabilization policy pursued by their Governments are other factors of considerable importance for the evaluation of a plan to improve housing conditions. From the foregoing paragraph it can be inferred that full utilization of available resources in building and the concomitant activities would have a more marked effect on the balance of payments in the event of implementation of a housing plan, because of the high proportion of equipment that has to be imported to raise production capacity. Unfortunately, the two

^{18/} In under-developed countries full utilization of resources - above all manpower - is not linked to monetary demand in the same way as in developed economies. Consequently, orthodox monetary and fiscal policy is often inapplicable in countries in the former category, since the problem of full utilization depends upon the installed capacity of the economy, and must therefore be solved by an increase in the real productivity of the factors of production, not by changes in monetary demand (see E. Jay Howenstine's article on the housing problem in relation to economic development, in International Labour Review, International Labour Organisation, Vol. LV, No. 1, Geneva, January 1957.

characteristic features of Latin America's balance-of-payments situation suggest that difficulties are likely to arise in this connexion, since the inflow of capital has decreased, and the capacity to import has also declined as a result of the deterioration of the terms of trade. Both these factors are affecting development capacity at present and will continue to do so in the immediate future.

As regards economic stability, Latin America's industrialization process has resulted in a growing pressure on internal price levels in all countries, mainly attributable to import substitution, save in a very few cases where this substitution has come about spontaneously because of benefits to productivity such as are rare in Latin America. A housing plan, because of the volume of additional expenditure involved and the high marginal consumption propensity of the labour force employed in building activities, would mean a greater effort to increase output and/or productivity in other sectors of the economy. Nevertheless, given the structure of expenditure in the lower income groups, the increment in demand thus induced would be applied chiefly to food and clothing; and since these consumers' propensity to import is low, inflationary pressures might more probably be generated in the agricultural sector, owing to the short-term rigidity of supply. Although agriculture has made some progress in Latin America in recent years, its output is still absorbed at high prices owing to the increasing demand for its products resulting from the growth of the population and the change in real per capita income.

This indicates that it is not enough to achieve an increase in productivity conducive to greater domestic saving and/or a change in the structure of expenditure and investment designed to relieve the relative housing shortage rapidly. Nor is this all. More ambitious plans are also subject to limitations deriving from technological factors, from the scale on which domestic saving has to be supplemented by funds from abroad, and from the degree of stability and the structure imparted to the economy by the manipulation of fiscal, monetary and trade policies.

5. Conclusion

These factors will inevitably restrict the practical scope of housing plans in Latin America. Nevertheless, a sense of responsibility in relation to economic and social development problems is rapidly altering the trend of these negative forces, and is manifesting itself in several different ways:

(a) Irrespective of such measures as can be expected to produce only long-term results (i.e., reforms in systems of basic education), those aimed at the more equitable distribution of wealth and income (i.e., agrarian, labour and tax reforms) are increasing productivity and changing the relation between consumption and saving in a way which ultimately will make a higher saving coefficient possible;

(b) The funds provided by the Alliance for Progress and loans from international financing institutions - so far mainly from the Inter-American Development Bank - will make a substantial contribution towards supplementing the shortage of domestic savings for housing purposes, and will partly offset the limiting effects of the decline in the capacity to import;^{19/}

(c) In so far as the Latin American common market facilitates economic integration, the breadth of the market and the optimum location of plants of economic size will reduce - ceteris paribus - the cost of inputs for housing, and will at the same time help to raise per capita income;

(d) The slowing-down in the trend of inflation in the different countries (Argentina, Colombia and Mexico have had some success in this respect) is expected to continue, which will mean that the price mechanism can operate more efficiently in relation to the allocation of investment resources, and luxury building and other extravagant forms of consumption can thus be prevented. Furthermore, this stability may be conducive to a greater inflow of foreign capital;

^{19/} It is worth while to stress the emphasis that is beginning to be laid by the Governments of capital-exporting countries and by international lending institutions on criteria other than productivity for the allocation of their resources. There is no reason to suppose that if favourable conditions are guaranteed in the beneficiary country, capital will not be available for projects whose economic yield is spread over a relatively greater number of years.

(e) Another incentive to increased activity in the housing sector is the preparation by interested Governments of economic and social development plans in which consideration is given to the role of the savings mobilized by the public sector for the improvement of housing conditions.^{20/} In some cases, too, the private sector makes a contribution in the shape of housing programmes for workers employed by establishments financially able to undertake such projects;

(f) Lastly, the distribution and expansion of funds for housing purposes that is, in essence, implicit in the foregoing conclusions justifies the assumption that activity will be intensified in the fields of processing statistics and formulating techniques for the channelling and allocation of these resources in such a way as to promote the maximum degree of well-being.

If the statistics suggested in the present paper were available, they would undoubtedly increase the reliability and efficiency of the measures adopted to attain housing targets. The sooner a systematic study of the factors affecting the housing deficit is carried out, and a better understanding of the operation of the market mechanism is achieved, the sooner will the way be cleared for the economic and social development of the Latin American countries.

^{20/} This problem, which is essentially one of financing, is closely linked to the development of the capital market, to investment trends and to the fiscal, monetary and trade measures which affect the composition of monetary demand in the economy.

Annex

Extract from the Proceedings of
the OAS Advisory Committee on Housing

A. SUMMARY OF COMMITTEE DELIBERATIONS

The Alliance for Progress

1. The Act of Bogota, which proposes measures for social improvement and economic development within the framework of Operation Pan America, was given great impetus by the Charter of Punta del Este, which established the Alliance for Progress. Among the points emphasized were the definition of the goals of national programmes aimed at urgent and intensive action in the social and economic fields and the financial and technical assistance that would represent a firm commitment to implement those simultaneous plans for national development in the Hemisphere.

Long and short-term development plans

2. Even though they have their own ways and means of being carried out, emergency and short-term programmes will have to be considered in conjunction with long-term programmes.

Their relation to housing

3. Remedial housing programmes, including the rationalized mass production of dwellings in accordance with local and national needs, must be co-ordinated with, and be an integral part of, national development plans. For that co-ordination to be more effective, it is essential to have the clearest possible knowledge of the actual state of the problem and its effect on the nation as a whole. It is therefore necessary to hasten the collection and analysis of relevant information and establish a useful methodology for the immediate task of formulating housing programmes as part of master plans for national development.

/Role of

Role of the OAS in housing programmes

4. It is a function of the OAS to stimulate and foster these tasks and likewise to furnish technical assistance and resources for the formulation of national programmes aimed at concrete action. The responsibility for defining national goals and specific programmes in housing and urban planning will necessarily fall to national institutions of economic and social development, housing and planning institutions, and public works and construction agencies.

Preparation of a research guide

5. The title "Research Guide for the Housing Survey within the Alliance for Progress" was chosen to reflect the dynamic and vital nature of the operations that will have to be carried out to attack the housing problem as part of a large-scale mobilization of resources. Although these operations would vary according to the special characteristics, background, experience, and available resources of each country, it was considered useful to prepare a research guide that national technicians might employ within their sphere for the compilation and analysis of basic information. If there is an insufficient number of technicians for these tasks, the countries may request technical assistance.

Objectives

6. The objectives of the immediate study of housing in Latin America would be (a) to define with all possible precision present housing needs and estimate future needs for a specified period ahead; (b) to assess the available and potential resources, direct and indirect, to meet the needs; and (c) to establish fundamental goals of action and the corresponding operative solutions.

Limitation of information

7. Even if allowance is made for the many differences between the countries, available information on housing and related aspects, such

/as habitability,

as habitability, building conditions, socio-economic levels, and population density, is inadequate and irregular. The lack of data needed for policy formulation and orderly programmes makes it imperative to insist on the advisability of promptly establishing simple and rapid systems designed to lay the foundation for long-term activities. The valuable contribution of national and international statistical offices was recognized, and attention was called to the difficulties they encounter in securing sufficiently detailed information on housing, its occupants and their surroundings.

Identification of survey objectives

8. Because of the dynamic nature of housing's physical, social, economic, and administrative aspects, it is advisable to identify the principal problems about which data must be compiled. Such data should be useful in the formulation of general housing policy. More direct and continued research into the existing complex picture will broaden these data-compilation objectives to include, among others: (a) financial aspects (generative effect of loans, savings systems, national-budget appropriations for housing, etc.); (b) policies with respect to land, urban services, and localization of industry; (c) mobilization of regional resources to meet the needs of local communities; (d) improvement of industry and construction, and reduction of building costs; (e) technical training and education; and (f) public and institutional administration at all levels.

A unified approach

9. In housing surveys, it is essential to consider the great differences in geography and culture, population and income levels, possibilities of change, and economic, social, political and technological conditions - in rural as well as urban areas. Likewise, what must be sought is a unity of concepts and thought, i.e., equivalent research methods designed to produce common bases for effective planning and facilitate the comparison and analysis of data by national experts or international institutions. Among the points specified were (a) the need to standardize definitions, terminology, statistical concepts, and methods of estimating housing needs

/and (b)

and (b) the possibility of utilizing statistical indicators to measure housing conditions.

Estimating housing needs

10. Housing needs may be determined subjectively (occupants' felt needs and their corresponding effects) and objectively (a technical approach setting specific standards). Estimates of the housing shortage must take into account its changing state. The deterioration of, or failure to improve, existing conditions may transform a potential shortage into a real one. These aspects of the housing shortage take on different characteristics according to local and regional environmental conditions; the procedures followed in the programmes; the time element; types of construction; social, economic and cultural levels; the manifold human relations, outside or indirect forces exerted, etc. The complexity of factors present renders it difficult to make an accurate appraisal of the real state of housing.

Criteria for the measurement of needs

11. What is required, then, for the estimation of needs is a valid working hypothesis, not inflexible standards of doubtful application. Some of the criteria used to measure the need for low-cost housing programmes are (a) relative urgency of the need for dwelling units; (b) services extended by the housing programmes, both in area and in number; (c) predictable cumulative effect of each housing programme; and (d) balance in the provision of public services for the community, and the interrelation thereof. These criteria will be considered in determining both the lines of national investment and geographic distribution. As to the urgency of the need for housing, it may be estimated in terms of deviation from accepted standards; exigency of services; pressure of time; and stability or variation with respect to the abatement or aggravation of the need.

Need for housing specialists

12. Although many countries have had years of experience in carrying out housing programmes, deficiencies in method and scope indicate

/a lack

a lack of clear-cut and comprehensive thought in planning. This points up the need for highly qualified specialists who might use, in a systematic fashion, the data compiled in each country for the preparation of programmes and their incorporation in national plans.

Utilization of statistical samples

13. Because of the limited time available for the preparation of national housing plans, emphasis was placed on the importance of sampling, properly prepared by qualified technicians supplied with basic documentation (cartographic, cadastral, etc.). This would make it considerably easier to arrive at estimates that could be used to formulate national programmes in a comparatively short time.

Experience of some countries in housing research

14. Mexican experience brought forth suggestions of points to be considered in housing research, such as localization of programmes; characteristics of the population; economic levels, physical condition of housing; habitability and density; technical and professional construction organizations; and technological development and research. Attention was also given to the experience of Colombia, which is based on studies of the demand for housing in cities of more than 10,000 inhabitants as well as on research of a qualitative nature. Priorities were determined for urban areas according to growth indexes, socio-economic sectors, and renewal areas. For the rural sector, the factors of importance were the quality of housing, its construction, and the provision of basic services. Sources of information, besides housing censuses, were construction licenses and industrial concerns. During the meeting, the experts were confronted with an insufficiency of statistics on the subject and for this reason laid stress on well-directed and periodical samplings that might be used as guidelines in housing policy and as controls on calculations and estimates.

/Possible local

Possible local sources of information

15. Considering the magnitude of the task of compiling housing statistics and the pressure of time, maximum use should be made of the different sources of information already in existence in the countries, such as public lending institutions, social security agencies, labour organizations, professional associations, industrial and building concerns, and municipalities and ministries. The national ad hoc committees on housing established in each country would locate the diverse sources within their sphere and gather information in co-ordinated fashion so that it might be used in more than one field of action (e.g., public health, taxation, productivity, education, etc.).

Scarcity of information on public and private investments in housing

16. Another matter explored was the scarcity of information on public and private investments in housing. The determination of their respective zones of influence and their relations can help to direct foreign investments toward those income groups that need them most and also toward those industries or centres contributing to national development.

Channeling investments into low-cost housing

17. One objective that must be kept in mind is that of channeling investments into low-cost housing. In this respect, it is important to have and pursue specific objectives; to emphasize the social significance of housing investments; to take advantage of the multiplying effect of investments for the production of dwellings and community services; and to prepare for the expansion of the building industry in line with the expected increase in new dwellings. Some obstacles, which vary in intensity but are interconnected, are insufficient research in the use of building materials; unsuitable design of dwellings and housing developments; misuse or nonuse of land; absence of land policies; limited legal instruments; administrative interference; and over all, lack of planning principles.

/ Restrictive factors

Restrictive factors in the production of dwellings

18. There are in operation in some countries a variety of factors that have an adverse effect on the production of dwellings and on their unit cost. These include poor techniques in the design of dwellings and housing developments; geographical location; operating, labour, and machinery costs; land speculation; level of supply and demand; availability of capital; and interest rates. This makes it difficult to discriminate costs or their make-up by region or period. Techniques for estimating costs and financial resources for housing must be accompanied by systems for attracting funds. Without such systems, there would continue to be a wide gap between theoretically available resources and those which can actually be channeled into the construction of dwellings. A large amount of savings, in the absence of opportunities for investment in housing, are spent on purchases of lesser social interest. Savings and loan associations can help to remedy this situation.

Influence of physical and financial resources on supply and demand

19. According as they are geographically located, natural resources, transformer plants, and distribution centres will have an influence - of greatly varying intensity - on the production of dwellings. This also holds for the network of communications, the location of population centres, and transportation costs, which therefore directly affect the volume and type of housing in demand.

Collaboration with local authorities

20. Since housing and community-development programmes cannot bypass local administration, some thought should be given to the possibilities of collaboration in such matters as urban development, types of housing, housing developments, public services, etc., considered in terms of quality and range within the total urban picture.

/Levels of

Levels of information for housing, building, and urban-planning surveys

21. To be effective, action programmes must be organized with adequate knowledge of each area's social and economic development. As to the information required for housing, building, and urban planning, three levels may be defined: (a) basic information for determining national policies and general regional-development programmes; (b) more detailed information for action, on both regional and local levels, and for use of urban and surrounding land; (c) even more precise information for the development of specific projects. Each survey should be prepared as economically as possible in terms of people and resources in order to secure the most significant information applicable to a specific programme of action. The "Research Guide" discussed above (paragraph 5) is offered as an aid for such compilations.

Formation of national ad hoc committees on housing

22. The time fixed at Punta del Este for the preparation of national development plans - which incorporate those in the field of housing - is quite limited. This makes it necessary to speed up the adoption of measures designed to lay the best groundwork for housing programmes. Several measures were suggested, one being the formation of national ad hoc committees on housing, comprising, among others, representatives of the various housing institutions and aided, on request, by the OAS and other international institutions.

APPENDIX A

B. RESEARCH GUIDE FOR THE HOUSING SURVEY WITHIN THE ALLIANCE FOR PROGRESS*

The Research Guide contains a list of subjects merely suggestive of the wide range of data and information necessary for the formulation of housing programmes. The emphasis placed on each one of the subjects will vary from country to country, though most of them may be applicable to all. This list is not intended to be a questionnaire, but a detailed enumeration of the subjects that, in the view of the Committee, should be thoroughly explored and considered in the planning of housing.

The Committee's evaluations of data priority and accessibility are recorded to the left and represent the following:

Priority

1. Data indispensable for the preparation of a long-term housing programme
2. Data necessary for those programmes
3. Data which, though not indispensable or necessary are desirable for a deeper understanding of the problem.

Accessibility

- (a) Data currently available and easy to obtain
- (b) Data not available but easy to compile
- (c) Data not available and difficult to compile.

I. GENERAL DATA FOR THE ANALYSIS OF PRESENT HOUSING CONDITIONS

Introduction: Brief general description of the country, including regional geographic, economic, and social data; natural resources; politico-administrative structure at different government levels; transportation and communications; their relation to housing.

* Provisional text, in process of revision and expansion.

P.A.

- 1.a. 1. Demographic data; family composition and rate of increase; migration factors; regional growth, urban and rural.
- 1.b. 2. Number of dwelling units (urban and rural), their classification and occupancy.
- 3.b. 3. Percentage of owners and renters.
- 1.c. 4. Distribution of family groups, urban and rural, by income; percentage of income and/or family expenditures for housing.
- 1.b. 5. Distribution of dwelling units constructed during a recent period (e.g., one year), according to cost, area, and rent.
- 1.b. 6. Occupancy ratios and overcrowding.
- 1.b. 7. Ratio of total investment in new housing to fixed capital formation and to gross national product.
- 3.c. 8. History of housing programmes and analysis of experience.

II. RESOURCES

A. Financial Mechanisms

- 1.a. 1. Sources of government financing, including pension funds, social insurance, lotteries, housing institutions; sources of private financing, including savings and loan associations, mortgage banks, insurance companies, non-profit associations, labour unions, etc.
- 1.b. 2. Current interest rates, urban and rural; amortization terms; difference between official and private interest rates; percentage of financing in relation to the cost of housing.
- 1.a. 3. Limitations of, and obstacles to, the supply of funds, such as inflation, land acquisition, defaults, rent control, usury, defective property deeds, etc.
- 1.c. 4. Volume of private savings and mechanisms to attract and channel them into mortgage funds.

/B. Land

B. Land Policies

- 2.c. 1. Nature of land tenure, small or large holdings; extent of public, private and communal property; obstacles to land acquisition.
- 2.a. 2. Regulations: legislation; controls on housing developments; zoning and building codes; their effectiveness.
- 2.b. 3. Planning and land use: regional and master plans; industrial centres; decentralization policies; provision for educational, recreational and other community facilities.
- 3.a. 4. Land acquisition: methods and institutions for land acquisition and expropriation for public use; obstacles. Delay; valuation techniques; auctions. Legal aspects.
- 1.a. 5. Land cost and speculation; rising cost of land as an obstacle to its development and availability to the various income groups.
- 2.b. 6. Proportion of raw land and its total cost when developed.
- 1.a. 7. Taxes: types of taxes; their effect on land speculation; valuation procedures; taxes on idle land; tax levies for public improvements.
- 3.b. 8. Obstacles to the extension of public utilities and transportation facilities in order to bring land into urban use.
- 1.c. 9. Urban and suburban squatting areas: percentage of squatters in terms of total population; programmes for the improvement, eradication, resettlement, and prevention of squatter areas.

C. Building and Building-Materials Industries

- 1.c. 1. Production of building materials (raw and processed); importation of required materials; ratio of domestic to imported materials; geographic location of manufacturing; transportation capacity and problems, installed capacity and possibility of increasing domestic production; economic integration treaties.

/1.b. 2.

- 1.b. 2. Essential imports (itemized list) and their relation to total cost per dwelling unit.
- 2.a. 3. Proportion of basic materials, such as cement, steel, lumber, and clay products, etc., used for housing construction in general.
- 1.b. 4. Most critical shortages of building materials (raw and processed).
- 2.a. 5. Aid to building-materials industries.
- 2.c. 6. Organization of building-materials industries; need for mechanical and other equipment; import restrictions.
- 1.c. 7. Organization of the building industry, potential capacity for the production of dwelling units according to type; comparison of private and official contract costs.
- 1.b. 8. Advances in building techniques, including whole or partial prefabrication, at the site or the factory; possible savings.
- 3.a. 9. Systems of contracts and subcontracts.

D. Human Resources

- 1.c. 1. Quantitative and qualitative structure of the labour force in the building industry; variety and availability of skilled labour for housing construction; unemployment; trade-union organization.
- 2.c. 2. Obstacles to more efficient organization and greater productivity of the labour force.
- 2.b. 3. Availability of professional talent (engineers, architects, administrators, planners, etc.).
- 1.a. 4. Obstacles to programmes of, and assistance from institutions for, professional specialization and the training of skilled personnel.

- 2.a. 5. Mutual-aid and self-help programmes; vocational training.

III. POLICIES, PROGRAMMES, AND ADMINISTRATION

- 1.a. 1. Social and economic aims, such as providing housing for low-income groups; reduction of overcrowding; resettlement of squatters; slum clearance and encouragement of home-ownership; expansion of employment opportunities; providing incentives for basic-materials production, industrial establishments, and savings.
- 1.a. 2. Housing policy for public and private sectors (including company housing); subsidies; urban-rural distribution; decentralization or centralization; privileged socio-economic groups.
- 1.a. 3. Summary of policy results and deficiencies; changes in orientation.
- 1.a. 4. Legislation related to housing.
- 1.b. 5. Analysis of housing agencies in charge of implementing programmes; amount of reorganization, if necessary.
- 2.b. 6. Emergency housing; new towns; "roof-loans"; self-help; urban renewal; slum clearance; land-improvement, demonstration, pilot and other programmes, and their results.
- 1.c. 7. Public services, including transportation, in relation to urban and suburban housing programmes.
- 2.a. 8. Housing and building-research programmes and institutions; incentives and their effectiveness.
- 2.b. 9. Building codes and other controls; compliance therewith and effect on national housing programmes.
- 2.c. 10. Rent controls and their effect on housing construction, repairs, and improvement.
- 3.a. 11. Promotion of co-operatives and similar associations.
- 2.b. 12. City and site planning; building standards; planning offices in relation to housing, and obstacles to their co-ordination.
- 3.a. 13. Public health and other institutional regulations concerning housing.

IV. NEED FOR INTERNATIONAL AID TO HOUSING

- 1.a. 1. List of internationally aided housing programmes in operation in the country.
- 1.a. 2. Detailed description of fields of action where international aid is required in order to determine goals in housing programmes; justification of aid; fields where it can be most effectively used; forms of aid required (loans, grants, technical assistance, machinery and equipment, materials production, or others).