# Population 29 Bulletin of the United Nations





United Nations

Department of International Economic and Social Affairs

## Population Bulletin of the United Nations

No. 29 1990



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ST/ESA/SER.N/29

UNITED NATIONS PUBLICATION

Sales No. E.90.XIII.5

ISBN 92-1-151190-9

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#### IMPROVEMENTS IN THE CENSUS QUESTIONNAIRES AND HANDBOOKS THAT GATHER INFORMA-TION ON THE FEMALE LABOUR FORCE IN LATIN AMERICA

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#### SUMMARY

This article analyses the methods used by Latin American censuses of the 1980s to gather information on labour-force participation, with emphasis on possible weaknesses and strengths in measuring women's economic activity. A comparison is made with censuses of the 1970s. Census questionnaires and enumerator's handbooks are systematically examined with regard to the following: question(s) on activity status; special instructions for identifying economically active women; and the specification (or not) of minimum time worked during the reference period to classify a person as economically active.

The analysis shows a picture of general improvement in the ability of Latin American census questionnaires and enumerator's handbooks to gather information on women's labour-force participation from the 1970s to the 1980s. Two kinds of changes were observed: those specifically designed to improve the identification of economically active women and technical modifications not specifically geared to either sex. It is thought that changes of the first kind were at least partially the consequence of a specific recommendation by the United Nations Statistical Commission for the 1980 round of population censuses with reference to the gathering of information on female labour-force participation and of the activities of the United Nations Decade for Women for the general improvement of statistics on women.

#### Introduction

The United Nations Decade for Women (1976-1985) gave rise to a wave of studies, many of which emphasized the inability of statistics sys-

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tems to record the real dimension of women's contribution to development. More specifically, during those years there was an accumulation of publications addressing the issue of the population census underestimation of women's participation in the labour force in developing countries.<sup>1</sup>

Examination of census instruments to record women's economic activity was done in a particularly systematic way for the Latin American censuses of the 1970s (Recchini de Lattes and Wainerman, 1979 and 1986; Wainerman and Recchini de Lattes, 1981). Now, on the eve of the 1990s censuses, it is appropriate to examine the 1980 censuses in the light of the activities of the Decade to improve the quality of statistics on women. This article presents an analysis of the methods used by Latin American censuses of the 1980s to gather information on labour-force participation, with emphasis on possible weaknesses and strengths in recording working women. The analysis reveals the improvements over the censuses of the 1970s. It is hoped that it will be of use to census bureaux in developing regions other than Latin America.

### International recommendations for population censuses and the Decade for Women

The international recommendations for population censuses aim at guiding countries in the improvement and comparability of census results. Since recommendations are addressed to countries of very different socio-economic and cultural backgrounds, the definitions and specifications of topics are rather general. For this reason recommendations do not provide operational advice about the questionnaire (i.e., question wording) or about the instructions to be given to census enumerators. Recommendations are on broad procedures, leaving room for each country to take its own decisions in the planning of the census, and particularly in the preparation of the questionnaire (type and format, wording and arrangement of questions) and the enumerator's handbook.

Two sets of recommendations have been guiding Latin American censuses since 1950: those formulated by the Statistical Commission of the United Nations Secretariat and those emanating from the Committee for the Improvement of National Statistics (COINS) of the Inter-American Statistical Institute (IASI). On the economic characteristics of the population, both sets of recommendations are based on the International Labour Organisation (ILO) recommendations on the subject. Because of their common origin and the fact that the two organizations work closely together, the sets of recommendations have been practically identical for every census round.

Up until the 1980s, census recommendations used the labour-force approach to register economic characteristics of the population.<sup>4</sup> (Some of the concepts used in that approach have provoked widespread comment and criticism,<sup>5</sup> which need not be dealt with here.) Recommendations were written without attention to sex until the 1970s—that is, they ignored the diversity of circumstances and characteristics of economic activities per-

formed by women and men and the particular problems encountered by the collection of statistics on female work. The United Nations recommendations for the 1980 censuses were a clear departure from that trend, since they included, in paragraph 2.190, a warning about the difficulties of classifying women as economically active. The paragraph emphasized the need explicitly to instruct the enumerators "to ask about the possible economic activity of the women in the household exactly as they do for men" (United Nations, 1980a, p. 93).

The introduction to paragraph 2.190—probably drafted earlier than 1980—was part of a series of activities undertaken in relation to the United Nations Decade for Women.<sup>6</sup> In 1980 the Programme of Action for the Second Half of the Decade recommended that the United Nations, the regional commissions and the specialized agencies collect and publish statistics on women, and produce studies for the improvement of indicators and statistics on the situation of women (United Nations, 1980b). The Decade's general activities probably contributed to wider awareness of women's issues, which no doubt had an indirect influence on the persons in charge of census tasks.

#### A QUALITATIVE ANALYSIS OF CENSUS INSTRUMENTS

Certain aspects of the questionnaires and enumerator's handbooks used in the 1970 Latin American censuses to gather information on activity status have already been extensively analysed: the questions (or headings) in the questionnaires and the corresponding instructions in both questionnaire and handbook; the reference period for the definition of economic activity; the minimum-time requirement for a person to be classified as belonging to the labour force; and the general instructions to enumerators. The analyses found frequent technical and conceptual problems; inconsistencies of two types—between a question and the corresponding instruction or between questions; and some gender biases encouraging the identification of women as homemakers instead of as economically active (Recchini de Lattes and Wainerman, 1986).

The measurement of activity status by the 1980 censuses does not show dramatic changes in comparison with the 1970s. Questionnaires and handbooks show small modifications from the 1970s to the 1980s, some of them clearly in the direction indicated in the above-mentioned paragraph 2.190 of the 1980 United Nations recommendations. Frequent imperfections in the 1970 censuses are less common or no longer found in the 1980s, and, on the whole, a positive picture emerges.<sup>7</sup>

The section below presents a global analysis of instruments used by the 1980 Latin American censuses for the measurement of the labour force, with emphasis on the continuation of or departure from the patterns observed for the 1970s. Table 1 lists the 20 Latin American censuses taken in the 1970s analysed in a previous work by Wainerman and Recchini de Lattes (1981), and the 16 taken in the 1980s up to early 1988 and analysed here. (English-speaking Caribbean countries have not been included in the

TABLE 1. DATES OF LATIN AMERICAN CENSUSES OF THE 1970s AND 1980s

Country	1970s	1980s
Argentina	30-9-1970	22-10-1980
Bolivia	29-9-1976	
Brazil	1-9-1970	1-9-1980
Chile	22-4-1970	21-4-1982
Colombia	24-10-1973	15-10-1985
Costa Rica	14-5-1973	10-5-1984
Cuba	6-9-1970	11-9-1981
Dominican Republic	9-1-1970	12-12-1981
Ecuador	8-6-1974	28-11-1982
El Salvador	28-6-1971	
Guatemala	26-3-1973	23-3-1981
Haiti	31-8-1971	30-8-1982
Honduras	6-3-1974	
Mexico	28-1-1970	4-6-1980
Nicaragua	20-4-1971	
Panama	10-5-1970	11-5-1980
Paraguay	9-7-1972	11-7-1982
Peru	4-6-1972	12-7-1981
Uruguay	21-5-1975	23-12-1985
Venezuela	2-11-1971	21-10-1981
TOTAL	20	16

Source: Demographic Yearbook 1983 (United Nations publication, E/F.84.XIII.1) and information kindly supplied by the Centro Latinoamericano de Demografía (CELADE).

analysis, since both their census practices and their cultural patterns differ greatly from those of the rest of the region.) The analysis is based on questionnaires and enumerator's handbooks of all 1980 censuses except that of Cuba, for which only the questionnaire was available to the author.

#### THE QUESTION(S) ON ACTIVITY STATUS

The 1970s census questionnaires used one of two approaches to gather information on activity status: a question that interviewers had simply to read to respondents, or a heading (title) in the questionnaire which left enumerators free to improvise whatever phrase they chose to gather the information (Wainerman and Recchini de Lattes, 1981, pp.81-92). The heading—clearly the poorer of the two instruments, since it does not assure consistent presentation—was used by four countries in 1970 (Costa Rica, Haiti, Peru and El Salvador) but by none of the 16 censuses examined for the 1980s, which used one or more questions.

As in the 1970s, the 1980s questions were of the form "What did you do during the past week?". The question was followed by the presentation of a list of precoded alternative answers, the first of which was "worked" or something similar, followed by one or two alternatives for the "unemployed" category (looking for a job, whether having worked before or not) and, finally, by those referring to economically inactive persons (i.e., homemaker, student, retired). In the 1970s, 10 out of the 13 censuses

which used a question instructed the interviewer to stop at the first affirmative answer. The order of presentation of the alternatives attempted to give priority to the economically active. But three of the 1970 censuses instructed interviewers to read all the alternatives, probably inducing many women to choose among the options that appeared most desirable (such as homemakers or students) and thus failing to record many of the women as economically active. In 1980, all but one of the censuses (Guatemala) instructed interviewers to stop at the first affirmative answer.

In 1970 three census questionnaires gave more than the usual space to the activity status topic, using more than one question to collect the information: Brazil (three), Panama (two) and Venezuela (eight).<sup>8</sup> In 1980 the same group of countries plus the Dominican Republic used several census questions for the topic.

Brazil drastically changed the instrument used in 1970, substantially improving it. Instead of the confusing double negative of 1970,<sup>9</sup> the 1980s instrument was split in two, with a wording very similar to that in censuses using just one question. The first question ("Did you work in the last 12 months?") supplied information on persons who worked. For those who answered negatively, the second question covered the alternatives, the first one being "looking for a job, having worked before or not", to which the rest of the usual alternatives followed (retiree etc.).

The first two questions of the Panamanian census ("Did you work or have any employment last week?" and "Did you look for a job last week?") provided alternatives only to economically active persons: the employed and the unemployed. But, in an attempt not to misclassify anyone who might have incorrectly answered negatively to both questions, a third question asked why the person was not looking for a job. The first four alternative answers to the last question <sup>10</sup> would have "rescued" persons wrongly classified in the first two as economically inactive. The last seven alternatives provided the usual "inactivity" categories.

The Venezuelan 1980 set of seven questions <sup>11</sup> was similar to the 1970 set. The 1980 census was previously highlighted as an outstanding instrument for recording economic activity, since the investigation on activity status was as detailed as in a household survey questionnaire (Wainerman and Recchini de Lattes, 1981). The group of seven questions used by the Dominican Republic census of 1981 resembled those of the Venezuelan, or, again, those of a household survey, questionnaire. In short, both questionnaires were designed with an emphasis on labour-force measurements and therefore probably met that objective more efficiently than censuses that did not emphasize the topic.

The Mexican census could be added to the list of those that gave additional space to the investigation of activity status. Although, formally speaking, the 1980 census used only one question (a question with only one identification number in the questionnaire), in reality it used many questions, since each of the alternative answers was presented with a carefully phrased question. For example, the alternative for "employed" read: "Did you work as a salaried worker, or as an employer, on your own

account, or as a member of a production co-operative?" This type of instrument undoubtedly more fully ensures the consistency of presentation of the alternatives to interviewees—so necessary for the validity of the results—and it is, therefore, a clear improvement over the 1970 census.

This brief analysis demonstrates a significant improvement from the 1970s to the 1980s in the census instruments that measure activity status. Although the improvement is far from general, the proportion of censuses with relatively good questionnaires is higher in the 1980s.

#### SPECIAL INSTRUCTIONS TO IDENTIFY ECONOMICALLY ACTIVE WOMEN

Only two of the 1970 censuses included specific instructions to enumerators for detecting those who were economically active but could have been incorrectly classified otherwise. In those two cases the handbooks indicated that when a respondent declared himself or herself a homemaker, student or retired person, the interviewer should verify that the person really had not worked.

Many of the 1970 census manuals encouraged interviewers to classify women as homemakers, either by the way the instruction was phrased (saying, for example, that "women should be classified as homemakers", instead of using a gender-free expression like "persons"), or by presenting graphic illustrations with female characters in domestic roles and male characters involved in economic activities (see fig. I) (Wainerman and Recchini de Lattes, 1981, pp. 79-99).

In the 1980s most censuses had changed their approach. The majority of the enumerator's manuals either avoided a stereotyped presentation of instructions and illustrations or explicitly warned against the sexual stereotype.

All the countries except Brazil avoided the stereotype. 12 Seven of them 13 also warned interviewers against it. In those seven cases, manuals instructed interviewers to continue the investigation for women who had been reported as homemakers, since those women might also have been doing some work for profit and, if so, should be classified as economically active. Most of the seven countries also gave examples of economic activities that women usually engage in at home preparing food or sweets for the market; working as a weaver, a laundress etc.). That device probably helped to recover many economically active women otherwise recorded as inactive. An eighth census (Colombia) noted in its instructions that homemakers were not necessarily women and, in doing so, warned against that frequent domestic stereotype.

Two additional censuses went beyond avoiding the stereotype but did not go so far as to warn against it. Both employed graphic illustrations helping to suggest that women were frequently engaged in economic activities. The female characters in the illustrations of the Dominican Republic census play exclusively economic roles, while the Peruvian illustrations include women engaged in both domestic and economic activities, acknowledging the double role often played by them (fig. II).

Figure I. Illustrations for the activity status question from the enumerator's handbook, Bolivian population census of 1976



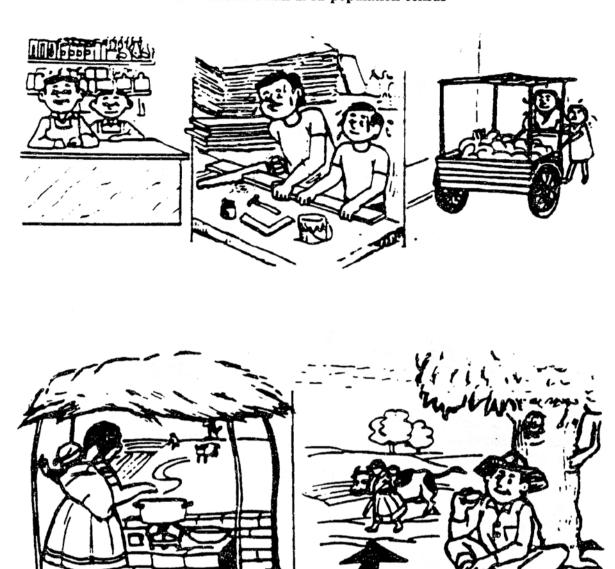
- 1. Did you work?
- 2. You didn't work but did you have a job?
- Unemployed?
- 4. Did you look for a job for the first time?
- 5. Only domestic chores?
- 6. Only student?
- 7. Retired?

Unfortunately not all graphic illustrations of the 1980 censuses followed the pattern of those two. In the Ecuadorian and Paraguayan censuses, the instructions for the activity status questions depicted exclusively male figures engaged in economic activity and female figures as homemakers. Nevertheless, they differed from those of the 1970s in certain important ways: they avoided stereotyped wording, they utilized drawings of female characters engaged in productive activities in the questions about industry or employment status addressed to those economically active and, in the case of the Ecuadorian census, they warned against the sexual stereotype.

#### TIME REQUIREMENT TO CLASSIFY A PERSON AS ECONOMICALLY ACTIVE

An important element in census questionnaires and enumerator's handbooks is specification (or not) of a minimum amount of time worked during the reference period in order to classify a person as economically active and, for those schedules that include a time requirement, the way it is used. Since full-time work is conceptually different from part-time, a variation in the treatment of the minimum time requirement is crucial to the comparability of labour force among countries, especially among women, because part-time and occasional employment are much more fre-

Figure II. Illustrations for the question on activity status from the Peruvian 1981 population census



The upper panel depicts persons who work in a family business. The lower panel depicts a typical situation in rural areas: a woman prepares the family meal and does productive agricultural work.

quent among adult women than among adult men. The ways chosen to operationalize the concept led to a number of problems for the validity and reliability of labour-force measurement.

Different treatments of the time requirement introduced considerable extraneous variation into the 1970 round of Latin American censuses. The differences reflected the lack of an international standard on this aspect of the conceptual definition of labour force. Latin American censuses range from no time requirement to time specifications varying from almost full-time workers (most of the reference period) to occasional workers (such as when the census required as little as one hour per week to classify a worker among the economically active), as can be seen in table 2.

The 1980 censuses present a similar picture. Most censuses (10 out of the 16) required—vaguely or precisely—an amount of time that the person

Table 2. Minimum time that classifies persons as economically active in Latin American censuses of the 1970s and 1980s<sup>a</sup>

Not stated	One hour	One day	Part of reference period	Most of the week
		1970		
Brazil	Colombia	Chileb	Dominican	Argentina
El Salvador	Costa Rica	Cuba	Republic	Chilec
Haiti	Mexico	Guatemala		Ecuador
Panama	Venezuela <sup>d</sup>	Honduras		Nicaragua
Peru				Paraguay
Uruguay				Venezuela
		1980		
Argentina	Colombia	Guatemala	Brazil <sup>e</sup>	Chile
Cubac	Costa Rica		Panama <sup>f</sup>	Ecuador
Dominican Republic	Peru		Venezuela	Paraguay
Haiti				
Mexicog				
Uruguay				

<sup>&</sup>lt;sup>a</sup>Information is based on either questionnaire or handbook, unless otherwise stated.

had to have worked during the reference period in order for the person to be included among the "working". As in the censuses of the previous decade, the amount of time varied from a maximum of "most of the period" to a minimum of "at least one hour". Six censuses do not stipulate any time at all. Details on the amounts of time and the countries are given in the footnotes to table 2.

The censuses that included a time requirement used various ways to specify it, both in the 1970s and in the 1980s. The ways reveal a lack of attention to technical details, which later became a source of error in the collection of statistics on the economically active population. The two most frequently identified problems, in both census rounds, were vagueness (in definition or instructions) and inconsistency between questionnaire and handbook or between questions.

Apart from the six 1980 censuses not specifying any minimum working time, three different formats were identified according to the degree of precision established in the questionnaire and/or the manual among the 10 censuses that set such criteria:

<sup>&</sup>lt;sup>b</sup>According to enumerator's handbook.

<sup>&</sup>lt;sup>c</sup>According to questionnaire.

d"A few hours", according to enumerator's handbook.

e"Part of the time" (of the 12-month reference period) was required to classify a person as working. The "last two months" was required in the categories "looking for a job—already worked" and "looking for a job—never worked before".

<sup>&</sup>quot;No matter what amount of time."

gThe first two alternatives on activity status—working—were immediately followed by a question on the number of hours worked. It is not known whether the number was used to classify the population as economically active.

- (a) The questionnaire did not make any reference to time, but the interviewer's manual defined the precise amount of time that was necessary in order for a person to be counted as a worker (Colombia, Costa Rica, Guatemala, Panama and Peru);
- (b) The questionnaire stated vaguely "most of the period", and that formula was repeated in the manual with no further clarification (Chile, Ecuador and Paraguay);
- (c) A definition with a time requirement was only vaguely stated in the manual (Brazil and Venezuela).

None of the three formats ensured that the time-requirement expression to interviewees would be consistent and precise. The first format is precise but, since it was not incorporated into the questionnaire, it was up to interviewers to improvise a phrase to comply with the instruction. The second format assured consistent presentation but, since it was only vaguely defined, was not effective because its interpretation could have varied from person to person. The third format is the worst, since it is vague and does not ensure consistency of presentation. Thus, the 1980 censuses did not improve over the 1970 censuses in this regard and are considered poor instruments.

An analysis of the 1970 censuses also revealed a lack of consistency between the question on activity status and the definition of the unpaid family worker with regard to the requirement of minimum time. Since in developing countries the proportion of economically active women in that category is usually higher than that of economically active men, problems arising from inconsistency in the measurement instruments affect women disproportionately. In the 1970s the majority of Latin American censuses, following the international recommendations, defined "unpaid family worker" as a person working at least 15 hours a week. The definition was, however, inconsistent, in most cases with either a shorter or a very vague time requirement for the "economically active", or even with a complete lack of it. (Details on countries are presented in table 3.) Since in census questionnaires the question on activity status comes before the question on employment status—acting in fact as a filter for the rest of the questions on economic characteristics—a problem arises when a person who is classified as active in the first question does not satisfy the time requirement to be classified as unpaid family worker in a following question.

Table 3 shows an improved situation in the 1980s: most censuses specified consistent time requirements for family workers and economically active people in general. The Uruguayan census was a special case, since the definitions for the economically active person in general and for the family worker in particular were inconsistent, but it provided instructions to solve the inconsistency problem. <sup>15</sup> Only four censuses required a longer time (15 hours a week, or one third of the normal working day) to classify a person as a family worker than to classify that same person as economically active (one day, one hour, any time, or no requirement at all. See tables 2 and 3). <sup>16</sup>

Table 3. Consistency or inconsistency between time requirement for classification as economically active and as unpaid family worker: Latin American censuses of the 1970s and 1980s<sup>a</sup>

Consistent	Inconsistent	No time requirement for either definition
	1970s	
Argentina	Chile	Brazil
Bolivia	Colombia	El Salvador
Costa Rica	Cuba	
Dominican Republic	Guatemala	
Ecuador	Haiti	
Nicaragua	Honduras	
Paraguay	Mexico	
	Panama	
	Peru	
	Uruguay	
	Venezuela	
	1980s	
Brazil <sup>b</sup>	Colombia	Argentina
Chile	Guatemala	Dominican Republic
Costa Rica	Panama	Haiti
Ecuador	Peru	Mexico <sup>c</sup>
Paraguay		
Uruguay <sup>d</sup>		
Venezuela		

<sup>&</sup>lt;sup>a</sup>If the time requirement for classification as economically active is longer than or equal to the time requirement for classification as family worker, both definitions are considered consistent. If the time requirement for classification as economically active does not exist or is shorter than the time requirement for classification as family worker, the definitions are considered inconsistent. Information is based on both questionnaires and enumerator's handbooks. The 1981 Cuban census has not been listed, because the handbook was not available to the author.

<sup>b</sup>Since the reference period for activity status is 12 months and the time requirement for unpaid family worker is 15 hours per week, it is not known how in practice enumerators stated the question.

<sup>c</sup>The Mexico census questionnaire has an additional question on the number of hours worked for the employed in general and the unpaid family worker in particular under the topic of activity status.

<sup>d</sup>Uruguay is a very special case. There was no time requirement for classification as economically active, and the requirement for family workers was at least 15 hours a week—that is, both definitions were inconsistent. But there were clear instructions for enumerators to solve the inconsistency.

#### Conclusions

This analysis has shown improvements in the census instruments that gather information on women's labour-force participation from the 1970s to the 1980s. The changes were of two types: questions that specifically facilitated the identification of women workers, and technical modifications not geared to any specific sex. It is likely that changes of the first kind were the consequence, at least partially, of paragraph 2.190 in the United Nations recommendations for the 1980 population censuses on activity status. That paragraph highlights the particular problems that censuses face

in identifying economically active women and provides guidance for avoiding them. The recommendation was probably reinforced by activities of the United Nations Decade for Women for the improvement of statistics on women.

It seems obvious, from the analysis of the Latin American censuses of the 1980s, that efforts were made in the region to avoid the sexual stereotypes frequently present in censuses of the previous decade and to instruct enumerators to probe further whenever domestic roles were reported for women. Census instruments such as graphic illustrations suggested that women frequently played economic roles. What is not known is whether interviewers followed the instructions provided.

The 1980 census instruments were improved in the following ways:

- (a) They all used a question rather than a heading or a title in the questionnaire;
- (b) They all gave priority to economic activity among precoded alternative answers to the question on activity status, and most instructed the interviewers to stop at the first positive answer;
- (c) More of them than in the 1970s emphasized the investigation of activity status, giving it more space in the questionnaire;
- (d) There was closer agreement as to the minimum time requirement for two classifications: economically active and unpaid family worker.

While these changes affect women and men, they are likely to have a disproportionately larger influence on the data on women, because women more frequently work part-time or in occasional employment and they tend to be assumed more often to have non-economic roles.

As in the 1970s, the 1980 censuses varied in their specifications of the minimum amount of time a person had to work in order to be classified as a member of the labour force. The lack of a common standard makes it difficult to compare the measurements of labour-force participation in the countries of the region. Even worse, most 1980 censuses that included a minimum time requirement stated it vaguely and gave no clear instructions to interviewers about it.

In short, specific and general improvements were observed from the 1970s to the 1980s in the instruments used to measure female labour-force participation by Latin American population censuses. <sup>17</sup> But there is still a long way to go before population censuses become completely reliable sources of such information. For the 1990 censuses we can expect greater consciousness of the problems involved in identifying economically active women and ways to deal with those problems. Yet, census bureaux of the region will have to deal with new international recommendations—that is, recommendations and guidelines based on new definitions of the labour force (ILO, 1983 and United Nations, 1986). To put those new—and imprecise—definitions into reliable measurement instruments will not be easy, since there will be little experience of them. Developing countries will have to be assisted in conducting further research and encouraged to share experiences among themselves.

#### Notes

<sup>1</sup>Some of the studies were initiated before the Decade (Durand, 1975), while others were probably influenced by the activities of the Decade (Baster, 1981; Dixon, 1982; Safilios-Rothschild, 1982; Zurayk, 1983; and Paiva, 1984). Many were directly sponsored or carried out by the United Nations (Recchini de Lattes and Wainerman, 1979; D'Souza, Robboni and Rohman, 1976; Wainerman and Recchini de Lattes, 1981; Anker, 1983; and United Nations, 1984b and 1985.

<sup>2</sup> Those analyses also provided quantitative estimates for various countries of the underestimation of female labour-force size as measured by censuses compared to alternative statistical sources.

<sup>3</sup>The two organizations have collaborated on the improvement of census statistics since the 1950s. For example, United Nations staff are listed among the participants at IASI meetings, and IASI representatives are listed as participants in meetings organized by the United Nations for discussion of, or in relation to, the preparation of the various census rounds (IASI, 1953 and 1958; United Nations, 1958b and 1961).

<sup>4</sup>The International Labour Organisation's new recommendations for measuring economic activity would affect the 1990 censuses, since the new ILO definitions were adopted by the United Nations (United Nations, 1986).

<sup>5</sup> For example, about the lack of clarity in the concept of work (Blacker, 1978 and 1980; Seltzer, 1978; Dixon, 1982; and Anker, 1983).

<sup>6</sup>The Statistical Office, which was in charge of drafting the recommendations for the 1980 censuses, also produced many documents relating to the quality of statistics on women (United Nations, 1976, 1980b, 1984a, 1984b, and 1985). Those documents contributing to discussions on the conceptual and technical problems of populations censuses adequately to register women workers, probably helped to prepare the way for the important changes introduced by the 13th International Conference of Labour Statisticians of ILO, in 1982 (ILO, 1983).

<sup>7</sup>This does not necessarily mean a general improvement in census results, since census quality depends on much more than just questionnaires and enumerator's handbooks.

<sup>8</sup>Obviously, more space does not necessarily mean better quality, although it generally does. The 1970 Brazilian census was the exception to the rule. The validity and reliability of its three questions to measure economic activity of women were judged very poor in a previous analysis (Wainerman and Recchini de Lattes, 1981, pp. 86-89).

<sup>9</sup> "Se neo trabalha, nem procura trabalho, qual a ocupacao ou situacao que tem e considera principal?" (If you are not working or looking for a job, what is your occupation or the activity that you consider principal?) This question was followed by a set of pre-coded alternatives, the first one of which was "homemaker". A second question asked about occupation in the previous 12 months. For more details see Wainerman and Recchini de Lattes (1981), pp. 86-89, or Recchini de Lattes and Wainerman (1986), p. 744.

 $^{10}$  (a) Does occasional jobs; (b) Has been looking for a job during the past three months; (c) Was looking for a job before and is now waiting to be hired; and (d) It is impossible to find a job.

11 "1. In which one of these situations were you *last week*? Working, looking for a job, etc. 2. Did you receive or are you going to receive payment in money for work you did at home or outside the home last week? (An enumeration of possible tasks followed.) 3. Last week did you work without receiving a payment in money, at your home or in a store, factory, workshop, agricultural enterprise etc. belonging to any member of your family? 4. Did you take any action during the past 30 days to find a job? 5. Did you work before, full- or part-time with payment in money? 6. How long have you been without a full- or part-time paid job? 7. How many hours did you work last week (or how many hours a week did you regularly work) in all your jobs (or how many hours did you regularly work in your last job or employment)?"

<sup>12</sup> The exceptional case of Brazil deserves a separate comment. The manual states that women who had worked any part of the previous 12 months should be classified as economically active even if they were not currently working because they had married and/or had given birth. This is part of a broader instruction intended to classify as economically active persons who work only part of the year. But this particular sentence can have mixed, if not only negative, consequences. The hidden assumption is that married women or those bearing

children do not work. The instruction would have helped to register more accurately those women who married or gave birth during the year. However, it is possible that it worked in a more subtle way, reinforcing the misconception that married women or women bearing children do not work, and thus inducing interviewers to skip the question for those women who appeared to be married and/or with children.

<sup>13</sup> Costa Rica, Ecuador, Guatemala, Haiti, Mexico, Panama and Venezuela.

<sup>14</sup> This proportion is lower than the one observed for the 1970 censuses, when 14 out of 20 censuses included a time requirement.

<sup>15</sup> The Uruguayan census followed the international recommendation of a minimum of 15 hours of work a week to classify a person as an unpaid family worker. But by not requiring any minimum time for the classification of economically active in general, it specifically instructed the interviewer to go back to the question on activity status in those cases where a person declared himself or herself an unpaid family worker and reported having worked less than 15 hours a week.

<sup>16</sup> The Brazilian census could be considered a fifth case. Consistency is difficult to establish, since the time requirement for the classification of economically active was "part of the time", with a reference period of 12 months, and the requirement for unpaid family worker was "at least 15 hours a week".

<sup>17</sup> These improvements do not necessarily mean that 1980 census results were better than those for previous censuses in a particular country. No country-by-country trend analysis was carried out, and, even if instruments to measure labour-force participation have improved, a more general evaluation of censuses than the one done here would be necessary before such a conclusion could be reached.

#### REFERENCES

- Anker, Richard (1983). Female labour force participation in developing countries: a critique of current definitions and data collection methods. *International Labour Review* (Geneva), vol. 122, No. 6 (November-December).
- Barbieri, M. Teresita de (1978). Notas para el estudio del trabajo de las mujeres: el problema del trabajo doméstico. *Demografia y Economía* (Ciudad Mexico), vol. XII, No. 1.
- Baster, Nancy (1981). The Measurement of Women's Participation in Development: The Use of Census Data. Brighton, England: Institute of Development Studies, University of Sussex.
- Blacker, J. G. C. (1978). A critique of the international definitions of economic activity and employment status and their applicability in population censuses in Africa and the Middle East. *Population Bulletin of the Economic Commission for Western Asia* (Beirut), No. 14 (June).
- \_\_\_\_\_(1980). Further thoughts on the definitions of economic activity and employment status. *Population Bulletin of the Economic Commission for Western Asia* (Beirut), No. 19 (December).
- Dixon, Ruth B. (1982) Women in agriculture: counting the labor force in developing countries. *Population and Development Review* (New York), vol. 8, No. 3 (September).
- D'Souza, Stanislaus, A. K. M. Rabbani and S. Rahman (1976). 1974 census estimates of fertility levels in Bangladesh. Unpublished paper presented at COX's Bazaar Seminar, Bangladesh, December 1976.
- Durand, John D. (1975). The Labor Force in Economic Development. Princeton: University Press.
- Inter-American Statistical Institute (1953). The Story of the 1950 Census of the Americas. Washington, D.C.: Pan American Union.
- (1958) Censo de Población. Bases para su planeamiento bajo el Programa del Censo de las Américas de 1960. Washington, D.C.: Pan American Union.
- International Labour Organisation (1983). Resolution concerning statistics of the economically active population, employment, unemployment and underemployment (resolution I). In Thirteenth International Conference of Labour Statisticians, Geneva, 18-29 October 1982.

- Paiva, Paulo de Tarso Almeida (1984). A concentração e a enumeração da população economicamente ativa nos censos demográficos Brasileiros. In Censos Consensos Contra-Sensos, III Seminário Metodológico dos Censos Demográficos. Ouro Prêto, Brazil: Associação Brasileira de Estudos Populacionais.
- Recchini de Lattes, Zulma and Catalina H. Wainerman (1979). Data from censuses and household surveys for the analysis of female labour in Latin America and the Caribbean: appraisal of deficiencies and recommendations for dealing with them (E/CEPAL/L.206). Santiago, Chile: Economic Commission for Latin America.
- \_\_\_\_\_(1986). Unreliable account of women's work: evidence from Latin American census statistics. SIGNS (Chicago), vol. II, No. 4 (Summer).
- Safilios-Rothschild, Constantina (1982). The persistence of women's invisibility in agriculture: theoretical and policy lessons from Lesotho and Sierra Leone. Center for Policy Studies, Working Paper No. 88. New York: Population Council.
- Seltzer, William (1978) A reply. Population Bulletin of the Economic Commission for Western Asia (Beirut), No. 14 (June).
- United Nations (1958a). Manual de Métodos de Censos de Población, Vol. II. Características Económicas de la Población. Sales No. 58.XVII.6 (vols. 1, 2, and 3).
- (1958b). Principios y Recomendaciones Relativos a los Censos Nacionales de Población. Sales No. 58.XVII.5.
- (1961). Seminario sobre evaluación y aprovechamiento de los resultados censales en América Latina (E/CN.9/CONF.1/1/Rev.1).
- (1967). Principles and Recommendations for the 1970 Population Censuses. Sales No. 67.XVII.3.
- \_\_\_\_\_(1976). Report of the World Conference of the International Women's Year, México City, 19 June-2 July 1975. Sales No. E.76.IV.1.
- \_\_\_\_\_(1980a). Principles and Recommendations for Population and Housing Censuses. Sales No. E.80.XVII.8.
- \_\_\_\_\_(1980b). Report of the World Conference of the United Nations Decade for Women: Equality, Development and Peace, Copenhagen, 14-30 July 1980. Sales No. E.80.IV.3 and corrigendum.
- \_\_\_\_\_(1984a). Compiling Social Indicators on the Situation of Women. Studies in Methods. Sales No. E.84.XVII.2.
- (1984b). Mejoramiento de los Conceptos y Métodos para las Estadísticas y los Indicadores de la Situación de la Mujer. Sales No. E. 84.XVII.3.
- \_\_\_\_\_(1985). Selected statistics and indicators on the status of women. In World Conference to Review and Appraise the Achievements of the United Nations Decade for Women: Equality, Development and Peace, Nairobi, Kenya, 15-26 July 1985 (A/CONF.116/10).
- (1986). Draft Supplementary Principles and Recommendations for Population and Housing Censuses (ST/ESA/STAT/SER.M/67/Add.l).
- Wainerman, Catalina H. and Zulma Recchini de Lattes (1981). El Trabajo Femenino en el Banquillo de los Acusados: La Medición Censal en América Latina. Mexico City: Terra Nova.
- Zurayk, Huda (1983). Women's economic participation. Population Council Regional Papers (Dokki, Giza, Egypt).