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PRINCIPLES AND RECOMMENDATIONS FOR A HOUSING CENSUS
DRAFT RECOMMENDATIONS FOR THE 1970 CENSUSES

(Report by the Secretary-General)

1. At its twelfth session, the Statistical Commission requested the Secretary-General "... to proceed with the examination now under way of the experience of countries in connexion with population and housing censuses held during 1955-1964 and report to the Commission at its next session."^{1/} In carrying out this work, the Secretary-General has gone a step further than the request of the Commission, in that the results of the investigation called for have been applied to the revision of the General Principles for a Housing Census.^{2/} The attached draft (see annex), Principles and Recommendations for a Housing Census, is the first step in that proposed revision, one of the United Nations activities in the 1970 World Housing Census Programme, reported on in document E/CN.3/337.
2. Preparation of the revision was accelerated because of the delay in convening the thirteenth session of the Commission and the emphasis placed at its twelfth session on "... the importance of ensuring that final recommendations, training materials and technical assistance for the 1970 censuses of population and of housing would be available when needed by the countries ...".^{3/} With the present time-table (see E/CN.3/337) it is anticipated that a second revision of the Principles might be ready for consideration of the Statistical Commission at its fourteenth session.

- 1/ Official Records of the Economic and Social Council: Thirty-fourth Session Supplement No. 13, Resolution 7 (XII).
- 2/ General Principles for a Housing Census (United Nations publication, Sales No.: 58.XVII.8).
- 3/ Official Records of the Economic and Social Council: Thirty-fourth Session, cp. cit.

ACTION BY THE COMMISSION

3. Should the Commission consider that the present document provides a suitable basis for developing recommendations covering the 1970 censuses of housing, it may wish to request the Secretary-General to:

- (a) circulate the draft to States Members of the United Nations or of the specialized agencies, to regional economic commissions, to other regional bodies and to interested specialized agencies for their review;
- (b) revise the draft to take into account the suggestions of the Commission and the comments received as a result of the action taken in accordance with (a);
- (c) convene a small group of experts in housing censuses to examine the revised draft prior to the fourteenth session of the Statistical Commission and to recommend such changes as they deem necessary; and
- (d) present the revised draft, together with any recommendations of the group of experts, for consideration at the fourteenth session of the Statistical Commission.

BACKGROUND

4. The General Principles for a Housing Census were formulated as a result of a recommendation of the Statistical Commission at its ninth session.^{4/} A first draft (ST/STAT/P/L.22, 20 August 1956) was prepared on the basis of (1) early studies and recommendations of the League of Nations, the International Statistical Institute, the International Labour Office and the International Union of Towns; (2) studies of concepts and methods used in national housing censuses, which had been presented for the consideration of the Statistical Commission at previous sessions; and (3) studies and recommendations made by the Conference of European Statisticians (Working Group on Censuses of Population and Housing), the Economic Commission for Europe (Working Party on Housing and Building Statistics) and the Inter-American Statistical Institute.

5. A second draft was prepared (E/CN.3/240/Add.1-ST/STAT/P/L.22/Rev.1, 16 December 1957) in the light of comments made by the Working Group on Censuses of Population and Housing of the Conference of European Statisticians at its second session (19-24 November 1956), by the Census Sub-Committee of the Committee on

^{4/} Official Records of the Economic and Social Council: Twenty-second Session, Supplement No. 7, Resolution 19 (IX).

Improvement of National Statistics (COINS) of the Inter-American Statistical Institute at its fourth session (31 October to 12 November 1957), by national statistical services, regional housing institutes and housing experts.

6. The second draft was considered by the Statistical Commission at its tenth session (28 April to 15 May 1958) and the comments and recommendations of the Commission were taken into account in preparing the final version of the Principles.

7. In recommending at its tenth session^{5/} that the Principles be circulated to governments for use in carrying out censuses of housing, the Statistical Commission requested that arrangements be made for field tests of the recommendations and that country experience in applying them to particular problems be transmitted to the Secretary-General. A subsequent evaluation of international experience was requested to be presented at a future session of the Commission.

8. As part of the 1970 World Housing Census Programme, which is reported in document E/CN.3/337, the Statistical Office carries out a continuous study of housing census methods on the basis of this methodological material received from governments. In addition, information has come from analysis of country experience prepared by the regional economic commissions^{6/} and the Inter-American Statistical Institute.

9. Account has also been taken of other developments. Since publication of the Principles in 1958, much attention has been given to determining the statistical series most urgently required for programmes of economic and social development.^{7/}

5/ Official Records of the Economic and Social Council: Twenty-sixth Session, Supplement No. 10, resolution 12 (X).

6/ Methods and Problems of African Population Censuses and Surveys (preliminary draft of United Nations document E/CN.14/CAS.4, to be presented to the Fourth Conference of African Statisticians); Analysis of National Replies to the Questionnaire on Censuses of Population and Housing. Part Two. Questions Relating to Housing Censuses (United Nations document Conf.Eur.Stats./WG.6/95); Analysis of National Replies to the Questionnaires on Population and Housing Enquiries Undertaken during the Period 1955-1964. Part Two. Questions Relating to Housing Censuses (United Nations document E/CN.11/ASTAT/CPH/L.2).

7/ Statistical Series for the Use of Less Developed Countries in Programmes of Economic and Social Development (United Nations publication, Sales No. 59/XVII.10).

A provisional regional programme has been drawn up by the Inter-American Statistical Institute^{8/} and by the Economic Commission for Asia and the Far East,^{9/} and a programme is in the course of being developed by the Economic Commission for Africa.^{10/} In formulating these programmes, the statistical requirements for housing programmes as an integral part of national development plans have been duly considered and the conclusions reached at the regional level have been taken into account in effecting the present revision. Two regional seminars^{11/} convened to study the statistics required for housing programmes reached substantial accord on this matter and their conclusions also have served as a point of reference in preparing this revised version of the Principles. A further statistical need that housing censuses may be called upon to fill lies in the data requirements for the calculation of the Statistical Indicators of Housing Conditions,^{12/} both with respect to housing conditions at the national level and as a component of the International Definition and Measurement of Levels of Living.^{13/} These also have been considered in drafting the revision. Reference to all of these is given as appropriate throughout the draft.

10. It will be noted that Part VII of the draft Principles and Recommendations includes specifications for each tabulation recommended; it is expected that, in addition to the outline of specifications, the next draft will include also a sketch table for each tabulation illustrative of the required attribute classifications.

8/ Inter-American Program of Basic Statistics, VIII Session of the Committee on Improvement of National Statistics, Inter-American Statistical Institute, Panama, 2-15 September 1964 (IASI document 4921a-9/12/64-75).

9/ Basic Statistics for Formulating and Implementing Plans of Economic and Social Development in Countries of Asia and the Far East (United Nations document E/CN.11/ASTAT/Conf.6/L.4).

10/ "Statistical Development in Africa" - a draft revision of Use of the Revised List of Basic Statistics for Programming Statistical Development in Africa, (United Nations document E/CN.14/CAS.3/9).

11/ Report of the Latin American Seminar on Housing Statistics and Programmes, Copenhagen, Denmark, 2-25 September 1962 (United Nations publication, Sales No.: 63.II.G.14). Report of the Seminar on Housing Statistics and Programmes for Asia and the Far East, Copenhagen, Denmark, 25 August-14 September 1963, (United Nations document E/CN.11/677).

12/ Statistical Indicators of Housing Conditions, (United Nations publication, Sales No.: 62.XVII.7).

13/ International Definition and Measurement of Levels of Living, An Interim Guide, (United Nations publication, Sales No.: 61.IV.7).

11. Along with each set of specifications in Part VII, supplementary information has been included which is intended only for the convenience of the Commission in its consideration of each recommended tabulation and its specifications. This information has been set apart from the remainder of the draft text by the use of brackets and is not intended to form part of the Principles and Recommendations. This same technique has been used in other parts of the draft to a limited extent.

ANNEX

PRINCIPLES AND RECOMMENDATIONS FOR A HOUSING CENSUS:
DRAFT RECOMMENDATIONS FOR THE 1970 CENSUSES

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INTRODUCTION

1. The importance of housing activities as part of national development has been the subject of consideration by the General Assembly for many years. The role of housing in the United Nations Development Decade was stressed by the Economic and Social Council when, at its thirty-seventh session in 1964, it placed before the nineteenth session of the General Assembly a resolution^{1/} in which the housing problem in countries throughout the world is cited as one of the most important calling for solution without delay. The resolution recommended, inter alia, that Member States should "Assume a major role in the solution of the housing problem in every country and to this end make provision in their national development planning for the necessary activities and resources; ...", including, it is assumed, statistics.

2. The role of statistics in the solution of these problems has been stressed not only by the Statistical Commission but by various international bodies concerned with housing, in particular by the Committee on Housing, Building and Planning, established by the Economic and Social Council on 2 August 1962 /resolution 903 C (XXXIV)/. At its first session in 1963, the Committee noted in the annex of resolution 976 (XXXVI) of the Economic and Social Council that preparation of detailed housing policies and programmes "should establish both the quantity and quality of housing in accordance with economic capacity".^{2/} It went on to recommend that these programmes should also cover related facilities and equipment and to this end, "statistical machinery would have to be set up on a considerable scale"

3. At its second session in 1964, "the Committee underlined the recognized need for adequate statistical data as a tool for effective projections and programming of housing and community facilities for assessing the housing situation in quantitative and qualitative terms and for a periodic review and evaluation of housing trends and developments. In this connexion, the urgent need for the development of basic housing, building and urban development statistics at

^{1/} Official Records of the Economic and Social Council: Thirty-seventh Session, Supplement No. 1, resolution 1024 (XXXVII).

^{2/} Official Records of the Economic and Social Council: Thirty-sixth Session, Supplement No. 13, p. 21.

the national level was stressed and also the need for close collaboration between housing agencies and agencies responsible for the collection and analysis of such statistics".^{3/}

4. The need to assess housing conditions and to keep under surveillance the changes that take place in these conditions requires the establishment of a system for the collection of both bench-mark and current housing statistics. The principal methods used to collect these data are the housing census, housing surveys, and procedures established to collect statistics that become available as a by-product of administrative action (current statistics). The principles and recommendations which follow deal with the substantive concepts and essential procedures of housing censuses. They are intended mainly as a guide to countries planning to take housing censuses but because of their nature, they are also applicable in some respects to bench-mark housing data collected by means of housing sample surveys or multi-subject inquiries, and to current housing statistics.

5. The Principles and Recommendations are set forth in seven parts as follows: Part I deals with the definition and essential features of a housing census.

6. The administrative aspects of a housing census are touched upon only briefly in Part II since they are similar to those pertaining to the population census which are discussed in some detail in the recommendations for population censuses.^{4/} Part III deals with the application of sampling methods to each of the statistical operations that constitute a housing census. As with Part II, reference should be made to the Principles and Recommendations for a Population Census (E/CN.3/330) for a fuller treatment of the role of sampling in inquiries of the census type. Part IV includes a discussion of the units of enumeration utilized in carrying out a housing census. The classification and definition of housing units is shown in Part V; Part VI includes a list of basic and additional topics with recommended definitions and classifications and a list of other topics for which information is recommended to be collected in housing censuses. The basic topics are those required for the tabulations shown in Part VII.

^{3/} Official Records of the Economic and Social Council, Thirty-seventh Session, Supplement No. 12, Report of the Second Session of the Committee on Housing, Building and Planning, 22 January-4 February 1964, para. 23, p. 7.

^{4/} Principles and Recommendations for a Population Census: Draft Recommendations for the 1970 Censuses (United Nations document E/CN.3/330).

7. The tabulations outlined in Part VII are intended to illustrate, in a simple form and one that can be adapted to various methods of data processing, the data most urgently required for housing programmes. The use of each tabulation is discussed in connexion with each one.

8. [Paragraph deleted.]

9. However, neither the list of basic topics in Part VI nor the tabulations in Part VII constitute a programme which countries should necessarily adopt in its entirety. On the contrary countries are urged to examine each of the tabulations with a view to selecting those that will be most useful to them and adapting them as necessary to meet their needs. The decision concerning the most effective tabulation programme consistent with resources will determine the topics to be included in the housing census. It is recognized that the basic list will be over-ambitious for some countries and insufficient for others and that the final selection of topics will depend upon the resources available.

10. The extent to which these proposed recommendations have already been followed is significant from the point of view of international comparability of the data collected. Perhaps more significant from the point of view of individual countries interested in carrying out a successful housing census is the fact that the recommendations outlined here represent the conclusions of successive international and regional groups concerned with various aspects of housing and the collective experience of a wide variety of countries. While it is assumed that modifications of the Principles will be required according to the varied situations in which they will be applied it is also suggested that caution attend any drastic departure from the essential concepts of "housing unit" and "household" or from the definitions of the basic topics.

Part I DEFINITION, OBJECTIVES AND ESSENTIAL FEATURES OF A HOUSING CENSUS

A. Definition of a housing census

11. A housing census may be defined as the total process of collecting, compiling, analysing and publishing statistical data pertaining, at a specified time, to all housing units^{9/} and occupants thereof in a country, or in a well delimited territory, for the purpose of obtaining information concerning the housing inventory and housing conditions of the population.

12. The dual objectives of a housing census require that if the census is taken separately from the population census, data on households^{10/} occupying housing units (which are essentially demographic data) must be collected in addition to data on the housing units themselves.

13. The housing census should supply basic data on the number of housing units classified according to objective criteria into groups which are significant for measuring housing conditions. The census data, therefore, must provide information on the structural characteristics and facilities which have a bearing upon the maintenance of privacy and conditions generally considered essential to health and the measurement of population density in relation to the housing available at the time of the census.

14. The Statistical Commission has directed the attention of national statistical services "to the need to develop, from housing censuses, the sort of bench-mark statistics in housing that could be supplemented by current building and construction statistics and which would provide a continuous up-to-date picture of the housing position needed for the consideration of housing programmes. Such a system of housing statistics would permit the use of more intensive surveys of housing and more adequate utilization of housing data obtained through household inquiries or by special sample surveys. Thus, the census data would provide a frame for such samples and surveys".^{11/}

9/ For definition of "housing unit", see paragraph 62.

10/ For definition of "household", see paragraph 70-73.

11/ Official Records of the Economic and Social Council: Twenty-second Session, Supplement No. 7, para. 117.

15. Thus, it is clear that not all the information required to assess housing needs or to formulate housing programmes can be obtained through a housing census. Additional data must be obtained through the population census, current housing statistics, special housing surveys, vital statistics, economic statistics, etc., but the housing census will constitute the basic framework within which the estimates will be made, indices computed, and further statistical inquiries planned.

B. Objectives of a housing census

16. The immediate objective of a housing census is to relate housing data to housing units in such a way as to obtain the information described in the following paragraphs

17. The first objective of a housing census is to make an inventory of all the various kinds of places in which people live and which together constitute the existing housing accommodation at a given time. This would include houses, apartments, huts, caves, convents, boats, penal institutions, etc.

18. Note: Practically all the housing censuses taken have been organized in accord with this objective, i e., they have made provisions for enumerating premises intended for habitation, as well as premises which may not conform to generally accepted standards for dwellings (improvised shelters, warehouses, booths, caves, etc.).7

19. The second objective of a housing census is to classify the housing units according to their structural characteristics, geographic location, and available facilities, installations and services.

20. The third objective of a housing census is to count and classify the population living in the various types of housing units according to household and family relationships as well as their demographic and economic characteristics and to record those who are without shelter.

C. Essential features of a housing census

21. Some of the essential features of a housing census are:

(1) Individual enumeration

22. A census implies that each housing unit is enumerated separately and that the information obtained is recorded separately for each unit. The direct universal enumeration of each housing unit may be combined with self-enumeration of occupants and supplemented by inquiries about housing units made through the owners or their agents and by means of registers of properties. A procedure by which aggregated or summarized data are recorded for groups of housing units or communities is not considered a census except in so far as such a procedure might be adapted to produce the same tabulation as a census of each housing unit can provide.

(2) Universality within a defined territory

23. The census operation should cover all housing units, of whatever type, within a precisely defined geographic territory and among all inhabitants of the territory, without omission or duplication.

(3) Simultaneity

24. The number of housing units and inhabitants enumerated should refer to a well-defined point or period of time.

(4) Periodicity

25. Censuses should be taken at regular intervals so that comparable information is made available in a fixed sequence. A series of periodic censuses makes it possible to appraise the past, accurately describe the present and estimate the future. It is recommended that a national housing census be taken at least every ten years.

(5) Compilation, evaluation, analysis and publication of data

26. The compilation, evaluation, analysis and publication of housing data by geographic areas, by housing characteristics, facilities and occupancy and by characteristics of the occupants are essential features of the housing census.

D. Role of the housing census in an integrated programme of data collection

27. Housing censuses are usually carried out in conjunction with censuses of population and thus it is to the population census that they are most closely related. However, they are conceptually related to housing surveys and current housing statistics and they may also be linked for certain purposes to censuses of buildings, censuses of agriculture or other inquiries that utilize lists of buildings or housing units as a means of control.

(1) Relationship to housing sample surveys

28. Housing sample surveys provide a means of collecting data that cannot suitably be included in a housing census or which may be more efficiently gathered through the use of sampling methods. The data obtained serves in some cases to up-date the housing census and in others to supplement the census data.

29. For example, information relating to the quality of housing, such as the need for repair, the demand for certain types of dwellings, the economic activity of the owner, doubling-up of families, differential study of the range of rentals and other matters which require the participation of specially trained enumerators, represent topics which could more appropriately be included in housing sample surveys than in housing censuses.

30. Sample surveys may also be used to collect certain bench-mark data and they have been used on occasion to collect data on dwelling construction and related activities (current statistics).

31. It is important that the concepts and definitions used in housing sample surveys should be in accordance with those employed in the housing census particularly where the information from the survey is used to up-date the census data.

(2) Relationship to multi-subject household sample surveys

32. Housing information is sometimes collected as part of a multi-subject household sample inquiry.^{12/} The data obtained may serve to up-date census data,

^{12/} Handbook of Household Surveys, A Practical Guide for Inquiries on Levels of Living (United Nations publication, Sales No.: 64.XVII.13) Chapter V.

or the multi-subject inquiry may be the only means available of obtaining benchmark housing data. Normally, the topics investigated in such inquiries are similar to those included in housing censuses. Topics that require specially trained enumerators and which might therefore be collected by means of a housing sample survey would not generally be included in a multi-subject sample household survey.

33. Whether the multi-subject survey is used as a means of up-dating a census or whether it is used as an interim means of obtaining housing information, the data obtained from multi-subject surveys and housing censuses need to be comparable and the same basic concepts should be used in both operations.

(3) Relationship to other types of censuses

(a) Population Censuses

34. If housing censuses are defined as the universal enumeration of housing units and their classification according to structural characteristics and occupancy, it becomes evident that conceptually the population and housing censuses are bound to each other. The two censuses may comprise one statistical operation or they may be two separate but well co-ordinated activities, but they should never be considered independently of each other.

35. There are essential aspects of each census which are common to both. It is an essential part of the population census to identify or list each housing unit and it is an essential part of the housing census to gather information on the number of occupants in each housing unit and their characteristics. It is therefore necessary that the concepts and classifications common to both censuses should be consistent.

36. In many countries, the population and housing censuses are taken concurrently, often with the use of a single schedule. This technique provides for ready matching of head of household and other identifying characteristics of the housing unit occupants. It also makes it possible to relate to the housing census data the information on demographic and economic characteristics of each household member collected in the population census; if this information cannot be taken from the population census, it has to be collected in the housing census.

37. The advantages of simultaneous investigation may be offset to some extent by the additional burden on the respondent and the enumerator resulting from the increased amount of information which must be collected at one time. In countries where this is likely to be a serious problem, consideration might be given to collecting data for a limited number of topics on the basis of a complete enumeration in the population and housing census, with more complex data in both fields being collected on a sample basis only, either concurrently with, or immediately following, the full enumeration.

(b) Census of buildings

38. Since, as part of the housing census operation, it is necessary to investigate all buildings (both residential and non-residential) in order to ascertain whether they are occupied or not, it may be convenient to record all buildings at the time of the housing census, even though data may be collected only for those in which housing units are located. The comprehensive list thus obtained sometimes provides the basis for a census of buildings, or it may provide for the identification of special types of buildings significant for subsequent inquiries, such as the census of distribution, the school census, etc.

(c) Census of agriculture

39. The housing census may provide a convenient means of identifying agricultural holdings for a subsequent census of agriculture and a question for this purpose is frequently included in a housing census. The housing census also provides an opportunity to collect data concerning small-scale agricultural activity carried on in the vicinity of the housing unit.

(4) Relationship to housing statistics obtained as a by-product of administrative action

40. These statistics refer mainly to data obtained from the permits issued for the construction of dwellings. Compiled monthly or quarterly, this information reflects the number of new dwellings constructed and certain related information such as investor, value, number of rooms, floor space, etc., as well as data on the number of dwellings destroyed or demolished. Although these data serve other purposes, they are also used to up-date the bench-mark data obtained from housing censuses.

/...

41. As noted above, data on dwelling construction are sometimes collected by means of housing surveys and an approximation of the rate may also be obtained from the housing census. The interrelationship among these three methods of collecting housing information and their common purpose requires that the same basic concepts be utilized in each operation.

Part II. PLANNING, ORGANIZATION AND ADMINISTRATION OF A HOUSING CENSUS

42. A detailed review of the principles which need to be considered in planning, organizing and administering a population census are set forth in Part II of the Principles and Recommendations for a Population Census (E/CN.3/330). The discussion there is presented in terms of (a) Preparatory work; (b) Enumeration; (c) Data processing; (d) Analysis; (e) Evaluation; (f) Dissemination of results; (g) Systematization of census experience. In view of the fact that the population census principles are equally applicable to a housing census, the paragraphs below are limited to brief references.

A. Preparatory work

43. As a minimum, each country should make a complete inventory or count of all housing units at the time of the population census. If resources permit, it would be advisable that, in addition, descriptive data enabling the principal types to be distinguished also be obtained through universal enumeration. It is recognized, however, that a scientifically designed sample, based on the complete enumeration of housing units, will provide sufficiently accurate information to describe statistically the housing conditions of greatest interest for major regions (for a discussion of sampling, see Part III).

B. Enumeration

44. The enumeration of housing units should be organized on the same basis as the enumeration for the population census and, in fact, the listing of each and every housing unit may be considered as a prerequisite for the control of the population enumeration and for ensuring its completeness. The universal enumeration of housing units should be made exclusively on a geographic basis, that is to say, the country should be divided into census enumeration districts and each district should be small enough to be covered by one enumerator during the period of time allowed for the enumeration. Other sources of information, such as registers of properties, cannot normally be considered as adequate for the purpose of a housing census, although they could be used for checking the completeness of the enumeration or the accuracy of the replies to certain questions.

C. Data processing

45. A detailed study of the procedures to be followed in processing the housing census data must be made at an early stage in the planning of the census. The resources available in terms of skilled manpower and machines will, in all cases, be an important factor in determining the extent of the housing census inquiry. The type of forms to be used, the coding procedures, and the administrative census organization may be substantially modified depending on whether the tabulation will be done mechanically or by hand and, if mechanically, by what type of machines. Whether or not machines are to be used, an early decision should be made as to the sequence and timing of operations. It is anticipated that, in order to fulfil by manual methods, a tabulation programme similar to the one outlined in Part VII, a special set of working tables would need to be designed. If the operation is done by machine, machines that can obtain aggregate numbers will be needed in addition to those that count units. The sequence of operations should always be studied and determined at the planning stage in order to save machine time and, consequently, reduce the cost. The technique of quality control should be applied in all cases to the verification of coding and punching. Editing rules should be established and tested. For detailed information on data processing reference should be made to the Handbook on Data Processing Methods^{13/}, a manual prepared jointly by the Statistical Office of the United Nations and the Statistics Division at the Food and Agriculture Organization.

46. Special consideration should be given to the advisability of obtaining advance census results by sample tabulation. The advantages of obtaining timely information are obvious but they should be weighed against the effect, on the over-all data processing programme, of the additional work which will be incurred.

D. Analysis of results

47. At an early stage of the planning, the views of the prospective users should be explored and the methods of analysis of the information to be obtained should

^{13/} Handbook on Data Processing Methods, Part I. Provisional edition. Prepared jointly by the Statistical Office of the United Nations and the Statistics Division, Food and Agriculture Organization of the United Nations, Rome, 1959.

^{14/} [Note deleted]

be determined in the light of the prospective uses. In general, in addition to the basic items and tabulations listed in Parts VI and VII for which immediate or future use can be assumed in most countries, supplementary data should be obtained only when its use and type of analysis can be ascertained beforehand.

E. Evaluation of results

48. A programme of evaluation should be planned well in advance of the beginning of the census operations, so that provision may be made for its implementation at every phase of the census work. Verification of coverage and content should be programmed by direct and indirect checking procedures, including, inter alia, post-censal field checks, comparison with entries on registers of properties and similar lists, comparison with results of censuses of buildings and analytical analysis designed to evaluate accuracy.

F. Dissemination of results

48a. At an early stage of census planning, a decision should be made on the type of data and extent of information to be published and on the method of reproduction. When the census publication is outlined in detail in the preparatory stage, it may be possible to schedule the data-processing operations so as to reduce considerably the time necessary for reproduction. The main consideration is whether the reproduction of the census report will be initiated after all the data processing has been completed or whether it will be done in parts, as soon as each stage of data processing is completed. Obviously, the time required for the publication will be greatly reduced in the latter case, but it requires thorough and detailed planning of all the census operations.

49. A report describing the administrative organization, the basic concepts, definitions and procedures used in compiling the data, the numerical results and analysis of the results should always be published by countries which have taken a housing census.

G. Systematization of census experience

50. Since housing censuses are a comparatively new type of statistical inquiry, it would be advisable that every country taking a housing census carry out census

tests sufficiently in advance of the main operation to allow time for the results of these to be properly recorded and analyzed, keep a record of the trials made, of the procedures, expenditures, personnel, difficulties encountered, etc. In this way, the experience gained may be fully utilized in carrying out subsequent census. In addition, an evaluation of census results should always be made; recommendations for the next census may be formulated as a result of such evaluation. The evaluation and record may be purely for the use of the national statistical agency responsible for the census, but to the extent possible, it would be desirable to make the results available to other consumers.

Part III. USE OF SAMPLING IN A HOUSING CENSUS

51. The use of sampling in a housing census differs little from its use in a population census. For a full discussion of the latter, reference can be made to Part III of Principles and Recommendations for a Population Census (E/CN.3/330) and, therefore, it is not proposed to repeat that section here. However, it is necessary to call attention to certain points which are peculiar to the use of sampling in a housing census.

52. It was mentioned in the discussion under the use of sampling in population census that the nature and extent of census-testing depend on the information which is available from previous censuses or other sources. This restriction is especially important with reference to housing censuses. The general lack of prior housing statistics makes it difficult to assess in advance the variability of the statistical material to be investigated and also of the quality of the interviewers. Therefore, there is usually a need to obtain an idea of these factors by means of an intensive pilot survey.

53. It should be considered feasible and acceptable to collect information on certain basic topics related to housing units and their occupants by enumerating only a random sample of housing units; thus, while the census covers all housing units within a delimited territory, information on certain topics may be obtained on a sampling basis. However, since one of the purposes of the census is to serve local interests, the feasibility of sampling is determined to some extent by the size of the smallest localities for which separate tabulations are needed. In order to obtain data of acceptable precision for these divisions and localities, it may be necessary to use high sampling fractions in view of the great variability in housing statistics.

54. Sampling field staff in connexion with a housing census is often required to compile detailed information from the respondents, and may have to make subjective decisions to place a respondent's answer under the correct category. For this reason, sampling field staff is required to be of a high calibre, well trained and preferably with prior experience and/or knowledge with regard to housing statistics. Because housing censuses often take place in conjunction with population censuses, the scope of the housing data to be collected may have to be limited by the quality of the interviewers.

55. A sample in connexion with a housing census may be of multi-stage design with enumeration districts at the first-stage and housing units at the second. The list of enumeration districts provides a convenient frame at the first stage; also, the enumeration districts tend to exhibit permanence. It is then necessary to list the housing units for the selected enumeration districts only.

56. In contrast to a post-enumeration sample check in connexion with a population census, which should confine itself to the topics asked during census enumeration, during a post-enumeration sample check in connexion with a housing census, one could ask questions on housing topics additional to those asked during census enumeration because of the permanence of the sample units, viz., housing units.

57. Generally, more than usual variability is experienced in housing statistics. For this reason, tabulation of sample data which are not amenable to error analysis should be discouraged unless prior investigation concerning sampling and non-sampling errors shows that data of acceptable validity are expected to be produced. This is particularly important in the context of housing censuses because of the heavy demands for detailed cross-tabulations for small divisions and localities.

58. Reference is made to paragraphs 59-77 which discuss the units commonly used for censuses of housing and the common sampling frame for subsequent sample inquiries. Whatever unit is used, it should be capable of being well defined. The sampling frame should be free from inaccuracy, incompleteness, duplication, inadequacy and obsolescence. If data on housing types are available from previous censuses of housing and/or buildings, preferably up-dated by the use of current statistics on the construction of housing units, stratification by type of housing unit could form the basis of an efficient sampling scheme.

Part IV. UNITS OF ENUMERATION FOR A HOUSING CENSUS

59. Three units of enumeration have been used in carrying out housing censuses: (a) the building; (b) the housing unit; (c) the household. It is important to bear in mind that, in statistical terms, these three concepts are clearly distinguishable and there is not necessarily an identity or exact correspondence among them. Several households may live together in one housing unit and one household may occupy more than one housing unit. Similarly, several housing units may together occupy one building and one housing unit may occupy more than one building.

60. In carrying out a census, it is essential that the units of enumeration be clearly defined and that the definitions be included in manuals of instruction for the enumeration and in census reports. The units of enumeration are discussed below.

A. Housing unit

61. The principal unit of enumeration in a census of housing is the housing unit. Only by recognizing it as such can data be obtained which will provide a meaningful description of the housing situation and a suitable basis for the formulation of housing programmes.

62. A housing unit is a structurally separate and independent place of abode. It may (a) have been constructed, built, converted or arranged for human habitation, provided that it is not at the time of the census used wholly for other purposes and that, in the case of mobile, improvised and collective premises, it is occupied at the time of the census, or (b) although not intended for habitation, actually be in use as such at the time of the census.

Consequently, a housing unit may be (a) an occupied or vacant house, apartment, independent room, group of rooms thatched hut or cabin or (b) an occupied squatters' hut, trailer, hotel, institution, camp barn, mill, cave or any other "shelter" occupied as living quarters at the time of the census.

(1) Separateness and independence

63. The essential features of a housing unit are separateness and independence. An enclosure may be considered as separate if surrounded by walls, fences, etc.,

/...

and covered by a roof so that a person, or group of persons, can isolate themselves from other persons in the community for the purposes of sleeping, preparing and taking their meals or protecting themselves from the hazards of climate and environment. Such an enclosure may be considered as independent when it has direct access from the street or from a public or communal staircase, passage, gallery or grounds, i.e., when the occupants can come in or go out of their living quarters without passing through anybody else's premises.

(2) Permanence

64. Housing units may be permanent or semi-permanent structures intended for habitation by private or collective households, or "shelters" used as places of abode on the day or night established as the time reference of the census by any group of persons except transients.

(3) Habitation

65. Housing units originally intended for habitation and used wholly for other purposes at the time of the census should normally be excluded from the census coverage, while "shelters" not intended for habitation, but occupied at the time of the census, should be included. In some circumstances, it may be convenient to make a separate count for national purposes of the units originally intended for habitation but used wholly for other purposes at the time of the census and vice versa. In such cases, specific instructions for the enumeration of these units must be supplied.

(4) Newly constructed units

66. Instructions should be issued covering newly constructed units so that it is clearly understood at what stage of completion they should be included in the housing census. In general, it is recommended that only those ready for occupancy should be enumerated; if dwellings in the course of construction are counted, they should be clearly identified as being "under construction" and should not normally be included in the total number of dwellings. If the system of current housing statistics refers only to "dwelling starts", however, then "dwellings under

construction" should be accounted for at the time of the census; otherwise they will be omitted where construction statistics are used to up-date census data. This procedure would be necessary to obtain a correspondence between census data and data on dwelling construction.

B. Household

67. For certain items the household may serve more efficiently than the housing unit as the unit of enumeration. For example, tenure is recommended to be collected from households rather than housing units (see paragraphs 162-165). Information about household possessions which are not normally included as part of the equipment of a housing unit (radio and television receivers for example) should be collected with reference to households. Information on rent, an item of significance in relation to both housing units and households would of necessity need to be collected in relation to the household.

68. For the purpose of a housing census, each household must be identified separately. Both the Seminar on Housing Statistics and Programmes for Asia and the Far East^{15/} and the Latin American Seminar on Housing Statistics and Programmes^{16/} drew attention to the importance of using separate concepts of household and housing unit in carrying out housing censuses in order to permit the identification of the units (groups of persons) in need of a separate dwelling. If, as is the case in some countries, the household is defined as a group of persons occupying a housing unit, the number of households and housing units will always be equal and there will be no apparent housing need in terms of households requiring housing units. If, as is also the case in a few countries, housing units are defined as the space occupied by a household, the number of households will again be equal to the number of housing units, with the added disadvantage that there will be no record of the number of structurally separate housing units.

^{15/} Report of the Seminar on Housing Statistics and Programmes for Asia and the Far East, Copenhagen, Denmark, 25 August-14 September 1963, (United Nations document E/CN.11/677).

^{16/} Report of the Latin American Seminar on Housing Statistics and Programmes, Copenhagen, Denmark, 2-25 September 1962, (United Nations publication, Sales No.: 63.II.G.14).

69. "Household" for housing census purposes should be defined in the same way as it is for population censuses. Therefore, the definitions which follow are the same as those set forth in Principles and Recommendations for a Population Census.^{17/} The household definition should distinguish two broad types: (1) private households and (2) collective households (previously designated in English as "institutional households").

(1) Private households

70. A private household should be defined as either: (a) A one-person household: a person who lives alone in a separate housing unit^{18/} or who, as a lodger, occupies a separate room or rooms in a part of a housing unit but does not join with any of the other occupants of the housing unit to form part of a multi-person household, or (b) A multi-person household: a group of two or more persons who jointly occupy the whole, or part, of a housing unit and who have common provisions for food or other essentials for living. The group may pool their incomes and have a common budget to a greater or lesser extent. It may be composed of related or of unrelated persons, or a combination of both, including boarders but excluding lodgers.

71. The criteria for a multi-person private household are not met by the practice of defining a household simply as the entire group of persons jointly occupying a housing unit. Although, in fact, most housing units are occupied by a single household, the exclusion from the definition of the multi-person household of a requirement that the persons make common provision for basic living needs makes it impossible to identify the housing units which contain more than one household (either one- or multi-person): this information is needed in connexion with housing censuses and sample surveys.

72. Slight modifications of the recommended definition may have to be made to take account of special conditions in certain countries. For example, the treatment of extended families dispersed in a colony of housing units but eating

^{17/} Op. cit. paras. 148-152.

^{18/} For definition of housing unit, see paragraph 62.

together, and of potentially separate households with a common head, resulting from polygamous unions, may necessitate some departure from the requirement that all members of a private household must occupy the same housing unit. In such cases, all the persons in the colony or compound may be considered to form a single household.

(2) Collective household

73. Collective households comprise groups of persons who live together but who do not constitute private households, such as persons living in boarding houses and hotels, in the dormitories of schools and colleges, in correctional and penal establishments, in hospitals, convents, military installations and the like. Households in which the number of boarders and lodgers exceeds five should be considered to be collective households. The households of institutional directors and other administrative personnel who occupy separate housing units on the grounds or within the building occupied by a collective household should be considered to be private households.

C. Building

74. The building is regarded as an important but indirect unit of enumeration for housing censuses since the information concerning the building (material of construction, date or period of construction and certain other characteristics of buildings) is of direct significance for the occupants of the housing units located within the building and for the formulation of housing programmes. In a housing census the questions on building characteristics are normally framed in terms of the building in which the housing unit being enumerated is located and the same information is recorded for each of the housing units located within it.

75. A building is any independent structure comprising one or more rooms or other spaces, covered by a roof and usually enclosed within external walls or dividing walls which extend from the foundations to the roof. However, in some cases, as in tropical areas, a building may consist of a roof with a supporting

19/ [Note deleted].

structure only, that is, without permanently constructed walls; in other cases, it may be a roofless structure consisting of an enclosure surrounded by walls.

76. A building may be used or intended for residential, commercial or industrial purposes or for the provision of services. It may, therefore, be a factory, shop, detached dwelling, apartment building, warehouse, garage, barn, etc. In the case of housing units with detached rooms, the detached rooms should be considered as separate buildings. A building may, therefore, contain several housing units as in an apartment building or duplex, it may be a single detached housing unit or it may be part of a housing unit (a housing unit with detached rooms clearly intended to be used as part of the housing unit).

77. The concept of building should be clearly defined and the instruction for the housing census should indicate whether all buildings are to be included or only the buildings in which people normally live. Instructions should also indicate whether buildings under construction are to be recorded and, if so, at what stage of completion they are eligible for inclusion.

Part V. CLASSIFICATION OF HOUSING UNITS AND DEFINITION OF EACH TYPE

78. The classification by, and the definition of each type of housing unit, properly belongs in Part VI which deals with "Topics to be investigated in a housing census." However, because of its fundamental importance and also because the presentation tends to be lengthy, the housing unit definition and classification is treated separately in this part.

79. Note: The following classifications and definitions are substantially unchanged from those included in the original version of the Principles. Since their publication in 1958, they have been widely utilized in carrying out housing censuses and other housing inquiries and this experience has been carefully studied both at the regional and at the international level.

80. The principal changes that have been incorporated in this revised version of the Principles are as follows:

- (1) The classification now includes only two main groups, namely, private housing units and collective housing units;
- (2) A definition of private housing unit has been included;
- (3) A sub-classification of conventional (permanent) dwelling has been proposed where appropriate for the reporting of "Core dwellings";
- (4) A minimum classification of housing units is proposed.]

A. Classification by structural type

81. Housing units as defined in Part IV, paragraph 62, are either private (occupied or intended for occupancy by a private household) or collective (occupied by a collective household). Private housing units should be classified to at least distinguish conventional (permanent) dwellings from other types of private housing units. It should be emphasized that without an adequate classification of housing units no meaningful analysis of housing conditions based on housing census data is possible.

82. The classification outlined below and described more fully in paragraphs 85 to 109 has been designed to group in broad classes housing units with similar structural characteristics. The distribution of occupants (population) among the various groups of housing units supplies valuable information about the housing accommodation available at the time of the census. The classification also affords a useful basis of stratification for sample surveys.

1.0.0 PRIVATE HOUSING UNIT

- 1.1.0 Conventional (permanent) dwelling [house, apartment, flat, etc.]
- 1.2.0 Rustic (semi-permanent) housing unit [thatched hut, cabin, etc.]
- 1.3.0 Mobile housing unit [trailer, caravan, tent, boat, wagon, etc.]
- 1.4.0 Marginal housing unit
 - 1.4.1 Improvised housing unit [squatter's hut, callampa, casa, bruja, etc.]
 - 1.4.2 Housing unit in buildings not intended for habitation. [barn, mill, garage, warehouse, etc.]
 - 1.4.3 Other place not intended for habitation [cave or other natural shelter, etc.]

2.0.0 COLLECTIVE HOUSING UNIT

- 2.1.0 Hotel, rooming house or other lodging house [motel, inn, boarding house]
- 2.2.0 Institution [convent, hospital, boarding school, etc.]
- 2.3.0 Camp [lumber, mining, military, etc.]
- 2.4.0 Multi-household housing unit [long house, carré, etc.]

B. Minimum classification of housing units

83. Not all the categories in the above Classification are of importance under all circumstances. For example, in some countries, certain of the groups may not need to be considered separately, while in others it will be convenient to subdivide them into smaller groups. However, some of the categories are of special significance for assessing the housing situation and should be distinguished even where a simplified classification is employed.

The following classification is proposed as a minimum; any further merging would seem to reduce the significance of the groups to a point where no meaningful assessment of the housing situation on the basis of structural types would be possible.

Private housing units	(1.0.0)
Conventional (permanent) dwellings	(1.1.0)
All other private housing units	(1.2.0, 1.3.0, 1.4.0)
Collective housing units	(2.0.0)*

* Where multi-household housing units constitute a significant proportion of the housing inventory they should be shown separately.

C. Definitions of each type of housing unit

84. A more precise description of the categories shown in paragraph 81 is given below.

(1) Private housing unit (1.0.0)

85. A housing unit has been defined in Part IV as "a structurally separate and independent place of abode" intended for habitation by a private household, or a place which, although not intended for habitation is nevertheless occupied as living quarters by a private household at the time of the census. It may be an occupied or vacant dwelling or rustic housing unit, an occupied mobile or improvised housing unit or any other place occupied as living quarters by a private household at the time of the census. This category includes housing of various levels of permanency and acceptability and therefore requires identification in order to provide for a meaningful assessment of housing conditions.

86. It should be noted that private housing units in the grounds or in the building of a collective housing unit should be separately identified and counted as private housing units. For example, if, in the grounds of a hospital, there is a separate and independent house intended for the habitation of the director and his family, the house should be counted as a private housing unit. In the same way self-contained apartments located in hotel buildings should be counted as private housing units if they have direct access to the street or to a common space within the building. Similar cases will need to be identified and described in the instructions for the enumeration.

(2) Conventional (permanent) dwelling (1.1.0)

87. A dwelling is a room or suite of rooms and its accessories in a permanent building, or structurally separated part thereof, which by the way it has been built, rebuilt, converted, etc., is intended for private habitation and is not, at the time of the census, used wholly for other purposes. It should have a separate access to a street (direct or via a garden or grounds) or to a common space within the building (staircase, passage, gallery and so on). Examples of dwellings are detached one-family houses, self-contained flats, apartments, etc.

88. Detached rooms for habitation which have clearly been built, rebuilt, converted, etc., to be used as a part of the dwelling should be counted as part of the dwelling. Thus, a dwelling may be constituted by separate buildings within the same enclosure provided that they are, as a group, clearly intended for habitation by a private household. Examples of these are servants' quarters on an estate or belonging to a villa.

89. By "permanent building" is understood a structure which may be expected to maintain its stability for ten years or more. It is recognized that the criterion of permanency or durability is difficult for the census enumerators to apply and that its adaptation to local conditions would require considerable study and experimentation by the national offices.

90. It may be noted that the terms dwelling, dwelling unit, dwelling house, residential dwelling unit; family dwelling, house, logement, vivienda, unidad de vivienda, etc. have been used indiscriminately to refer to housing units of any type. The expression "dwelling" is here limited to a housing unit located in a permanent building and designed for occupancy by one private household, which may, at the time of the census be vacant or occupied by one or more households.

91. Although a dwelling is a housing unit intended - i.e., constructed or converted - for habitation by a private household it may, at the time of the census, be vacant or occupied by one or more private households or by an institutional household.

(a) Core dwellings

92. As already noted, it may be necessary under some circumstances to expand the classification of housing units recommended. One such instance may arise in connexion with the recording of "core" or "nuclear dwellings". Many countries with insufficient resources to meet their housing needs have attempted to alleviate the housing conditions of the population living in squatter areas by providing such "dwellings" or, in some cases, by providing only land with essential facilities such as piped water and sewerage systems. Under these programmes the households move their improvised shacks from the squatter area to the new location, the idea being, that gradually, and generally with government assistance of one kind or another, the households with land and public facilities will construct new dwellings and those with "core" or "nuclear dwellings" will add to the nucleus until they can abandon their shacks entirely.

93. A "core dwelling" sometimes consists of a small concrete unit containing bathing and toilet facilities; such units do not fall within the definition of dwelling. Obviously, however, although the household continues to occupy its original shelter (which would probably be classified as an "Improvised housing unit") its housing situation is vastly improved over that of the households remaining in the squatter areas.

94. The problem is, therefore, one of reflecting in the statistics collected the improvements brought about by programmes such as those described above without distorting the data that refers to fully constructed conventional dwellings. Data on the availability of housing facilities will accomplish this to some extent but it seems that a clearer picture would be obtained by also reporting "Core dwellings" under an appropriate classification. Specific instructions would also need to be issued concerning the stage of construction at which these units should be included in the census as conventional (permanent) dwellings.

(3) Rustic (semi-permanent) housing unit (1.2.0)

95. A rustic housing unit is an independent enclosure which has been rudely constructed or erected (e.g., having mud walls, thatched roof, etc.) with locally available rustic materials, such as stones, sun-dried bricks, bamboo, palm, straw or any similar vegetable materials, for the purpose of habitation by a private household and is not at the time of the census used wholly for non-residential purposes. Such units may be expected to last for only a limited time (a few months to ten years) although occasionally they may last for longer periods. This category is intended to cover housing units which are typical and traditional in many tropical rural areas and which have special significance for large sectors of the population in certain countries. A rustic housing unit may be a cabin, a rancho, a bohío, a barasti, a barong barong, etc.

(4) Mobile housing unit (1.3.0)

96. A mobile housing unit is any type of living accommodation which has been made to be transported or which is a moving unit, such as a ship, boat, barge, vessel, railroad car, caravan, tent, trailer, yacht, etc., and which is being used by non-transient persons as living quarters at the time of the census.

97. Mobile housing units which are used as permanent living quarters are of special interest. It is not possible, however, to obtain information on usual residence, except in those countries in which population censuses are tabulated on a residence basis. Persons who happened to be en route (transients) on the night of the census should not be counted as occupants of their vehicles, nor should the vehicles be considered as housing units. Special instructions should be issued for the enumeration of transients on the night or day of the census.

(5) Improvised housing unit (1.4.1)

98. An improvised housing unit is an independent makeshift shelter or structure built of waste materials, without a predetermined plan, for the purpose of private habitation and which is being utilized as living quarters at the time of the census. In this category are included, for example, squatters' huts, poblaciones callampas (Chile), hongos (Peru), favelas (Brazil), sarifas (Iraq), jhuggi (India and Pakistan), gubue (Indonesia) and any similar premises arranged and used as living quarters though they may not comply with generally accepted standards for habitations.

99. There is wide variation in the procedures and criteria used in classifying these units. There are many borderline cases and the countries should make decisions and issue detailed instructions on how to enumerate and classify improvised housing units.

(6) Housing unit in permanent structure not intended for habitation (1.4.2)

100. Included in this category are housing units in permanent structures that have not been built, constructed, converted or arranged for human habitation but which are actually in use in living quarters at the time of the census. In this category are included stables, barns, mills, garages, warehouses, booths, etc.

101. Premises which have been converted for human habitation, although not initially designed or constructed for this purpose, should not be included in this category.

(7) Other places not intended for habitation (1.4.3)

102. This category refers to places which are neither intended for habitation nor located in permanent structures but which are, nevertheless, used as living quarters at the time of the census. Caves and other natural shelters fall within this category.

(8) Collective housing units (2.0.0)

103. A collective housing unit is a separate and independent set of premises intended for habitation by generally large groups of individuals or several private households and occupied at the time of the census. Such units have certain common facilities, such as cooking and toilet installations, baths, lounge rooms or dormitories which are shared by the occupants. Collective housing units may be subdivided, as indicated in the classification, into: hotels, rooming houses, and other lodging houses; institutions; camps; and multi-household housing units.

104. As noted in paragraph 86, private housing units in the grounds or within the building of a collective housing unit should be separately identified and counted as private housing units.

(9) Hotels, rooming houses, and other lodging houses (2.1.0)

105. This group comprises permanent structures which are intended to provide lodging on a fee basis. In this category are included hotels, motels, inns, boarding housing, pensions, lodging houses, etc.

(10) Institutions (2.2.0)

106. This group covers any set of premises in a permanent structure or structures designed to house groups (usually large) of individuals who are subject to a common authority or régime or who are bound by a common public objective and/or personal interests and characteristics. In this type of housing unit, occupants of the same sex usually share dormitories. In this category are included hospitals, military barracks, boarding schools, convents, prisons, etc.

(11) Camps (2.3.0)

107. This group includes enclosures containing sets of premises intended for the transitory occupation of individuals with common activities or interests. In this

category are included military camps and camps established for the housing of workers in mining, agriculture, public works or other types of enterprises.

(12) Multi-household housing units (2.4.0)

108. This group includes buildings and enclosures intended for collective habitation by several private households in these housing units structurally separate and independent living quarters for individual occupancy by private households are not provided. This category would include housing arrangements existing in certain countries such as long houses (Sarawak) and carré (French West Africa).

109. It should be noted that the housing units included in this category are intended for collective habitation, i.e., constructed or converted for this purpose. A study of the procedures adopted in carrying out housing censuses indicates a tendency to include housing units intended for occupancy by a private household which at the time of the census are occupied by several households. Under these circumstances, the classification loses much of its significance and obscures the identification of households doubled up in dwellings (an important element in estimating housing needs). It is suggested therefore that, in carrying out the census, a strict distinction be maintained between private housing units occupied by more than one household and housing units constructed or converted for collective habitation.

Part VI. TOPICS TO BE INVESTIGATED IN A HOUSING CENSUS

A. Factors determining the selection of topics

110. With reference to the selection of topics to be included in a housing census, attention is drawn to the importance of limiting statistical inquiries to the collection of data that can be processed and published within a reasonable period of time. Such admonitions are especially applicable in connexion with housing censuses since it is customary to conduct housing and population censuses as combined or serial operations and there is more than the usual possibility that the amount of data included may be beyond the capacity of enumerators and data processing facilities. It may be sufficient in some under-developed countries, for example, to ascertain only the number of housing units of various types, the number and characteristics of occupants and the availability of an adequate water supply system. Indeed, it might not be feasible or desirable in some cases to do more, and, if more were attempted, the success of the census might be jeopardized.

111. On the other hand, it is false economy to collect housing data which are so incomplete that they fail to serve the principal purposes for which they are required. Attention may be drawn, in this connexion, to one of the main conclusions of the Seminar on Housing Statistics and Programmes for Asia and the Far East^{20/} in which the need was emphasized for close consultation between housing programmers and statisticians at an early stage in the preparations for a housing census in order to concentrate on providing the data most urgently required for housing programmes and supplying them in their most useful form.

112. In addition to giving careful attention to the needs for, and specific uses of, the housing data which it is proposed to collect, the limitations imposed by local conditions and the resources available must also be considered. Limitations may be imposed by the budget, the quality and quantity of enumerators, the goodwill and level of education of the public, the likely accuracy of the responses, the practical and physical difficulties of collection, and the data processing and publishing facilities available. In principle, the goal should be an accurate and efficient collection of data for a limited number of topics, followed by prompt

^{20/} Report of the Seminar on Housing Statistics and Programmes for Asia and the Far East, op. cit., para. 25, p. 11.

tabulation and publication, rather than the collection of data for an over-ambitious list of topics which cannot be properly collected or tabulated, or whose publication must be unduly delayed.

113. It is recognized that many countries will find it convenient to collect in the census information on topics of national or local interest and that the census data may need to be supplemented by housing surveys in order to obtain information on important questions such as state of repair, the quality of housing units from the health point of view, total capacity, household preferences with respect to housing, etc.

B. List of topics

114. The list of topics shown below is divided into three parts; "Basic topics recommended to be collected", "Additional topics that may be collected" and "Other topics which have been collected in housing censuses".

115. The basic topics are those required for the tabulations most urgently needed for the measurement and evaluation of housing conditions and for the formulation of housing programmes (see Part VII); a study of housing census experience indicates the feasibility of collecting information on these topics by means of housing censuses. For convenience, they may be grouped into topics concerned with (1) the building in which the housing unit is located; (2) the housing unit itself, and (3) the population involved.

116. The additional list represents an attempt to select topics which are also of importance for the formulation of housing programmes but for which there is a less pressing need. It should be emphasized that the additional list does not represent an expanded programme. A decision to include in the census any topic shown in the additional list should be made on the basis of the usefulness of the information which will be made available, weighed against the additional resources required for its collection and processing, and the extent to which the efficient collection of more important topics may be jeopardized by the added workload imposed.

117. The list of "Other topics that have been collected in housing censuses" has been compiled on the basis of country practice. No attempt has been made to produce a restricted list based on the utility of the data since the reasons for

including these topics in a census depend to a large extent on the circumstances peculiar to certain countries. They are presented as an indication of information that may be collected by means of a housing census.

118. The topics in the three categories are set forth below:

(1) BASIC TOPICS RECOMMENDED TO BE COLLECTED

Building in which housing unit is located - characteristics of

1. Building type
2. Material of building construction
3. Year or period of construction

Housing unit - characteristics and facilities of

4. Electricity
5. Floor space
6. Location (address)
7. Occupancy
8. Rooms - number of
9. Toilet facilities
10. Tenure
11. Type of housing unit
12. Vacancy
13. Water supply

Population

14. Demographic and economic characteristics
15. Family nuclei
16. Homeless persons
17. Households
18. Occupants - number of

(2) ADDITIONAL TOPICS THAT MAY NEED TO BE COLLECTED

1. Bathing facilities
2. Cooking facilities
3. Floors, number in the building
4. Gas
5. Ownership
6. Rent paid
7. Sewage disposal

/...

(3) OTHER TOPICS THAT HAVE BEEN COLLECTED IN HOUSING CENSUSES

Building in which the housing unit is located - other characteristics

1. Elevator
2. Garage
3. Housing units, number in the building
4. Outbuilding and their use
5. State of repair

Housing unit - other characteristics and facilities

1. Access to housing unit
2. Garbage disposal
3. Lighting, kind of
4. Location of the housing unit in the building
5. Outdoor spaces
6. Temperature control

Household conveniences

1. Iron, electric
2. Radio receiver
3. Refrigerator
4. Sewing machine
5. Telephone
6. Vacuum cleaner
7. Washing machine

Miscellaneous

1. Agricultural information
2. Automobile
3. Cottage industry
4. Economic activity of the owner
5. Housing management
6. Land, how acquired
7. Length of occupancy of present household
8. Mortgage
9. Charges for local services such as garbage or night soil remover
10. Value of the housing unit
11. Tenure of previous housing unit

C. Definition and specifications of basic and additional topics

119. It is essential that each topic be clearly and unambiguously defined. The definitions set forth below have been developed to give guidance in line with the

ultimate objective of each topic. They are arranged in strict alphabetic order as an aid to reference.

(1) Bathing facilities

120. Information should be obtained on whether or not there is a fixed bath or shower installation within the premises of each housing unit. Additional information may be collected to show whether or not the facilities are for the exclusive use of the occupants of the housing unit and whether there is a supply of hot water for bathing purposes or cold water only.

Building (see Part IV, paras. 74-77)

(2) Building, type of

121. This topic refers to the type of building in which the housing unit is located. The information collected should be classified so as to show the following:

- (a) single detached housing unit
- (b) attached dwelling (row house or duplex)
- (c) multi-dwelling building (used mainly for residential purposes) *compound?*
- (d) building used mainly for non-residential purposes.

122. In this classification a separate category may be included for housing units located in buildings constructed with certain common facilities for the occupants although the housing units themselves are structurally separate and independent. Such buildings may include certain types of conventillos, casas de vecindad or cuarterías which in some Latin American countries represent a significant proportion of the housing inventory. Other categories such as "shop/dwelling" may be included if required and information may be sought on whether the building is wholly residential, residential and commercial, mainly commercial, etc.

123. Note: In practice it seems to have been easier for countries to consider such aspects as single detached, apartment, etc. in terms of the kind of building rather than the kind of housing unit and this item therefore replaces the item on type of dwelling or rustic housing unit included in paragraph 406 of the original version of the Principles.

Construction material (see Material of building construction)

(3) Cooking facilities

124. Information should be obtained on whether the housing unit has a kitchen or a kitchenette; on the kind of equipment used for cooking (stove, sink, etc.); and on the use of electricity, gas or certain other fuels for cooking.

125. A kitchen is defined as a space, conforming in all respects to the definition of "room", equipped for the preparation of the principal meals and intended primarily for this purpose.

126. It may be noted that the question for the basic topic concerning the number of rooms (paragraph 152) may provide a convenient opportunity to collect information on kitchen and kitchenette where such information is desired. Additional information may be collected to show whether the facilities are for the exclusive use of the occupants of the housing unit.

Demographic characteristics (see Population)

Economic characteristics (see Population)

(4) Electricity

127. Information should be collected to indicate whether or not the housing unit has electricity installed and the source of the electricity. A housing unit is considered to have electricity installed when it is equipped with an electric wiring system and connected to either a community supply or a private generating plant or some other source of electricity (the supply generated for an industrial plant, a mine, etc.). The information should be classified as follows:

(a) With electricity

(i) Community supply (municipality, etc.)

(ii) Own generating plant

(iii) Other (industrial plant, mine, etc.)

(b) Without electricity

(5) Family nuclei

128. For the purposes of the housing census, a family nucleus consists of the following combination of persons within the same household: a married couple

without children; a married couple with one or more unmarried children; one parent (either father or mother) with one or more unmarried children. Couples living in consensual unions should be regarded as married couples.

129. Where the concept of family nucleus is introduced, it should be clearly distinguished from "private household" both with respect to definition and terminology. Confusion has arisen because the term "family" or "census family" has in many cases been applied to private household.

130. Nor should the concept of family nucleus be confused with the broader definition of family which appears in the Principles and Recommendations for a Population Census.^{21/}

131. The information required to identify family nuclei would need to be obtained from data on the relationship of household members to the household head which is normally available from the population census. Where the data are not available from the census of population or where the census of housing is carried out independently of the census of population it may be sufficient as a basis for estimating housing needs to simply identify and record the number of married couples within each private household.

(6) Floor space

132. Several concepts of floor space may be recognized and the one used will depend upon the purpose for which the data collected is to be used.

133. (a) Useful floor space is defined as the floor space of housing units measured inside the outer walls, excluding cellars, non-habitable attics, and, in multi-dwelling buildings, all common spaces.

134. (b) Living floor space refers to the total area of the rooms that fall within the definition of "room" (see paragraph 152).

135. For the purpose of these recommendations the area of living floor space is considered as being the most useful concept to employ.

^{21/} Op. cit., para. 226.

(7) Floors, number in the building

136. This topic refers to the number of floors in the building in which the housing unit is located. There are various uses for such data in connexion with maintenance requirements, zoning, fire-fighting services, observation of trends with respect to building types etc. It should be indicated whether the number of floors includes basements, attics, mezzanines, etc.

(8) Gas

137. A housing unit is considered to be equipped with gas when it has a permanent installation for the use of gas for cooking, heating, lighting, etc., and when it is connected to a community supply of gas or when an individual supply (such as gas cylinders) is utilized. It may be noted, however, that information on gas is usually collected either in relation to the kind of fuel or kind of stove used for cooking (see paragraph 124) or as one type of energy used for heating (see paragraph 186).

(9) Homeless persons

138. Homeless persons are defined as those persons who, at the time of the census, have no fixed place of abode. They may be distinguished from persons occupying housing units not intended for habitation by the fact that the latter have managed, although often under precarious circumstances, to establish themselves in a place which provides them with shelter on a more or less continuous basis, whereas the homeless carry their few possessions with them, sleeping in the street, in doorways, on piers, or in any other unguarded space where they can deposit their meagre belongings.

139. [Note: Although a diminishing problem in Europe, the few statistics available concerning the homeless population, coupled with actual observation, indicate that it may be one of substantial proportions in other regions. Syria reported 211,000 persons without shelter in 1960 and Venezuela 79,875 in 1961. It has been estimated that in Calcutta some 600,000 persons sleep in the street and that 1 out of every 66 persons in Bombay is homeless.]^{22/7}

(9a) Household head

139a. The head of the household is that person in the private household who is acknowledged as such by the other household members (see also paras. 147-149).

(10) Household, private (see Part IV, paras. 69-73)

Housing unit (see Part IV, paras. 62-66)

Kitchen (see Cooking facilities, paras. 124-126)

(11) Location of housing unit

140. Information that describes the place where the housing unit is to be found and distinguishes it from other housing units in the same locality falls within this category. As a rule the information for location includes the name or number of the street and the number of the housing unit (in the case of apartments the building number and the apartment number). In countries without a permanent house-numbering system housing units should be numbered as part of the census operation in order to provide for adequate identification. A clear indication of the location of housing units is important from the point of view of the census operations (callbacks, post-enumeration checks, etc.) and as a basis for carrying out sample or supplementary inquiries subsequent to the census.

(12) Material of building construction

141. This topic refers to the construction material of the building in which the housing unit is located. It is suggested that priority be given to the collection of construction material of the outer walls since this is generally of most significance for estimates of durability although construction material of roof or of floors may be of special significance in some circumstances. The materials for which information is collected (brick, concrete, wood, adobe, etc.) will depend upon the materials most frequently used in the country concerned and on their significance from the point of view of permanency of construction.

142. It should be noted that while material of construction is a useful addition to data collected on the type of housing unit, it should not be considered as a substitute for such information.

(13) Occupancy

143. Information should be obtained for each conventional (permanent) dwelling and rustic (semi-permanent) housing unit on whether the unit is occupied at the time of the census. It should be noted that all other housing units except dwellings and rustic housing units are required by definition to be occupied in order to fall within the scope of the census and that occupancy data does not, therefore, apply to them. For a discussion of vacancy data to be obtained in a housing census see paras. 171-172.

(14) Occupants, number of

144. Each person usually resident in a housing unit should be counted as an occupant of that housing unit. However, since housing censuses are usually carried out simultaneously with population censuses, the applicability of this definition depends upon whether the population census is taken on a de jure or de facto basis. In either case care should be exercised to distinguish transients in mobile housing units (caravans, trailers, etc.) from the usual residents of such units.

(15) Ownership

145. Information on this topic should be obtained to show:

(a) whether the housing unit is owned by the public sector (central government, local government, public corporations);

(b) whether the housing unit is privately owned (by households, private corporations, co-operatives, housing associations, etc.). The question is sometimes expanded to show whether the housing unit is fully paid for, being purchased in instalments, mortgaged, etc.

146. It has been observed that the collection of information on this matter at a general census may be hampered by the fact that the occupants may not know who is the owner of the property and that the agents may be located outside the enumeration zone. Furthermore, there are numerous cases of borderline and mixed ownership which make the problem too difficult for nation-wide enumeration. This is one of the items for which more accurate information might be obtained through a housing survey.

(16) Population - demographic and economic characteristics of

147. The following topics have been selected as being of most significance in relation to housing conditions; they are defined and fully described in the Principles and Recommendations for a Population Census.^{23/} For the housing census, the data relate only to the head of the household, although it may, in some cases, be necessary to tabulate similar information for the other occupants of private households.

(a) Sex: male; female

(b) Age: under 15 years; 15-29; 30-44; 45-64; 65 and over

(c) Marital status: single, i.e. never-married; married; widowed; divorced, separated

(d) Relationship to head of household: head, spouse and unmarried children

(e) Type of activity: economically active; not economically active

(f) Industry: major divisions of the latest revision of the United Nations International Standard Industrial Classification of all Economic Activities (ISIC)

(g) Occupation: major groups of the latest revision of the International Labour Office's International Standard Classification of Occupations (ISCO)

148. Income data is also of significance in relation to housing conditions and housing programmes. Since this has not yet been recommended as a basic topic in population censuses, it is not listed here, but, should it have been included in the population census, it should also be related to housing data.

149. The classification of occupants by type of housing unit and according to their household and family relationships and demographic and economic characteristics should be considered as a fundamental objective of the housing census. For the implementation of this principle it is necessary to establish and maintain a close conceptual and operational relationship between population and housing censuses. Whether the two census enumerations are taken simultaneously or at different times, a decision should be made beforehand about the demographic and economic characteristics which will be tabulated by type of housing unit.

^{23/} Op. cit., Part V, D.

(17) Rent paid

150. Rent is the amount paid monthly for the space occupied by a private household. Provision must be made to indicate whether the living quarters covered by the rent are furnished or unfurnished and whether utilities such as gas, electricity, heating, etc., water rates or ground rent are included. It may also be necessary to indicate whether the rent is controlled or free. Information may be obtained on the basis of a scale of rents rather than on the exact amount paid.

151. In countries where rent for the housing unit is paid separately from rent for the land upon which it stands, separate information may need to be collected reflecting the amount of ground rent paid.

(18) Rooms, number of

152. A room may be defined as a space in a housing unit enclosed by walls reaching from the floor to the ceiling or roof covering, or at least to a height of two metres above the ground, of a size large enough to hold a bed for an adult (4 m^2 at least). In this category should fall normal bedrooms, dining-rooms, living-rooms, habitable attics, servants' rooms, kitchens and other separate spaces used or intended for dwelling purposes so long as they meet the criteria. Passageways, verandahs, lobbies, etc., as well as bathrooms and toilet rooms should not be counted as rooms.

153. The number of rooms is most frequently used as a measure of the size of dwellings, i.e., rooms per dwelling, and as a basis for the calculation of the density of occupation, i.e., the number of persons per room.

154. Although there may be some difficulty in enumerating rooms used only for professional or business purposes, it is generally agreed that they should be included in calculating the number of rooms per dwelling but not in calculating the number of persons per room. Each country should indicate whether or not this procedure has been followed.

155. In examining country experience with reference to the collection of data on rooms, it has been observed that the instructions for the enumeration usually specify the types of rooms to be excluded and included but in many cases the concept of "room" is not defined. While this procedure provides the enumerator with practical guidance concerning the rooms to include, it seems that the concept should be defined so that, in doubtful cases at least, some criteria are available in deciding whether a space is to be considered as a room or not.

156. The definition should be applied also in deciding whether or not to include kitchens as rooms. It is recommended that kitchens, the structural characteristics of which conform to the definition of room, be included in the count of rooms while kitchens or kitchenettes that are smaller than four square metres or that have other characteristics which disqualify them should be excluded.

157. In this connexion attention is drawn to the fact that the enumeration of rooms provides a convenient opportunity to collect information on type of room and hence on the availability of kitchens and kitchenettes if information on these items is desired. Kitchen is defined in paragraph 125.

(19) Sewage disposal

158. This item is discussed briefly in paragraph 169, where it is suggested that, if it is desired to collect information concerning the methods of sewage disposal, the question on toilet facilities may provide a convenient means of doing so. The information collected usually indicates:

- (a) whether the housing unit is connected to a community sewerage system;
- (b) whether an individual system is used and the type (septic tank, pit, etc.);
- (c) whether there is no sewerage system.

(20) Tenure

159. Tenure refers to the arrangements under which the household occupies its living quarters. Information should be obtained on:

- (a) whether a member of the household is the owner of the housing unit;
- (b) whether the household rents the housing unit as the main tenant,
- (c) whether the household rents the living quarters as a sub-tenant from a main tenant or owner-occupier;
- (d) whether the household occupies the living quarters under another form of tenure.

160. The question on tenure needs to be clearly distinguished from the other housing questions in the questionnaire as one to be asked for all households; otherwise there is a danger of omission in cases where more than one household occupies a single housing unit.

161. In countries where the land and the housing unit are frequently occupied under separate tenure this topic may be expanded so as to show separate information for the tenure of the housing unit or living quarters and for the land upon which the housing unit is located.

162. Note: In the present draft, tenure is included as a topic to be collected for households rather than housing units (dwellings and rustic housing units) as was recommended previously.⁷

163. Tenure information collected for housing units shows very clearly the distinction between rented units and units that are owner occupied but it fails to distinguish the various forms of sub-tenure which exist in many areas and which could be included in a question directed at households;^{24/} nor does it allow for a direct relationship between tenure and socio-economic characteristics of heads of household. Also, under some circumstances, it may be useful to distinguish separately households which, although not sub-tenants in the sense of renting from a main tenant or owner-occupier, rent part of a housing unit from a landlord who lives elsewhere. These households and sub-tenant households may be of special significance for the formulation of housing programmes and further analysis would be facilitated where information on tenure can be related to data on the socio-economic characteristics of the heads of the households involved.

164. It may be noted that data on owner occupancy can be obtained just as easily from data collected for households as from data collected for housing units, approximate data on the number of rented housing units could also be derived from the data.

165. The information on tenure may be limited to data for households occupying dwellings and rustic housing units or in some cases it may be useful to extend the coverage to include the occupants of other types of housing units. For example, it has been shown that households living in squatter areas occupy their shelter under various forms of tenure which it may be useful to investigate.^{25/} The main difficulty would probably lie in the reliability of the data collected under these circumstances.

^{24/} Some indication of the number of households occupying their living quarters as sub-tenants could be obtained from a comparison of the number of households with the number of housing units.

^{25/} Abrams, Charles, Man's Struggle for Shelter in an Urbanizing World, Massachusetts Institute of Technology, 1964 (Chapter 2, "Squatting and Squatters").

(21) Toilet facilities

166. As a minimum, information should be obtained to show whether or not the housing unit being enumerated has a toilet installation and if it has, whether the installation is a flush-toilet or a non-flush toilet.

167. A flush toilet may be defined as an installation for disposal of human wastes through piped water under pressure, emptying into a main sewer, septic tank or cesspool.

168. It should be noted that the information collected refers to the toilet installation intended for the exclusive use of the occupants of the housing unit being enumerated. Whether the toilet is located inside or outside the housing unit is of varying significance according to the type being considered. Any additional information that may be sought to indicate whether the occupants have the use of a shared facility, and the type, should refer only to housing units enumerated as having no fixed installation.

169. Some countries have found it useful to expand the classification for non-flush toilets to distinguish certain types that are widely used and that indicate a certain level of sanitation. Where information on the type of sewerage system is to be collected (see paragraph 158), it may usefully be included in the question on toilet facilities. Such data usually indicate whether the housing unit is connected to a public sewerage system, whether there is a septic tank, etc.

(22) Type of housing unit

170. Because of its basic importance in carrying out a housing census and also because of its length the classification and definition of housing units is dealt with separately (see Part V).

(23) Vacancy

171. Information should be obtained for conventional (permanent) dwellings and rustic (semi-permanent) housing units on the number of vacant units and, for those intended for year-round occupancy, the reason for vacancy (for rent, for sale, etc.). Housing units other than dwellings or rustic housing units are required by definition to be occupied in order to be counted at the census and vacancy data will therefore not apply to them.

/...

172. The enumeration of vacant units is likely to pose difficult problems; however, at least a total count of vacant units should be made for purposes of controlling the enumeration and for the reasons stated under the uses of tabulation 11 (Part VII). The reason for vacancy is frequently indicated by "for sale" or "for rent" signs posted on the housing unit. Vacant units intended for seasonal occupation may represent a large proportion of the housing inventory in resort areas and the separate identification of such a category may be necessary for the correct interpretation of the over-all vacancy rate as well as for an evaluation of the housing situation in the area concerned.

(24) Water supply system

173. The basic information to be obtained by the census is whether the housing unit has a piped water installation, i.e., whether water is laid on to the housing unit by pipes from a community-wide system or from individual installations (pressure tanks, pumps, etc.). It is necessary to indicate whether the housing unit has a tap inside or, if it is outside, whether it is within a certain distance (100 metres) from its door. The following categories may be recognized:

- (a) housing units with piped water inside;
- (b) housing units with piped water outside but within 100 metres;
- (c) housing units without piped water (including piped water beyond 100 metres); and
- (d) housing units for which such information could not be obtained.

The housing units may be further classified according to the source of the water available (community-wide system, tank, public well, private well, river, spring, etc.).

174. As noted above the most significant information in relation to sanitary conditions is whether the housing unit has piped water within the premises. However, some countries have added a category to distinguish cases where the piped water supply is not in the housing unit but is within the building in which the housing unit is located; others have distinguished the water supply according to whether it was only for the use of the occupants of the housing unit being enumerated or for the use of the occupants of several housing units; and additional information has been sought in some censuses on whether hot as well as cold water is available and the kind of equipment used for heating water.

(25) Year or period of construction

175. This topic refers to the building in which the housing unit is located. It is recommended that single years be shown for buildings constructed during the census year or the two preceding years; for dwellings constructed before this, the information should be collected for periods that will provide a useful means of assessing the age of the housing inventory. The periods should be measured in terms of events that have some special significance in the country concerned as for example since World War II; between World War I and World War II; prior to World War I.

D. Other topics that have been collected in housing censuses

176. The following discussion refers to the topics included in paragraph 118 (3). Not all of the topics are discussed since very little is known concerning some of them except that they were collected. Moreover, no attempt is made to define these topics, the discussion being merely an attempt to make available the information that has come to light as a result of an examination of census materials. Since these topics have been found useful to some countries it is possible that the information concerning them may be useful to others.

(1) Agricultural information

177. It is not unusual to find a question on agriculture included in the housing census. The housing census provides a convenient means of recording the location of agricultural holdings for a subsequent census of agriculture and also of obtaining information concerning secondary agricultural activity which often takes place in the immediate vicinity of the housing unit and on building lots which do not fall within the definition of agricultural holdings.

Air conditioning (see Temperature control, topic (10), para. 186)

(2) Cottage industry installations

178. Information on the equipment installed for carrying on cottage industries is sometimes collected in housing censuses. In some cases, the question has been broadened to include, as a basis for further inquiries, a brief description of the goods produced.

(3) Elevators

179. Data on elevators are significant in relation to the number of floors in the building and may provide useful information in connexion with maintenance requirements.

(4) Garbage disposal

180. It may be important to know whether the occupants of housing units have a suitable means of disposing of household waste. Garbage disposal may be effected by means of individual units installed in the housing units, by group incinerators, etc., by collection, etc.

Heating (see Temperature control, topic (10), para. 186)

(5) Household conveniences

181. The topics shown in the list of household conveniences, (para. 118 (3)) refer, in general, to equipment normally purchased and owned by the household and not as a rule permanently installed in the housing unit. Housing censuses have provided a convenient means of collecting such information, although because of the nature of the topics, the information should be collected for households rather than housing units.

(6) Housing units - number in the building

182. To some extent information on the number of housing units in the building may provide alternative information to that furnished by the question on type of building (para. 121) with the limitation, however, that a building with one housing unit may not necessarily be a single detached housing unit nor one with two housing units a duplex. Nevertheless, it would probably furnish a good approximation for such a classification. Information on the number of housing units in the building also provides a useful indication of maintenance and servicing requirements.

(7) Location of the housing unit within the building

183. This question has been included in some censuses with particular reference to housing units located in basements and attics.

(8) Outdoor spaces

184. In a few countries data have been collected to show whether the housing unit has an outdoor space, that is, a yard or a kitchen garden. Outdoor spaces may be considered as offsetting, to some extent, crowded conditions that may exist within the housing unit itself.

(9) State of repair

185. There is a pressing need for information on this topic for the formulation of housing programmes. Unfortunately, however, the possibility of collecting sufficiently accurate information in a housing census seems dubious. It is generally considered that for meaningful results, specially trained enumerators would be required to collect the data, and state of repair would, therefore, seem to be a topic which could be more efficiently collected by means of a sample survey than a census. Should the topic be included in the census it is suggested that the criteria used should be limited to those which can be easily observed and which do not require engineering or architectural skills to discover.

(10) Temperature control

186. The use of equipment for controlling the temperature of housing units is becoming wide-spread and increasingly recognized as an important facility particularly under certain climatic conditions. For heating systems the question is framed in terms of the kind of equipment used (central heating by steam, hot water, hot air, etc.; other types) and according to the source of energy utilized (electricity, gas, oil, coal, etc.). Information is also collected to show whether the housing unit is connected to an air-conditioning system which serves all the housing units in the building or whether it has an individual unit.

Part VII. RECOMMENDED TABULATIONS

187. As countries have turned to national planning as a means of promoting and guiding economic and social development, the need for factual information on which to base the necessary programmes had become universally recognized. Resources are scarce however, and statistical inquiries costly. It has therefore become increasingly necessary to weigh each topic proposed for collection in terms of its ultimate cost and its utility for the planning process, to keep the number of topics collected to a bare but significant minimum and to sharpen the series wherever possible for greater economy and efficiency.

188. In re-examining the Principles the first consideration, therefore, has been to select the tabulations that would yield the data required most urgently for housing programmes.^{26/} Two regional seminars^{27/} convened to consider methods of formulating housing programmes as part of over-all development plans produced comprehensive lists of the statistical series required and these lists have been taken into account in preparing the tabulation programme which follows. The data requirements for the computation of the Statistical Indicators of Housing Conditions^{28/} have also been an important factor in selecting the tabulations. It may be recalled that the indicators were established by the Statistical Commission and the Inter-Agency Working Party on Statistics for Social Programmes to fill the gap that existed in so far as the housing component of the International Definition and Measurement of Standards and Levels of Living^{29/} was concerned. Their purpose is to facilitate

^{26/} Although the formulation of housing programmes is the primary purpose for which housing statistics are required their use for other purposes is recognized and has to be taken into account. Nevertheless at the international level emphasis has been placed on their use for the formulation of housing programmes due to the fact that the various other purposes for which the data may be required depend to a large extent on national circumstances.

^{27/} Report of the Latin American Seminar on Housing Statistics and Programmes, op.cit., paras. 367-568; Report of the Seminar on Housing Statistics and Programmes for Asia and the Far East, op. cit., Chapter V, pp. 101-141.

^{28/} Statistical Indicators of Housing Conditions, United Nations Publication, Sales No.: 62.XVII.7, New York 1962.

^{29/} International Definition and Measurement of Standards and Levels of Living (United Nations publication, Sales No.: 1954.IV.5), para. 114.

international comparisons of housing conditions and to provide a means of assessing the national housing situation and of measuring changes over time. Since the indicators provide an important tool for measuring the effectiveness of housing programmes, they constitute justification for tabulation of the required data.

189. Due account has also been taken of the studies which have been carried out, and which are continuing, with respect to the establishment of regional programmes of basic statistics for economic and social development in Africa,^{30/} Asia and the Far East^{31/} and Latin America,^{32/} and of the work which has been accomplished by the Economic Commission for Europe's Working Group on Census of Population and Housing^{33/} in connexion with the revision of the European Programme for National Housing Censuses and the corresponding Working Group of the Economic Commission for Asia and the Far East.^{34/} Finally a close examination of country practice in carrying out housing inquiries during the period 1955-1964 has been of particular significance with respect to the feasibility of collecting the data by means of housing censuses and for studying the methods employed in conducting these inquiries.

^{30/} Statistical Development in Africa, a draft revision of Use of the Revised List of Basic Statistics for Programming Statistical Development in Africa (United Nations document E/CN.14/CAS.3/9).

^{31/} Basic Statistics for Formulating and Implementing Plans of Economic and Social Development in Countries of Asia and the Far East (United Nations document, E/CN.11/ASTAT/Conf.6/L.4).

^{32/} Inter-American Program of Basic Statistics, VIII Session of the Committee on Improvement of National Statistics, Inter American Statistical Institute, Panama, September 2-15, 1964, 4921a-9/12/64-75.

^{33/} Working Group on Censuses of Population and Housing, Report of the Fifth Session, (United Nations document Conf. Eur./Stats/WG.6/97).

^{34/} Report of the Working Group on Censuses of Population and Housing, Conference of Asian Statisticians, Sixth Session (United Nations document E/CN.11/ASTAT/Conf.6/L.10).

A. Scope and objectives of recommended tabulations

190. For the purpose of housing programmes, it is necessary to obtain a clear picture of the housing situation in terms of housing units vis à vis the population to be housed. Aggregates, however, are of little significance without additional information concerning the quality of the accommodation (provided by stratifying the housing inventory into significant categories based on structural characteristics), and the number, size and composition of households and families who occupy the housing unit (tabulation 1). In countries with poor housing, these categories may have more significance and may be more easily identified than in others; in those with high levels of housing, the distinction of housing units by type may, in fact, be of very little significance while the question of facilities assumes greater importance in distinguishing levels of quality (tabulations 7 through 9). These factors plus information concerning levels of density (tabulations 5 and 6), occupancy (tabulation 11) and tenure (tabulation 10) provide an over-all description of the housing inventory in relation to the population as of a certain point of time. Estimates of the changes that are likely to occur in this situation may be derived by considering the rate of dwelling construction and the rate of replacement (tabulations 12 and 13) in relation to projections of the number of private households.

191. In seeking solutions to housing problems, demographic and economic data concerning the occupants (tabulations 2, 3 and 4) are essential. They provide an indication of the capacity (financial and otherwise) of private households to meet their housing needs and of the extent to which assistance may need to be provided.

192. The tabulations are presented in the simplest form for the sake of clarity. Their purpose is to draw attention to the classifications and cross-classifications for which there is a clearly established need and which it should be possible to derive from the data collected by means of a housing census. As with most international recommendations it is understood that the tabulations proposed may have to be modified and/or expanded to meet national or regional requirements. Also, in actual practice and according to the type of equipment being utilized, it may be found convenient to combine some of the tabulations or to re-arrange them in other ways; the tabulations outlined are not intended to set a rigid pattern that should be adhered to under all circumstances.

193. Since housing census data are especially valuable for the interpretation of local housing conditions the tabulations emphasize the need to provide information for each city and town as well as for larger geographic divisions. Nevertheless it should be understood that all the information outlined in the tabulations need not be published nor do the tabulations indicate in any way the order in which data should be processed. For the purposes of general publication of census results it may be sufficient to include data for the country, urban and rural, major geographic divisions and the larger cities; however, arrangements should be made for storing original schedules, punch cards, tabulation sheets or computer tapes, as the case may be, so that data for the smallest areas may be made available as it becomes necessary.

194. Tabulation 1 should be obtained from a total universal enumeration and processing of data for all the housing units in the area covered by the census. The other tabulations may be obtained on the basis of either the universal enumeration and tabulation of all housing units and occupants or from the enumeration and/or tabulation of a representative sample. The application of sampling to population and housing censuses is discussed in Part III.

B. List of recommended tabulations

195. Following is a list of recommended tabulations:

Number	Tabulations
1.	Housing units, private households, family nuclei and population in private households, by type of housing unit
2.	Occupied housing units, private households and population in private households, by type of housing unit, and age and sex of head of household
3.	Occupied housing units, private households and population in private households, by type of housing unit, and type of activity and industry of head of household
4.	Occupied housing units, private households and population in private households, by type of housing unit, and type of activity and occupation of head of household.

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Number	Tabulations
5.	Conventional dwellings and rustic housing units by number of occupants and number of rooms
6.	Occupied conventional dwellings by number of occupants and area of living floor space
7.	Housing units, private households, and population in housing units, by type of housing unit and water supply system
8.	Occupied dwellings, rustic housing units, and population in each, by type of toilet installation
9.	Occupied dwellings, rustic housing units, and population in each, by electricity supply
10.	Private households and population in dwellings and rustic housing units, by tenure
11.	Vacant dwellings and rustic housing units, by reason for vacancy
12.	Conventional dwellings by material and year (or period) of construction of building (in which dwelling is located)
13.	Conventional dwellings by type and year (or period) of construction of building (in which the dwelling is located)

C. Specifications for each recommended tabulation

196. The tabulations listed above are described individually in the following paragraphs. The housing units and the population to be included are specified in each case as well as the geographic divisions for which the information should be tabulated. This is followed by the topics with their recommended classifications and the tabulation units.

197. Under "use of the tabulation" the regional and international requirements or justification for the data are stated and their use for the formulation of national housing programmes is treated in some detail. Finally attention is drawn to the changes that have been made to the analogous tabulations recommended for the 1960 censuses as included in the General Principles for a Housing Census.^{35/}

^{35/} General Principles for a Housing Census (United Nations publication, Sales No.: 58.XVII.8), paras. 500-506.

Tabulation 1. HOUSING UNITS, PRIVATE HOUSEHOLDS, FAMILY NUCLEI AND
POPULATION IN PRIVATE HOUSEHOLDS, BY TYPE OF HOUSING
UNIT

Units of tabulation: housing units; private households; family nuclei and persons

Housing units included: all housing units

Population included: population living in private households

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.
Distinguish urban and rural for (i).
- (b) Type of housing unit (paras. 81-109): conventional (permanent) dwelling; rustic (semi-permanent) housing unit; mobile housing unit; improvised housing unit; housing unit in permanent structure not intended for habitation; other place not intended for habitation; hotel, rooming house and other lodging house; institution; camp; multi-household housing unit.
- (c) Separate class for homeless persons (para. 138).

Use of the tabulation:

- (1) There is wide agreement concerning the usefulness of this tabulation or variants of it. Its most important function is to make a broad distinction between permanent housing of an acceptable standard and makeshift, temporary or improvised housing and to describe the occupants in terms of aggregates, private households and families.
- (2) The regional seminars on housing statistics and programmes for Latin America^{36/} and for Asia and the Far East^{37/} considered that it was of primary importance for the formulation of housing programmes and it is a prerequisite for the calculation of one of the basic statistical indicators of housing conditions^{38/} developed by the

^{36/} Report of the Latin American Seminar on Housing Statistics and Programmes, op. cit.

^{37/} Report of the Seminar on Housing Statistics and Programmes for Asia and the Far East, op. cit.

^{38/} Statistical Indicators of Housing Conditions, op cit. and International Definition and Measurement of Levels of Living, An Interim Guide (United Nations publication, Sales No.: 61.IV.7).

Statistical Commission in collaboration with the Inter-Agency Working Party on Statistics for Social Programmes.

(3) The distribution of occupants according to the various types of housing units not only supplies valuable information about the housing accommodation available at the time of the census but it affords a useful basis for stratification in carrying out sample surveys.

(4) As noted in paragraph 83 the extent to which types of housing unit are distinguished may vary according to the needs of the country concerned. In reducing the number of categories care should be exercised so that a clear distinction continues to be maintained between categories that represent satisfactory housing and those which represent housing below acceptable standards. It must also be borne in mind that the data provided by a simplified classification may need to be comparable at some future date to the data collected under an expanded classification. For a minimum classification of housing units see Part V, paragraph 83.

(5) The distinction between private and collective housing is necessary because the problems involved and the methods of dealing with them are distinct. Collective housing units generally do not come under the responsibility of the agency responsible for private housing units and housing programmes are directed for the most part toward the maintenance or improvement of housing conditions of the population living in private housing units. Information concerning collective households is not included in this tabulation but information on the number of persons in collective households is available from the population census tabulation programme. Their exclusion from this tabulation facilitates the identification of private households occupying collective housing.

(6) The population in private households is shown in terms of persons, private households and families for several reasons. Mention has already been made of the Statistical Indicators of Housing Conditions,^{39/} the first of the basic indicators, "Proportion of population living in dwellings" and the complementary indicator "Proportion of the population living in housing units other than dwellings or which is without shelter of any kind" require for their calculation the population in terms of number of persons according to the type of accommodation occupied. These indicators measure changes in the housing situation as reflected

by an increase or a decrease in the proportion of the population living in permanent dwellings and in other kinds of accommodation.

(7) For housing programmes information is required not only as an indicator but for practical action and the number of housekeeping units or private households that need to be provided with dwellings is required. The number of households according to the type of housing unit occupied and the number of households without shelter provides a first approximation of this element of housing needs.

(8) Information on the average number of persons per private household occupying each type of housing unit may be derived from the tabulation. As is well known, however, the size of households may be inflated as a result of a serious shortage of housing and as additional dwellings become available, households tend to break up into smaller housekeeping units each requiring a separate dwelling. Good estimates of the extent to which this may occur can only be made as a result of special surveys but a first approximation can be obtained by examining the extent to which households are composed of more than one family nucleus and the number of these families.^{40/} The number of family nuclei included in the table may therefore be expected to yield data which will be useful in estimating the number of potential private households and their size.

(9) This tabulation includes all housing units without regard to occupancy but it should be noted that with the exception of dwellings (paras. 87-94) and rustic housing units (para. 95) which may be either occupied or vacant, other housing units must be occupied in order to fall within the scope of the housing census.

Changes from 1960 United Nations recommendations:

(10) An additional category has been incorporated to provide for the homeless population; where the problem does not exist this category may be omitted.

(11) Family nuclei, in addition to private households and occupants, are tabulated in order to provide additional data for estimating housing needs.

^{40/} National customs, for example the prevalence of the extended family system, must of course, be taken into account.

- (12) Note: In some form this tabulation has been proposed for each of the regional programmes of basic statistics for economic and social development established for Africa,^{41/} America,^{42/} and Asia and the Far East,^{43/} it was included as a first priority tabulation in the European Programme for the 1960 round of housing censuses^{44/} and although the programme is subject to revision there is no indication that this tabulation will be substantially changed.]

Tabulation 2. OCCUPIED HOUSING UNITS, PRIVATE HOUSEHOLDS AND POPULATION
IN PRIVATE HOUSEHOLDS, BY TYPE OF HOUSING UNIT, AND AGE
AND SEX OF HEAD OF HOUSEHOLD

Units of tabulation: housing units; households and persons

Housing units included: all occupied housing units

Population included: population living in private households

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.
Distinguish urban and rural for (i).
- (b) Type of housing unit (paras. 81-109): conventional (permanent) dwelling; rustic (semi-permanent) housing unit; mobile housing unit; improvised housing unit; housing unit in permanent structure not intended for habitation; other place not intended for habitation; hotel, rooming house or other lodging house; institution; camp; multi-household housing unit.
- (c) Separate class for homeless persons (para. 138).
- (d) Sex of head (paras. 147-149): male, female.
- (e) Age of head (paras. 147-149): under 15 years; 15-29; 30-44; 45-64; 65 and over.

^{41/} Statistical Development in Africa, op. cit.

^{42/} Inter-American Program of Basic Statistics, op. cit.

^{43/} Basic Statistics for Formulating and Implementing Plans of Economic and Social Development in Countries of Asia and the Far East, op. cit.

^{44/} European Programme for National Housing Censuses (United Nations document Conf. Eur. Stats/WG.6/82).

Use of the tabulation:

- (1) Since, in almost all cases, housing censuses and population censuses are carried out as closely co-ordinated operations it is assumed that the economic and demographic data required for tabulations 2, 3 and 4 will be obtained from the population census. The topics proposed are recommended for collection in population censuses^{45/} and, provided that the housing and population census are properly co-ordinated, there should be no difficulty in relating them to the housing data.
- (2) In selecting the characteristics to be used, the primary consideration should be their efficiency in providing insight into the housing requirements of the population as well as an indication of the possibilities that exist for meeting these requirements in so far as private resources are concerned and the extent to which the nature of the problem merits public assistance. The age and sex of the heads of the households, together with the number of persons in these households distinguished according to the type of housing occupied will provide valuable insight in this respect. This tabulation also provides one component needed to compute headship rates specific for age and sex, for the projection of number of households. If this tabulation is extended to include marital status of head, it may produce also the data needed for the age/sex/marital status component of headship rates.

Changes from 1960 United Nations recommendations

- (3) Specific classifications are proposed for the tabulation of housing data by demographic characteristics.
- (4) The classification of geographic divisions recommended has been expanded to include minor divisions and cities and towns.

^{45/} E/CN.3/330, Part V, D.

Tabulation 3. OCCUPIED HOUSING UNITS, PRIVATE HOUSEHOLDS AND POPULATION
IN PRIVATE HOUSEHOLDS, BY TYPE OF HOUSING UNIT, AND TYPE
OF ACTIVITY AND OCCUPATION OF HEAD OF HOUSEHOLD

Units of tabulation: housing units; private households and persons

Housing units included: all occupied housing units

Population included: population living in private households

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.
Distinguish urban and rural for (i).
- (b) Type of housing unit (paras. 81-109): conventional (permanent) dwelling; rustic housing unit; mobile housing unit; improvised housing unit; housing unit in permanent structure not intended for habitation; other place not intended for habitation; hotel, rooming house and other lodging house; institution; camp; multi-household housing unit.
- (c) Separate class for homeless persons (para. 138).
- (d) Type of activity (paras. 147-149): economically active; not economically active.
- (e) Industry (paras. 147-149): according or convertible to the one-digit categories of the United Nations International Standard Industrial Classification of all Economic Activities (ISIC).

Use of the tabulation:

(1) Tabulation 3 provides a basis for analysing the housing situation in terms of basic economic characteristics. The population accommodated in various types of housing is classified by type activity and industry of the head of the household. Industry may be useful from several standpoints. It may be of assistance in determining whether certain groups of the population falling within the major industrial divisions are characterized by poor housing conditions and thus provide a starting point for an investigation of causes, effects and possible remedial

action. Other non-housing characteristics of the population within these groups may be of considerable assistance in this respect, for example, the average income and the social characteristics of workers in the respective industries.

(2) In addition to its significance from the point of view of the resources available to the head of the household, industry may be of importance where the aim is to stimulate the development of certain sectors of the economy. The International Labour Office has recommended that "Special consideration should be given in national housing programmes, particularly in developing countries, to the housing needs of workers employed in, or required by, industries or regions which are of great national importance".^{46/} In this connexion also, attention has been drawn by the Asian Regional Conference of the International Labour Office to the provision of workers housing as a means of raising the productive capacity of the economy.^{47/}

Changes from 1960 United Nations recommendations

(3) Specific classifications are recommended for the classification of housing data by economic characteristics of head of household.

(4) The classification of geographic divisions recommended for the table has been expanded to include minor divisions and cities and towns.

Tabulation 4. OCCUPIED HOUSING UNITS, PRIVATE HOUSEHOLDS AND POPULATION
IN PRIVATE HOUSEHOLDS, BY TYPE OF HOUSING UNIT, AND TYPE
OF ACTIVITY AND OCCUPATION OF HEAD OF HOUSEHOLD

Units of tabulation: housing units; households and persons

Housing units included: all occupied housing units

Population included: population living in private households

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.

Distinguish urban and rural for (i).

^{46/} Workers' Housing Recommendations (1961), Suggestions concerning methods of application, paras. 1-2, Official Bulletin XLIV 1, p. 8.

^{47/} Asian Regional Conference I (1953) paragraph 4, Official Bulletin XXXVI 4, p. 87.

- (b) Type of housing unit (paras. 81-109): conventional (permanent) dwelling; rustic housing unit; mobile housing unit; improvised housing unit; housing unit in permanent structure not intended for habitation; other place not intended for habitation; hotel, rooming house and other lodging house; institution; camp; multi-household housing units.
- (c) Separate class for homeless persons (para. 138).
- (d) Type of activity (paras. 147-149): economically active; not economically active.
- (e) Occupation (paras. 147-149): according or convertible to the major groups of the latest revision of the International Labour Office's International Standard Classification of Occupations (ISCO).

Use of the tabulation:

(1) The relationships established in this tabulation provide data on the type of activity and occupation of heads of households occupying each type of housing unit together with the number of persons in each of the categories established. This tabulation serves a similar purpose to tabulation 3 in that it attempts to isolate population groups in need of housing by characteristics which provide a means of analysing the housing problem, in this case in terms of the occupation of the economically active heads of private households. In the absence of data on income, which is not normally available from the population census, this tabulation may provide at least a general indication of socio-economic level. The recommendations of the International Labour Office cited in connexion with tabulation 3 may also be noted in connexion with the present table; where national plans are directed towards the development of certain key sectors of the economy, occupation may be of particular significance for determining priorities in meeting housing needs.

Changes from 1960 United Nations recommendations:

- (2) Specific classifications are recommended for the tabulation of housing data by economic characteristics.
- (3) The classification of geographic division recommended for the tabulation has been expanded to include minor divisions and cities and towns.

Tabulation 5. CONVENTIONAL DWELLINGS AND RUSTIC HOUSING UNITS BY NUMBER
OF OCCUPANTS AND NUMBER OF ROOMS

Unit of tabulation: housing units

Housing units included: Conventional (permanent) dwellings (paras. 87-94); rustic (semi-permanent) housing units (para. 95) separately.

Population included: Occupants of dwellings and rustic units

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.
Distinguish urban and rural for (i).
- (b) Number of occupants (para. 144): 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and over.
- (c) Number of rooms (paras. 152-157): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and over.

Use of the tabulation:

(1) Density of occupation in terms of the number of persons per room is a widely recognized measure of the adequacy of housing conditions. One of the aims of housing policy is to reduce the density of occupation to a level consistent with the maintenance of health and privacy of the occupants. This aspect of housing is regarded as being of sufficient importance in many countries for legal standards to have been adopted which specify the maximum number of persons by age, sex and family relationships to be housed in dwellings having a specified number of rooms and bedrooms.^{48/}

(2) The number of persons per room furnishes the basis for two of the indicators included in the Statistical Indicators of Housing Conditions^{49/} and the housing component of the International Definition and Measurement of Levels of Living: An Interim Guide.^{50/} As a fundamental of healthful residential environment the

^{48/} Minimum Standards of Occupancy and Fitness for Habitation of Urban Dwellings Enforceable under Fertility, Report of the Secretary-General, (United Nations document: E/CN.5/207/Add.1, 2, 3 and 4, Annex I).

^{49/} Statistical Indicators of Housing Conditions, op. cit., paras. 18-22, 32-36.

^{50/} Op. cit., paras. 37-41.

Expert Committee on the Public Health Aspects of Housing^{51/} drew attention to the importance of a sufficient number of rooms as well as a suitable separation of rooms according to the age and sex of the occupants.

(3) The table provides for the manual or automatic selection of data concerning any desired level of density considered of significance, from extreme overcrowding to under-occupancy. In establishing the Statistical Indicators of Housing Conditions^{52/} the Statistical Commission and the Inter-Agency Working Party on Statistics for Social Programmes agreed that, for international purposes, dwellings with densities of 3 or more persons per room should be considered as overcrowded under any circumstances. For national use this level may be raised or lowered according to circumstances; or different levels may be set for urban areas than for rural areas (the outdoor spaces in rural areas are sometimes considered as offsetting to some extent high densities prevailing within the dwellings).

(4) The geographic classification may be modified but it should be noted that high levels of density may coexist with a reasonably low average and classification of the data by small geographic areas may be more revealing in this respect than data which refers to more extensive regions.

(5) It should be kept in mind that only an approximate index of over-all average density can be derived from this tabulation. Aggregates for rooms and occupants can be obtained only by estimating the open-end classifications for the number of rooms and the number of occupants in dwellings (10 and over). For a more precise index, these aggregates should be obtained for predetermined areas in the course of tabulating the data required for the table.

(6) Only dwellings and rustic housing units are included in this table. For collective housing units, persons per room is not a significant indicator of density because this type of housing frequently includes dormitories and other rooms intended for communal use and therefore occupied by large numbers of persons. Housing units not intended for habitation and improvised housing units are excluded from the classification because their structural characteristics call for the replacement of these units on this basis alone. Also, because of the varied and unconventional character of these places of abode there is a problem of identifying within them, spaces conforming to the definition of room. The same argument would

^{51/} Expert Committee on the Public Health Aspects of Housing, First Report, World Health Organization, Technical Report Series No. 225, Geneva, 1961, sections 2.3.1 and 2.3.2, pp. 19-20.

^{52/} Op. cit., para. 19.

generally apply to mobile housing units where these represent tents, wagons, carts, etc. In some circumstances, however, mobile housing units may be considered as providing reasonably satisfactory housing (e.g., in the case of well constructed and properly equipped trailers) and it may be useful to investigate and tabulate information on the number of rooms and the number of persons occupying them.

Changes from 1960 United Nations recommendations:

- (7) No change.
- (8) [Note: Tables providing the number of persons per room are included in the Inter-American Program of Basic Statistics^{53/} and in the draft programme of basic statistics for economic and social development being prepared by the Economic Commission for Africa^{54/} and the Economic Commission for Asia and the Far East.^{55/} A similar table was included on a first priority basis in the European Programme for National Housing Censuses^{56/} which served as a guide for the censuses taken around 1960.]

Tabulation 6. OCCUPIED CONVENTIONAL DWELLINGS BY NUMBER OF OCCUPANTS
AND AREA OF LIVING FLOOR SPACE

Units of tabulation: housing units*

Housing units included: occupied conventional (permanent) dwellings

Population included: occupants of the occupied dwellings

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.
Distinguish urban and rural for (i).
- (b) Number of occupants (para. 144): 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 and over.
- (c) Area of living floor space (in square metres) (paras. 132-135): less than 15; 15-29.9; 30-59.9; 60-89.9; 90-199.9; 200 and over.

^{53/} Op. cit.

^{54/} Statistical Development in Africa, op. cit.

^{55/} Basic Statistics for Formulating and Implementing Plans of Economic and Social Development in Countries of Asia and the Far East, op. cit.

^{56/} Op. cit.

Use of the tabulation:

- (1) As a fundamental of a healthful residential environment the Expert Committee on the Public Health Aspects of Housing drew attention to the need for a sufficient number of rooms, usable floor space and volume of enclosed space to satisfy human requirements for health and for family life consistent with the prevailing cultural and social pattern of the region concerned.^{57/}
- (2) The information obtained from this table provides useful insight into the living conditions of the population and an additional indicator of the density of occupation in terms of area of living floor space per person. The data are tabulated for the smallest geographic unit because levels of density may vary sharply from one neighbourhood to another. Only an approximate over-all average density figure can be derived from this tabulation because of the open-end classification of area and number of occupants; for a more precise index the aggregates for the average should be obtained from the original data.
- (3) Only dwellings are included in the tabulation since space standards are normally applicable only to dwelling construction and not to the construction of less permanent housing units; the information concerning area of living space would therefore be required in relation to dwellings.

Changes from 1960 United Nations recommendations:

- (4) Tabulation not previously included.
- (5) [Note: Floor space is included as a basic item in the 1970 housing census programme for Economic Commission for Asia and the Far East^{58/} and it is being considered for inclusion as a basic item by the Working Group on Censuses of Population and Housing of the Conference of European Statisticians.^{59/}]

^{57/} Expert Committee on the Public Health Aspects of Housing, First Report, op. cit., section 2.3.1, p. 19.

^{58/} Report of the Working Group on Censuses of Population and Housing, op. cit., para. 111.

^{59/} Op. cit., para. 126.

Tabulation 7. HOUSING UNITS, PRIVATE HOUSEHOLDS, AND POPULATION IN
HOUSING UNITS, BY TYPE OF HOUSING UNIT AND WATER
SUPPLY SYSTEM

Units of tabulation: housing units, households and persons

Housing units included: all housing units

Population included: occupants of housing units

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.
Distinguish urban and rural for (i).
- (b) Type of housing unit (paras. 81-109): conventional (permanent) dwelling; rustic housing unit; mobile housing unit; improvised housing unit; housing unit in permanent structure not intended for habitation; other place not intended for habitation; hotel, rooming house and other lodging house; institution; camp; multi-household housing unit.
- (c) Water supply system (paras. 173-174): with piped water inside; with piped water outside but within 100 metres; without piped water.

Use of the tabulation:

(1) From this tabulation information may be derived concerning the population and the number of private households with ready access to a protected water supply as well as the availability of piped water for each class of housing unit. The supplying of water through pipes is recognized as the most effective means of protecting it from pollution and of ensuring its purity, provided that the water supply system is efficiently administered. The provision of as large a proportion of housing units as possible with a piped water installation is, therefore, one of the primary objectives of housing policy as well as of public health policy and the availability of piped water is considered to be perhaps the most valuable indicator of sanitary conditions. The availability of a protected water supply for the occupants of each housing unit is essential for the prevention of communicable diseases as well as for the cleanliness and general comfort of the occupants.

Furthermore, since it is a universal practice for the majority of the population to take their principal meals in their living quarters, the availability of a water supply installation is of particular importance in connexion with the preparation of food.

(2) At its first meeting in Geneva in 1961 the WHO Expert Committee on the Public Health Aspects of Housing recommended that, as a fundamental of a healthful residential environment, "A potable and palatable water supply be provided in each dwelling unit or in the courtyard where it is easily and readily accessible."^{60/} The Committee noted that "In the developing countries it may be economically feasible to supply the water only to a tap located in the courtyard or other similar area serving a group of houses. While this standard will permit the attainment of at least a minimum level of sanitation and cleanliness, the Committee suggests that the long-range objective in developing countries be the installation of piped water into each dwelling-unit."^{60a/}

(3) The classification of water supply recommended in tabulation 7 is proposed as a minimum classification which may be expanded according to the needs of a particular country. Many countries have found it useful to tabulate information about the source of the water supply in addition to information on whether or not it is piped to the housing unit; some have distinguished a supply used only by the occupants of the housing unit being enumerated from that used by the occupant of several housing units; others have qualified further the location of the piped water supply by including a separate category for a supply which is not inside the housing unit but which is inside the building in which the housing unit is located.

(4) The per cent of occupied dwellings with piped water inside the dwelling or outside but within 100 metres was selected as a basic indicator for the Statistical Indicators of Housing Conditions^{61/} and for the housing component of the International Definition and Measurement of Levels of Living: An Interim Guide.^{62/}

^{60/} Expert Committee on the Public Health Aspects of Housing, First Report, op. cit., p. 59.

^{60a/} Ibid., section 2.4.1, p. 22.

^{61/} Op. cit., paras. 23-26.

^{62/} Op. cit., para. 37.

(5) Because of the universal importance of a protected water supply for the total population, all classes of housing units are included in the tabulation with their total occupants. In tabulating households, however, only private households have been included. Data for collective households would appear only in the cells corresponding to collective housing units and since collective households correspond in number and type to the housing units which they occupy, data on the availability of piped water can be derived from the data for collective housing units.

Furthermore the exclusion of collective households facilitates the tabulation of private households occupying collective housing units (for example the director of an institution and his family, managers of hotels, etc.).

(6) It is recommended that the data be tabulated in geographic detail because of the importance of the topic and the use to which the information yielded may be put. In cities and towns particularly, the provision of piped water is normally a public responsibility and data concerning the areas lacking this facility may provide the basis for extending municipal systems. Where individual housing units located in areas to which municipal systems have been extended are found to be without piped water systems the data may provide the basis for initiating local sanitation programmes.

Changes from 1960 United Nations recommendations:

(7) Private households are included whereas previously only occupants and housing units were tabulated.

(8) [Note: A similar tabulation is included in the Inter-American Program of Basic Statistics^{63/} and has been proposed for regional programmes of basic statistics for economic and social development being formulated at Economic Commission for Asia and the Far East^{64/} and Economic Commission for Africa.^{65/} The tabulation of housing units by type and type of water supply was accorded first priority in the Economic Commission for Europe programme for the 1960 round of housing censuses.^{66/}]

^{63/} Op. cit.

^{64/} Basic Statistics for Formulating and Implementing Plans of Economic and Social Development in Countries of Asia and the Far East, op. cit.

^{65/} Statistical Development in Africa, op. cit.

^{66/} European Programme for National Housing Census, op. cit.

Tabulation 8. OCCUPIED DWELLINGS, RUSTIC HOUSING UNITS, AND POPULATION
IN EACH, BY TYPE OF TOILET INSTALLATION

Units of tabulation: Housing units and persons

Housing units included: Occupied conventional (permanent) dwellings (paras. 87-94)
and occupied rustic (semi-permanent) housing units
(para. 95) separately.

Population included: occupants of the dwellings and rustic units

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division;
(iii) each minor civil division; (iv) each principal locality.
Distinguish urban/rural for (i).
- (b) Toilet facilities (paras. 166-169): with toilet installation (flush
toilet; non-flush toilet); without toilet installation of any type.

Use of the tabulation:

(1) From this tabulation data may be obtained on the number of dwellings and rustic housing units with the number of occupants and the type of toilet facilities available to them. The extent to which dwellings and rustic housing units, particularly those located in closely populated areas, are equipped with satisfactory means of disposing of human waste is extremely important from a health point of view.

(2) The World Health Organization considered that "Along with the provision of water supplies, the safe and efficient disposal of human wastes is one of the great problems of environmental sanitation. It is considered among the first basic steps which should be taken towards assuring a suitable environment for man's well-being. In large areas of the world, and indeed in parts of every country, proper excreta disposal is among the most pressing public health problems, as indicated by the number of requests received from governments for assistance in this field".^{67/}

^{67/} General Review of the Development and Co-ordination of the Economic, Social and Human Rights Programmes and Activities of the United Nations and the Specialized Agencies as a whole. Appraisal of the Programme of the World Health Organization, 1959-1964, Note by the Secretary-General (United Nations document E/3344, 7 April 1960).

(3) Only dwellings and rustic housing units are included in the tabulation because other types of private housing units are inherently unsatisfactory from a structural point of view and housing programmes would not normally be directed at providing them with facilities. Collective housing units could be included in the classification of housing units and in fact information concerning the availability of toilet facilities in institutions, hotels, etc. is frequently collected in housing censuses.

(4) The tabulation of toilet facilities shown provides the minimum data required for an evaluation of the stock of dwellings and rustic housing units according to the facilities available. The information is required for the computation of indicators included in Statistical Indicators of Housing Conditions^{68/} and in the housing component of the International Definition and Measurement of Levels of Living: An Interim Guide.^{69/} It was proposed by the Seminar on Housing Statistics and Programmes for Asia and the Far East^{70/} and by the Latin American Seminar on Housing Statistics and Programmes^{71/} as a topic on which data are required for housing programmes.

(5) In many countries the classification has been elaborated to provide information concerning the availability of particular types of toilets (other than flush) which are prevalent and characteristic of the country concerned and which imply varying degrees of efficiency from a sanitary point of view. The classifications are sometimes extended to show the type of sewage system to which the toilet facility is connected (public system; septic tank, pit, etc.) and whether the toilet facilities are for the exclusive use of the occupants of the housing unit or are shared with the occupants of other housing units.

^{68/} Op. cit., paras. 38-40.

^{69/} Op. cit., paras. 37-40.

^{70/} Report of the Seminar on Housing Statistics and Programmes for Asia and the Far East, op. cit.

^{71/} Report of the Latin American Seminar on Housing Statistics and Programmes, op. cit.

(6) The geographic classification is subject to modification according to the proposed use of the data. The proximity of a public sewage system to the housing unit will frequently be the factor which determines whether or not the housing unit can be equipped with a flush toilet. It will, therefore, be of interest to city planners to obtain information on the location of dwellings or rustic housing units without flush toilets both within and beyond the areas to which the public sewage system is extended; this may require data for small areas. The proportion of dwellings or rustic housing units with flush toilet has quite different implications in cities and towns from the proportion in rural or sparsely populated areas; moreover, the type of arrangement considered satisfactory in rural areas, may not come up to the standards established by public health authorities for urban areas and thus some differentiation of the data by rural and urban may be necessary for its correct interpretation.

Changes from 1960 United Nations recommendations.

(7) No change.

(8) [Note: "Housing units by type of toilet facility" is included as a priority tabulation in the European Programme for National Housing Censuses.^{72/} Toilet facilities has been proposed as a topic to be included in the extension of work in the draft programme of basic statistics for Africa^{73/} and as an item to be included in the later stage of developing the programme of basic statistics for Asia and the Far East.^{74/} It is included as an item to be tabulated for private housing units in the Inter-American Programme of Basic Statistics.^{75/}

^{72/} Op. cit

^{73/} Statistical Development in Africa, op. cit.

^{74/} Basic Statistics for Formulating ... op cit

^{75/} Op. cit.

Tabulation 9. OCCUPIED DWELLINGS, RUSTIC HOUSING UNITS, AND POPULATION
IN EACH, BY ELECTRICITY SUPPLY

Units of tabulation: Housing units and persons

Housing units included: occupied conventional (permanent) dwellings (paras. 87-94)
and occupied rustic (semi-permanent) housing units
(para. 95) separately

Population included: occupants of dwellings and rustic units.

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division;
(iii) minor civil division; (iv) each principal locality. Distinguish
urban and rural for (i).
- (b) Electricity supply (para. 127): with electricity [community supply, own
generating plant, other (industrial plant, mine, etc.)]; without
electricity.

Use of the tabulation:

(1) Countries in all regions attach considerable importance to the provision of electricity either in terms of the housing unit being wired for electricity and connected to a supply or as one source of energy used for lighting, cooking, heating, etc. The Expert Committee on the Public Health Aspects of Housing enumerated "sufficient natural and artificial illumination" as one of the factors contributing to a healthful residential environment.^{76/}

(2) The data are tabulated only for dwellings and rustic housing units for the same reason stated in connexion with toilet facilities, that is, other types of private housing units are inherently unsatisfactory (with the exception of certain mobile units) and programmes would not normally be directed at providing them with electricity. On the other hand the tabulation could provide for planners a useful indication of areas where a supply of electricity needs to be extended to permanent or semi-permanent housing units.

^{76/} Expert Committee on the Public Health Aspects of Housing, First Report, op. cit., section 2.2, (j), page 18.

(3) The geographic classification may be modified in accordance with the proposed use of the data.

Changes from 1960 United Nations recommendations

(4) This tabulation was not previously included.

(5) [Note: Electricity has been included as a basic item for the regional housing census programme by the Economic Commission for Asia and the Far East Working Group on Censuses of Population and Housing ^{76a/} and it is also included as a basic item by the European Working Group on Censuses of Population and Housing. ^{76b/} In the Inter-American Program of Basic Statistics ^{76c/} housing units are shown according to whether or not they are provided with electric lighting.]

Tabulation 10. PRIVATE HOUSEHOLDS AND POPULATION IN DWELLINGS AND RUSTIC HOUSING UNITS, BY TENURE

Units of tabulation: private households and persons

Housing units included: conventional (permanent) dwellings (paras. 87-94) and rustic (semi-permanent) housing units (para. 95).

Population included: Population in private households

Classifications:

(a) Geographic division: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.

Distinguish urban and rural for (i).

(b) Tenure (paras. 159-165): owner; tenant; sub-tenant; other form of tenure.

Use of the tabulation:

(1) The above tabulation yields data showing the type of tenure under which private households occupy their living quarters. The data is tabulated in terms of households rather than housing units in order to show more clearly the tenure

^{76a/} Report of Working Group, cp. cit., para. 111.

^{76b/} Working Group ... Report of Fifth Session, op. cit., para. 136.

^{76c/} Op. cit.

status of households sharing housing units. The number of owner-occupied dwellings or rustic housing units can be obtained from the tabulation from the corresponding figures for owner households in each category; an approximation for rented units could be obtained by subtracting the number of owner occupied units from the total occupied dwellings or rustic housing units shown in tabulations 2, 3 or 4.

(2) The extent to which households own or rent the accommodation which they occupy is of special significance for housing programmes. Housing programmes frequently include special provisions for assistance to owner occupiers for the maintenance or improvement of their dwellings and housing policy is invariably concerned with rent levels and the population likely to be affected by rent policy. The number of private households occupying their living quarters as sub-tenants is indicative of the seriousness of the housing shortage and such households will be of primary concern in formulating housing programmes.

(3) In some cases, it may be useful to tabulate the data for households occupying all types of housing units. A greater variation of tenure status seems to exist among the occupants of certain types than was hitherto supposed. Whereas it was once assumed that the inhabitants of squatter areas erected and owned their own improvised shacks it now appears that the economic demand for this type of housing has manifested itself in the appearance of squatter "entrepreneurs" who trade in squatter accommodation by buying, selling or renting it as the opportunity arises.^{77/} In countries with substantial numbers of private households living under these conditions, a tabulation of all private households may be useful provided that the tenure data obtained is sufficiently reliable for the results to be meaningful.

(4) Several variations of the classification of tenure have been found useful. Tenure data is sometimes classified separately for the housing unit and for the land upon which it stands (for some countries such a classification may be of special significance). Owner occupants are shown in some cases according to whether the dwelling is fully paid for or whether it is being paid for in instalments or mortgaged; rental data is subclassified to show separate information for accommodation rented unfurnished and accommodation rented furnished.

^{77/} Man's struggle for Shelter in an Urbanizing World, Charles Abrams, M.I.T. Press, Cambridge Massachusetts, 1964.

Changes from 1960 United Nations recommendations:

- (5) Tenure status is shown for households instead of for housing units.
- (6) A classification has been included for the separate tabulation of households who are sub-tenants.
- (7) Note: A tabulation of all types of private housing units by tenure and number of rooms is included in the Inter-American Program of Basic Statistics.^{78/} The Economic Commission for Asia and the Far East draft programme^{79/} includes class of housing unit and tenure and this topic is also proposed for an expanded programme for the African region.^{80/} The 1960 European Programme for National Housing Censuses^{81/} included a tabulation of dwellings by tenure.⁷

Tabulation 11. VACANT DWELLINGS AND RUSTIC HOUSING UNITS,
BY REASON FOR VACANCY

Units of tabulation: housing units

Housing units to be included: vacant conventional (permanent) dwellings (paras. 87-94) and rustic (semi-permanent) housing units (para. 95) separately

Classifications:

- (a) Geographic divisions: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality. Distinguish urban and rural for (i).
- (b) Reason for vacancy (paras. 171-172): seasonally vacant; suitable for year-round occupancy (for rent; for sale; other; unknown)

Use of the tabulation:

- (1) Vacancy data is important from several points of view. In many countries the vacancy rate runs from 3 to 5 per cent of the housing inventory which is equal to and, in some cases, a good deal more than, the number of dwellings produced

^{78/} Op. cit.

^{79/} Basic Statistics for Formulating and Implementing Plans of Economic and Social Development in Countries of Asia and the Far East, op. cit.

^{80/} - Statistical Development in Africa, op. cit.

^{81/} Op. cit.

annually from new construction. It seems appropriate, therefore, that the number of vacant units should be kept under careful surveillance in order to ensure that the stock of housing is used as fully and as economically as possible. The vacancy ratio provides insight into the proportion of dwellings and rustic housing units required to allow for a turnover of housing among owners and renters. This rate can be applied to calculations of housing needs in order to provide for a similar vacancy ratio in estimating the number of new dwellings that it will be necessary to construct.

(2) Vacancy data classified according to the reason for vacancy should furnish useful information concerning the availability of housing. For example, seasonally vacant dwellings can be ruled out as a source of additional permanent accommodation; however, an examination of the reasons for vacancy of dwellings suitable for year-round occupancy may reveal an over-abundance in categories which do not correspond to the requirements or the resources of the population groups in need of housing (it may be noted that information as to the size of vacant dwellings and rustic housing units is available from tabulation 5). Corrective action may be taken in these circumstances either by restricting, directly or indirectly, the construction of the type of dwelling in question or by subsidizing the purchase or rental of dwellings.

(3) This tabulation confines itself to data relating to dwellings and rustic housing units because all other types of housing units are required by definition to be occupied in order to fall within the scope of the census, a classification by occupancy would not, therefore, be applicable to them.

(4) In some housing censuses, vacancy information is recorded during the listing of housing units and summaries of these lists provide the aggregates furnished by this tabulation although generally not in detail as far as reasons for vacancy are concerned. Such a procedure may, however, provide an economic means of obtaining the data where there are important reasons to curtail the number of tabulations.

Changes from the 1960 United Nations recommendations:

(5) The category for dilapidated vacant dwellings and rustic housing units has been deleted because of the difficulty of collecting information on the state of

repair during a housing census. The reasons for vacancy have been confined to dwellings and rustic housing units suitable for year-round occupancy.

- (6) Note: A tabulation of the total number of vacant housing units is included in the Inter-American Program of Basic Statistics^{82/} and in the draft programme of basic statistics for economic and social development for Africa.^{83/} The tabulation included in the Economic Commission for Asia and the Far East draft programme^{84/} includes a classification by reason for vacancy; that included in the 1960 European Programme for National Housing Censuses^{85/} shows a classification by seasonally vacant dwellings and dwellings normally used for year-round occupancy. The European programme also recommends tabulations of separately identified vacant units according to type of dwelling, water supply, bathing facilities and number of rooms.⁷

Tabulation 12. CONVENTIONAL DWELLINGS BY MATERIAL AND YEAR
(OR PERIOD) OF CONSTRUCTION OF BUILDING (IN
WHICH DWELLING IS LOCATED)

Units of tabulation: housing units

Housing units included: conventional (permanent) dwellings (paras. 87-94)

Classifications:

- (a) Geographic division: (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.
Distinguish urban and rural for (i).
- (b) Material of building construction (paras. 141-142): construction material of the walls (sub-classified into types of construction material which are of significance for permanence and durability).

^{82/} Op. cit.

^{83/} Statistical Development in Africa, op. cit.

^{84/} Basic Statistics for Formulating and Implementing Plans of Economic and Social Development in Countries of Asia and the Far East, op. cit.

^{85/} Op. cit.

- (c) Year or period of building construction (para. 175): single years for buildings constructed during the census year or during the two preceding years; specified periods for buildings constructed prior to this.

Use of the tabulation:

(1) This tabulation provides information on the number of dwellings by material of construction of the walls of the building in which the dwelling is located cross-classified by the year or period of construction of the building. The data derived from this tabulation are of special importance for the formulation of housing programmes since it provides the basis for appraising the dwelling inventory in terms of durability and expected rate of replacement and also provides the basis for an estimate of the annual rate of dwelling construction over a three-year period. As is well known, construction data is difficult to collect and seriously lacking in most countries, particularly for the private sector, yet they are indispensable for determining the extent to which housing programmes are meeting the need for new dwellings. The construction data obtained may thus fill a serious gap in the series of statistics required for housing programmes. The tabulation also provides part of the data required for the computation of one of the Statistical Indicators of Housing Conditions^{86/} namely, "Index of dwelling construction in relation to estimated requirements (for three-year periods)".

(2) The question of whether to include only conventional dwellings in the tabulation, or rustic housing units as well, will depend upon the importance of the latter as far as the over-all housing situation is concerned. In tropical countries where a substantial proportion of the population lives in housing units constructed of locally available material such as bamboo, palm, thatch, etc., information on the rate of construction of these units may be considered sufficiently important for them to be included.

(3) The tabulation includes material of construction for walls only since this appears to be of most significance as an indicator of durability. Information on the construction material of the roof and floor are also frequently sought in housing censuses particularly the former but certain complications arise in

^{86/} Op. cit.

tabulating construction material for more than one element of the dwelling. Obviously, if mechanical tabulation methods are used, combined data of this kind could be easily obtained but for a basic tabulation the classification is restricted to the type of material used in the construction of the outer walls.

(4) In some countries, single years have been used over a longer period than that shown, to tabulate information on the date of construction; however, it must be borne in mind that as the period is extended the quality of the data may be impaired.

Changes from 1960 United Nations recommendations:

(5) This tabulation was not included in the 1960 recommendations.

(6) Note. The Inter-American Program of Basic Statistics^{87/} includes a table showing private housing units by type and material of construction of walls, floors and roof. Material of construction of the walls and roof of dwellings in urban areas is included in the extended programme of basic statistics for Africa.^{88/} Material of construction is being considered by the Economic Commission for Europe, Working Group on Censuses of Population and Housing,^{89/} as a topic that may be included as basic in the revised European Programme for National Housing Censuses.^{90/7}

Tabulation 13. CONVENTIONAL DWELLINGS BY TYPE AND YEAR (OR PERIOD)
OF CONSTRUCTION OF BUILDING (IN WHICH THE DWELLING
IS LOCATED)

Units of tabulation: housing units

Housing units included: conventional (permanent) dwellings (paras. 87-94)

Classifications:

- (a) Geographic division (i) total country; (ii) each major civil division; (iii) each minor civil division; (iv) each principal locality.

Distinguish urban and rural for (i).

^{87/} Op. cit.

^{88/} Statistical Development in Africa, op. cit.

^{89/} Report of Working Group Fifth Session, op. cit., para. 123.

^{90/} Op. cit.

- (b) Type of building (paras. 121-123): single detached dwelling; attached dwelling (row house or duplex); multi-dwelling building (used mainly for residential purposes).
- (c) Year or period of building construction (para. 175): single years for dwellings constructed during the census year or during the two preceding years; specified period for dwellings constructed prior to this.

Use of the tabulation:

- (1) The principal purpose of this tabulation is to provide a description of the housing inventory in terms of the type and age of the buildings in which dwellings are located with special reference also to the types of building in which newly constructed dwellings are located.
- (2) The inventory considered in terms of age and type of building provides a basis for estimating maintenance costs; it also furnishes insight into the housing patterns of the population, a factor which experience has shown should not be neglected in formulating housing programmes.
- (3) As mentioned in connexion with tabulation 12, statistics of dwelling construction are seriously lacking in many countries yet they are essential for the formulation of housing programmes. Also lacking in most countries are estimates of the investment devoted to dwelling construction. If data can be provided that will reflect even approximately the rate of dwelling construction for a given period together with a broad description by type and material of construction (as provided by tabulations 12 and 13) a reasonable estimate of housing investment should be possible. This is an important factor in assessing, and also in establishing the role of housing in over-all plans for economic and social development.
- (4) Only conventional dwellings are included in the present tabulation but if necessary the tabulation could be expanded to include rustic housing units or other types considered to be of significance in the country concerned.
- (5) The classification by type of building may be modified or expanded as the occasion demands. It may be found useful to introduce information on the number of floors in the building, particularly with respect to apartment buildings, and also the number of dwellings in the building.

/...

Changes from 1960 United Nations recommendations:

(6) "Type of building" as shown in the present tabulation replaces "Type of dwelling or rustic housing unit" which was included as a basic item in the 1960 United Nations recommendations. The classifications were not precisely formulated however, and the item was not included in the tabulation programme.

(7) [Note: The Inter-American Program of Basic Statistics^{91/} includes a tabulation in which dwelling construction is classified by single dwelling structures and multi-dwelling structures. Also the classification of housing units used throughout the programme includes separate categories for apartments and "private houses". The European Programme for National Housing Censuses^{92/} included a tabulation of dwellings according to whether they are located in farm and agricultural buildings, one-dwelling houses, multi-dwelling houses, non-residential buildings.]

^{91/} Op. cit.^{92/} Op. cit.