[Communicated to the Council and the Members of the League.]

.

Official No.: C. 133. M. 85. 1939.II.A. [C.E.S.145.] Appendix I.

.

STUDIES AND REPORTS ON STATISTICAL METHODS No. 5

-

HOUSING STATISTICS

A MINIMUM PROGRAMME OF HOUSING STATISTICS

DRAWN UP BY THE

COMMITTEE OF STATISTICAL EXPERTS

.

LEAGUE OF NATIONS GENEVA 1939

CONTENTS

	Page
PREFACE	4
Reports on Housing Statistics:	
I. Part I of the Report of the Committee of Statistical Experts on the Work of its Eighth Session (document C.133.M.85.1939.II.A)	5
II. Extract from Part II of the Report of the Committee of Statistical Experts on the Work of its Seventh Session (document C.226.M.128.1938.II.A)	6
Appendix	
HOUSING STATISTICS	
A. Geographical Scope of General Housing Censuses	7
B. Definitions of Basic Units:	
I. Definition of the Room	7
II. Definition of Dwellings	8
III. Definition of Households	9
IV. Definition of Occupants	9
C. Statistics relating to the Characteristics of Dwellings	10
D. Statistics relating to the Occupation of Dwellings and Rooms:	
I. Occupation of Dwellings by more than One Family Household	10
II. Statistics showing the Density of Occupation	11
E. Other Statistics relating to Households and Dwellings	12
F. Statistics of Buildings	12
4082 - S.d.N. 1.255 (F.) 1.145 (A.). 5/39. Imp. Kundig	

PREFACE

This pamphlet contains the recommendations of the Committee of Statistical Experts on Housing Statistics. The recommendations have been prepared in accordance with a decision of the 1937 Assembly of the League of Nations. They take the form of a minimum programme for the compilation of housing statistics on the occasion of general housing censuses. The programme was originally prepared by a special Sub-Committee, the composition of which is shown on page 5.

ì

A. LOVEDAY,

Director of the Financial Section and Economic Intelligence Service.

League of Nations,

Geneva, April 1939.

REPORTS ON HOUSING STATISTICS

I. Part I of the Report of the Committee of Statistical Experts \cdot on the Work of its Eighth Session¹

(document C.133.M.85.1939.II.A)

1. In accordance with a decision of the Assembly of the League of Nations (1937) regarding the study of the problem of urban and rural housing (document A.46.1937.III), the Committee submitted to the Council in its last report (document C.226.M.128.1938.II.A) an international minimum programme for housing statistics. The Council decided on September 10th, 1938, that this programme should be communicated to all Governments of States Members of the League of Nations and of non-member States for their observations.

2. At its present session, the Committee reconsidered the programme in the light of the numerous and valuable observations received. The Committee was happy to note that the general outline of the programme was approved by all countries from which replies were received. Most of the comments referred to points of secondary importance, with the exception of a few criticisms of the definition of "rooms" and "households". As, however, the original proposals regarding these definitions have met with approval in the great majority of the replies received, the Committee has not felt itself called upon to make substantial changes. The revised programme annexed to this report (see Appendix) does not therefore differ materially from the provisional programme circulated for observations.

3. The Committee is aware that a rigid application of this programme to the population as a whole might not prove practicable in certain countries, and in colonial territories in particular, where the living-conditions of large sections of the population differ more or less radically from those of the areas which the Committee has had in mind in framing its recommendations. As such special conditions cannot be covered in a uniform international programme, the Committee suggests that these countries should apply the programme in the manner best suited to show the differences in the housing conditions of the various groups of the population.

4. The Committee ventures to hope that the Council will decide to communicate the annexed programme to all Governments of States Members of the League of Nations and of non-member States, and to invite them to apply it.

¹ The following members of the Committee were present at this session: M. M. HUBER, Director of Studies at the Statistical Institute of the University of Paris; Dr. C. BRÜSCHWEILER, Director of the Swiss Federal Bureau of Statistics; Mr. R. H. COATS, Dominion Statistician, Canada; Mr. E. COHN, Director of the Statistical Department of Denmark; M. V. DORE, Head of the General Statistical Bureau of the International Institute of Agriculture; M. D. DURAND, of the United States Tariff Commission; Sir Alfred FLUX, formerly Chief of the Statistical Service of the Board of Trade; M. G. JAHN, Director of the Central Statistical Office of Norway; Mr. J. W. NIXON, Chief of Section, International Labour Office.

The programme on housing statistics was originally prepared by a Sub-Committee which included the following members of the main Committee: M. G. JAHN, M. M. HUBER, and Mr. J. W. NIXON. It had the benefit of the assistance of some outside experts on housing statistics—viz., Mr. V. P. A. DERRICK, General Register Office (Somerset House), London; Mr. E. M. FISHER, Director of the Division of Economics and Research of the United States Federal Housing Administration; M. B. NYSTRÖM, Chief of Bureau in the Social Board, Sweden, and Rapporteur of the Committee on Housing Statistics of the International Institute of Statistics; M. V. SEKERA, Statistical Office of Czecho-Slovakia.

Mr. V. P. A. DERRICK and Mr. E. M. FISHER were also present at the eighth session of the Committee, at which M. B. NYSTRÖM was replaced by M. B. HELGER, Social Board, Sweden.

II. EXTRACT FROM PART II OF THE REPORT OF THE COMMITTEE OF STATISTICAL EXPERTS ON THE WORK OF ITS SEVENTH SESSION

(document C.226.M.128.1938.II.A)

4. At the present stage, the Committee has limited its recommendations to those subjects on which, in its view, adequate information can be obtained by a "general housing census". This term is intended to cover all censuses, whether forming an integral part of the population census, or taken concurrently therewith, in which the data are collected by means of household forms or schedules completed by the householder, either with or without the aid of enumerators. The Committee proposes to study at a later stage of its work the information to be obtained from more detailed investigations or housing surveys, which in the opinion of the Committee can only be carried out by trained investigators or special agents. Such investigations may be confined to a sample of houses only and, where this is the case, information relating to all dwellings obtained from a general housing census is necessary as a basis for securing an adequate and representative sample.

5. The recommendations are further restricted to the problem of how the population, and more especially family households, are housed. As the data obtained by housing censuses will form the basis for current building statistics, statistics of rents, of vacant dwellings, etc., the Committee, when formulating its definitions, has also borne in mind the requirements of these branches of statistics.

6. These recommendations should be considered as a minimum programme capable of meeting the most important statistical requirements from an international point of view. As housing conditions vary widely in different countries on account of climatic and social conditions, and as housing policy is frequently a matter which devolves largely on local authorities, national and even local circumstances will usually play an important part in the determination of the scope of, and the classifications to be derived from, the national censuses. The Committee therefore thought it wise to limit itself to a very restricted programme and to omit, at this stage, detailed consideration of more complex factors such as rents, which are sometimes covered by national housing censuses. While the several national programmes would, as a rule, cover a wider field than that of the minimum programme, the Committee suggests that they should in all cases be founded upon the definitions recommended in the Appendix.

APPENDIX

HOUSING STATISTICS

A. GEOGRAPHICAL SCOPE OF GENERAL HOUSING CENSUSES

In accordance with its terms of reference, the recommendations of the Committee apply to both urban and rural housing. Rural housing conditions, however, differ substantially in certain respects from urban conditions, and in view of the particular interest which, in many countries, attaches to the problem of rural housing and of the special aspects of that problem,¹ the Committee devoted particular attention to the information on this subject which can be readily obtained on the occasion of a population census. The Committee did not consider it necessary to define the border-line between urban and rural districts, as the validity of the comparisons which can be made from the statistics drawn up in accordance with the minimum programme is hardly affected by the different solutions of the problem.

B. DEFINITIONS OF BASIC UNITS

For the purposes of the minimum programme of the Committee, the following units require to be defined:

- I. The room;
- II. The dwelling;
- III. The household;
- IV. The occupants.

For reasons which will be found in Part F of this report,² the Committee has not given a definition of "the building" for the purpose of a general housing census.

I. Definition of the Room.

The determination of the space to be counted as a "room " for statistical purposes is usually governed in practice by considerations which can be roughly classified under two main types:

(a) Those which rely on a formal definition based upon physical characteristics, in which a criterion of minimum size can be incorporated if so desired;

(b) Those which have regard to the purposes for which the space is or may be used and which rely therefore upon a conventional selection of purposes justifying the recording of a space as a "room".

Both types are, in fact, used for ascertaining the number of rooms. By the former, rooms are identified irrespectively of the purposes for which they may be used, and the head of the household, controlled by the enumerator, has to decide which spaces fall under the definition. Under the

- 7 -

¹ See, for example, the studies on rural housing being made by the Health Organisation of the League and its Conferences on rural hygiene.

second type, in which physical characteristics are disregarded, the householder or enumerator requires to be informed as precisely as possible of the kind of rooms to be counted—e.g., bedrooms, kitchens, servants' rooms, etc.—and also of the types of rooms to be ignored—e.g., bathrooms, toilets, etc.

The second method alone does not readily permit of the introduction of a criterion of minimum size if the dimensions of rooms are not asked. The Committee is aware that the exact measurement of each room is very difficult to obtain in a general housing census. It thought, however, that the uniformity and comparability of the statistics would be greatly increased if a minimum size for the spaces to be counted as rooms were introduced, and it recommended the fixing of the limit at about 4 square metres.

As, however, the proportions of the room are no less important than its superficial area, the Committee adopted, as an additional test, its ability to contain a bed for an adult, such specification being regarded as the simplest way of describing the proportions of a room. Long and very narrow corridors having more than 4 square metres are thus excluded. The Committee wishes to state clearly that the limit of 4 square metres was adopted in order to include among the "rooms" all spaces which are, in the practice of to-day, actually inhabited; this limit is by no means intended to imply any judgment as to what constitutes a standard of desirable space.

The Sub-Committee therefore suggests the following definition of rooms:

As "rooms" should be regarded bedrooms, dining-rooms, living-rooms, habitable attics, servants' rooms, kitchens and other habitable spaces, separated from one another by walls reaching from the floor to the ceiling and of a size large enough to hold a bed for an adult (approximately 4 square metres at least).

Kitchenettes, corridors, verandas, lobbies, etc., not falling under the above definition, as well as bathrooms and toilets, should not be counted as rooms.

Rooms regardless of size, if used only for professional or business purposes, should not be counted as parts of the dwelling and should not be taken into account for calculating the number of persons per room.

II. Definition of Dwellings.

In existing housing statistics, dwellings are defined by:

(a) The structural disposition of rooms, coinciding in the case of permanent buildings with the intended use of premises;

(b) The actual use of premises;

or by a combination of both.

A third criterion determined by legal conditions—namely, one which identifies the dwelling with the rooms or premises covered by a lease from the house-owner—was not considered as offering particular advantages from the international point of view. Apart from the difficulties which would arise from differences in legal practice as between one country and another, the definition would only apply to rented dwellings and would therefore require supplementation for dwellings occupied by the proprietor or occupied on a legal basis other than a lease.

As the definition of the "dwelling" should be the same for housing statistics as for current building statistics, etc., the structural layout of rooms appears to be the only common criterion. This criterion is inherent in the popular conception of a dwelling, and the difficulties of its application are therefore relatively small, at least in urban districts. Moreover, an interpretation based on structural disposition is likely to correspond most nearly to the intended use of the premises, so far as habitation by family households is concerned. A definition based on the structural disposition of premises needs, however, certain rectifications depending on the actual use made of these premises, where this differs from the intended use, as in the case of dwellings originally intended for habitation by family households which are actually used as offices or for other business purposes. As the occupation of dwellings for such purposes is frequently permanent, running parallel with the development of business quarters in big towns, such premises should be excluded from statistics of dwellings. Following the same line of thought, rooms or parts of dwellings used only for business purposes should not be counted as part of the dwelling.

The Committee therefore proposes the following definition of a dwelling:

The dwelling should comprise any structurally separated room or suite of rooms in permanent buildings used or intended for habitation by family households and having a separate access to a street or to a common passage or stairway. Detached rooms for habitation which are clearly intended to form a part of the dwelling should be counted as part of the dwelling. Rooms used only for business purposes should not be counted as parts of the dwelling.

III. Definition of Households.

General population censuses usually distinguish two types of households:

- (a) The family household;
- (b) The non-family (or collective) household;

In the present minimum programme of housing statistics, only the family household is used as a basic unit. For reasons of precision, the Committee gives the following definitions of both types:

The *family household* should comprise the members of a family forming the nucleus of the household, including resident domestic servants. Other persons sharing the rooms occupied by the family or having separate rooms in the dwelling, but taking their meals with the family, should be counted as members of the family household.

Persons living alone and lodgers occupying rooms of their own and not sharing in the meals of the family should be counted as separate family households.

It should be noted that, under the above definition, one dwelling may be occupied by several family households, and that the family household is not necessarily identical with the total number of persons living in the same dwelling.

Non-family households should comprise all persons living in groups which are not to be considered as family households—e.g., in hotels, institutions, military barracks, etc.

In doubtful cases, which may particularly arise in respect of pensions and boardinghouses, the border-line between the family household and the non-family household should be drawn at the point where the number of boarders, etc., exceeds the number of the family members, including servants, etc.

It should be noted that directors or the personnel of institutions, hotels, etc., occupying a separate dwelling should be counted as family households.

IV. Definition of Occupants.

If the methods adopted for enumerating the population in the general population census enable the usual residents of a dwelling to be identified as distinct from the persons occupying the dwelling on the day of the census, only the usual residents should be counted as occupants. Each physical person, regardless of age, should be counted as one unit.

C. STATISTICS RELATING TO THE CHARACTERISTICS OF DWELLINGS

The Committee was of the opinion that the most important information bearing on the characteristics of dwellings is, from the point of view of international comparisons, that dealing with the number and size of the dwellings and the existence of certain types of amenities.

The size of dwellings should be measured only by the number of rooms, as any other method requiring reference to the dimensions of the premises appears to be unsuitable for adoption in general censuses.

As regards the amenities available in a dwelling, the Committee recommends that they should be ascertained for each dwelling to which they structurally belong. There is no doubt that it would be equally important to show the amenities available for each household; the necessary basic information on this point is, however, more difficult to obtain in practice and has therefore been disregarded.

The Committee recommends that the total number of dwellings should be shown, subdivided by size into dwellings with one, two, three, four, five, six, seven, eight and more rooms in accordance with the definition of rooms given above.

For each of the above groups, the tabular analysis should distinguish the number of dwellings possessing the following amenities:

- (I) Kitchenettes (*i.e.*, kitchens not corresponding with the definition of rooms);
- (2) Bathrooms:
 - (a) Private;
 - (b) Common;
- (3) Toilets:
 - (a) Private;
 - (b) Common;
- (4) Running-water supply:
 - (a) Inside the dwelling:
 - (b) Outside the dwelling;
- (5) Electricity supply;
- (6) Gas supply,

In many countries, the heating system, and especially central heating, is a matter of importance, but as international comparisons of this kind have less significance owing to differences in climatic conditions, the Committee did not include this topic in its programme.

- D. STATISTICS RELATING TO THE OCCUPATION OF DWELLINGS AND ROOMS
 - I. Occupation of Dwellings by more than One Family Household.

One of the main objects of housing censuses in several countries is to throw light on the occupation of dwellings by more than one family household, as this information is of importance in

the determination of existing housing needs. The Committee therefore recommends that the number of dwellings occupied by:

- (a) One family household;
- (b) Two family households;
- (c) Three and more family households

should be given, at least separately for dwellings with one, two, three, etc., eight and more rooms. In addition to the total number of dwellings occupied by family households, the *number of vacant dwellings* should be given for the same room categories, and it should be exactly stated which kinds of dwellings have been included as vacant dwellings.

II. Statistics showing the Density of Occupation.

The occupation of dwellings and rooms should be shown for international comparison on the basis of physical persons, adults and children being counted as equal units. Although information as to sex, age, marital status and the situation in the household is frequently available for all persons of the household, the Committee abstained from including such distinctions in the minimum programme.

Statistics showing the density of occupation—*i.e.*, the number of persons in relation to the number of rooms—are computed in different ways in various countries. They are generally based on one of the following methods:

(a) By reference to the dwellings as the unit, the total number of persons being related to the total number of rooms in the dwelling;

(b) By reference to the household as the unit, the number of persons in a family being related to the number of rooms occupied by that family.

In those cases—the great majority—in which a dwelling is occupied by one household, the two methods yield the same result. In cases where more than one household occupies a dwelling, the Committee recommends that the second method be adopted, in view of the fact that the number of persons per room may vary considerably for each of the households in the same dwelling. It is understood that the kitchen, or any other room, if shared by more than one household, should be allocated to the main household in the dwelling.

The Committee recommends that the tabulation displaying family households in relation to the rooms they occupy should be in the following form:

Number of persons per family household	Number of family households occupying the following number of rooms									Total number of	
	I	2	3	4	5	6	7	8	9	10 and more	family house holds
One											
Total number of family households										•	

Number of Family Households of Different Sizes occupying Different Numbers of Rooms.

The Committee has adopted this form of presentation as it permits of calculating the total number of persons associated with each room category and the total number of rooms associated

with each size of family household. At the same time, the several items can be aggregated in any desired density group, in terms either of persons per room or rooms per person; an arrangement which facilitates the application of varying national crowding or overcrowding standards.

E. OTHER STATISTICS RELATING TO HOUSEHOLDS AND DWELLINGS

The Committee has considered various other statistics which are frequently obtained from national housing censuses, without making recommendations in respect of them for its first minimum programme.

If the housing census is undertaken in connection with a census of population in which occupations are recorded, the necessary basic data for a classification of households by the occupation of the head of the household are available. The Committee is aware that such a grouping is sometimes undertaken as a means of throwing light on the housing conditions of various social groups, and emphasises the importance of such grouping. At this stage, however, the Committee does not suggest a uniform classification for that purposes. The classifications prepared by the Committee of Statistical Experts for the purpose of grouping the gainfullyoccupied population will offer certain groups which might be useful also for the purpose of housing censuses.1

Statistics of rents, although of importance for statistics of housing conditions, have been excluded from consideration, owing to the difficulty of defining what is included in rents in different countries and the difficulty of obtaining such information by means of a general housing census. In this connection, the Sub-Committee draws attention to the compilation of rents on a uniform basis for certain selected types of dwellings which is being undertaken by the International Labour Office and its Committee of Statistical Experts.²

Statistics of the tenure of dwellings are generally required if statistics of rents are prepared. They are, however, also of considerable importance for other national purposes, especially in relation to differences between urban and rural districts and the changes in the various forms of tenure. The definitions and classifications needed depend largely on legal practice and national customs; they have therefore not been included in the minimum programme.

Statistics of family income and their combination with housing statistics are also of great interest. As, however, only a very small number of countries compile such statistics, it was impossible to include them in the minimum programme.

F. STATISTICS OF BUILDINGS

At a general housing census, the notion of the "building" has to be introduced for the administrative purpose of ensuring the completeness of the enumeration, but it may also serve as a unit to be subjected to statistical measurement. In the latter event, the main information which it is generally desired to obtain is the following:

(a) The character of the buildings according to the type of construction:

(1) Whether the buildings are constructed in such a way as to serve permanently for habitation;

(2) Whether the structures inhabited are of a provisional or special type—e.g., huts, tents, wagons, boats;

¹ See "Studies and Reports on Statistical Methods ", No. 1.

See Studies and Reports on Statistical methods , 10. 1.
 See "Rents of Workers' Dwellings in Various Towns, 1936/37", International Labour Review, Vol. XXXVIII, No. 6, December 1938; also Robert Guye: "A Further Contribution to the International Comparison of Rents", International Labour Review, Vol. XXXIV, No. 5, November 1936.

(b) The character of permanent buildings according to the material of construction, age, state of repair and other criteria throwing light on the conditions of the buildings;

(c) The character of permanent buildings according to their use:

(1) Whether used mainly or wholly for habitation by family households (residential buildings);

(2) Whether used mainly or wholly for other purposes (e.g., commercial, industrial and public buildings);

(d) The size of permanent buildings, which is most frequently measured in general censuses by the number of floors or by the number of dwellings per building, and sometimes by the number of rooms;

(e) The situation of the buildings (e.g., whether detached or forming a row with other buildings, whether situated on the street or in a courtyard, etc.).

The Committee considered all this information as being very valuable from the national point of view. As, however, numerous countries do not at present consider it necessary for their own purposes to prepare statistics showing the number of buildings of different kinds, the Committee believed that this subject could be regarded as a matter of secondary importance which should not be especially pressed for in an international minimum programme.

In order to secure comparability between the statistics of those countries which are willing to prepare statistics of buildings, the Committee has drawn up certain recommendations relating to some of the above-mentioned questions—namely, to the type of construction, the use and the size of buildings. As regards the last-mentioned criterion, the Committee considered that the most important distinction from the international point of view was that between houses consisting of one or two dwellings on the one hand and larger houses on the other.

The recommendations given below are intended to be applied to urban districts only. They provide for some broad distinctions, and it is indicated later that the application of a uniform definition of a "building" is not indispensable for this purpose. The Committee therefore abstained from formulating a definition of a "building".

If statistics of buildings are prepared, the Committee suggests that at least the following particulars should be covered and distinguished for international purposes:

- (1) Permanent residential buildings (i.e., used mainly or wholly for habitation by family households), subdivided by size into:
 - (a) Buildings with I, 2, 3, 4, 5 and more dwellings;
 - (b) Buildings with 1-2 floors, 3 floors, 4 floors, 5 and more floors.
 (The term "floor " is used as excluding the cellar, but including the ground floor and habitable attics.)

For each of the above groups should be shown:

- (i) The number of buildings;
- (ii) The number of dwellings situated therein;
- (iii) The number of persons living in these dwellings, and, as as far as possible,
- (iv) The number of rooms in these dwellings.
- (2) Huts, tents, wagons, boats, caves and similar units of a special kind actually inhabited by family households:
 - (i) Number of units;
 - (ii) Number of persons living therein.

- (3) Permanent buildings other than residential buildings (i.e., used mainly or wholly for industrial, commercial or public purposes):
 - Buildings containing some dwellings for family households (e.g., directors', service or caretakers' dwellings in commercial buildings, schools, asylums, hotels, etc.;
 - (i) Number of buildings (if desired);
 - (ii) Number of dwellings situated therein;
 - (iii) Number of persons living in these dwellings;
 - (b) Buildings containing no dwellings for family households (military barracks, etc.):
 - (i) Number of buildings (if desired).

Data concerning the number of buildings under groups 3(a)(i) and 3(b)(i) are only required if complete inventories of the number of existing buildings are desired; these data are of little importance from the international point of view and could therefore be ignored.

Persons living in non-family households are not covered by the above classification; they may live in buildings of either of the above groups. As no further subdivision of this group of persons according to types of non-family households is suggested for international purposes, the total number of persons living in non-family households can easily be obtained by deducting from the total population the number on persons living in family households (*i.e.*, total population minus aggregate of groups I (a) (*iii*) [or I (b) (*iii*)], 2 (*ii*) and 3 (a) (*iii*)].

If the above classifications are to be comparable as to the *number* of buildings, buildings should be defined in all countries in the same manner. The Committee is, however, aware that it is very difficult to find a uniform definition which could be applied to all the varying types of buildings in the different countries.

The existing definitions are based on criteria derived either from structural considerations -e.g., that buildings separated from each other by a wall from the cellar to the roof should be counted as separate units—or from legal, administrative or other conditions in a given country. Although the Committee believes that a definition derived from the construction might be the most suitable from the international point of view, it does not think that such a definition will be suitable for all countries or cover all cases.

As, however, the statistics of the number and size of buildings prepared in various countries reveal important facts, the Committee recommends that such statistics should be compiled, even if the international comparability of the number of buildings might be defective. The classifications proposed above provide, however, that, in addition to the number of buildings, the number of dwellings and the number of persons in each group should be shown. For international comparisons, a distinction between the number of dwellings in one- or two-family houses and those in larger buildings, and more particularly between the number of persons living in these different types of buildings, appears to be of greater importance than the identification of the number of buildings. Moreover, as buildings with five and more dwellings are included in one group, and differences on account of different definitions will mainly arise for the larger buildings only, the number of dwellings and the number of persons shown for the larger buildings, on the one hand, and for the smaller buildings, on the other, will not be materially influenced by the differences in definitions.