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DEMOGRAPHIC AND SOCIAL STATISTICS: POPULATION AND HOUSING CENSUSES

World Population and Housing Census Programme, 1985-1994

Report of the Secretary-General

SUMMARY

The present report contains information on the proposed activities related to the 1990 World Population and Housing Census Programme which is to be undertaken during the period 1985-1994. Provided first is an overview of the 1980 World Population and Housing Census Programme which was carried out during the period 1975-1984, including an inventory of the censuses held in that decade (paras. 2-10). A summary of the main issues emerging from past census experience and their implications for the 1990 round of population and housing censuses is also given (paras. 11-26). The report contains a discussion of the implications for population censuses of two recent developments relating to the economic characteristics of the population: (a) the new concepts and standards concerning statistics of the economically active population, employment, unemployment and underemployment, adopted by the International Labour Organisation in 1982 (paras. 27-33); and (b) the planned revisions pertaining to major standard classifications of industry, occupation and status in employment (paras. 34-42). Information is provided on a range of proposed activities pertaining to the 1990 Programme, as well as on the related census work of the regional commissions, and a tentative calendar of preparatory activities is presented (paras. 43-61). Points for discussion by the Commission are included (para. 62).

^{*} E/CN.3/1985/1.

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INTRODUCTION

The present report, submitted in response to requests made by the Statistical Commission at its twenty-second session, 1/ contains proposals concerning the 1990 World Population and Housing Census Programme which is scheduled to be carried out during the period 1985-1994. The report includes an overview of the 1980 World Population and Housing Census Programme implemented during the decade 1975-1984 and the census activities of that decade, as well as the emerging issues related to census taking and the implications of these issues for the 1990 Programme. It also contains a discussion of the implications for the 1990 Programme of recent and anticipated revisions of the international recommendations relating to statistics of the economic activities of the population, including the definitions and classifications of employment and unemployment, status in employment, the International Standard Industrial Classification of All Economic Activities (ISIC) and the International Standard Classification of Occupations (ISCO). In addition, information is provided on the proposed activities to be undertaken by the Statistical Office of the United Nations Secretariat in order to assist Governments in preparing for and implementing national population and housing censuses in the forthcoming census decade, including the documents to be prepared, the regional workshops and seminars to be conducted and the other technical co-operation activities to be undertaken. The activities carried out by several regional commissions in connection with the 1990 Programme are also briefly outlined.

I. 1980 WORLD POPULATION AND HOUSING CENSUS PROGRAMME: OVERVIEW

- 2. In accordance with Economic and Social Council resolution 1947 (LVIII) of 7 May 1975, the 1980 World Population and Housing Census Programme was carried out during the decade 1975-1984. In that decade, a census of population or a census of population and housing was carried out in 191 countries or areas of the world. Over 95 per cent of the world's population was enumerated and, compared with the 1950 (1946-1954), the 1960 (1955-1964) and the 1970 (1965-1974) census decades, during which a census was carried out in, respectively, 150, 166, and 176 countries or areas, the number of countries or areas covered by the 1980 Programme was the largest.
- 3. In the 1980 census decade (1975-1984), a census was not conducted in 22 countries or areas. For some of them, all census preparations had been made but for various reasons the census was cancelled or postponed to a date after 1984. For others, administrative record systems are used to collect population and housing data and census taking was considered to be unnecessary. For a few others, no census was planned or no information was provided about census plans.
- 4. In 20 countries or areas, two censuses were taken, most of which were regular quinquennial censuses. As a result, the number of censuses conducted in the 1980 decade totalled 211. Of these 159 were censuses of population and housing and 52 were censuses of population. About one half (102) of all censuses were conducted in 1980 and 1981 and almost one quarter of them (47) were taken in 1975 and 1976. In two thirds of the 191 countries or areas, a census was conducted in

the four-year period 1979-1982. On the other hand, in all but one of the years of the census decade, 9 or more national censuses were carried out. Even when census taking was least common (in 1978), a census was taken in 5 countries or areas (see the table below).

- 5. In Africa, a census was taken in 50 of a total of 55 countries or areas during the 1980 census decade; one half of the censuses taken were population censuses. In the 1970 census decade, a census was conducted in only 36 of the countries or areas in Africa. The increase in the number of census activities undertaken in the 1980 decade can be attributed in part to the promotion of the African Census Programme by the United Nations in the 1970s, with financial support provided by the United Nations Fund for Population Activities (UNFPA). As a result, for 17 countries in which a census had not been taken in the 1970 decade, a census was taken in the 1975-1984 decade. Some of these censuses were the first conducted in these countries. However, no census was taken in the 1970 decade for 3 countries in which a census had been conducted in the preceding decade.
- 6. Unlike other major areas of the world in which censuses were taken for the most part in 1980 and 1981, one third of the African censuses were conducted in each third of the 1980 census decade. In many countries, a census was originally planned for either 1980 or 1981 but for various reasons the undertaking was postponed to a subsequent year. As a result, 14 censuses were conducted in 1983 and 1984, the last two years of the 1980 census decade.
- 7. In all but 4 of the 35 North American countries or areas, a census was taken in the 1980 decade; in 28 of these countries, a census was conducted in the period 1980-1982 and in one country (Canada) two censuses were conducted. All of these were censuses of population and housing. During the decade, a census was taken in 13 countries or areas in South America. In the one country (Colombia) in which a census was not conducted, a census is planned for 1985. Of the censuses taken in South America, 11 were conducted in the period 1980-1982. Two of them were censuses of population and 13 were censuses of population and housing.
- 8. One census was taken in 29 of the 43 countries or areas in Asia, two censuses were taken in 7 and in a further 7 no census was taken. One half of the censuses (22) were conducted in 1980 and 1981 and 8 were taken in 1975; 6 of the latter were quinquennial censuses. The 1979 population census of Afghanistan was the first census conducted in that country. In China, Jordan, the Lao People's Democratic Republic and Viet Nam, in which a census was not taken in the 1970 decade, a census of population was conducted in the 1980 decade. Of the 43 censuses taken, 8 were censuses of population and 35 were censuses of population and housing.
- 9. Censuses were taken in 32 countries or areas in Europe-USSR; in 6 of them two censuses were taken and in 4 others, no census was taken. In a few countries, census information was collected not by field enumeration but from existing administrative registration records.

Number of countries or areas and of censuses taken or expected to be taken, by continent, 1975-1984 census decade

	World			Africa		America, North		America, South			Asia			Europe-USSR			Oceania				
Countries or areas and censuses	T	P	PH	T	P	PH	T	P	PH	T	P	PH	T	P	PH	T	P	РН	T	P	PH
Number of countries or areas	213			55			35			14			43			38			28		
Number in which a census was taken	191			50			31			13			36			33			28		
lumber in which no census was taken	22			5			4			1			7			5			0		
Number in which two censuses were taken	20			1			1			0			7			6			5		
Number of censuses	211	52	159	51	26	25	32	0	32	13	2	11	43	8	35	39	4	35	33	12	21
Number taken each year																					
1975	21	6	15	6	4	2	0	0	0	1	0	1	8	1	7	6	1	5	0	0	. (
1976	26	8	18	8	4	2	0	2	1	0	1	2	2	1	2	0	0	2	11	3	8
1977	9.	4	5	4	3	1	0	0	0	0	0	0	1	0	1	2	0	2	1	1	1
1978	5	3	2	2	2	0	0	0	0	0	0	0	1	0	1	1	0	1	1	1	(
1979	14	9	4	4	4	0	1	0	1	0	0	0	4	1	3	3	3	0	2	2	(
1980	55	9	76	7	2	5	16	0	16	5	2	3	11	0	11	7	0	7	9	5	4
1981	47	3	44	3	1	2	7	0	7	2	0	2	11	2	9	16	0	16	8	0	8
1982	16	4	12	3	2	1	5	0	5	4	0	4	2	1	1	2	0	2	0	0	(
1983	10	4	6	8	3	5	0	0	0	0	0	0	2	1	1	0	0	0	0	0	(
1984	8	2	6	6	1	5	1	0	1	0	0	0	1	1	0	0	0	0	0	0	

Note: T: total census; P: population census; PH: population and housing census.

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10. In all 28 countries or areas in Oceania, a census was taken in the 1980 decade. In 5 of them, quinquennial censuses were taken and for one small island a population count was conducted at the end of each year.

II. EMERGING ISSUES AND ADEQUACY OF EXISTING CENSUS RECOMMENDATIONS

11. Along with the increase in census activities and number of census users, some issues related to the content of the census and the methods of census operation have emerged as being of particular concern to Governments, census users and producers or to the general public. These issues have their origins in the census work and experience of previous decades. Because of their importance, they were brought to the attention of the Statistical Commission at its twenty-second session in a progress report of the Secretary-General on national experiences and emerging issues in population and housing censuses (E/CN.3/1983/16). In view of the direct impact of these issues on the 1990 World Population and Housing Census Programme, they are briefly summarized below.

A. Emerging issues

12. Six broad emerging issues have been identified: (a) methods of data collection, (b) census content, (c) census confidentiality, (d) census editing, (e) storage, retrieval and dissemination of census data and (f) the working relationship between the census statisticians and the data-processing personnel. Many of these issues are related either directly or indirectly to the rapid development of electronic data-processing technology. Such development has, on the one hand, significantly facilitated the collection and processing of census data and, on the other, created a gap between the availability of modern means and methods for census processing and the lack of a workable and efficient system by which these means and methods can be integrated in such a manner as to best serve the census users and producers and the providers of census data, the general public

1. Methods of data collection

13. During the 1970 and 1980 census decades, in a few countries in which there were well-maintained population and other registration systems, the conventional method of collecting census data (i.e., use of canvassing, self-enumeration and other field methods) began to be replaced by a method by which census data from various registration systems or data registers were compiled through a process of computerized record linkage. The registers used for this purpose included, inter alia, those of population, housing, building, tax, real estate, health, education and employment exchange. After the process of linkage is completed, the assembled data are tabulated and census reports are printed and disseminated. So far, in no country has it been found possible to link and utilize all the registration systems and to generate all census data from the registers. One of the major difficulties seems to lie in the different definitions, concepts and reference dates of various population characteristics contained in various registers, as well as the frequency of updating of each of the registers involved.

Therefore, time will be needed to assess the cumulative effects of this new method of data collection. Moreover, the choice of data collection method will continue to depend on a number of factors, such as the size of the country, the structures and operations of the statistical systems, the methods used for data storage and the extent to which users have access to various statistical data bases.

2. Census content

14. While there has been almost no change in the basic topics covered in the censuses of the past two decades, there has been a growing tendency to ask more questions related to the characteristics of the household, particularly in relation to the level of living of the household or family. Part of the reason for the increase is the interest of census data users in obtaining more information from the census. Moreover, the use of electronic computers has increased data-processing capabilities and has made possible the addition of a few more census questions and the cross-tabulation of detailed population characteristics without significantly increasing the burden on census producers. On the other hand, the expansion of census content has tended to place an additional burden on respondents since they must answer either more or more complicated questions.

3. Census confidentiality

15. In a number of countries, emerging concern about census confidentiality and the burden on respondents has introduced pressure to reduce the number of questions being asked. Although the legal protection of the confidentiality of census data (i.e., the guarantee that no one other than census officials has access to individual census records) has become an accepted principle in most countries and is stated in the statistical law or the census laws or decrees, the general public, in a number of countries, no longer appears to consider such assurances to be adequate or sufficient, particularly since the number of census users and the intensity of use of censuses increased. The rapid advancement of data-retrieval capability and the wider availability of census data bases have also generated among the general public an incorrect impression that various governmental agencies have easy access to all personal data files through a linkage of census data bases with other administrative data bases. In one country, the issue of census confidentiality has forced the postponement of its 1983 census and has, along with the issues of burden on respondents and perceived intrusion on individual privacy, become a major issue in a number of other countries. These issues must be dealt with carefully in order to avoid their having an adverse effect on the 1990 Programme.

4. Census editing

16. How census errors should be treated is not a new issue. It has been a major concern of census producers for decades and many quality control procedures have been developed to reduce such errors. With the availability of high-speed electronic computers, it is now possible to carry out extensive editing and

imputation of census data. However, a major issue is how the census editing and imputation rules should be prepared and how much editing is appropriate. When the field work is poorly done, either in whole or in part, should the census return be corrected through imputation to "improve" its quality? When the returns are clearly undercounted or when they contain too many missing or unknown entries, should imputation be used to make up the underenumeration or to change the questionable entries to some acceptable values? Experience in using automatic editing and imputation has been accumulated and studied in few countries. Moreover, there has been only limited theoretical treatment of the statistical properties of the methods of editing and imputation now in use. Of course, census editing and imputation can improve the usefulness of the data for many users if the rules and procedures established are appropriate. Indeed, the major impetus for imputation of data came initially from users who requested guidance on the treatment of the "unknown" categories in published census tabulations. On the other hand, it must be understood that census editing and imputation cannot add information to the census results and is not a remedy for the faulty planning or execution of a census. Moreover, the editing, if badly done, may introduce serious distortions in the census results.

5. Storage, retrieval and dissemination of census data

- 17. The use of computers to process census returns has brought a new dimension to the tabulation, dissemination and utilization of census data. Vastly more detailed and rich cross-tabulations are feasible. At present, it is possible for users to obtain tabulated census results not only in published form but also as computer print-outs, on microfiche and from magnetic tape files. It is also possible to provide ad hoc tabulations to those who have a special interest in certain social, economic or demographic features of society or in certain geographical areas. The time lag between the completion of the census enumeration and the completion of the census tabulations can be reduced if a careful and appropriate processing plan is developed. Detailed census records can be stored and retrieved in a way that greatly facilitates their use.
- 18. Depending on the needs of the users, census data may be stored at various levels of aggregation, ranging from individual records to table images. Since there is increasing interest in storing census data in a permanent data base, there is reason to ask whether the time has not come first to create the data base and then, as the first use of the data base, to make the tabulations, or at least some of them. In some countries, this may be a natural consequence of the decentralization of processing and the dissemination of selected census results under a centralized national plan.
- 19. In many countries, the publication of census results in printed volumes is still the only means available for the dissemination of census data. In countries in which a computer processing capability has only recently been acquired, there may not yet be a workable and efficient system for the tabulation, storage and retrieval of census data. However, in part because of increased data-processing capacity, national census offices are being asked to provide more detailed tabulations. As a result, the volume of tabulated results is expected to increase

dramatically. It is essential that census offices prepare, in consultation with users, comprehensive plans for the tabulation and dissemination of data that will take into account all feasible means of preparing and disseminating census results.

6. Working relationship between census statisticians and data-processing personnel

20. In the 1980 census decade, computers were used in almost all countries to process the census returns. The change in processing technology has increased the capacity for census editing and tabulation and has reduced the time needed for the editing, tabulation and, in some cases, printing of tables. Because of the huge volume of data to be processed, much of them inaccurate and incomplete, the continual pressure for an ever-earlier release of census results and the frequent changes and improvements made to the available computer technology, the processing of census data remains a very difficult part of census work. The need for co-operation and co-ordination between the subject-matter statisticians who worked on the census and the data-processing personnel who work to make the computer serve the census cannot be over-emphasized. Unfortunately, in many countries, these two groups of people have insufficient experience in working together and each does not have a clear understanding of the other's field of specialization. Too often, each tends to ask both too much and too little of the other in order to accomplish a part of the census work. The lack of qualified staff and of adequate resources for carrying out processing work has adversely affected the co-ordination and co-operation between the two groups in many countries. Computer data processing is now closely related to almost every aspect of population and housing census work. It is imperative to involve both subject-matter statisticians and data-processing personnel in every aspect of the census work, that is, in the design of questionnaires, the coding of census results, the specification of census editing and imputation rules, the editing and imputation operations, the control of the flow of questionnaires during processing, the initial verification of tabulated results, the storage, retrieval and dissemination of data and the planning of census publications.

B. Adequacy of existing population and housing census recommendations

- 21. The Principles and Recommendations for Population and Housing Censuses 2/which were adopted by the Statistical Commission at its twentieth session in 1979, were intended to be used as a guide to Governments and others in planning and carrying out their 1980 population and housing censuses. Prior to their adoption, the recommendations had been circulated widely to Governments and others in a draft form that drew extensively on the related work of the regional commissions. An examination of national census documents reveals that the recommendations have indeed been used in many countries in census work.
- 22. The recommendations were to remain in force until the Statistical Commission considered that revisions were warranted. While it is not anticipated that a major revision of the recommendations will be required for the 1990 World Population and Housing Census Programme, a number of developments in past years concerning the

concepts and methods of collecting and analysing certain population characteristics suggest that there is a need to issue some supplementary recommendations for the 1990 Programme. The first of these developments is the adoption in October 1982 by the Thirteenth International Conference of Labour Statisticians of the International Labour Organisation (ILO) of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment. 3/ In this resolution, new concepts and standards are set forth concerning the usually active population and currently active population, paid employment and self-employment, unemployment, and visible underemployment and invisible underemployment. The extent to which these new concepts and standards are applicable to labour force surveys is being studied by the International Labour Office and the implications of the new concepts for census operations are being studied by the Statistical Office of the United Nations Secretariat. Some of these implications are discussed in paragraphs 27 to 42 below.

- 23. The second development is the revision planned by the ILO of the International Standard Classification of Occupations (ISCO) and the revision of the International Standard Industrial Classification of all Economic Activities (ISIC) that is being carried out by the Statistical Office under the guidance of the Statistical Commission. Both classifications were last revised in 1968 and new revisions are expected to be completed in the latter part of the 1980s. It is not yet known whether the revisions will be completed in time for use in the 1990 round of censuses. Nevertheless, some issues pertaining to the revisions of ISIC, ISCO and related classifications are discussed in section III below.
- 24. A third development concerns international migration statistics. At its nineteenth session, the Statistical Commission adopted a set of recommendations on statistics of international migration and generally endorsed, at its twenty-first session in 1981, a strategy for implementing the recommendations on migrant flow statistics and immigrant stock data. With respect to immigrant stock data, the principal source of data is national population censuses and a detailed tabulation of information collected on immigrant stock (or the foreign-born population), according to the new recommendations, will greatly improve the international comparability and usefulness of data for countries of immigration as well as of emigration. Therefore, the above-mentioned recommendations need to be adequately incorporated in the recommendations for population and housing censuses.
- 25. In addition, there may be a need to consider several other topics in connection with 1990 Programme: for example, the classification of socio-economic groups and the classification of the not economically active population. The Commission's quidance in these matters is requested.
- 26. In the light of the above-mentioned issues and developments, a set of draft supplementary recommendations will be prepared by the Statistical Office and discussed by an expert group on the 1990 World Population and Kousing Census Programme which is tentatively scheduled to be convened in October 1985. Representatives of the regional commissions and interested specialized agencies will also be invited to participate in the meeting of the expert group. Assuming that the Commission agrees with this approach, the results of the group's discussion and a set of draft supplementary recommendations will be submitted to the Commission at its twenty-fourth session.

- III. IMPLICATIONS OF NEW DEVELOPMENTS IN THE CONCEPTS AND CLASSIFICATIONS OF ECONOMIC AND SOCIAL STATISTICS
- A. Resolution of the International Labour Organisation concerning statistics of the economically active population
- 27. The data on the economically active population collected in the 1980 and previous rounds of population censuses were based on international standards and definitions adopted by the Eighth International Conference of Labour Statisticians in 1954 4/ and by the Statistical Commission at its fourteenth session in 1966. 5/ Subsequent national experience with the existing standards has strongly underscored the need to modify these standards in order to enhance their usefulness in all countries and to improve further the international comparability of statistics of the economically active population. Therefore, the Thirteenth International Conference of Labour Statisticians adopted new standards concerning statistics of the economically active population (see para. 22 above).
- 28. Population censuses have been one of the principal sources of statistics on the economically active population in most countries and subdivisions thereof. It will, therefore, be necessary to adopt in future censuses the new concepts and standards in lieu of the 1954 standards. However, there are a number of serious issues that will have to be resolved if these new standards are to be fully incorporated into the 1990 round of population censuses. Conceptually, the new standards will broaden the coverage that is considered necessary to take account of economic conditions, especially in the developing countries. However, the new standards concerning the employed, particularly those in self-employment, the unpaid family worker and the unemployed are so relaxed and subjective in nature that the resulting statistics must be used with great caution in analysing and comparing trends and patterns of employment and unemployment on the basis of the 1980 round or previous rounds of censuses. In this context, it is important that for the 1990 Programme detailed guidelines be presented on how to maintain the historical comparability of the data.
- 29. One important aspect of the new standards concerns the measurement of the economically active population, employment and unemployment on the basis of a long reference period, such as one year. The new international standards specify that, in this case, the measurement should be based on the main activity status, as determined in terms of the number of weeks or days that the person was employed or unemployed during the specified long reference period. In implementing the new standards, the implications of using one year as a reference period in a census should be examined in detail.
- 30. Operationally, there remains the problem of accurately measuring in a census the economically active population and its components according to the new international standards. These components include, for example, self-employment where primary production is for own and household consumption or unemployment when the current availability for work is the main criterion for its measurement. A good deal of subjectivity will necessarily enter into the measurement of these components. In a sample survey, for which there is the possibility of using a more detailed questionnaire, the necessary probing can be incorporated directly into the

questionnaire. In a census, however, the limited number of items in the questionnaire precludes this. Two experimental studies for testing the application of the new standards in sample surveys were carried out by the International Labour Office in 1983 and 1984; the results should be available in 1985.

- 31. Likewise, some case studies will need to be carried out in the context of a census to test the feasibility of condensing the required questionnaire items into a minimal set for census purposes in order to meet the requirements of the new standards and to ensure objectivity in measuring the economically active population. Such studies will contribute to the preparation of appropriate supplementary recommendations for the 1990 round of censuses, concerning statistics of the economically active population. The studies should also deal with statistics of the not economically active population which, according to the new standards, may be taken as the residual of the total population above a specified age.
- The tabulation plan for the 1990 Programme should also be examined carefully in the light of the requirements of the new standards. In particular, the new standards stipulate that the population above the age specified for the measurement of the economically active population should be cross-classified by usual activity status (e.g., employed, unemployed, student and homemaker) and current activity status (i.e., employed, unemployed and not currently active). This recommended cross-classification serves, among other things, to link census data with that of current labour force surveys and enables the preparation of post-censal employment estimates and patterns by industry, occupation or rural or urban area. In most population censuses carried out in the 1981s and earlier, however, only one question on economic activity, embodying a reference period of one week or one year, was included. The methodological implication of the recommendation on cross-classification is far-reaching with respect to the procedures for the collection, classification and tabulation of data. In this context, the manual proposed by the Thirteenth International Conference of Labour Statisticians in its resolution should be a very valuable tool; it should be prepared urgently for use in the ensuing population censuses and surveys and focus on, inter alia, the various implications discussed above.
- 33. It is expected that an expert group on the 1990 World Population and Housing Census Programme which is scheduled to be convened in the second half of 1985 will hold detailed discussions on whether and how the new standards can be introduced in the recommendations for the 1990 round of censuses.

B. Revisions of international economic and social classifications

34. In its resolution, the Thirteenth International Conference of Labour Statisticians also recommended the classification of the economically active population by industry, occupation and status in employment (i.e., employer, employee etc.). The current international classifications of occupation, industry and status in employment originated in the late 1960s. Developments in the past decades have, however, given rise to a number of new industries and occupations and it will be necessary to make appropriate revisions of these classifications in

order to bring them up to date and make them more useful. In making revisions, it will be important to take into account changes to the existing standards concerning the measurement of the economically active population. Described briefly below are recent developments concerning the major international classifications and, taking into consideration the new standards, some of their implications for the 1990 round of censuses.

1. International Standard Industrial Classification of All Economic Activities

- 35. In the 1980 round of censuses, use was made of the International Standard Industrial Classification of All Economic Activities (ISIC) that was developed in 1968 by the United Nations. Work on the third revision of ISIC is in progress and the revised ISIC in its entirety is expected to be available around 1988.
- 36. Conceptually, the third revision of ISIC is being carried out more in reference to economic classifications relating to trade and transportable goods and less in reference to the classification of the economically active population. This approach, besides adding considerable complexity to ISIC, may have serious implications, particularly for the developing countries, in respect of its direct adoption or of the convertibility of existing national industrial classifications for the purpose of international comparability.
- 37. Further, the new standards concerning the economically active population may have a number of implications for the 1990 round of population censuses. For example, as noted in paragraph 28 above, the new standards place emphasis on the coverage of persons in self-employment, especially in the household and informal sectors, as well as on the inclusion of persons engaged in the production of goods and services for own and household consumption, as in self-employment. The classification of the latter group may pose difficulties under the approach taken to the revision of ISIC and a large number of the active population may possibly be placed under category of "not elsewhere classified". To ensure quality and comparability over time, the active population by industry must also be classified separately by paid employment and self-employment and analysed in conjunction with the related cross-classification by status in employment (see paras. 41-42 below). In addition, in the light of the new standards, there may arise a real need to provide for the separate identification of activities using modern techniques and of those using traditional techniques in order to account for a large informal sector and an unorganized labour market in developing countries. Some of these implications will need to be addressed in future work related to industrial classification in population censuses. (For more information on the revision of ISIC, see "Draft revision of the part of the International Standard Industrial Classification of All Economic Activities (ISIC) covering activities producing transportable goods" (Provisional ST/ESA/STAT/SER.M/4/Rev.3 (Part I)) which is also before the Commission at its present session.)

2. International Standard Classification of Occupations

- 38. In the 1980 round of censuses, use was made of the International Standard Classification of Occupations (ISCO) that was developed also in 1968 by the ILO. The ILO plans to revise ISCO around 1988 (work was started in July 1984) and intends to produce a manual on national classification of occupations and a macro-level ISCO. Since this development has occurred only recently, the approach to the revision has not yet been firmly set out, so that its implications for the 1990 round of censuses cannot yet be considered in detail. Nevertheless, at this stage, some implications of producing only a macro-level ISCO rather than a fully revised ISCO may be pointed out.
- 39. At present, ISCO is used as a national classification, particularly in a number of developing countries. In many of these countries, a national classification and occupational codes have not, for various reasons, been developed. (In some of these countries, ISCO is considered adequate for national purposes, while in others there is a lack of the resources needed to develop a separate national classification.) If only a macro-level revision of ISCO is to be carried out, it will be necessary for these countries to take account of developments in the occupational field since the last revision of ISCO in 1968, either on their own account or by following the example set in other countries in which circumstances are comparable.
- 40. Thus, it is to be emphasized that a fully revised ISCO will not be available, as in 1968, for the direct use by those developing countries in their future censuses or as a standard model for reference by countries that are interested in developing or revising their own national classification of occupations. The ILO does, however, plan to provide a manual containing a set of guidelines explaining how a detailed national classification can be developed to meet national needs and to reflect specific national circumstances. (For more information about the revision of ISCO, see section III of the progress report of the Secretary-General on the development of social indicators and integration of social, demographic and related statistics (E/CN.3/1985/11) which is also before the Commission at its present session.)

3. International classification of status in employment

41. The classification of status in employment recommended by the United Nations in 1966 was used in countries in the 1980 round of censuses. The classification consists of the categories (a) employer, (b) own-account worker, (c) employee, (d) unpaid family worker, (e) member of producers' co-operative and (f) persons not elsewhere classifiable by status. This classification had been used with remarkable uniformity in previous population censuses, although in some countries it has been expanded by the inclusion of additional categories at the second-digit level. The classification is expected to be increasingly used, particularly in conjunction with ISIC or ISCO in deriving classifications of socio-economic groups. (For more information concerning work on classifications of socio-economic groups, see section III of the progress report mentioned above (E/CN.3/1985/11).)

42. In this context, the new standards, in particular those concerning the unpaid family worker and persons in self-employment, will have significant implications for the present structure of this classification. The component "persons in self-employment" under the new standards seems to overlap notably with the category of "own-account workers" in the existing classification of status in employment and this matter calls for some guidance so as to ensure that there is no duplication of the classifications in future censuses. Additional implications in the light of the conceptual basis adopted for identifying the individual's occupation in the planned revision of ISCO may also arise. Therefore, the Statistical Office of the United Nations Secretariat plans, in co-operation with the International Labour Office, to carry out a detailed review and revision, as appropriate, of the international classification of status in employment as part of the 1990 Programme. Indeed, the revisions of all three international classifications require very close co-ordination among competent organizations, in particular the Statistical Office, the International Labour Office and the regional commissions, as well as consultations with national census offices in order to ensure the effective application of the classifications in the 1990 round of censuses.

IV. PROPOSED ACTIVITIES PERTAINING TO THE 1990 WORLD POPULATION AND HOUSING CENSUS PROGRAMME

A. Documentation

43. As part of its continuing work on population and housing census methods, the Statistical Office of the United Nations Secretariat is responsible for the preparation of various technical documents and publications which are used as aids in the planning and execution of censuses. The documents and publications are intended to provide information to Governments and others on recent issues and developments related to census taking and to introduce new methods and provide knowledge of experience that may be used to improve census enumeration and the processing, dissemination, utilization and analysis of data. Some of these documents and publications have been completed and others are in the process of preparation. Documentation dealing primarily with the 1990 Programme is described in paragraphs 44 to 52 below.

1. Emerging issues in population and housing censuses and their implications for national censuses during the 1985-1994 decade

44. A progress report of the Secretary-General on national experiences and emerging issues in population and housing censuses (E/CN.3/1983/16) was presented to the Commission at its twenty-second session held in March 1983. The issues discussed in that report have been summarized in section II above. After further revision and expansion, the report will be made available as a background paper to an expert group on the 1990 World Population and Housing Censuses Programme at a meeting which is tentatively scheduled to be held in October 1985. The report will be published after that meeting.

2. Supplementary census recommendations

45. A set of draft recommendations which supplement those contained in <u>Principles</u> and <u>Recommendations</u> for <u>Population</u> and <u>Housing Censuses</u> 2/ will be prepared for and discussed by the above-mentioned expert group. The draft recommendations will be submitted to the Commission at its twenty-fourth session and, if approved, will be subsequently published.

3. Handbooks and technical reports

- 46. A number of handbooks of population and housing census methods and technical reports related to general census methodology are under preparation.
 - (a) Handbook of Population and Housing Census Methods, parts I, II and V
- 47. The Handbook of Population and Housing Census Methods consists of six parts. Part III, Topics and Tabulations for Housing Censuses, part IV, Survey of Population and Housing Census Experience, 1955-1964 and part VI, Sampling in Connexion with Population and Housing Censuses have been published. 6/ The preparation of the other three parts (part I, Planning, Organization and Administration of Population and Housing Censuses, part II, Topics and Tabulations for Population Censuses and part V, Methods of Evaluating Population and Housing Census Results) has been delayed.
- 48. So that all parts of the <u>Handbook</u> can be issued and used in the 1990 Programme, the Statistical Office has collected a large amount of national course material, including questionnaires, administrative reports and methodological publications. A questionnaire on census methodology is also being sent to national statistical authorities in order to obtain specific information on the organization of national censuses and the methods used to collect data on age, marital status, household, economically active population and other subjects. The results obtained from the 1983 questionnaire on census of population and housing which was circulated by the Economic Commission for Europe will also be used in the preparation of parts I, II and V of the <u>Handbook</u>, which are scheduled for publication in 1987 or before.
- 49. In addition, efforts are being made to bring up to date part IV of the Handbook which covered the census experience of 1955-1964. The revised publication will cover the census experience of 1965-1984 and is to be submitted for publication in 1985.
 - (b) Census costs and staffing: technical study of population and housing census procedures and resource requirements
- 50. Information on the preparation of a technical study covering population and housing census costs and staffing was contained in a progress report of the Secretary-General (E/CN.3/546) which was presented to the Statistical Commission at its twenty-first session, held in February 1981. The publication of this technical study was unfortunately delayed because of the complexity of the topic and the

reassignment of the staff member working on it. Financial support was provided by UNFPA in the initial phases of the project and the study was submitted for publication in 1984. In addition, two supplementary studies of country experience in this area were issued in 1983, namely, "National studies of population census cost and staffing requirements: Hungary" (ST/ESA/STAT/104) and "National studies of population census cost and staffing requirements: Philippines" (ST/ESA/STAT/106).

(c) International migration statistics: technical report on national practices in coding country of birth or citizenship

51. In a technical report which is scheduled for completion in 1985, suggestions and guidance will be provided to Governments on how international migration statistics obtained from population censuses can be tabulated using information on country of birth or citizenship. The report will be focused on the international comparability of such tabulations.

B. Meeting of an expert group on the 1990 World Population and Housing Census Programme

52. An expert group is scheduled to be convened at United Nations Headquarters, tentatively in October 1985, to discuss the details of the implementation of the 1990 World Population and Housing Census Programme. Under the guidance of the Statistical Commission, the expert group is expected to examine various census issues that have emerged in the past decades and to consider draft supplementary recommendations for the 1990 Programme. The expert group will review and comment on the other planned census activities, including training and other forms of technical co-operation, as well as other activities that may be required in connection with the 1990 census decade. If the Commission so requests, the results of the meeting of the expert group will be reported to the Commission at its twenty-fourth session.

C. Training activities

53. In connection with the 1980 World Population and Housing Census Programme, four regional training workshops were conducted in the period 1978-1980 as a means of assisting national census officials in acquiring knowledge of methods of census operation. The workshops were organized by the regional commissions in co-operation with the Statistical Office and were supported financially by UNFPA. Participants from 15 countries took part in the first workshop which was conducted at Lagon, Ghana, in August-September 1978; participants from 18 countries took part in the second, held at Lima in October-November 1978; participants from 12 countries took part in the third, held at Manila in June-August 1979; and participants from 22 countries took part in the fourth, held at Damascus in January-February 1980. This type of training activitity is very effective: senior national census officials learn about the new methods of census operation and the experience gained in other countries in conducting censuses. The possibility of conducting similar types of training workshops in connection with the

1990 Programme is being explored. As in the past, these will be regional training activities co-ordinated through the Statistical Office. The Statistical Office has participated in other national and international census training activities, such as the regional training workshops organized by the United States Bureau of the Census in Cameroon in 1980 and in Tunisia in 1981.

D. Other technical co-operation activities

- 54. The United Nations will continue to provide support for national census programmes through technical co-operation activities. At present, the United Nations is assisting six Governments which are planning to undertake population and housing censuses in 1985 and 1986. This number is expected to increase as more Governments begin to make plans for the 1990 round of censuses.
- 55. In the 1980 census decade, a total of 106 countries received technical assistance from the United Nations in various aspects of planning and carrying out population censuses. Of these, 49 were in Africa, 24 were in Asia, 6 were in South America, 19 were in North America and 8 were in Oceania. The technical co-operation activities carried out were as follows: the provision of technical advisory services by means of country, regional or interregional advisors; the provision of training by means of workshops, fellowships and study tours; and the provision of funds for the purchase of equipment and to meet selected local costs. These types of direct technical co-operation were supported primarily by UNFPA and, within the United Nations Secretariat, were executed by the Department of Technical Co-operation for Development with substantive support provided by the Statistical Office in the planning and operational aspects of the census, including data processing. Similar efforts will be made, through technical co-operation activities, to assist countries in conducting improved census enumeration, expediting the processing and publication of census returns and increasing the utilization of census data for national development planning, daily administrative work, research and other uses. It is expected that UNFPA will continue to provide support to developing countries in carrying out their 1990 round of population and housing censuses. (Related technical co-operation activities are discussed in other reports of the Secretary-General (in particular, E/CN.3/1985/13 and E/CN.3/1985/16) which are before the Commission at its present session.)

E. Regional census activities

- 56. The Economic Commission for Europe (ECE), the Economic and Social Commission for Asia and the Pacific (ESCAP), the Economic Commission for Latin America and the Caribbean (ECLAC) and the Economic Commission for Africa (ECA) have made plans for the 1990 Programme and their activities are briefly summarized below. The Economic Commission for Western Asia (ECWA) is also beginning to prepare for the 1990 Programme and will report directly to the Statistical Commission on its activities.
- 57. The planned activities of ECE include: (a) the collection and analysis of information on the extent to which, in the countries of the region, there has been

compliance with the ECE regional recommendations on the 1980 round of population and housing censuses (1983-1986); (b) the convening of a seminar on the evaluation of census results and methodology (May 1984); (c) the convening of an informal meeting on population censuses (first quarter of 1985); (d) the convening of an informal meeting on housing censuses (third quarter of 1985); and (e) the convening of a formal meeting on population and housing censuses (third quarter of 1986). A set of recommendations for the 1990 round of population and housing censuses will be issued after the formal meeting. Other related census activities include the convening of: (a) an informal meeting on classifications of socio-economic groups (first quarter of 1985); (b) a meeting between data-processing specialists and population and housing specialists on computer-related aspects of the census (1987 or 1988); and (c) a meeting on the results of and the methodology used in the 1990 Programme (1993 or 1994).

- 58. The planned activities of ESCAP include the provision of advisory services to Governments, upon request, to assist in the planning and implementation of their census programme, as well as the convening of regional meetings and training workshops on census aspects. Two meetings have been scheduled: (a) a workshop on intercensal sample surveys (early 1985); and (b) a working group on the regional programme for the organization of the 1990 round of population censuses (mid-1986). There has been collaboration between ESCAP and the South Pacific Commission on training in preparation for the censuses to be held in the Pacific region in 1985 and 1986. Preparations for training workshops for the entire ESCAP region, planned for the period 1987-1989, are currently being made in consultation with the Statistical Institute for Asia and the Pacific.
- 59. The activities envisaged by ECLAC include: (a) the preparation of methodological documents dealing with the application of international recommendations to national circumstances; (b) an analysis of the classifications of socio-economic groups applied in various regions of the world for the purpose of designing a new classification for the countries of the ECLAC region; and (c) the convening of a regional training workshop on population and housing censuses at which national census officers can discuss problems encountered in census planning, administration, organization, field work, sampling, processing, cartography and evaluation of census results, as well as topics and tabulations. Further, the Latin American Demographic Centre will provide support to countries at every stage of the census work and, in addition, is planning to adopt in the near future techniques based on the use of micro-computers that will enable the officers of various national organizations to be trained in new ways of analysing census data.
- 60. Activities planned by ECA for the 1990 Programme include: (a) the provision of advisory services to member States, upon request, in connection with the planning, enumeration, processing and evaluation of censuses; (b) the publication of technical reports on census and demographic statistics; and (c) the provision of substantive services to working groups and training workshops. The publications proposed include those on: (a) an evaluation of the 1980 round of population censuses in Africa (1985); (b) the methods used for and the problems involved in carrying out population and housing censuses in Africa (1986); (c) the processing of census, civil registration and sample-survey data (1987); and (d) non-sampling errors (1989). The meetings and workshops scheduled are: (a) a training workshop

for participants from French-speaking countries on census taking and the use of statistical software packages (third quarter of 1984); (b) a working group on the recommendations for the 1990 round of population and housing censuses in Africa (1986); (c) a training workshop for participants from English-speaking countries on census taking (1987); (d) a working group on the processing of census, civil registration and sample-survey data (1988); and (e) a meeting on the concepts, definitions and classifications used in population censuses and demographic and social surveys undertaken in Africa (1988).

F. Tentative calendar of preparatory activities for the 1990 World Population and Housing Census Programme

61. In order to assist in the co-ordination of proposed activities in connection with the 1990 Programme, the following is a tentative calendar of the activities so far planned:

	Activity	Dates							
1.	Meeting of an expert group on the 1990 World Population and Housing Census Programme	October 1985							
2.	Consideration by the Statistical First quare Commission of draft supplementary recommendations for the 1990 Programme								
3.	Publication of the supplementary Third quarter, 196 recommendations for the 1990 Programme								
4.	Regional census meetings:								
	(a) Economic Commission for Europe	Third quarter, 1986							
	(b) Economic and Social Commission f Asia and the Pacific	or Mid-1986							
	(c) Economic Commission for Latin America and the Caribbean	To be determined							
	(d) Economic Commission for Africa	1986							
	(e) Economic Commission for Western	Asia To be determined							
5.	Census training workshops	To be determined							

<u>Activity</u> <u>Dates</u>

6. Publications:

(a) Emerging issues in population and housing censuses and their implications for the national censuses to be undertaken during the 1985-1994 decade

Second quarter, 1986

(b) Handbook of population and housing census methods:

(i) Part I

Fourth quarter, 1987

(ii) Part II

Third quarter, 1987

(iii) Part V

Third quarter, 1986

(iv) Part IV (revision)

First quarter, 1985

(c) Census costs and staffing: a technical study of population and housing census procedures and resource requirements

Third quarter, 1984

(d) International migration statistics: technical report on national practices in coding country of birth or citizenship

Third quarter, 1985

V. POINTS FOR DISCUSSION

62. The Statistical Commission may wish to:

- (a) Review the emerging issues and their implications for the 1990 round of population and housing censuses (see sect. II above);
- (b) Comment on the implications of the new concepts and standards concerning the economically active population, including the planned revisions of the major economic classifications, and consider further work designed to promote the implementation of those concepts, standards and classifications in future population censuses (see sect. III above);
- (c) Comment on the proposed activities pertaining to the 1990 World Population and Housing Census Programme (see sect. IV above) including, in particular:
 - (i) The need for supplementary recommendations and the scope of such recommendations;
 - (ii) Other needed documentation;

- (iii) The convening of an expert group on the 1990 World Population and Housing Census Programme;
- (iv) Training and other forms of technical co-operation activity that may be needed in connection with the 1990 Programme;
- (v) Other activities that may be needed.

Notes

- 1/ Official Records of the Economic and Social Council, 1983, Supplement
 No. 2 (E/1983/12 and Corr.1), chap. I, sect. A.
 - 2/ United Nations publication, Sales No. E.80.XVII.8.
- 3/ See International Labour Office, "Thirteenth International Conference of Labour Statisticians; resolution I: resolution concerning statistics of the economically active population, employment, unemployment and underemployment" (Geneva, 1983). In this connection, see also M. V. S. Rao, "New international standards for statistics of the economically active population", Quarterly Bulletin of Statistics for Asia and the Pacific, vol. XII, No. 4 (December 1982); and International Labour Office, Bureau of Labour Statistics, "Recent changes in the international standards for statistics of the economically active population" (paper prepared for the Organisation for Economic Co-operation and Development, Working Party on Employment and Unemployment Statistics, Paris, 24-25 October 1983).
- 4/ International Labour Office, International Recommendations on Labour Statistics (Geneva, 1976), pp. 28-32.
 - 5/ Ibid., pp. 32-33.
- 6/ United Nations publications, Sales Nos. E.70.XVII.6, E.70.XVII.70 and corrigendum and E.70.XVII.9, respectively.