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

Zulma Recchini de Lattes and Catalina H. Wainerman, Consultants

This document was prepared in connexion with the project on "Research for
promoting the integration of women into Latin American development: improvement
and utilization of census, data and exchange of information", and was produced
with the collaboration of the Centro Nacional de Estudios de Población (CENEP),
Buenos Aires. The opinions expressed in this study are the exclusive
responsibility of the authors.
## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chapter I</td>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Chapter II</td>
<td>THE THEME OF FEMALE EMPLOYMENT: CONTRIBUTIONS TO AN EXPLANATION</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>2. Economic Development and Female Labour: the U-Curve</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>3. Empirical Studies of the Factors Determining the Participation of Women in the Labour Market</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>4. Use of Time</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>5. The Approach to Household Duties in Marxist Economics</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Bibliography</td>
<td>26</td>
</tr>
<tr>
<td>Chapter III</td>
<td>THE CONCEPT OF LABOUR FORCE: ITS APPLICATION IN POPULATION CENSUSES AND HOUSEHOLD SURVEYS</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>1. Measurement of the female economically active population in the 1970 Latin American censuses</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>(a) Wording of the &quot;filter&quot; question</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>(b) Time-reference period</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>(c) Minimum time worked</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>2. Measurement of the female EAP in household surveys in Latin America</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>3. Comparison between censuses and household surveys: biases in measuring the participation of women in economic activity in population censuses</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>(a) Comparison of population censuses versus household surveys</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>(b) Comparison of population census versus population survey</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>(c) Comparison of the population census versus a continuing register</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>4. Conclusions</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>Bibliography</td>
<td>65</td>
</tr>
<tr>
<td>Chapter IV</td>
<td>APPRAISAL AND SUGGESTIONS</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>1. Validity on the collection of data on activity status: operational definitions used</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>(a) Wording of the &quot;filter&quot; question</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>(b) Time-</td>
<td></td>
</tr>
</tbody>
</table>
(b) Time-reference period ........................................ 71
(c) Minimum time of activity .................................... 72

2. Gaps in the collection of data on variables relevant to the analysis and explanations of female labour behaviour ........................................... 73

3. Provision of measures which partially overcome the problem of the validity of census data on activity status ........................................... 79

4. Additional processing of data available from censuses ........................................... 89

5. Conclusions and recommendations .................. 98

Bibliography ........................................... 98

Sources of census data ........................................... 100

Appendix A Questions and instructions referring to the activity status in population censuses, household surveys and other sources in several Latin American countries ........................................... 103

Appendix B Questions referring to activity status in the household survey of Chile ........................................... 121

Appendix C Partial inventory of data available on female labour obtained from censuses and household surveys taken in Latin America and the Caribbean around 1970 ........................................... 127
Chapter I

INTRODUCTION

"Census enumerations of the labor force may be greatly influenced not only by variations of the formal definitions but also by the arrangement and phrasing of the census questions, the methods of enumeration, and the care taken by interviewers and respondents to provide complete and accurate information. Popular attitudes and preconceptions and the educational level of the population are also involved; the same questions and definitions may produce different results in different cultural settings. In general, the enumeration of females in the labor force is more sensitive than that of males to varying definitions and other factors of noncomparability and error." (Page 50.) "The problem of low reliability and poor comparability remains, especially in the census measures of female activity rates in less developed countries and of female labor force in agriculture in countries at all levels of development." (Pages 77-78.)

For any one familiar with the subject of female labour, commentaries like the above are already common places. But the inadequate coverage referred to by Durand although perhaps the most serious problem is not the only one. In addition to the inadequate quality, the quantity of data required if progress is to be made understanding a topic of such complexity is inadequate. In this latter sense, as in many other fields, the transfer of knowledge from the sphere of those who produce theory to the sphere of those who produce data is only a trickle and advances slowly.

Although the difficulties of measuring female labour are recognized as an established fact, a systematic and quantified analysis of the subject has rarely been attempted. This is the objective of this study. The field of analysis covers all the censuses and some of the household surveys taken in Latin America and the Caribbean around 1970. The fact that the survey


\*/ coverage is
coverage is not exhaustive is due to the great frequency of data collection, the diversity of models they exhibit both in the countries and among them, the lack of systematization and compiling of the material required for the analysis, etc.

This study is comprised of four chapters and three appendices. The bibliographical references quoted in each chapter appear at the end of each. Following this introductory chapter, chapter II reviews the conceptual frameworks and currently available proof relating to the participation of women in the economic sphere, particularly although not exclusively from the standpoint of supply. The contributions used come from neoclassical economic theory, marxist economics, from the approach which relates levels of economic development with the volume and structure of female labour, from the approach which centres on the use of time and from the enormous number of principal studies which investigate the factors determining female economic participation. A product of this review is the identification of those variables to which the different approaches and contributions assign most relevance. This will result in a list of conceptual variables, and, provided the information is available, a list of their operational interpretations.

Chapter III develops the history of the concept of "labour force", its utilization and modes of operationalization in censuses and surveys. It also contains a comparison between measurements of the volume of the female labour force for the same universe by pairs of sources for collecting data - censuses, household surveys and other types of studies - which use the same conceptual definition of activity status but different operational and technical definitions of registration. The object of this chapter is to appraise the degree of elaboration of the concept of labour force, identify the problems involved in drawing up the questions and instructions used to measure it, and detect and measure the biases incurred, fundamentally on the basis of the census data.

Chapter IV appraises the difficulties existing in data originating in surveys and censuses and formulates some recommendations for dealing with them. These difficulties arise both in collecting and in processing the data. In the context of data collection, two topics are discussed; one concerns the quality (validity of the operational definitions of activity status) and
status) and the other concerns the quantity of data (spectrum of variables for which data are collected). In the context of processing, a further two topics are dealt with: the type of measure to be used with already existing data which will make it possible partly to overcome their inadequacies and the additional processing which could be carried out on the basis of these data.

The recommendations proposed arise out of the confrontation between the variables contained in the conceptual frameworks (and identified in chapter II) and the variables for which the censuses and surveys collect data, and also between the pairs of measurements of female labour prepared on the basis of different data sources (analysed in chapter III).

Three appendices complete the study: the first two contain transcripts of questions and instructions referring to activity status in the censuses, household surveys and other types of data sources used in the region; the last appendix sums up in three tables an inventory (which makes no claim to be exhaustive) of the variables for which the above-mentioned sources collect data, and existing and published tabulations on female labour, excluding characteristics relating to its insertion in the economic structure.

Before going on to the substantive content of the study, it should be stressed that the limited time in which it was prepared made it necessary to select subjects and data sources. In no sense does the analysis presented here take in all the aspects which might be covered and which it would indeed be necessary to tackle in order to improve the present situation of measurements, analysis and explanation of the participation of women in economic activity. It should also be stressed that it was not the objective of this study to make specific statements of modifications to be introduced into data-collecting operations but merely to identify the areas of greatest concern and some ways of tackling them.
Chapter II

THE THEME OF FEMALE EMPLOYMENT: CONTRIBUTIONS TO AN EXPLANATION

Introduction

This chapter contains the result of a review of the conceptual frameworks and empirical evidence accumulated to date as regards the participation of women in economic activity. Although extensive this review makes no claim to be exhaustive. Its ultimate objective is to identify the variables which the different contributions suggested are relevant for studying this topic.

As will emerge from a perusal of the following pages, the different approaches cover problems of explaining female economic behaviour (essentially, although not exclusively, from the standpoint of supply), and the elucidation of the concept of "work". These approaches differ in their levels of analysis (macro or micro), the degree of theoretical development and the stage of sophistication as regards the formulation of interpretative links which connect the planes of theory and empirical fact.

The review does not include approaches in which the topic of the economic participation of women occupies a secondary and not a central position. This is the case of recent Latin American developments on "family survival strategies" (Duque and Pastrana, 1973; Aldunate, 1974; Borsotti, 1976; García y Oliveira, 1977, among others). In this line of thought the family is conceived of as a unit of consumption and production (social production and daily and generational reproduction) which generates different life strategies depending on its class situation and demographic and anthropological characteristics. The incorporation of women in the labour market is one of the possible survival strategies, as is also the incorporation of minors and other forms of behaviour relating to fertility, migratory movements, etc. The family unit in this approach acquires the status of a mediator between phenomena at the macrosocial level and phenomena at the microsocial level.
The contributions described below are the following: 1. framework of neoclassical economics; 2. economic development and female labour; 3. empirical studies of factors determining the participation of women in the labour market; 4. use of time; and 5. approach to household duties in marxist economics.

The first three basically contain contributions to the (independent) variables associated with female economic behaviour, the last two to the (dependent) variable of female economic behaviour. Only the second is maintained exclusively at the macrosocial level. Despite different theoretical orientations, two new lines of conceptualization are proposed, if not in all at least in several of the approaches; one favours the inclusion of unpaid household activity in the concept and measurement of productive work, while the other suggests that the analysis should centre on the family unit rather than the individual unit.

Each of the contributions will be presented separately, together with the identification of the conceptual variables most central to each, their operational interpretations and an indication of some of the research in which they have been employed. At the end of this chapter the reader will find the bibliographical references mentioned in the text.

1. Neoclassical Theory of Labour Supply
   (New Home Economics)

The neoclassical theory of labour centres its analysis on the explanation of supply. This approach - developed by Mincer: 1962, Becker: 1965, Lancaster: 1966 and adopted by Cain: 1966, Bowen and Finegan: 1969, Gronau: 1973, Nerlove: 1974, Kahne and Kohen: 1975, Lloyd: 1975, Standing: 1978, among others - diverts attention from the individual towards the household conceived as a unit of consumption and of production and as a decision-making unit. According to the model, the resources which are scarce are the time and the productivity of each individual member. Unlike the classical microeconomic theory, however, which divided the time of the possible suppliers of hours of work to the market between two alternative uses (work for the market and inactivity), the neoclassical approach recognizes a more complex allocation of time split between that devoted to work for the market, household duties and inactivity. In incorporating this

/new distinction
new distinction the economic analysis opens up a whole spectrum of extra-
market activities. This particularly affects women whose productive work
in the home, to which no value is assigned in the national accounts, is
recognized as susceptible of being of very great value for women and their families.

As in the classical theory the New Home Economics approach is based
on the assumption that the decision-makers are rational, capable of measuring
their states of satisfaction and of knowing exactly at any moment the price
of the goods they produce, including that of the work required, and of
knowing what is the maximum level of total utility (satisfaction) desired.
It is also based on the estimate of the operation of the contrasting effects
of income and substitution. It is considered that an increase in wages
represents an increase in the price of an hour of inactive time, and also for
a given number of hours of work an increase in income. This means that, in
relation to the quantity of hours of work offered, the income effect is
negative (when real income increases the consumption of all goods, including
inactivity, rises, thus reducing the number of hours devoted to work). At
the same time, and contradicting this (negative) income effect, once wage
increases reach a certain point they seem to result in a (positive)
replacement of inactivity by work (the opportunity cost of the time of
inactivity, i.e., non-working time, becomes more expensive).

As has been said, however, the supply of work to the market by each
member of the family unit is the result of a decision which takes account
of the circumstances of other members and not only those of the individual.
As the family is conceived as a unit in which income is unified and
consumption shared, the relevant income for such decision-making is that
of the family as a whole. An increase in this income may have very different
effects for different members of the unit. This depends on the comparative
advantages of the members in relation to the production of goods for the
market and the household; these comparative advantages being in turn
determined by the potential income and the relative productivity of each,
the product of their human capital.

/An increase
An increase in the wage supply for a particular member (while the wages of the rest remain constant) will not necessarily cause a reduction of his own working hours, even when the income effect produces a drop in the number of hours added to the work supplied by the family as a whole. Mincer (1962) for example, gave empirical proof showing that if the income capacity of the women does not vary, an increase in the family income tends to reduce their participation in the labour force. However, if family income and productivity do not vary, an increase in women's wages increases their assignment of time to the market, where they become more productive.

According to Finegan (1975), in the case of married women (and although not explicitly stated, women with small children) an increase in real wages they can obtain in the market, in addition to the usual effects of income and substitution, generates in them a special substitution effect whereby they reassign working time in the home to market work. The intensity of this special effect depends on many factors, including the possibility of replacing certain domestic goods (for example, cleaning the house, looking after the children, cooking, etc.) by certain market goods (for example, servants, crèches, meals in restaurants, etc.), including the relative prices and the clarity of these market goods.

It should be noted that the approach described does not examine the social relations between producers and products but only considers the products, and only as possessors of utility. But the emphasis on the household as the relevant decision-making unit and the inclusion of household duties as a separate category for the analysis of labour supply constitutes significant advances in the neoclassical economic tradition.
<table>
<thead>
<tr>
<th>Conceptual variable</th>
<th>Empirical variable</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential income (or income capacity, or opportunity cost of not working)</td>
<td>Level of education of the woman</td>
<td>Bowen and Finegan: 1967; Sweet: 1970</td>
</tr>
<tr>
<td></td>
<td>Average income of women who worked 50-52 weeks the preceding year (macro-level)</td>
<td>Bowen and Finegan: 1967</td>
</tr>
<tr>
<td>Need for income (or economic family pressure)</td>
<td>Husband's wage</td>
<td>Da Vanzo: 1972; Pecht: 1976</td>
</tr>
<tr>
<td></td>
<td>Total family income less wife's income</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Permanent income index (income anticipated for the husband on the basis of his-education, age, region of residence, and occupation)</td>
<td>Cain: 1966</td>
</tr>
<tr>
<td></td>
<td>Equivalent family income per adult (takes into account differential consumption needs of each adult according to age)</td>
<td>Peek: 1975; Standing: 1975</td>
</tr>
<tr>
<td></td>
<td>Equivalent family income per adult less wife's income</td>
<td>Anker, Knowles: 1977</td>
</tr>
<tr>
<td></td>
<td>Adjusted income (family income less wife's income divided by minimum income needs of the family according to structure)</td>
<td>Sweet: 1970</td>
</tr>
<tr>
<td></td>
<td>Income per adult</td>
<td>Nerlove, Schult: 1970</td>
</tr>
<tr>
<td></td>
<td>Income husband less income &quot;threshold&quot;</td>
<td>Encarnación: 1974</td>
</tr>
<tr>
<td>Economic participation (time)</td>
<td>Annual number of hours worked (weeks worked in the year x hours worked during the census week)</td>
<td>MacCabe, Rosenzweig: 1976</td>
</tr>
<tr>
<td></td>
<td>Number of hours per week</td>
<td>Peek: 1976, Angulo and Rodríguez: 1975</td>
</tr>
</tbody>
</table>
2. Economic Development and Female Labour: the U-Curve

This is a macrolevel approach, essentially the product of empirical generalizations. It presupposes that throughout the economic development process the participation of women in economic activity describes a U-shaped curve, i.e., reaches relatively high levels at the early and late stages and relatively low levels in the intermediate stages. This process would seem to derive from the fact that at the start of industrialization, when a high percentage of workers is concentrated in the agricultural sector and the number of manufacturing and trading enterprises restricted to domestic production is fairly significant, the level of integration of women in the labour force is high. At this stage, the majority of goods and services are produced and consumed within the family group; there is no rupture within a unit in which both domestic and economic functions are concentrated.

In a second stage, as income grows and an ever-greater use of capital and technical know-how increases productivity, the proportion of agricultural workers required per capita diminishes since the (relatively inelastic) demand for food grows more slowly. More and more people specialize in individual jobs and the economic autarchy of the family group is superseded by the interchange of goods and services. When the level of economic development induces an increasing number of people to leave small trade and household industry and when parallel to this migration takes place from urban to rural areas, the rate of activity of women tends to decrease.

The differentiation of domestic and economic functions creates a conflict between the domestic and the economic role which at first glance seems insuperable. It can only be modified when the sectoral structure of the economy is sufficiently changed to offer sufficient opportunities for employment, which generally takes place through the growth of the services sector, concomitant with the increase in the productivity of agricultural and manufacturing activities. At a much more advanced stage of development, with the incorporation of women in the services sector, female economic participation will once again begin to grow.

*/  For a more exhaustive review of this approach, see Recchini de Lattes and Wainerman, 1977.

In brief:
In brief, the high rate of economic participation of women in the first leg of the U-curve would develop predominantly within domestic limits and generally speaking would be unpaid; however, the high rate of participation in the last leg would be predominantly extradomestic and remunerated.

This hypothesis of the historical changes in the labour performance of women was drawn up by Sinha (1965) on the basis of synchronic data from different countries. In an extensive study containing diachronic data from one hundred countries and synchronic data from fifty, Durand (1975a, 1975b) confirmed the U-shaped curve for the total active population and for the female population, but not for the male population which, as he showed, described a logistic curve. Studies prior to that of Sinha, such as those by Leser (1958) and Cullver and Langlois (1962) concentrate on the last leg of the U-shaped curve, and give favourable evidence in global terms but not in terms of employment groups in specific categories an examination of which reveals varied types of behaviour. A recent study by Boserup (1975) based on data from 39 countries classified at eight stages of development, would seem to support the hypothesis of the U-shaped curve, this time on the basis of a detailed analysis by sectors, groups and occupational categories which provides a further step towards knowledge of the components of the change.

The studies referred to, and that of Wilensky (1968), the results of which at the most global level would seem to support the curve hypothesis, are characterized by having been put forward with a high level of aggregation, on the basis of a large number of national units, with very heterogenous cultural traditions and historical and social circumstances. At the regional level, the available evidence for Latin America is far from unequivocally corroborating the U-shaped form. While Elizaga's study (1974) seems to support it, the synchronic studies of Durand (1975b) and Pantelides (1976) suggest the existence of a linear and not a curvilinear association, and that of Ramos (1978) shows no simple association for the region as a whole. Lastly, the few case studies available, whether they cover long periods (Madeira and Singer: 1973, Recchini de Lattes and Wainerman: 1977), or whether they make a more thorough comparison between countries at a single point in time (Chakiel: 1976), reveal a U-shaped curve at the level of total participation. This result is not maintained, however, when the total /participation curve
participation curve is broken down into its sectoral or occupational components or into those corresponding to the urban or rural milieu, with different age groups or birth cohorts (Recchini de Lattes: 1979a).

It is very probable that the discrepancies obtained are the result of a series of theoretical and methodological difficulties. On the one hand, the authors differ in how they conceptualize and measure economic development; their data also differ as regards the definition of activity status and the sectors of activity referred to. Owing to the lack of sufficient historical series, many authors use an essentially synchronic pseudo-trend design, in which the data for each unit throughout its own process of development are replaced by data from several units situated at the same point in time at different stages of development. In this line of work, all the other variables which are not economic development, such as cultural features, sociopolitical circumstances, etc., are treated as if they were constant or irrelevant.

It may be concluded from the above that an adequate appraisal of the validity of the U-curve hypothesis requires efforts to include authentically theoretical proposals and the development of empirical research at levels of greater breakdown in terms of variables relating to the demand for female labour (industry, occupations and occupational groups), and variables relating to supply (age groups, birth cohorts, marital status), and the intersection of supply and demand (urban and rural participation).

<table>
<thead>
<tr>
<th>Conceptual variable</th>
<th>Empirical variable</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic development</td>
<td>Total economic participation in modern sector</td>
<td>Boserup: 1975</td>
</tr>
<tr>
<td></td>
<td>Per capita income</td>
<td>Sinha: 1965</td>
</tr>
<tr>
<td></td>
<td>Quotient of the proportion of persons employed in the organized sector */ and the total number of persons employed in non-agricultural activities</td>
<td>Wilensky: 1968</td>
</tr>
</tbody>
</table>

*/ The organized sector is operationally defined as that formed by the groups which recruit at least 50% of the wage-earners.
3. Empirical Studies of the Factors Determining the Participation of Women in the Labour Market

The number of empirical studies currently existing on the factors determining the economic participation of women is enormous. The majority are studies aimed at detecting relationships rather than at testing hypotheses derived from theoretical frameworks. Their results have made it possible to identify some variables relevant to the study of the problems in question. Since they are for the most part based on secondary data of a quantitative nature rather than on data collected ad hoc, the number of variables explored is limited and their nature predominantly obvious. Those most frequently investigated are: age, marital status, number of children and educational attainment. Much less frequent are studies analysing the relation between female economic participation and stages of the life cycle, migratory status or urban-rural residence. We shall go on to sum up very briefly the results achieved by these studies taking each variable separately.

Age

Age is associated with changes in marital status and in the stages of the family cycle, which, especially in the case of women, pose different conditions for the potential exercise of domestic and productive roles. It is therefore not surprising to find marked differences existing in the specific rates
specific rates of participation by age. The patterns associated with age, however, vary among the different countries and in some of them have varied markedly in the course of the last few decades.

The analysis contained in a United Nations report (1962) based on census data collected around 1950 from approximately ninety countries which differed in terms of levels of development and cultural context shows large-scale differences between the most industrialized and those which are predominantly agricultural. Among the former, variations in the economic performance of the different age groups are considerable; among the latter, participation remains very stable between 15 and 50 years of age. The type of economic activity predominant among women - relatively difficult to harmonize with household duties - no doubt explains a large part of these differences. Some if not all the countries of Latin America show an intermediate pattern: since among the most industrialized countries the maximum rates occur around 20 years of age and then drop sharply until around 30, as from when, as in the predominantly agricultural countries, the rates are maintained with little variation until around 45 when they fall gradually.

The patterns which may be observed at the present time in the industrialized countries (United Nations: 1973) can be summed up in two types, one of which is unimodal and the other bimodal. In the first, the maximum rates occur at the beginning of active life, coinciding with the starting of the family; this is the type of pattern which was typical up to the Second World War. In the second, a new peak emerges between 45 and 50 years of age, when women re-enter the labour market once their children demand less attention and care. This second peak, which begins to be noted as from 1950 in such countries as the United States of America, Canada, Sweden, France, Japan, England, becomes even more prominent than the first around 1960 (this is the case of the United States of America). In some provinces of Argentina too the second peak began to appear in the last intercensal period (Recchini de Lattes, manuscript, no date).
Marital status

Unlike the male population, the economic performance of the female population in most societies is closely bound up with changes in marital status. Generally speaking, the probability of married women participating in the labour market is less than that of unmarried women and widows, women who are separated and divorcees (United Nations: 1973). To judge by the data collected around 1950 in numerous countries (United Nations: 1962), both the global rates of participation and the specific rates by age of the married women diverged much more among countries than those corresponding to unmarried women. The opposite was the case with the rates for widows, separated and divorced women. Apart from the fact that domestic demands and the probabilities of sharing the economic burdens vary according to marital status, the cultural definitions exercised strong influence on this differential behaviour (Youssef: 1974).

Probably one of the most significant changes which has taken place since the 1950s in female economic participation in the most developed countries occurred among married women, whose rates of activity came close to those of unmarried women. The change mentioned above from a unimodal to a bimodal pattern responds essentially to changes occurring among married women, who at the age of 35 to 40 notably increased their economic participation (Ostry: 1968, Oppenheimer: 1970).

At the present time, in the countries of Latin America, the performance of married and unmarried women is far from having converged as much as in the more developed countries. While in the former the relation between the rates of participation of unmarried and married women residing in urban areas in the group 20 to 24 years of age is 5 to 1, in the latter it has reached 2 to 1 (Elizaga: 1974). In Argentina the increase in the participation of married women has recently become evident (Recchini de Lattes and Wainerman: 1978).

Number of children

One of the most prolific lines of research in the area of female activity is that centred on the relation between fertility and work behaviour. While in general the probability which women with small children have of producing for the market is smaller than that of women with older children or with no children, one cannot arbitrarily conclude that there exists a
simple and direct causal relationship by which the economic participation of women tends to reduce the size of the family. To date the direction of the causality has not been clarified, i.e., it has not been settled whether women who work tend to have a smaller number of children or whether a process of selection operates by means of which women with a small number of children tend to have a higher level of participation because they have more time, because they are subject to fewer social restrictions, because they offset a shortfall, or because of some other reason.


Probably the contradiction in the results is only apparent and corresponds to the diversity of universes studied (women of different ages, at different stages of the family cycle, with different levels of educational attainments employed in very different economic activities, etc.), the variety of indicators used and the heterogeneous quality of the data. It is further possible that these contradictions would decrease notably if other relevant variables were included in the analysis such as the age of the children (Sweet: 1970), the characteristics of the activity (Jaffe: 1959, Jaffe and Azumi: 1960, Macisco, Bouvier and Weller: 1970, Darian: 1975, Peek: 1975), the presence of other adults in the household (Sweet: 1970), the level of educational attainment (Ostry: 1968, Angulo and Rodríguez: 1975, Wainerman: 1979).
Family cycle

In recent years several empirical studies have taken into consideration the implications of the different stages of the family cycle for female behaviour in employment. An explanatory nature has been conferred on the concept of the family cycle, developed to a large extent by Glick (1947), in respect of a series of phenomena (consumer and spending patterns, needs for housing, mobility, points of maximum economic pressure, etc.) among others, that of female economic participation. Generally speaking, in the studies concerned with the family life cycle, the process has been classified in terms of certain key events in the development of the family unit (Glick: 1947) or in terms of changes in the age of the children (Duvall: 1967). In the latter case there are proposals which take into account the age of the eldest child and others that of the youngest child. The fact is that as the family goes through the successive stages of the life cycle, changes take place in its size and structure giving rise to different income and consumption needs and variable demands on the different members in terms of time and activity. Oppenheimer, inter alia, (1974, 1976), following Wilensky (1962), indicates two peaks of maximum economic pressure ("life-cycle squeeze") relating to the establishment and maintenance of the family: when the young couples are endeavouring to set up house and when, once the family is constituted, the children reach the expensive stage of adolescence.

These points of maximum economic tension correspond to the changes in the structure of the family and its concomitant demands for consumption, and the fact that the income profile (especially that of the head of the household) is not constant throughout active life. Among manual workers, the profile generally climbs to around middle-age and gradually declines to retirement; among professionals, however, it may continue growing until retirement.

One type of behaviour affected by these changes is that of married women with children in relation to the labour market. The number and age of the children, in producing economic demands, and the spacing of the births, in producing domestic demands, have been proved to influence the probabilities of women's participation.

The family cycle has been given explanatory status both at the micro and the macrosocial level. In the latter case, the analysis centres on the fact that the reduction in the death rate and the average size of the family in cutting down the period of procreation, and a drop in the age at which women conclude the stage of procreating and caring for children and enter (together with their spouses) on the postparent period (when the children have left home), favour an increase in the volume of female economic participation.

Educational attainment

Whether greater educational attainment increases the opportunity cost of remaining outside the labour market because it increases employment opportunities and income aspirations, leads to redefining the means of personal realization, reduces the effects of cultural pressures, or for other reasons, it is a fact that the studies have frequently detected a positive relationship between the educational attainment of women and their tendency to take part in economic activity (see evidence, inter alia, in Ostry: 1968, United Nations: 1973, Elizaga: 1974, Peek: 1975, Pecht: 1976, Pantelides: 1976, Standing: 1975, 1976, Wainerman: 1979). However, this pattern of positive association is not the only one which has been found. Whether it is because the size or structure of the market do not have the capacity for absorbing the most highly educated women or whether it does not allow them to satisfy their income aspirations (status frustration), the fact is that cases in which there is a negative relation between educational attainment and female economic participation are not uncommon (Maurer, Ratajczak and Schutz: 1973, Angulo and Rodríguez: 1975, McCabe and Rosenzweig: 1976), or are more usually U-shaped (Sinha: 1965, United Nations: 1968, Standing and Sheehan: 1976, Torrez: 1977).

Migratory status

Although the empirical proofs are scanty, generally speaking they concur in identifying a positive relationship between migration and participation in economic activity, particularly in Latin America and in the case of women (Isaza and Ortega: 1969, Elizaga: 1970, Macisco, Bouvier

*/ For an exhaustive review of the subject see Young: 1977.

/and Weller:
and Heller: 1970, Rueda: 1972, Vary: 1974, Angulo and Rodríguez: 1975, Sheehan: 1976, Standing and Sheehan: 1976). At the individual level this positive relationship could be explained on the basis of the fact that the majority of migratory movements respond to economic reasons - endeavours to improve status and income - and most are from low economic opportunity levels to areas with better opportunities. On the other hand, migration is selective in the sense that generally speaking the migrants are younger and have a better level of education than the overall population of an active age, these characteristics influencing the possibility of participating in the labour market.

Urban-rural residence

The analysis of the differential participation of women in economic activity in urban and rural areas has not made very much progress to date. The noticeably lower validity of measurements in rural areas is not unconnected with this fact, owing to the difficulties of distinguishing domestic activities which produce goods for subsistence from those aimed at the production of goods and services for the market. Probably the most conspicuous example of the level of these difficulties is to be found in the work of Denti (1968) which ends up with a collection of warnings on the precautions which should be taken with the data on which his analysis of urban and rural manpower is based.

In Latin America, generally speaking, rates of female rural activity are lower than urban rates in contrast to Africa and India and unlike the pattern of the Arab countries where the rates are low in both areas, and the countries of southeast Asia where both are high (Boserup: 1970). The Latin American pattern has repeatedly been confirmed, with few exceptions (Gendell and Rosell: 1968, Ramos: 1970, Elizaga and Mellon: 1971, Pantelides: 1976, Recchini de Lattes: 1979b).

The conjectures which have been advanced to explain the urban and rural differences in Latin America are of varying orders: greater job opportunities in the city, greater relative profitability of market activities compared with household duties in the urban milieu vis-à-vis the rural, the greater relative demand for domestic service in the cities, the selectivity of migration (lower age, greater education and aspirations), the more permissive attitudes towards the work of women in the cities, etc.
<table>
<thead>
<tr>
<th>Conceptual variable</th>
<th>Empirical variable</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Years</td>
<td>United Nations: 1962; 1973, and numerous researchers</td>
</tr>
<tr>
<td></td>
<td>Age of children</td>
<td></td>
</tr>
<tr>
<td>Family situation</td>
<td>Presence-absence of</td>
<td>Wainerman: 1979</td>
</tr>
<tr>
<td></td>
<td>spouse</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of children</td>
<td>Ostry: 1968, Oppenheimer: 1970</td>
</tr>
<tr>
<td></td>
<td>Age of wife</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of children</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age of children</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Age of wife</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Last year completed</td>
<td>Angulo, Rodríguez: 1975</td>
</tr>
<tr>
<td></td>
<td></td>
<td>/Conceptual variable</td>
</tr>
<tr>
<td>Conceptual variable</td>
<td>Empirical variable</td>
<td>Author</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>Migratory status</td>
<td>Type of schooling</td>
<td>Encarnación: 1974</td>
</tr>
<tr>
<td>Urban-rural location</td>
<td>Urban: population resident in administrative centres, capitals, etc.</td>
<td>Denti: 1968</td>
</tr>
<tr>
<td>Husband's occupation</td>
<td>Occupational groups</td>
<td>Ostry: 1968</td>
</tr>
<tr>
<td>Convenience of work</td>
<td>Index formed by: works at home or outside; goes to work on foot or not; part-time (less than 30 hours per week) or not</td>
<td>Darian: 1975</td>
</tr>
<tr>
<td>Location of job in relation to home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of other adults in the household</td>
<td>Typology formed by presence-absence of relatives Sex of relatives Age of relatives</td>
<td>Freedman, Whelpton, Campbell: 1959, Mincer, Polachek: 1974, Anker, Knowles: 1977</td>
</tr>
<tr>
<td>Wife's position in the household (or with relation to the head of household)</td>
<td>Activity status of relatives</td>
<td>Sweet: 1970</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Angulo, Rodríguez: 1975</td>
</tr>
</tbody>
</table>

/4. Use
This approach is eminently empirical. Its application may, however, result in significant consequences both in terms of concepts and as regards measurement. It is based on the recognition that although it is not every activity which is reflected in income or expenditure, all human activities consume time, which in principle can be measured and recorded. Its aim is to achieve a description as complete as is empirically possible of the activities (remunerated or not) undertaken by individuals during a specific unit of time. It makes no a priori judgements as to what economic activity is. In this sense the results of applying this approach, although not restricted to the time of "productive" work, may contribute to clarifying the concept of "work" and improving measurement of it and consequently measurement of the labour force.

The conventional measurements of the labour force are classifications of how people use their time in economic activities (the employed) or how they would like to use it (the unemployed and underemployed). That means that only a small and rather arbitrary group of activities of all those which an individual undertakes is included in the measurement, being those which are considered to be offered for the production of economic goods and services. This fact affects the measurement of female more than male labour and the measurement of labour in developing countries more than in developed countries owing to the fact that both among women and in the less developed economies larger proportions of persons are employed in activities producing goods which do not go through the market and therefore do not enter the monetary circuit of social production.

As Szalai (1975) says, on the basis of the extensive data collected among the adult urban population of twelve countries (Szalai: 1972, p. 6), there is perhaps no social phenomenon in respect of which investigation of the time budget has produced such precise, well-documented and dramatic knowledge of the national situation as in connexion with the social division of work.
Originally, research on the time budget was mainly concerned with the amount of time allocated to different activities by each individual over a period of time, generally the 24 hours of the day. More recently, research has concentrated on the "pattern of activities", placing the emphasis on the record of the organization or time sequence of the activities of the various members of the household rather than on the duration of the activities of the individuals. Records are frequently made for working days and weekends and at different seasons of the year.

The techniques normally used for collecting data, separately or jointly, are: records prepared by the person himself, retrospective questionnaires and direct observation. The first two require most participation by the individual persons. The individual records of time maps are made by individual persons by recording at regular intervals, for example, of one hour, the activities carried out the previous hour. The retrospective questionnaires are administered by an interviewer who questions the persons on the time devoted to various activities over a recent period of time (last hour, day, etc.). Direct observation is normally carried out by one or more interviewers installed in the household for the purpose of recording facts on timetables.

The adjustment of these techniques varies according to the characteristics of the population to which they are applied. The individually prepared records, for example, require at least the ability to read and write and the capacity for measuring time. Observation, however, depends only on the capacities of the interviewers. This is obviously the most expensive technique owing to the volume and level of training of the personnel required. All these techniques also come up against the need to make choices which may possibly bias the data obtained. This includes the choice of the unit of time, the respondent and the type of instrument for collecting data (with or without pre-established activity categories) (see inter alia, Szalai: 1966, 1972, 1975, Guilbert, Lowit and Creusen: 1967, Walker: 1969, Wall and Schroeder: 1970, Tikhomirov, Gordon and Klopou: 1972, Young and Willmott: 1973, Stuart Chapin: 1974, Vanek: 1974, Putz and Greenberg: 1975, Michelson: 1975, Boulier: 1976, 1977, Hawry-Lyshyn: 1976, King: 1976, Pedrero: 1977, Gillespie: 1977, Cebotarev: 1978).

/Although, as
Although, as has been said, this approach is essentially empirical and does not subscribe to any particular theoretical position, its use is compatible with approaches as different as that of the neoclassical economists or the one which recently emerged among marxist economists. In fact, for the former all the time of the members of the family is productive, while this time together with the goods purchased and the family capital are considered the basic elements of the family as a unit of production. As regards the latter, who postulate the need to redefine domestic activity in order to fit it into the category of productive work, it would seem impossible to ignore that progress in clarifying the concept of "work" goes through a detailed and exhaustive description of all the activities carried out by the members of a household. Research along these lines will not aim at answering the question: "who is working"? but "who does what"?. This would make it possible to overstep motivational and normative criteria underlying the usual definitions of economic participation by allowing a more objective approach to the study of labour supply.

It seems almost unnecessary to note that the technique to be used in the studies of the use of time are incompatible with census-taking and are only applicable through surveys or field studies of an anthropological type.

<table>
<thead>
<tr>
<th>Conceptual variable</th>
<th>Empirical variable</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of time</td>
<td>Activities carried out (by unit of time or in fixed periods)</td>
<td>Boulier: 1977, Cebojarev: 1978, Gillespie: 1977</td>
</tr>
<tr>
<td></td>
<td>Schedule of activities (timetable, sequence and frequency of execution)</td>
<td>Szalai: 1972</td>
</tr>
<tr>
<td></td>
<td>Time occupied per activity, Agents in charge of each activity</td>
<td></td>
</tr>
</tbody>
</table>

/5. The
5. The Approach to Household Duties in Marxist Economics

In recent years and from the Marxist standpoint in economics a fruitful discussion has been developed on the role of household duties in the economy, their productive or non-productive status and their role as a generator or not of value (see inter alia, the work of Harrison: 1973, Seccombe: 1973, 1976, Coulson, Mazas and Wainwright: 1975, Gardiner: 1975, Conference of Socialist Economists: 1976, Humphries: 1977, Collectif Mémories: 1977, Barbieri: 1978). This is an essentially theoretical approach, aimed at illustrating the "work" aspect of unremunerated household duties and in favour of their being calculated on an economic basis.

Unremunerated household duties do not produce goods; their products do not circulate in the market nor are they the object of trade; they are produced to satisfy the needs of the producer and his family and are not appreciated economically but rather emotionally. This is furthermore the activity which occupies the majority of adult women in the world, particularly in the least developed countries, and at the same time excludes their participation in the labour market. Normally it is not calculated as work in the national accounts.

The exclusion of this activity from the category of productive work does not, however, respond to a clear and precise definition. The fact that it is unpaid is not used as a criterion since the work of persons who contribute family assistance without receiving any remuneration is accepted as productive. Nor is the fact that the product of the work is for own-account consumption used as a criterion, since the work of rural dwellers who produce for their own subsistence and that of their families is considered to be productive. Lastly, neither is it the milieu in which a criterion already used is expanded since paid domestic service is considered to be productive.

The discussion among the authors who subscribe to this approach has still not succeeded in unifying criteria as to whether household duties produce goods or not (labour force), whether they should be considered "productive" or "unproductive" work, and even whether or not they are an indispensable part of the capitalist economy or could be replaced by alternative institutions.
alternative institutions. There is, however, agreement among the authors, on the indisputable fact that household duties play a vital role in the (daily) maintenance and conservation and (generational) reproduction of the labour force and should therefore be taken into consideration when the total picture of social production is analysed. There is also some agreement to the effect that household duties produce a surplus and that the immediate beneficiaries are the other members of the family, while in the last instance, through the reduction in the wages earned by the family, the beneficiary is the capitalist.

The argument is that the preparation of food, care of the children, washing, ironing and making of clothes, cleaning, repairs, etc., carried out within the household, essentially by women—mothers—wives—housewives—permit a considerably higher level of living than would be feasible if all these services had to be obtained in the market. These activities exercise a depressive effect on wages, since the subsistence wage does not include the cost of household chores. In brief, together with underconsumption, domestic production covers the difference between the cost of living calculated at market prices and the level of minimum wages.

The inclusion of domestic output in the category of productive work would affect the measurement both of the potential of a society's manpower and of its use, the first by identifying that part of the "inactive" population which is in fact responsible for domestic output, and the second by clarifying what part of the "active" population does a double day's work.

**Variables**

Not described.

/BIBLIOGRAPHY
BIBLIOGRAPHY


BOULIER, Bryan L., (1977), An evaluation of time budget studies as complements to conventional labor force studies, paper presented at the Annual Meeting of the Population Association of America, St. Louis, Missouri (USA), 1977.


/CAIN, Glen
CAIN, Glen (1966), Married women in the labor force, Chicago, Chicago University Press.

CEBOTAREV, E.A. (1978), La organización del tiempo de actividades domésticas y no-domésticas de mujeres campesinas en latinoamérica, mimeographed.

COLLECTIF REMOIS (1977), "Une approche globale du travail des femmes mariées à des prolétaires", Critique de l'économie politique, No. 26, January-March.


CONFERENCE OF SOCIALISTS ECONOMISTS (1976), On the political economy of women, CSE Pamphlet No. 2, London: Stage one.

COULSON, Margaret, Branka MAGAS and Hilary WAINWRIGHT (1975), "The housewife and her labor under capitalism. A critique", New Left Review, No. 89.

CHAKIER, Juan (1976), La fuerza de trabajo en los países de la Cuenca del Plata, 1960, San José, Costa Rica: CELADE.


DUQUE, Joaquín y Ernesto PASTRANA (1973), Las estrategias de supervivencia económica de las unidades familiares del sector popular urbano (una investigación exploratoria), Santiago, Chile: FLACSO.


ELIZAGA, Juan Carlos (1970), Migraciones a las áreas metropolitanas de América Latina, Santiago, Chile: CELADE.

/ELIZAGA, Juan Carlos

ELIZAGA, Juan Carlos and Roger MELLON (1971), Aspectos demográficos de la mano de obra en América Latina, Santiago, Chile: CELADE.


GARCIA, Brígida and Orlandina de OLIVEIRA (1977), Reflexiones teórico-metodológicas sobre el estudio de las relaciones entre el trabajo de la mujer y la fecundidad en la ciudad de México, presented at the V Meeting of the Working Group on the population reproduction process, of the Comisión de Población y Desarrollo (CLACSO), Guaruyá (Brazil), April.

GARDINER, Jean (1975), "Women's domestic labour" New Left Review, No. 89.


GENDELL, Murray and Guillermo ROSELL (1968), "The trends and patterns of the economic activity of women in Latin America during the 1950s", Estadística, 26 (100), pp. 561-576.


/HALL, P.T.


ISAZA, J. and F. ORGEA (1969), Encuestas urbanas de empleo y desempleo, Bogotá: CEDE.


MAURER, K., R. RATAJCZAK and T.P. SCHULTZ (1973), Marriage, fertility and labour force participation of Thai women: An econometric study, Rand Corporation Report R-829-AID/RF, Santa Monica, California.


UNITED NATIONS (1968), Methods of analyzing census data on economic activities of the population, New York, United Nations, ST/SOA Series. A/43.


OSTRY, Sylvia (1968), The female worker in Canada, Ottawa, Canada: Dominion Bureau of Statistics.


PEDRERO, Mercedes (1977), La participación femenina en la actividad económica y su presupuesto de tiempo: Notas sobre problemas relativos a conceptos y captación; México: Centro Nacional de Información y Estadística del Trabajo.


RECCHINI DE LATTES, Zulma (1979b), "Las mujeres en la actividad económica en Argentina, Bolivia y Paraguay", accepted for publication in Demografía y Economía, (in press).

RECCHINI DE LATTES, Zulma (no date), "Female labor force and fertility in Argentina: Regional patterns of demographic and socioeconomic change", (manuscript).


TIKHOMIROU, N., L. GRODON and E. KLOPOU (1972), "Studies in the way of life of the working people and some problems of social planning", Society and leisure, No. 3.

TORREZ, Hugo P. (1977), La mujer boliviana y sus características demográficas en la fuerza de trabajo, 1975, Ediciones CIS.


YOUNG, Christabel M. (1977), The family life cycle. Literature review and studies of families in Melbourne, Australia, Monograph No. 6, Australian Family Formation Project, Department of Demography, The Australian National University, Canberra.


/Chapter III
Chapter III

THE CONCEPT OF LABOUR FORCE: ITS APPLICATION IN POPULATION CENSUSES AND HOUSEHOLD SURVEYS

Introduction

The concept of labour force or economically active population (EAP) recommended by different international organizations for use in population censuses does not stand up to an analysis of logical consistency. Indeed, as various authors have observed, the criterion for including specific sectors of the population in the EAP or otherwise is not at all clear. While it includes unpaid family workers who work helping a person related to them in an economic enterprise or in another paid activity (IASI: 1977b, p. 30), it excludes persons engaged in work for domestic consumption unless they are paid. Although it is not specifically planned, in practice the censuses do include people who are living under a subsistence economy - i.e., unpaid - among the economically active population but yet exclude a large proportion of women in the same situation. In other words, the criterion is not the type of work nor the remuneration. How then can the concept be understood as it is repeatedly recommended and frequently used?

The concept of economically active population has a relatively long history although it is only in modern societies that an attempt has been made in some form to distinguish between those who work and those who do not work. (In fact, in primitive societies the population producing goods and services required for subsistence is practically one with the total population if the very young and the physically or mentally incapacitated are excluded.) In what is known as the pre-statistical period a word was frequently appended to the name of each person to identify his social status (gentleman, clerk, peasant, artisan, poor man, etc.), in lists of persons drawn up for different purposes - taxation, administration, etc. In the statistical era, many of the censuses taken last century (for example, the census of Argentina in 1869, the United States census of 1870) began to record occupations, professions and means of living of persons, for the most part without a clear conceptualization or precise instructions to the persons responsible for administering the census questionnaires. The idea implicit in these early censuses was to record what constituted
a status of a person and/or his usual employment. This last-mentioned is what constitutes the concept of paid worker which with certain variations—such as the imposition of a lower age limit as from which occupation is investigated—was generally employed until it was replaced by the concept of labour force or economically active population. The change took place in the United States on the occasion of the 1940 census, as a result of the deep seated economic crisis experienced by this country during the 1930s, which obliged the authorities to face up to the need of including not only those persons who actually were engaged in an occupation, but also the mass of unemployed persons who were attempting to obtain employment, whether they had worked before or not. Hence the spirit of the new concept was to measure the availability of workers, not in terms of a person's status, as in the concept of the paid worker, but in terms of his behaviour. In fact, in accordance with the concept of labour force—a concept which has begun to be revised, if not by those responsible for the censuses at least by social researchers of different trends (see inter alia, Jelin: 1974; Himmelweit and Mohun: 1977 and Standing: 1978 \*/*—employed persons and all those seeking work during the time-reference period (the unemployed) were included among the active.

The new concept may be qualified as being more precise in the sense that it refers to a specific period and not only covers those who are working but also those who wish to work and are seeking work. Like the old concept of the paid worker, however, the new concept was introduced for capitalist economies with some degree of industrialization. Despite being recommended for and used by the majority of underdeveloped countries, therefore, it is not suitable in many of them, and it is in these countries that the inconsistencies become even more apparent. The concept of labour force presupposes the existence of a market economy \*/* (although in practice it also includes members of groups in subsistence economy regimes, as has already been said) and although it takes unemployment into account, it does

---

\* For a more complete bibliography on this subject consult chapter II of this report.

\*\* For further details see Jaffe (1968).
it does not consider a phenomenon of particular importance in Latin America - underemployment, visible or invisible. Furthermore, if the time-reference period is short, as is recommended, it is possible that it will leave out of the economically active population many seasonal workers whose activities are not in progress during the time-reference period selected.

Several of the problems mentioned constituted conscious concerns in those responsible for making recommendations to the American countries on how to cope with the question on the economic activity of persons; this may be seen, for example, in the recommendations of IASI **/(1956) for the 1960 census, in which solutions of a mixed or intermediate type are reached. This means that although the concept of labour force was preferred, according to the economic characteristics of the country the concept of paid worker had to be adopted if necessary since for national purposes it would give a more realistic appreciation of the volume of the population engaged in economic activities. For the purposes of the inter-American comparison, it was recommendable to use a shorter time-reference period - one week - and be able to distinguish between the employed and the unemployed.

For the censuses taken under the COTA - 1970 ***/ programme, the use of the concept of labour force with a week as time-reference period was most emphatically recommended, and only in a footnote is it indicated that "when employment has a definite seasonal pattern and periodic investigations are not made on this aspect during the year, supplementary data can also be collected on 'usual' economic characteristics with reference to a longer time period" (IASI, 1977a, p. 27). The recommendations of the United Nations are practically identical in this regard (United Nations, 1967, paragraph 291).

*/ Visible underemployment is a statistical-type concept which characterizes the situation of persons who are in employment of less than normal duration and who are seeking or would accept additional work, and reflects an inadequate volume of employment. The second type is an analytical concept which reflects a poor distribution of labour resources, or a basic disequilibrium between manpower and the other factors of production. Its characteristic symptoms could be the low level of income and inadequate use of qualifications (concealed underemployment) and low productivity (potential underemployment) (CEPAL, 1979).

**/ Inter-American Statistical Institute.

***/ Program of the Census of America, used by IASI.
Lastly, the recommendations for the forthcoming 1980 censuses are more cautious. After lengthy considerations of the advantages and disadvantages of a short time-reference period — concept of labour force — or a much longer period — which would bring the concept closer to that of usual activity or paid worker — it is concluded that the countries will have to decide for themselves which concept is most appropriate to their needs or whether both should be used whenever possible (United Nations, 1978).

As will be seen in the course of this brief history of the concepts used to describe the economic activity of persons, they have without exception been expressed without distinction of sex. But the problems and inconsistencies affect men and women differently, since the roles assigned to them are differentiated whatever society they live in. (We could also refer to groups of persons who are located in specific sections of the life cycle — young people, adults, old people — who also carry out differential functions in society, and who are also differently affected by the inconsistencies and problems of the definition of activity.) We shall go on to analyse first of all which concepts were used to cover the economically active population in the 1970 Latin American censuses, and secondly, the forms in which these concepts were operationalized and the problems to which each form-type may have given rise, with particular reference to aspects of critical importance in registering the female economically active population. A brief analysis will then be made of the concept and how it is operationalized in the household surveys compared with the same process in the censuses. Lastly, by comparing measurements of the female labour force made on the basis of data from population censuses and other types of data-collection operations the low level of validity of the census as a supplier of information on this subject will be shown.
1. Measurement of the female economically active population in the 1970 Latin American censuses

All the Latin American censuses taken during the present decade used the concept of labour force. It cannot, however, be concluded that the female EAP has been measured uniformly throughout all the countries or that all the results are valid or comparable. On the contrary, the operationalization of the concept has been achieved in different forms, each of which involves different measurements, apart from the fact that the utilization of the same measuring instrument produces measurements of different validity when it is applied to cases which differ economically, socially and culturally.

The following analysis refers to the operationalization of the concept of labour force in general and of the female labour force in particular in the Latin American censuses taken during the 1970s, with emphasis on the validity of each measurement and the problems of inter-American comparability which could arise out of different forms of operationalization. This means that only the "filter" question (by means of which it is determined whether the person is economically active or non-active) is analysed and not the rest of the questions on the economic characteristics of the economically active population, the formulation of which depends on whether the answer to the first was affirmative or not. In order to restrict this task, the speculations - of course, very relevant for certain more specific objectives - as to whether, for example, the instructions to the enumerators were followed or not, will be left on one side.

It will be assumed here that the instructions were closely followed. It will not be analysed how the instructions referring to the identification of the head of the household and the person supplying the information may have influenced the measurement of the female EAP. No analysis will be made either of the minimum age as from which this concept is investigated, although information is given in table 1. It will be understood that the

²/ It could perhaps be considered a deviation the fact that Barbados has considered as economically active the population which does not attend school full time and takes part in the production of goods and services.

/Table 1
Table 1
LOWER AGE LIMIT FOR INVESTIGATING THE ECONOMICALLY ACTIVE POPULATION IN THE LATIN AMERICAN CENSUSES OF THE 1970s

<table>
<thead>
<tr>
<th></th>
<th>5 years of age</th>
<th>6 years of age</th>
<th>7 years of age</th>
<th>10 years of age</th>
<th>12 years of age</th>
<th>13 years of age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Haiti</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Argentina</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Barbados a/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cuba</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>El Salvador</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guatemala</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jamaica a/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nicaragua</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panama</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paraguay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uruguay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a/ Only tabulated as from 14 years of age.

The variation in the minimum age met with in the countries of the region constitutes a problem which is easily dealt with in the comparative analysis using tabulations with uniform age limits. The aspects analysed are therefore: the wording of the question on types of activity - the "filter" question as has already been said, which discriminates between active and non-active - the time-reference periods used, and the minimum working time required for a person to be considered part of the labour force. The material used for the analysis includes the census schedules - the majority of which may be consulted in IASÉ (1977) - the handbooks for enumerators and publications of census results.

(a) Wording
(a) Wording of the "filter" question

This question and the accompanying instructions - whether in the census questionnaire itself or in the enumerators' handbook - and its diagrammatical representation - took different forms in the 1970 censuses, although there are characteristics common to all of them, such as the presentation of pre-coded alternatives for types of activity, and others followed by the great majority of countries, such as the fact that the first of these alternatives was that of "you worked". Even within these general forms the wording of the question varied.

Of those used in the region the most valid was possibly that in which the form of the question was "What did you do during the week?" or "Of the following types of activity which were you employed in?" with pre-coded alternatives, as has been said - the first of which was "you worked" followed by alternatives aimed at detecting the unemployed and lastly the different categories of non-active persons - with the instruction to read each of them in the order given, stopping at the first affirmative answer. About twelve countries */ of the region generally followed this form.** This appears to be the most suitable because it establishes a standard form of questioning each person enumerated, and without revealing all the alternatives endeavours to locate, as the first priority, those who worked or actively looked for work. In other words the intention or "spirit" of the question is in the first place to identify the economically active. This is especially important for women, since they usually fulfil the role of housewives although, for example, they may also engage in economic activity. Since their domestic role is the most widely spread and socially accepted and often perceived as their most important role by the women themselves or the persons who supply the census data, if the alternative of allocation to

*/ Bolivia, Colombia, Cuba, Ecuador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Uruguay and Venezuela.

/** Although Panama differs slightly in the form of the question, it has been placed in this group of countries because the "spirit" of the question is very similar and the validity of the reply is considered to be similar. Similarly, the wording used by Venezuela is slightly different and although the instruction was to follow the order, a stop at the first affirmative reply was not specified, but probably happened in any case.

/this activity
this activity were offered straight off, it could affect the census coverage of the female labour force. (In Appendix A, the question and instructions in the Bolivian census are given for the investigation of "activity status").

If the analysis stopped here, it could precipitately be concluded that the group formed by these twelve countries has valid and comparable EAP data for the 1970 censuses. However, this is not the case. There are very important shades of difference. In some cases, such as Guatemala and particularly Honduras, the wish to give top priority to identifying the active population is reaffirmed in some more specific recommendations, such as those which instruct enumerators to bear in mind that when a person reports herself as a housewife, student, or non-active and is of advanced age, it should be checked whether she has not actually worked since many of these women may also engage in activities which produce money income and in this case should be classified as active. Other cases, however, because of the instructions lead to the exclusion from the economically active population of certain categories of persons (such as Costa Rica, which suggests that persons of over 65 years of age are probably not active), or explicitly suggest their exclusion. Very noteworthy examples indicating exclusion are given twice over by Cuba, whose census instructions state that unemployed males cannot be under 17 years of age or over 60, and unemployed women under 17 or over 55, and furthermore leave paid domestic service out of the labour force. This last-mentioned indication certainly affects the measurement of the female EAP more than that of the male EAP and in conjunction with the afore-mentioned instructions means that the total EAP figure for the country is not comparable to that of the rest of the Latin American countries, who include paid domestic servants among the employed and do not prevent the population of certain ages from being included in the category of the unemployed.

There are countries which, although maintaining the general forms of the question expressed above, changed its "spirit". In Chile, Argentina, and the Dominican Republic, although the wording does not fundamentally differ from that of the countries already mentioned, there is a very

* In the case of the Dominican Republic it should be observed, however, that the sequence of alternatives and instructions which accompany the question is rather confused.
important difference in how it is formulated. In the earlier cases, the enumerator had to read the alternatives in the order indicated and stop at the first affirmative reply. But in the present cases, the instruction lays down that all the alternatives must be read so that the persons enumerated know what they all are, and can choose according to their own criterion. The answer will also differ in this case according to the alternatives offered and how many there are. This form may of course cause the "loss" of some active persons who choose to assign themselves to another alternative which they consider more appropriate, prestigious or important according to their own evaluation but which, in terms of the criteria implicit in the concept of labour force, would be classifiable as active. This possibly happens in many of the cases of double roles: housewife-economically active person, student-economically active person, retired person-economically active person.

There is a form which is clearly differentiated from that of the rest of the countries of the region - used by Brazil - as regards how to cope with the census question to measure economic activity, not only in respect of its wording but also the order of the alternatives and their layout. This is the most complicated form and the least valid measurement of those made in the region in the censuses of the decade beginning in 1970. The question goes: "If you were not working or seeking work what was your situation and occupation?" followed by alternatives, the first of which was household duties. This means that the suggestion that the person did not work and did not seek work is reinforced by the first alternative offered, especially for the female population. It is very probable that many women who fulfil a double role of housewives and participants in economic activity have assigned themselves to this category. But there is still the possibility that those who chose this alternative - household duties - have been erroneously classified as being incapacitated or invalids, since the space in the questionnaire for marking any alternative selected are so placed that confusion may arise, as may be seen below:

/Household chores
Lastly, several countries chose simply to put a heading or title over a column or row with "type of activity" or some similar wording, with pre-coded alternatives below (see in Appendix A the corresponding item in the census schedule for Costa Rica). This means that in the countries that chose this alternative (Costa Rica, El Salvador, Haiti, Peru, Jamaica, Barbados, Trinidad and Tobago) it would seem that how the question was formulated was left to the inspiration of the enumerator. The main criticism which can be made here is that there is no kind of standardization, and this is reinforced when it is noticed that there are no instructions for reading the different alternatives in an established order, nor for stopping at the first affirmative answer.

Lastly, although it is only marginally related to the operational definition of the female economically active population, it should be noted that some countries of the region were induced to differentiate by

---

* Although in the case of Costa Rica the instructions say that the enumerator should ask what the person does, this does not, of course constitute a clear and standard order as regards how to formulate the question.

** The case of Peru is the only one to admit the possibility of selecting more than one alternative, the three alternatives for economic activity being mutually exclusive: employed, unemployed having worked previously and seeking work for the first time. In this case it might be speculated whether the economically active women who are "lost" as a result of not having read the alternatives in an order which gives priority to economic activity are finally situated within the labour force with the admission of the double classification.
sex the population occupied in household duties - which was therefore not classified as active - through the instructions to the enumerators.

The idea that household duties are tasks proper to women is, of course, widespread and regarded as natural, although many men and women from different parts of the world not only would not agree with it but would be prepared to argue and oppose it, since there is nothing to show that it must be so. However, this idea has been made explicit in various of the 1970 Latin American censuses through the instructions to the enumerators which state that in the census category "domestic duties", men should exceptionally be classified (Costa Rica, Cuba), or which state simply in the definition of this activity that women should be included when they carry out specific tasks (El Salvador, Haiti, Panama). Of course, in some of these countries (El Salvador, Haiti), it is also recommended, as was said earlier, that when household duties are reported, a further question is asked to establish whether the person assigned to this category does not also carry out paid work and therefore should be placed in the category of an economically active person.

(b) Time-reference period

The majority of the Latin American countries have used one week as the time-reference period, either defined as the week prior to the census, or a week with a specific date. Nearly all the countries adopted this latter alternative, indicating clearly to the enumerators which days to take into account to determine activity status. A few countries used the more indefinite form (Bolivia, Cuba, Peru, Uruguay, Venezuela), which may affect comparability with other countries or its validity, particularly when the census is taken over a relatively lengthy period which coincides with changes in activities of a seasonal nature. Although this lack of precision as regards the time-reference period may affect all the population in general, since it is commoner for women than men to be incorporated in the labour market on an occasional basis, or for them to enter and leave it more frequently, not only in agricultural work but in general (Ostry, 1968), it is thought that this affects the validity and comparability of the measurement of the female economically active population more than the male.
One country - Haiti - used the six months prior to the census, as the time-reference period. It is thought that in a predominantly agricultural economy, as is the case of this country, this should, in principle, result in a wider coverage of female labour which frequently participates during periods of intensification of agricultural work. The data for this country would thus have a much wider coverage of the female economically active population, but it would be difficult to compare them with the data for the rest of the Latin American countries.

Lastly, there are the cases of a few countries which selected more than one time-reference period: Mexico, which to define activity status uses a week but refers the economic characteristics of active persons to the activity of the past year; Brazil, which has an indeterminate period for the "filter" question and uses a year of reference to determine employment, industry and status of the economically active, and lastly, for those persons who had been working during the twelve months prior to the census, asked about their employment situation for the last week; and Trinidad and Tobago, Jamaica and Barbados, which used a year for reference in the "filter" question and the rest of the economic characteristics but also investigated activity during the week prior to the census. In the cases of the last-mentioned countries, which used a double time-reference period, there is great confusion when it comes to analysing the data, since in several cases it is not clear which period was used for tabulating. For example, Jamaica classifies the labour force for a week by industry and occupation which refer to a year. This also has more serious implications for the case of the female population for reasons already noted: greater frequency of occasional work and of entering and leaving the labour market than the male population.

(c) Minimum time worked

The minimum time spent on economic activity for persons to be considered as part or not part of the economically active population was dealt with in different forms in the 1970 Latin American censuses; (i) very generally and vaguely as part of the actual wording of the "filter" question - which contained the expression "most of the period"; (ii) with very precise instructions as to the number of hours or days which must have been worked.
for a person to be included in the labour force; (iii) combining the above two criteria; and (iv) without any specified limit. The details of the one or more criteria for each of the countries may be seen in Table 2.

Following the international recommendations, the majority of the countries included a minimum time worked - sometimes coinciding with that used to define the labour force, but in the majority of cases with greater accuracy and/or a longer limit - to define unpaid family workers. Since the question on status in employment - which makes it possible to classify a worker as an unpaid family worker or in different categories of paid work - comes after the "filter" question has been asked and is only put to those persons who have been classified by it as economically active, it is not clear - since this is not laid down in the census instructions - what is to be done if the minimum time worked for a person to be considered as an unpaid family worker is not the same as for the definition of an active person and it is discovered through this question that a person already classified as active - since he fulfils the requisite of the minimum time worked - is a worker who describes himself as an unpaid family worker and does not comply with the requisite of minimum time for inclusion in this category. What does one do? Does the enumerator go back to the question on activity status and remove the person from the row or column of the economically active? If so, does he repeat the filter question in order to allocate the person to one of the other alternatives - seeking work for the first time, housewife, student, etc.? It is difficult to believe that in an operation of the size of a census, with enumerators who are rarely paid and generally poorly trained, and above all do not have instructions as to what do to, anything is done. But the question still stands as to what employment status was assigned to the person was following the initial hypothesis of this analysis, which was that the enumerators followed the instructions closely. In the absence of instructions, it may be imagined that the enumerator takes the easiest way out. And the easiest way out in this case is to leave the person who classified himself as active in the filter question in that category, although he is an unpaid family worker who has worked less than the instructions say he should have done for inclusion in this category. Status in employment is a topic which is

/Table 2
### Table 2

**MINIMUM LIMITS OF TIME WORKED CONSIDERED IN THE LATIN AMERICAN CENSUSES OF THE 1970'S IN THE QUESTIONS ON ACTIVITY STATUS AND EMPLOYMENT STATUS**

<table>
<thead>
<tr>
<th>Minimum limit of time worked</th>
<th>Question on activity status</th>
<th>Question on employment status (only for unpaid family workers)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Including &quot;most of the period&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4 normal working days or 35 hours</td>
<td>Argentina</td>
<td></td>
</tr>
<tr>
<td>2 days in the week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 day in the week</td>
<td>Chile</td>
<td>Guatemala, Honduras, Cuba</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1/3 of each normal working day or 15 hours weekly</td>
<td>Dominican Republic</td>
<td>Colombia, Nicaragua, Cuba, Chile, Dominican, Guatemala, Republic, Haiti, Uruguay, Honduras, Venezuela, Mexico</td>
</tr>
<tr>
<td>1 hour in the week</td>
<td></td>
<td>Colombia, Costa Rica, Mexico</td>
</tr>
<tr>
<td>Not specified</td>
<td>Barbados, Bolivia, Ecuador, Jamaica a/ Paraguay, Trinidad and Tobago, Venezuela</td>
<td>Brazil, El Salvador, Nicaragua, Panama, Peru, Uruguay</td>
</tr>
</tbody>
</table>

*a/ Jamaica has two questions on activity: one referring to the year and the other to the week. For the second it is specified that if the person is responsible for household duties, the minimum time worked from consideration as part of the economically active population is 8 hours. The same probably occurs with the other Caribbean countries, but there is not sufficient documentation.*
not analysed here, but one would be tempted to speculate that it would probably be that of the unpaid family workers, whatever time was spent on economic activities, since this would once again be the easiest way out of the difficulty for the enumerator. Even when the frequency of persons in the category of unpaid family workers is usually and relatively much greater for active women than for men, and therefore the inconsistencies in the definition and census instructions in this question would particularly affect the validity of the measurement of the female labour force, the analysis of this question is not continued, although the information is included in table 2. For the reasons given earlier in this report, it is considered that the really important question is that of activity status.

After having drawn attention to this point, therefore, the analysis of the minimum time in the filter question continues.

Of the four forms enumerated above for establishing the minimum time worked to consider a person as active, the surest means of achieving uniformity is no doubt the third, i.e., the form combining the specification of a number of hours or days and the expression "most of the time" in the wording of the question. Only two countries of the region, Argentina and Chile, followed this criterion, although with very different minimum limits - one day in the week for Chile, and four normal working days or 35 hours weekly for Argentina. But although this would make for greater uniformity, since female work is usually characterized in many cases by informal arrangements and/or part working days, a strict adherence to these census instructions would leave many women out of the labour force, especially in Argentina, where the minimum time is so long.

The countries which opted for the alternative of leaving "most of the period" only expressed in the wording of the question perhaps find themselves in a fairly similar situation to that of countries which opted

\* In the case of Chile, the inconsistency between the wording of the question which says "most of the week" and that of the instructions which state "one day", should be pointed out. Does this mean that one day's work can be considered to be what was done during most of the week? It is difficult to believe that anyone who only works one day in the week has no other activity which actually takes up more time.

/for combining
for combining the criteria, if it is considered that a precise answer is given to the question in terms of its real meaning. But it may be doubted whether in practice the persons enumerated listen to and attend to the exact wording. It is thought that attention is given merely to the general sense of the question, which means that there would be no great difference between the validity of the reply in censuses using this form or those which left the question of the minimum time completely out of consideration. Indeed, how can it be thought that the persons enumerated will discriminate correctly between "most of" and the vagueness of the question "what did you do?" when those responsible for taking the census, who are supposed to have analysed each question and the instructions to it, do not notice the inconsistency of criteria, as in the case of Chile already mentioned? The majority of the countries of the region find themselves in this state of vagueness as may be seen in table 2. Vis-à-vis this situation it is possible that the answer is to be found in terms of cultural patterns of female work, and where this is widely accepted all women who engage in any economic activity are included, while where the stereotype functions in the opposite direction, i.e., where the women only devote themselves to housework, only those who work for full days or nearly full days are included.

2. Measurement of the female EAP in household surveys in Latin America

While early versions of population censuses can be found in population registers and counts made hundreds of years ago for different purposes, and those of the statistical era date from at least the middle of last century, household surveys constitute a totally recent instrument of measurement. Although their early records should be attributed to an earlier date, it was during the 1950s that the United Nations began to concern itself with developing an instrument which would provide regular annual reports in the developing countries on living conditions in each. The instrument which was to be created had to have as its fundamental characteristic a far greater periodicity than the population censuses, and also allow the coverage of different topics which it was not feasible to include in these censuses, i.e., they had to be multipurpose surveys.
During the 1960s, the United States Bureau of the Census developed the Atlantida model - "A Case Study of Household Sample Surveys" - to serve as a model for the Latin American countries, which effectively occurred. Many countries of the region followed this model, while others adopted designs which differed from it only in some aspects (for example, the case of Mexico) or which were fundamentally different (for example, the case of Argentina).

It is not possible to use the region's household surveys, to perform a task similar to that of analysing the investigation of activity status in the Latin American censuses of the 1970s. While in the case of the censuses the collection of the necessary material (background, census schedules, instruction handbooks, census publications) is feasible if not easy, this is not the case with the surveys, mainly as a result of their characteristics, among others, their frequency plus the fact that in a large number of cases modifications are being introduced in each new application of the instrument. This multiplies several times the quantity of material to be obtained. On the other hand, just as some international organizations have systematized and compiled part of the census material required for the analysis (for example, the case of the census schedules and concepts used as they appear in IATI: 1977b), there is nothing similar for the household surveys made in the region (table 3 contains a list - perhaps not exhaustive - of these surveys). And then the data supplied in the official publications of the countries is not adequate for the purpose. The analysis of this type of operation of data collection can not therefore have the characteristics of that of the censuses, but must necessarily be more general.

As regards the measurement of female labour, what it is important to stress in the case of household surveys is the operational use made of the activity status variable, defined conceptually in the same way as in the censuses as labour force. Unlike the censuses which, as was already said in the last section, interpret the variable by means of a single question, in the surveys a sequence of questions is normally used. In other words, in the household surveys activity status ceases to be a variable which takes the form of an item in the questionnaire, and becomes
<table>
<thead>
<tr>
<th>Country</th>
<th>Name of survey</th>
<th>Period made</th>
<th>Coverage</th>
<th>Survey at present continuing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Permanent household survey</td>
<td>1972-1975</td>
<td>Main cities</td>
<td>X</td>
</tr>
<tr>
<td>Barbados</td>
<td>Household survey</td>
<td>1975-1976</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Bolivia</td>
<td>Employment survey</td>
<td>1976</td>
<td>City of La Paz</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Household survey</td>
<td>1977</td>
<td>La Paz-Cochabamba-Santa Cruz</td>
<td>X</td>
</tr>
<tr>
<td>Brazil</td>
<td>National household sampling survey</td>
<td>1967-1970</td>
<td>Regions I to IV; Regions I to VI</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>National household sampling survey</td>
<td>1971-1973</td>
<td>Regions I to VI and metropolitan area</td>
<td></td>
</tr>
<tr>
<td></td>
<td>National study of family expenditure</td>
<td>1974-1975</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Colombia</td>
<td>Household survey</td>
<td>1970-1977</td>
<td>7 cities; National; 4 cities; Bogota</td>
<td>X</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>Household survey</td>
<td>1967-1971</td>
<td>National; urban areas</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Household survey</td>
<td>1976-1978</td>
<td>Metropolitan area; National</td>
<td>X</td>
</tr>
<tr>
<td>Cuba</td>
<td>Employment survey</td>
<td>1956-1972</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Chile</td>
<td>Employment survey</td>
<td>1973-1974</td>
<td>Selected cities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employment survey</td>
<td>1973-1976</td>
<td>Greater Santiago</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employment survey</td>
<td>1975-1976</td>
<td>National and by regions</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td>Household survey</td>
<td>1968-1969</td>
<td>Urban area; main cities; national</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Employment survey</td>
<td>1975</td>
<td>Urban areas; main cities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employment survey</td>
<td>1977</td>
<td>Urban areas; main cities</td>
<td>X</td>
</tr>
<tr>
<td>El Salvador</td>
<td>Employment survey</td>
<td>1974-1976</td>
<td>Metropolitan area; national</td>
<td>X</td>
</tr>
<tr>
<td>Guatemala</td>
<td>Survey of human resources</td>
<td>1977</td>
<td>Department of Guatemala</td>
<td></td>
</tr>
<tr>
<td>Guyana</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Haiti</td>
<td>Socioeconomic survey</td>
<td>1990</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honduras</td>
<td>Household survey</td>
<td>1971</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jamaica</td>
<td>Employment survey</td>
<td>1972-1975</td>
<td>Metropolitan area Kingston</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td>Household survey</td>
<td>1973-1977</td>
<td>Mexico City and some metropolitan areas; selected regions</td>
<td></td>
</tr>
<tr>
<td>Nicaragua</td>
<td>Employment survey</td>
<td>1973-1976</td>
<td>Main cities</td>
<td>X</td>
</tr>
<tr>
<td>Paraguay</td>
<td>Household survey</td>
<td>1977</td>
<td>Selected areas</td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td>Household survey</td>
<td>1965-1972</td>
<td>Selected cities</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Employment survey</td>
<td>1969-1973</td>
<td>Main cities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employment survey</td>
<td>1973-1974</td>
<td>National-urban</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Household survey</td>
<td>1970-1971</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unemployment survey</td>
<td>1971</td>
<td>Metropolitan area Lima Callao</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Socioeconomic survey</td>
<td>1972</td>
<td>Oriente region; 5 cities</td>
<td></td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>Employment survey</td>
<td>1977</td>
<td>Santo Domingo, Santiago de los Caballeros</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trinidad and Tobago</td>
<td>Household survey</td>
<td>1963-1975</td>
<td>National</td>
<td></td>
</tr>
<tr>
<td>Uruguay</td>
<td>Household survey</td>
<td>1968-1977</td>
<td>Montevideo</td>
<td></td>
</tr>
<tr>
<td>Venezuela</td>
<td>Household survey</td>
<td>1968-1971</td>
<td>Metropolitan area of Caracas</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Household survey</td>
<td>1968-1971</td>
<td>Ciudad Guaya</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Household survey</td>
<td>1975</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

/an area
an area of topics investigated through a group of items. In addition to the declaration requested from the person enumerated as regards his participation or otherwise in the labour market during a certain time-reference period, those who do participate are questioned on the time spent in hours per week on their activity or each of their activities, both regular and extraordinary, their willingness to work more hours, the reasons for not doing so, etc.; while those who do not participate are questioned on the reasons for their lack of employment, the length of time that this has been the case, the motivations and attempts to seek work, etc. In brief, as may be observed from reading the sequences of questions contained in household surveys such as that carried out in Argentina in 1970 or in Chile the same year, which follows the Atlántida model (transcript in Appendices A and B, respectively), the household surveys make a relatively exhaustive and valid investigation of the problem.

3. Comparison between censuses and household surveys: biases in measuring the participation of women in economic activity in population censuses

Before appraising the relative degree of validity of the data produced by population censuses and household surveys, it is relevant to recall certain basic differences between the two types of operation. They differ in their objectives, coverage, frequency and data-collection characteristics, these being facts which cannot but affect the quality of the data they provide.

The population census endeavours to obtain data on a few characteristics of a country's population as a whole at a given moment (size, structure, distribution, educational and economic characteristics of individuals, plus some characteristics of census households). The operation - which tends to be repeated every ten years - is usually carried out in a single day or over a very short period of time, by means of a census schedule which is necessarily brief, simple and easy to interpret for the persons enumerated and for the many enumerators, who normally have little training and are not paid for a task habitually imposed on them.

The household survey, however, is aimed at a periodic (once or twice per year) and thorough investigation of some topics which are considered
fundamental (employment, unemployment, underemployment and others which, in the form of modules, are periodically incorporated in different surveys). In this case the data is collected from a sample of the population of a country or one or several cities, by means of a relatively long and complex questionnaire, applied by a small group of enumerators specially trained for the task for which they receive remuneration, and normally extending over a longer period.

The differences in the objectives and methodology no doubt mean that the data collected by the household surveys on the activity status of the population have a higher level of validity than those collected by the censuses. The utilization of a sequence of questions compared with the use of a single question does not only increase the quantity since if in the former case the reply to the first question in the sequence produced an erroneous answer, there would be a possibility of rectifying this in the following questions, which is impossible in the case of a single question. This has further-reaching implications for some sectors of the population than for others. This is the case of women and children among whom the distinction between economic and non-economic activities is more difficult to establish. It is also the case of those (men and women) who work in the traditional and informal activities of the economy and who are in a situation of underemployment, whether visible or invisible.

In view of the characteristics of discontinuity of the economic participation of women - characterized by their frequent entering and leaving the labour market - the frequency among them of part-time work, sporadic work (seasonal or otherwise); participation in unpaid family activities, in the informal sector, and prejudices against their participation in the economic sphere, it cannot but be expected that the survey operation will not only provide a more valuable measurement than the census of the labour force in general, but of the female labour force in particular.

A comparison is made below of measurements taken on the basis of data provided by censuses and by other types of registers. For all the reasons given in the foregoing paragraphs a greater relative validity will be presupposed for data supplied by the household surveys and other surveys more similar to them than to those of a census type.

/ The specific
The specific aim of the next few pages is to contribute some empirical evidence to revealing how different forms of operationalization based on the same conceptual definition of a phenomenon give rise to different magnitudes of this phenomenon. For this purpose some cases will be presented of pairs of instances data collection for the labour force of several universes through population censuses and household surveys, using the same conceptual definition of labour force. The examples chosen are: Greater Buenos Aires in 1970 - one of the biggest urban agglomerations in Latin America - and the state of São Paulo in Brazil, for the same date - predominantly urban with an appreciable proportion of rural population (around 20%). It would have been desirable to analyse more than two instances of census and household survey measurements from the same universe but unfortunately they are not plentiful - at least as regards the publication of results. Two cases of measurements have been found, however, which involve censuses and other types of data collection. Both have been included here because they also contribute to showing the low level of validity of census data in relation to the female labour force. The two cases are: the Bolivian census of 1976 and the National Population Survey taken a year earlier; and the Costa Rican census for 1973 and a continuing register made by the Social Security Fund of Costa Rica.

In none of the cases analysed did the data correspond strictly to the same populations, defined in time and space, as would have been ideal. But as may be seen in table 4 they are reasonably equivalent. The case of Greater Buenos Aires is the closest to complying with the condition that the data compared should come in actual fact from the same universe. In Bolivia and São Paulo there are large-scale variations between the collection dates for both sources; in the first case it is approximately a year, while in the second is substantially less than a year. Although in such periods overly drastic changes cannot be expected, the fact that the collections were made at different periods of the year may well be of importance for the possible presence of seasonal activities both in Bolivia - a predominantly rural country - and in São Paulo outside its urban area.
### Table 4

**SOME CHARACTERISTICS OF THE SOURCES OF DATA COMPARED**

<table>
<thead>
<tr>
<th>Place, source</th>
<th>Date of survey</th>
<th>Spatial coverage</th>
<th>Time-reference period</th>
<th>Minimum time</th>
<th>Size (per cent)</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Buenos Aires (Argentina) Census</td>
<td>30/9/1970 (1 day)</td>
<td>Metropolitan area of Buenos Aires a/</td>
<td>Week of 21 to 26 September</td>
<td>4 working days or 35 hours per week (for all the occupational groups)</td>
<td>2.0</td>
<td>165 791</td>
</tr>
<tr>
<td>Employment survey</td>
<td>October 1970 (10 days)</td>
<td>Metropolitan area of Buenos Aires a/ b/</td>
<td>Week prior to the survey</td>
<td>1 hour; paid female workers 15 hours; unpaid family workers</td>
<td>0.15</td>
<td>12 437</td>
</tr>
<tr>
<td>Bolivia Census</td>
<td>29/9/1976 (?)</td>
<td>The whole country</td>
<td>Week prior to the census</td>
<td>Not specified (asks for &quot;most of&quot;)</td>
<td>3.3</td>
<td>139 434</td>
</tr>
<tr>
<td>Population survey</td>
<td>June-October 1975 (4 months)</td>
<td>The whole country</td>
<td>Week prior to the survey</td>
<td>Not specified</td>
<td>1.2</td>
<td>52 293</td>
</tr>
<tr>
<td>Costa Rica Census</td>
<td>14/5/1973 (?)</td>
<td>The whole country</td>
<td>Week from 7 to 12 May</td>
<td>1 hour in the week (for all occupational groups)</td>
<td>Universe</td>
<td>Universe</td>
</tr>
<tr>
<td>Social Security Fund of Costa Rica</td>
<td>June 1973 c/</td>
<td>The whole country</td>
<td>Week from 7 to 12 May</td>
<td></td>
<td>Universe</td>
<td>Universe</td>
</tr>
<tr>
<td>Household survey</td>
<td>First quarter 1970 (one quarter)</td>
<td>State of São Paulo a/</td>
<td>Week from 25 to 31 August)</td>
<td>Not specified</td>
<td>0.10</td>
<td>17 201</td>
</tr>
</tbody>
</table>

a/ Federal Capital and groups from Greater Buenos Aires.

b/ Private households.

c/ The exact details of the survey are not known. From the introduction which precedes the statistical data-reproduced in Appendix A — it is assumed that this is a monthly report and therefore refers to the month.

d/ Refers only to employers, wage-earners and a few own-account workers and members of co-operatives. It was estimated that in 1973 the fund covered 40% of the EAP.

e/ Private and collective households, except for persons in sanatoria, army barracks, homes for old people, orphans or invalids, convents and prisons (but including persons employed in those institutions).
Appendix A reproduces the operational definitions of labour force used by the sources of information compared, as they appear in the questions in the forms and in the instructions to data-collectors. It emerges from the comparison that the degree of divergence varied greatly from one case to another; the smallest was between the Bolivian sources, the largest between the Costa Rican sources, and in an intermediate situation, although tending to diverge considerably, were to be found the cases of the censuses and household surveys of Greater Buenos Aires and the State of São Paulo.

(a) **Comparison of population censuses versus household surveys**

As has already been said, both in the case of Greater Buenos Aires and in that of the State of São Paulo, the discrepancy between the operational definitions of labour force used by the pairs of sources is very considerable. As regards the comparison between rates of activity by sex and age prepared for both cases on the bases of data from censuses and surveys, the results are very clear: the surveys record a relative number of active persons which is greater than in the census, as may be seen from table 5 (the only exception to this generalization occurs in the group of advanced ages in São Paulo where perhaps the divergence could be justified by the sampling error, since this is no doubt the group of least frequency both in the total population and in the active population). The results then coincide with what may be expected.

But the differences are not equal for both sexes. If they are not very large, although significant, in the case of males, they are enormous in the case of women. It would seem that different operational definitions do not greatly affect coverage of the male labour force but do affect the female labour force, even in a completely urban area like Greater Buenos Aires, where the coverage of the active population is generally more

---

* Unquestionably no questionnaire is available for the household survey of Brazil. Verbal references exist, however, to the fact that it is a good survey as also the definitions used of the labour force, quoted in Appendix A, lead it to be thought.

** In the case of Argentina, in addition to the general greater validity of the survey operation vis-à-vis the census, it is possible that the difference in the time limits fixed in the census (4 normal working days) and in the survey (1 hour per week) may be of influence in defining a person as active.

/Table 5
Table 5
RATES OF PARTICIPATION by SEX AND AGE FROM CENSUSES AND HOUSEHOLD SURVEYS.
GREATER BUENOS AIRES (ARGENTINA), STATE OF SÃO PAULO (BRAZIL), 1970

<table>
<thead>
<tr>
<th>Age</th>
<th>Women Survey</th>
<th>Women Census</th>
<th>E * 100</th>
<th>Men Survey</th>
<th>Men Census</th>
<th>E * 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29</td>
<td>62.3</td>
<td>49.9</td>
<td>124.8</td>
<td>91.8</td>
<td>90.8</td>
<td>101.1</td>
</tr>
<tr>
<td>30-39</td>
<td>42.1</td>
<td>34.4</td>
<td>122.4</td>
<td>99.1</td>
<td>98.2</td>
<td>100.9</td>
</tr>
<tr>
<td>40-49</td>
<td>38.8</td>
<td>28.9</td>
<td>134.3</td>
<td>97.4</td>
<td>96.6</td>
<td>100.8</td>
</tr>
<tr>
<td>50-59</td>
<td>25.6</td>
<td>20.4</td>
<td>125.5</td>
<td>87.1</td>
<td>82.6</td>
<td>105.4</td>
</tr>
<tr>
<td>60-69</td>
<td>8.8</td>
<td>7.6</td>
<td>115.8</td>
<td>40.9</td>
<td>37.7</td>
<td>108.5</td>
</tr>
<tr>
<td>70 and +</td>
<td>2.8</td>
<td>2.5</td>
<td>121.7</td>
<td>14.7</td>
<td>11.6</td>
<td>126.7</td>
</tr>
</tbody>
</table>

State of São Paulo

<table>
<thead>
<tr>
<th>Age</th>
<th>Women Survey</th>
<th>Women Census</th>
<th>E * 100</th>
<th>Men Survey</th>
<th>Men Census</th>
<th>E * 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-24</td>
<td>47.4</td>
<td>39.5</td>
<td>120.6</td>
<td>92.8</td>
<td>88.5</td>
<td>104.9</td>
</tr>
<tr>
<td>25-34</td>
<td>31.7</td>
<td>26.5</td>
<td>119.6</td>
<td>97.9</td>
<td>96.0</td>
<td>102.0</td>
</tr>
<tr>
<td>35-44</td>
<td>29.0</td>
<td>22.6</td>
<td>128.3</td>
<td>97.1</td>
<td>95.3</td>
<td>101.9</td>
</tr>
<tr>
<td>45-54</td>
<td>19.4</td>
<td>17.1</td>
<td>113.5</td>
<td>92.8</td>
<td>88.2</td>
<td>105.2</td>
</tr>
<tr>
<td>55-64</td>
<td>12.6</td>
<td>9.5</td>
<td>132.6</td>
<td>72.7</td>
<td>68.6</td>
<td>106.0</td>
</tr>
<tr>
<td>65 and +</td>
<td>2.4</td>
<td>3.7</td>
<td>64.9</td>
<td>31.6</td>
<td>34.2</td>
<td>92.4</td>
</tr>
</tbody>
</table>

Source:
- Argentina (1974), Table 6.
- Argentina (undated), Table 1a.
- Brazil (1973b), Table 21.
- Brazil (undated), Table 3.1.2.

a/ The rate of participation is the quotient of the economically active population and the total population of the corresponding sex and ages, expressed as a percentage.
valid. The differences between the rates of female participation in both sources are never less, with the exception noted, than 14% and exceed 30% in some cases. The conclusion is clear and immediate in these populations: the population census would not appear to have been a good instrument for measuring the economic participation of women, either in a totally urban population or in another which, although urban elements predominate, is rural to an appreciable extent.

Fortunately the data available for São Paulo allows a more thorough comparison in permitting the rates of activity to be calculated separately for agricultural and non-agricultural workers on the one hand, and for unpaid family workers and wage-earners on the other. The results given in table 6 show clearly that, at least in this case, the population census is not a good means of covering the female labour force in general, and furthermore it is particularly poor in respect of the agricultural sectors and unpaid family workers. In fact, the figures are very impressive, although it could be added that the sampling error of the survey is maybe significant in these relatively small groups, or that surveys made on different dates may have been affected by the presence of seasonal activities. However, the differences, in addition to being considerable, are consistent in themselves and also consistent with the results found by Pecht (1974) in his analysis of the figures produced for Brazil and for Mexico by the population and agricultural censuses, both taken in the same period. In the case of São Paulo, therefore, we come face to face with one of the Latin American population censuses in which it would seem to be confirmed that the underenumeration of active women is generally high but particularly high in respect of women employed in agricultural activities and unpaid family workers - both those employed in agricultural and non-agricultural activities.

The bibliography on the economically active female population insists in pointing out that underenumeration is more common for agricultural workers and unpaid family workers, and less common in urban than in rural areas.
Table 6

RATES OF FEMALE PARTICIPATION BY AGE, AGRICULTURAL AND NON-AGRICULTURAL SECTOR, WAGE-EARNERS AND UNPAID FAMILY WORKERS FROM THE POPULATION CENSUS AND HOUSEHOLD SURVEY, STATE OF SÃO PAULO (BRAZIL), 1970

<table>
<thead>
<tr>
<th>Age</th>
<th>Survey</th>
<th>Census</th>
<th>E x 100</th>
<th>Survey</th>
<th>Census</th>
<th>E x 100</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Agricultural</td>
<td></td>
<td></td>
<td>Non-agricultural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 - 24</td>
<td>4.5</td>
<td>1.9</td>
<td>236.8</td>
<td>42.8</td>
<td>37.4</td>
<td>1134.4</td>
</tr>
<tr>
<td>25 - 34</td>
<td>4.7</td>
<td>1.1</td>
<td>427.9</td>
<td>26.6</td>
<td>25.3</td>
<td>1066.5</td>
</tr>
<tr>
<td>35 - 44</td>
<td>4.2</td>
<td>1.2</td>
<td>350.0</td>
<td>24.8</td>
<td>21.4</td>
<td>1150.9</td>
</tr>
<tr>
<td>45 - 54</td>
<td>2.8</td>
<td>1.2</td>
<td>233.9</td>
<td>16.6</td>
<td>15.9</td>
<td>1048.4</td>
</tr>
<tr>
<td>55 - 64</td>
<td>3.8</td>
<td>0.8</td>
<td>475.0</td>
<td>8.8</td>
<td>8.7</td>
<td>1011.2</td>
</tr>
<tr>
<td>65 and +</td>
<td></td>
<td>0.4</td>
<td></td>
<td>2.4</td>
<td>3.2</td>
<td>751.2</td>
</tr>
</tbody>
</table>

Unpaid family workers

<table>
<thead>
<tr>
<th>Age</th>
<th>Survey</th>
<th>Census</th>
<th>E x 100</th>
<th>Wage-earners</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 - 24</td>
<td>3.5</td>
<td>1.1</td>
<td>318.2</td>
<td>42.2</td>
</tr>
<tr>
<td>25 - 34</td>
<td>5.6</td>
<td>0.5</td>
<td>1120.0</td>
<td>25.1</td>
</tr>
<tr>
<td>35 - 44</td>
<td>3.9</td>
<td>0.4</td>
<td>975.0</td>
<td>21.0</td>
</tr>
<tr>
<td>45 - 54</td>
<td>2.8</td>
<td>0.4</td>
<td>700.0</td>
<td>13.1</td>
</tr>
<tr>
<td>55 - 64</td>
<td>2.1</td>
<td>0.3</td>
<td>700.0</td>
<td>6.9</td>
</tr>
<tr>
<td>65 and +</td>
<td></td>
<td>0.2</td>
<td></td>
<td>1.2</td>
</tr>
</tbody>
</table>

Sources: Brazil (1973b), Table 21; Brazil (undated), Table 3.2.2.

(a) The rate of participation by sector of activity or occupational group is defined as the quotient of the economically active population of each sector and group and the total population of the corresponding sex and age.
(b) **Comparison of population census versus population survey**

The general methodology of a population survey like that taken in Bolivia in 1975 is in many aspects similar to that of a population census. It coincides with the latter in using a short and simple questionnaire and also in the variables it investigates, although, of course, some differences exist such as the fact that in the survey, under the subject "economic characteristics" only "activity status" is investigated, although the investigation of fertility and mortality is more thorough. The most notable difference, however, is that the survey uses sampling on the population to be investigated; it is carried out by a relatively small number of well-trained enumerators who move around the area over a period of three to four months, which is the time the data collection lasts.

The operational interpretations of labour force in the "filter" questions of the 1976 census and the 1975 survey are nearly identical. The instructions to enumerators, however, are rather more different. In fact, a careful reading of the instructions (see Appendix A) leads to the inescapable conclusion that those of the survey are clearer and above all more detailed, whether they are clarifications included in the questionnaire or guidelines laid out in the enumerators' handbook.

Table 7 gives comparative data for the survey and the census, adding some male data to the female data to serve as a point of reference. The relation between the rates of participation of the survey and those of the census for the total number of women in Bolivia, controlled by age-groups, shows that the survey covered between 33 and 49% more active women than the census. But these differences prove enormous vis-à-vis those of the Capital - an area where survey and census give rates of participation which differ very little - and minute compared with those of the rural area. In the latter, the rates of women between 20 and 39 years of age obtained on the basis of survey data more than double those obtained from census data. It is a fact that the rural population of Bolivia, which accounts for approximately 65%, counts for a great deal in the average national rates. The male rates prepared on the basis of data from both the censuses are those which differ least, even less than females rates for the Capital.
Table 7


<table>
<thead>
<tr>
<th>Age</th>
<th>Total country</th>
<th>Capital</th>
<th>Rural area</th>
<th>Total country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Survey</td>
<td>Census</td>
<td>E * 100</td>
<td>Survey</td>
</tr>
<tr>
<td>20 - 29</td>
<td>37.0</td>
<td>25.0</td>
<td>148.0</td>
<td>35.4</td>
</tr>
<tr>
<td>30 - 39</td>
<td>34.1</td>
<td>23.5</td>
<td>145.1</td>
<td>36.8</td>
</tr>
<tr>
<td>40 - 49</td>
<td>30.2</td>
<td>22.8</td>
<td>132.5</td>
<td>28.6</td>
</tr>
<tr>
<td>50 - 59</td>
<td>27.1</td>
<td>19.5</td>
<td>129.0</td>
<td>27.8</td>
</tr>
</tbody>
</table>

Sources: Torrez (1977) Tables 11 and 12, Polo Najera (1978), Table 4 and Bolivia (1977) Table 9, and unpublished tabulations of the National Population Survey of 1975 kindly supplied by the National Statistical Institute (La Paz).

a/ The rate of participation is the quotient of the economically active population and the total population of the corresponding sex and age, expressed as a percentage.
In other words, census and survey are not over-different in the coverage of the economically active male population and the female population residing in urban areas. But the differences are enormous when dealing with the female population residing in rural areas.

It might be thought that it is the seasonal nature of agricultural work which, in being reflected in the different dates of data collection, affects the figures to such an extent. There is, however, rather a tendency to think that as in the case of the Brazilian census, the Bolivian census also turned out to be an operation of little validity in collecting data on the female labour force employed in agriculture, and thus in the rural area. The results of the survey, however, are also more consistent with the previous Bolivian census (1950) which showed higher rates of participation in the agricultural sector than in the non-agricultural sector. The urban-rural differential shows the same trend according to the data from the 1975 survey (Recchini de Lattes: 1979), and this is in keeping with the living conditions of the population of the Altiplano, which comprises the majority of Bolivia's population. The differential revealed by the data from the 1976 census, however, has a contrary trend (Polo Nájera: 1978), i.e., similar to that shown (possibly erroneously) by the rest of the countries of the region.

(c) Comparison of the population census versus a continuing register

These two sources of information on the labour force show considerable divergences, as has already been said. While the population census, at least theoretically, covers the entire population of Costa Rica, the register of the Social Security Fund of Costa Rica only covers the workers who come under the insurance - who are estimated to constitute somewhat less than half the economically active population - and the information depends on the data supplied monthly by active employers. Despite their incompleteness, the data from the register will make it possible to show up the inadequacy of population censuses as regards coverage of the female labour force devoted to agricultural work.

In fact, the relation between the rates of both sources for the rest of the urban population (not presented here) is very similar to that of the Capital.
The global figures of the register, as has been said, account for 46% of the total labour force calculated by the census for that year (1973). The coverage of the register is higher for women than for active men - if the comparison is made in relation to the census. This could be the case either because the insurance - which includes maternity leave - covers the female population to a more satisfactory extent than the male population, or because active women are less well enumerated than men by the population census. Even so, the figure for female workers according to the register is far different from that of the census figure of which it represents only 61%. The trend of the difference is inverted in the case of women in agricultural activities; the coverage of the register represents 117% of that of the census. This figure is eloquent of census under-registration of women in agricultural activities. Although the register does not cover all active women, it records more women in agriculture than the census does. In particular, the insurance system of registration does not cover unpaid family workers - who would be included by definition in the census figures - and only appears to cover a very small proportion of own-account female workers - who would be included under what the Social Security describes as "voluntary continuation". On comparison with other sectors of activity it could be observed that the insurance covers the workers of both sexes in the agricultural sector to a lesser extent than other workers. This fact may be seen, for example, in the figures corresponding to men - usually well covered by the population census. While male workers registered by the Social Security account for 42% of the census male EAP, workers in the agricultural sector account for only 22% of those enumerated in the census. This means that on the one hand there is evidence that the agricultural sector is one of those least covered by the Social Security and on the other hand that the Social Security covers a large number of women in agricultural activities than were recorded by the population census. This leads us to the conclusion not only that the Costa Rican census of 1973 - like those of Brazil and Bolivia - did not constitute a good instrument for measuring female agricultural workers, but that the true number must be greater than that recorded by either of the two sources consulted: census and register.
4. Conclusions

Through the four cases analysed in this chapter, in which a contrast was drawn for several universes between the population census and other sources of data on the female labour force, it was shown that, as has frequently been affirmed but not so far proved, this is generally speaking not a good instrument for taking this measurement, and particularly poor when dealing with female agricultural workers and unpaid workers. This does not mean - far from it - that the other sources give totally reliable information. It can only be said, through this analysis, that they provide more complete information. But since the population censuses constitute the broadest sources of data for the past, while the improvement of the data which may be obtained from them by refining the conceptual and operational definitions is a matter for the future, the next chapter will devote a point to suggestions which may make it possible to overcome at least some of the deficiencies mentioned - and suggest how to deal with improving the statistics of the forthcoming population censuses.
ARGENTINA, INSTITUTO NACIONAL DE ESTADISTICA Y CENSOS (INDEC), (1974),
Censo Nacional de Población, Familias y Viviendas - 1970. Resultados
obtenidos por muestra. Gran Buenos Aires, Area Metropolitana, Buenos
Aires, INDEC.

ARGENTINA, INSTITUTO NACIONAL DE ESTADISTICA Y CENSOS, (no date), Encuesta

BOLIVIA, INSTITUTO NACIONAL DE ESTADISTICA, (1977), Resultados Anticipados
por Muestra. Censo Nacional de Población y Vivienda 1976, Instituto
Nacional de Estadística.

BRASIL, FUNDAÇÃO INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTADISTICA (IBGE),
Série Regional. Volume I, Tomo XVIII, Rio de Janeiro, Fundação IBGE.

BRASIL, FUNDAÇÃO IBGE (no date), São Paulo, pesquisa nacional por amostra
de domicílios. População; habitação; mão de obra; salário; instrução.
Doc. GEPD N° 48, First quarter, 1970, IBGE, Lucas, GB.

CELADE, "Banco de datos: Operación Muestra de Censos 1970 (OMUECE 70)"

CEPAL (1979), "La medición del empleo y de los ingresos en áreas urbanas a
través de encuestas de hogares", Documento preparado para el Grupo de
Trabajo sobre la medición del empleo y de los ingresos en áreas urbanas
través de encuestas de hogares. Santiago, Chile, (2-6 July 1979),
CEPA/UF/EST/195.

COSTA RICA. CAJA COSTARRICENSE DE SEGURO SOCIAL (1974), Estadística
patrones, trabajadores, salarios y cuotas 1973, Departamento Actuarial
y Estadístico, Sección de Estadística.

COSTA RICA, DIRECCION GENERAL DE ESTADISTICA Y CENSOS (1974), Censos

HIMMELWEIT, S. and S. MOHUN (1977), "Domestic labour and capital",


IASI (1958), Censo de Población. Bases para su planeamiento bajo el

IASI (1977a), Report of the Third Session of the Subcommittee on Demographic,
Housing and Related Statistics of the Committee on Improvement of

/IASI (1977b),


MADEIRA, Felicia R. (1977), O trabalho da mulher em Fortaleza, presented at the Primer Simposio Mexicano Centroamericano de Investigación sobre la Mujer, held in Mexico.

UNITED NATIONS (1964), Handbook of household surveys, New York, Series F, No. 10.


OSTRY, Sylvia (1968), The Female Worker in Canada, Ottawa, Dominion Bureau of Statistics.

PECHT, Waldomiro (1975), La población económicamente activa en las actividades agrícolas en Brasil y México: un análisis a partir de los censos económicos y de población, Santiago, CELADE, IPI/6, Rev.1.

PEDRERO NIETO, Mercedes (1979), "Importancia de las Encuestas de Hogares en el Estudio del Empleo. Señalamiento de algunas limitaciones del Modelo ATLANTIDA", Tercera reunión del Grupo de Trabajo sobre la Información Sociodemográfica, Comisión de Población y Desarrollo, CLACSO, Lima.

POLO NAJERA, José (1978), Características de la población económicamente activa de Bolivia, INE-CELADE, Seminario sobre Situación Demográfica de Bolivia, La Paz (17-20 April).

PREALC (1970), Un intento de medición de la disponibilidad de la mano de obra en los países de la región latinoamericana a través de las encuestas de hogares por muestreo, Segundo Simposio sobre Encuestas de Hogares por muestreo en Latinoamérica, Río de Janeiro.


/STANDING, Guy

TORREZ P., Hugo (1977), La Mujer Boliviana y sus Características Demográficas en la Fuerza de Trabajo 1975, La Paz, Ediciones CIS, Serie Estudios de Población y Desarrollo N° 12.


This chapter sums up the lines developed in the previous chapters. It contains an appraisal of difficulties existing in the data compiled from censuses and household surveys around 1970 in Latin America and the Caribbean for the study of female labour, and some suggestions for overcoming them. These difficulties relate both to the collection and to the processing of data. From the point of view of collection, two classes of problems have been identified: one concerns the validity of the data on the phenomenon itself which it is intended to measure and analyse - a problem concerning the operational definitions of activity status used; the other relates to the quantity of information collected for the analysis and explanation of this phenomenon, and relating to the spectrum of variables in respect of which data is collected in censuses and household surveys. From the point of view of the processing there are also two topics of interest which have been identified, this time exclusively in relation to the censuses: What type of measures would make it possible to overcome, even partially, the difficulties inherent in the data actually collected, and what other processing and tabulation, in addition to what is already available, could be proposed on the basis of this data?

In other words, problems exist both as regards the collection and processing of data, in terms of quantity (variables on which data are not collected and data which are not tabulated) and of quality (low level of validity of the collection of data and the measures used to process them). We shall go on to describe these four problems separately. Both the appraisal and suggestions presented have arisen from the confrontation between (i) the conceptual frameworks reviewed and the data at present available for the measurement and analysis of the participation of women in economic activity, and (ii) alternative measurements of this phenomenon prepared on the basis of data from different collection operations which share the same conceptual definition of labour force but differ in its operationalization and general methodology. As will be seen, some of the suggestions presuppose the collection of
collection of new data or the use of different instruments to do so; others, however, lead off from data already available and propose new forms of using them.

1. Validity on the collection of data on activity status: operational definitions used

Since, as was seen in the last chapter, the degree of validity of the measurement of the female labour force in household surveys to all intents and purposes is far superior to that of the censuses, the recommendations and suggestions formulated will refer to the latter. Of the aspects analysed, there are three which most affect the measurement of the participation of women in the economy and therefore which require further consideration.

(a) Wording of the "filter" question

Several suggestions have been provoked by the analysis of the wording of the "filter" question and the instructions which accompany it with a view to determining the activity status of the population of active age. Firstly, and following the most basic methodological recommendations applicable to any social investigation, emphasis must be laid on the fact that the wording of the question (the stimulus aimed at producing the data) must be clear, precise and standard for the entire population. As regards clarity, the use of the negative form, especially if repeated, as in the case of the Brazilian census, contradicts the most elementary principles of the wording of items aimed at collecting valid information. As regards uniformity (constancy of the stimulus), if any semblance of it is to be achieved, the information on activity status must be requested through a question contained in the census schedule or through the title of a column or row which will make each enumerator give it (at his own discretion) the form of a question.

Secondly it is important that in presenting the different pre-coded alternative responses to each question, the activities should be placed in order, beginning with economic activities followed by non-economic activities, with instructions to the enumerator to stop reading the alternatives on reaching the first reply chosen by the person enumerated.

*// This question is worded as follows: "If you were not working nor were seeking for work, what situation and employment did you have?" (underlining added).
If the economic activities are not given an appropriate order of hierarchy or if the person enumerated is given the possibility of answering after he has heard all the alternatives, it is probable that many active women will be erroneously classified as not active—because their culture "states" that proper and suitable work for women is work in the house, or because in specific circumstances housework is considered more prestigious than certain economic activities and also because, generally speaking, economically active women usually play a double role.

Thirdly, and although apparently obvious, it would seem necessary to insist that the enumerators' instructions should not be ignored and the wording of the "filter" question contradicted, as has seen to happen in many cases. It is very particularly recommended that in the handbook of instructions no suggestion should be made, for example, that household chores are proper to women and only exceptionally done by men, or that persons of specific ages are very probably inactive or unemployed. On the contrary, the instruction should tend to break with the stereotype that women only devote themselves to household chores, by insisting that if they engage in an economic activity, even at home, or part time, they should equally be classified as economically active.

As regards the formulation of the question on activity status, since the usual layout in the form of a single question in fact condenses several—the series of alternative replies—it is concretely suggested that it should be spread out into a sequence, contributing in this way too to clarifying what is understood by "work". A possible formulation would be that given below.\# (This sequence would only replace the "filter" question as usually worded in the Latin American censuses. It therefore does not

\# The sequence of questions given below has been suggested by Valdecir Lopes, of CELADE, who on a personal basis has authorized their inclusion in this document. The only change has been that of the expression "the week" used by Lopes to "the period" in accordance with the considerations expressed below. It should be noted that in this sequence of questions there is one particularly aimed at covering unpaid family workers, usually underenumerated by the censuses. The possibility of working at home is also made explicit—a form of participation in the labour force which is common among women of certain social conditions.
include items such as "time worked" - hours per week, months per year, etc. - which, as suggested in point 2, should be added to narrow down the measurement of activity status.

Sequence of questions on activity status (when a positive answer is received go on to question ...)

1. During the period from ... to ... did you have a job, at home or outside for which you received some type of payment or remuneration in money or kind?
   Yes: At home _____ Outside _____ No _____

2. During the period from ... to ... did you help any member of the family in an enterprise, workshop, business or profit-making concern of his own without receiving payment?
   Yes _____ No _____

3. You did not work during the period from ... to ... but had a job for which you usually receive some type of payment?
   Yes _____ No _____

4. You did not work during the period from ... to ... but had worked previously and were interested in finding a job?
   Yes _____ No _____

5. You did not work during the period from ... to ... and had never worked before but were interested in finding a job?
   Yes _____ No _____

6. You had private means or were retired and had no paid job?
   Yes _____ No _____

7. You were studying at school (primary, secondary or higher education) and had no paid activity?
   Yes _____ No _____

8. During the period from ... to ... you were only concerned with keeping house and had no paid or profitable activity?
   Yes _____ No _____

9. State what you were doing during the period from ... to ...:

(b) Time-reference period

As several authors have pointed out (D'Souza: 1978, United Nations: 1978, Torrado: 1979), the choice of a short period like a week particularly affects female agricultural workers, who only participate in periods when work of this type is particularly intensive. Although no other information has been found to
found to contrast with this, it does not seem too venturesome to say that the very high rate of participation observed in Haiti - the highest in Latin America according to the latest census data available, as will be seen below - is a result of the long time-reference period selected by this country. A further step must be taken in considering this recommendation. Research on the topic carried out in some nations outside the region shows that women's participation is characterized by their entering and leaving the labour market on a number of occasions, even in relatively short periods like a year. Ostry's study (1968) on female labour in Canada gives quantitative evidence of their greater occupational "elasticity" compared with men: the comparison between the rates of participation obtained from 1961 for the week and for the year prior to the census shows a difference of as much as 14% among women but not even 5% among men. Although data for a week underestimate the figures for both sexes given by the measurement for a year, the effect is significantly greater for female labour force. Consequently, a more adequate measurement than has been made to date of female labour in the region would require an extension of the time-reference period by considering not only agricultural work but all economic activities. In other words, this is a recommendation which all the countries should take into account and not only those countries in which agricultural activities predominate.

(c) Minimum time of activity

From an analysis of cases in which instructions were included as to the time required to be considered active, it could be seen that only two countries specified a precise time in addition to including in the wording of the question the expression "most of the week", but in one of them there is inconsistency between the instruction and the question. Of the rest of the countries which mentioned an exact time - one day, 15 hours, etc. - in the question on activity status the great majority gave different instructions for unapid family workers. As was shown in chapter III, in that it leads enumerators who do their work carefully to dead-end situations, this divergence may have determined that in the majority of cases these instructions have not been taken into consideration. The recommendation here is not to include a minimum time either in the question on activity status or in the instructions to it. Should it be decided to establish it,
however, there should be no differences between the time set for unpaid family workers and the rest of the active female population at the risk of having to formulate more complicated instructions - unsuitable for an operation like a census - or, as was the case in the past, of ending up with incoherent or absurd recommendations.

Some of the suggestions formulated could perhaps be tested on special modules which are added to the household surveys which, in addition to including other variables as is suggested in the next point, could try out new forms of questions, for example with several time-reference periods, a week, a month, a year.

2. Gaps in the collection of data on variables relevant to the analysis and explanations of female labour behaviour

Under this heading we shall give the results of the separately made appraisal of the censuses and household surveys, and for each of these operations to collect data, for variables characterizing the woman whose employment behaviour it is wished to analyse and for variables which characterize other members of the household of which the woman is part. The appraisal was made by confronting the variables included in the conceptual frameworks reviewed in chapter II with those actually included in the censuses and surveys taken around 1970. Tables Ia and Ib of Appendix C give the result of this confrontation for the censuses of all the countries of the region, for the Atlantida household survey model - used by a large number of countries - and for three instances of surveys which differ notably from this model - those used by Argentina, Brazil and Venezuela.

Before making any appraisal one should be quite clear that the women whose employment behaviour it is wished to investigate are all women of an active age, i.e., susceptible of offering themselves in the labour market, independently of their marital status or position in the family unit (cohabitational status and relationship to the head of the household - male or female). Married and unmarried women, widows, separated and divorced women, mothers, daughters, grandmothers, aunts, sisters-in-law, domestic servants living in the household, pensioners, etc., are all of interest. It is for all these women and not only for married women or mothers or heads of households that
households that the variables included in the conceptual frameworks reviewed are relevant, and not only those characterizing the women themselves but also those characterizing the other members of the household of which they are part. It should also be made clear that as far as the family unit is concerned, it is not only the nuclear type which is of interest but all other types of family arrangement which empirically occur. This comment would seem relevant in view of the frequency with which it is implicitly although not explicitly assumed in the studies on this group of topics, that the nuclear type is the dominant domestic arrangement.

The appraisal given below has been made on the assumption that it is possible to reconstruct the data on individuals in terms of their belonging to households, i.e., that even when the data from censuses and surveys is usually collected from and tabulated for individuals, it is susceptible of allowing a register of households to be made from it. On this hypothesis the problems relating to processing are for the moment excluded from the appraisal in order to concentrate on those relating to collection. What therefore requires to be pointed out is which are the variables suggested by the conceptual frameworks on which the censuses and surveys did not collect information and of which no analysis can thus be made even if it were possible to undertake further processing and tabulations.

Table 8 - a summary of tables Ia and Ib of Appendix C - shows which are the variables for which the censuses and surveys did not provide data (-) and those for which they did (X). It does not include variables on which it is impossible or extremely difficult to collect data using censuses or household surveys, such as those characterizing levels of economic development (framework of the U-curve) or use of time (framework of the time budget). For the study of this latter topic, which we consider to be fundamental in order to advance in elucidating concepts and in measuring "work", another type of instrument for collecting data would be required.
Table 8
VARIABLES INCLUDED IN THE CONCEPTUAL FRAMEWORKS AVAILABLE FOR THE STUDY OF FEMALE LABOUR IN RESPECT OF WHICH THE CENSUSES AND HOUSEHOLD SURVEYS COLLECT OR DO NOT COLLECT DATA (THE APPRAISAL PRESUPPOSES THE POSSIBILITY OF DRAWING UP A REGISTER OF HOUSEHOLDS)

<table>
<thead>
<tr>
<th>Censuses</th>
<th>Surveys</th>
</tr>
</thead>
<tbody>
<tr>
<td>For individual women</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>X</td>
</tr>
<tr>
<td>Marital status</td>
<td>X</td>
</tr>
<tr>
<td>Schooling</td>
<td>X</td>
</tr>
<tr>
<td>Migratory status</td>
<td>X</td>
</tr>
<tr>
<td>Urban-rural residence</td>
<td>X</td>
</tr>
<tr>
<td>Relation to head of household (male or female)</td>
<td>X</td>
</tr>
<tr>
<td>Number of children</td>
<td>X</td>
</tr>
<tr>
<td>Activity status</td>
<td>X</td>
</tr>
<tr>
<td>Time worked</td>
<td>-</td>
</tr>
<tr>
<td>Length of experience of work</td>
<td>-</td>
</tr>
<tr>
<td>Physical relationship employment-household</td>
<td>-</td>
</tr>
<tr>
<td>Income</td>
<td>-</td>
</tr>
</tbody>
</table>

| For the other members | |
| Age of children | - | - |
| School attendance of children | - | - |
| Presence-absence of other members (relatives and non-relatives) | - | X |
| Sex of relatives | - | - |
| Age of relatives | - | - |
| Activity status of other members (relatives and non-relatives) | X | X |
| Occupation of husband | - | - |
| Occupation of head of household (male or female) | X | X |
| Income of husband | - | - |
| Income of head of household (male or female) | - | - |
| Income of other adults | - | - |
| Family income | - | - |

- Data exists in the Atlantida model.
- Data exists in the survey of Brazil.
- Data exists in the censuses in 11 of the 24 countries of the region: Brazil, Colombia, Costa Rica, Haiti, Mexico, Panama, Peru, Venezuela, Barbados, Jamaica, and Trinidad and Tobago.
- Data exists on the hours worked per week, not on the months per year.
- Data exists in the surveys of Argentina and Brazil, not in the Atlantida model nor the survey of Venezuela.
- As for g/, with the exception of Haiti.
- Data exists for female heads of households and, with some margin of error, for the wives of heads of households of nuclear units.
- Only in the case of female heads of households and, with some margin of error, in that of wives of heads of households of nuclear units can "other members" be differentiated according to their family-non family relationship. For other women data may be available on "other adults" with no possibility of differentiating between relatives and non-relatives.
- Data exists for females heads of households.
As may be seen from the above table the absence of available data is more pronounced as regards the characteristics of other members of the household than those of the object of the analysis, and still more so in censuses than in household surveys. The fact is consistent with the orientation towards the study of the individual, independently of his insertion in the domestic unit which has predominated to date in this type of register. This orientation is what approaches as different as that of neoclassical economics, that of the recent current of marxist economics or that of the time budget are endeavouring to modify.

This, however, requires to be qualified according to the groups of women concerned. In fact, if the woman whose behaviour it is attempted to analyse is head of a household, and to some extent if she is the wife of the head of a household of a nuclear type, then the drawing up of a register of households and the tabulations which may follow on from it would make it possible to have access to data on characteristics of other members. This is so because in censuses and surveys, data on other members refer to the head of the household. If the woman occupies this position, there is no problem. If, however, she is the spouse of the head of a nuclear unit, the data collected for the head and husband can validly be applied to her with a relative margin of error (a certain margin of error with reference, for example, to the case of one of the spouses being widowed or separated after a previous marriage and the biological children not being the children of the present spouse). The picture is completely different if the woman is not the head of the household nor the wife of the head of a nuclear unit. This is the case of women who are not heads of households who are part of a nuclear unit but are not the wives of heads of households (for example, daughters), or women who form part of non-nuclear units (for example, the mother, mother-in-law, aunt, servant and other relative or non-relative of the head). For these women neither the census nor the household surveys collect equivalent data.

In view of the differences between the two types of data-collecting operations (censuses and surveys) in terms of the different level of training of the collecting agents, the possible extension of the instrument used in terms of the number of units to which it applies and the associated costs, the suggestions which may be advanced on the collection of further data must be differentiated.
In the case of the censuses, and in the light of the evidence presented in chapter III, in addition to what was said in the last point in this chapter, it would appear to be fundamental before collecting a larger quantity of data to increase the quality (validity) of the data collected on the activity status variable and also ensure the possibility of reconstructing the census households. As regards this latter point we shall return to it later in this chapter (see point 4). As regards the measurement of activity status, in addition to the recommendations made in 1, it is thought advisable only to suggest the inclusion in the census schedule of questions on the working time measured in hours per week and months per year. These questions would produce a more accurate and complete measurement of activity status and would have an indubitable effect on the validity of the measurement of the volume of employment and unemployment. This is a very different approach to that which establishes a minimum time of activity in the questions and/or in the instructions referring to activity status, an approach which, as has already been said, is not considered very suitable. The present suggestion would make it possible to know the time actually worked by each person, independently of the limit imposed as a minimum to define their status as an "active" person.

Owing to the difficulties attendant on the investigation of income (rejection of the subject, distortion and consequent undermining of the validity of the data) and because the collection of data on other characteristics of individual women and other members of the family would expand the census schedule for more than is advisable, it is not deemed appropriate for this measurement to be included in this type of operation for collecting data, although it is suitable for inclusion in household surveys.

Also in connexion with surveys it seems advisable to recommend ensuring the possibility of processing the data for the household unit. */ Should this operation be carried out, it does seem relevant to propose the collection of additional data, some in a permanent form in all the surveys taken, and some in a sporadic form in some of the surveys, following the suggestions which may arise out of the conceptual frameworks reviewed (see table 8). In the

*/ See a proof of this type in Argüello (1977).
first case an attempt would be made to investigate the number, age and
school attendance of the children; the time worked in months per year; the
length of the working experience or perhaps, more specifically, an account
of the number of times the person has entered and left the labour market;
and the physical relationship between the place of employment and the home.
In the second case, it is suggested that, taking advantage of the survey
operation, additional data should be collected during some of the annual
rounds on the sex and age of the relatives and on the employment and income
of the husbands of the women members of the household. All these variables
have demonstrated their relevance in studies which follow the orientation of
neoclassical economics and in many others of an essentially empirical line
(see chapter II).

One clarification seems relevant as regards the measurement of the
months worked in the year. Although in the household surveys the number of
hours worked per week is already measured, in the case of women—whose
participation in work is discontinuous unlike that of men—data for a longer
period of time than a week seems indispensable. This topic has already been
dealt with in the previous section in connexion with the "time-reference
period" and the evidence supplied by Ostry (1968). The inclusion of this
characteristic in household surveys and in censuses would therefore have an
effect on the validity of measurement of the volume of female labour.

The inclusion of the other characteristics suggested is more relevant
to the analysis and explanation of female working behaviour than to its
measurement. We consider of special interest the information referring to
the children and the location of the place of the job in relation to the
home which we consider to be variables with considerable explanatory capacity
as regards the economic participation of women, in the light of the evidence
provided by essentially empirical research such as that based on the new
home economics (for some of this evidence, see chapter II).
3. Provision of measures which partially overcome the problem of the validity of census data on activity status

The conclusions arrived at on the basis of the analysis of the operational definitions of the female labour force used by the Latin American population censuses, and furthermore, the results reached when measurements of female activity from census data were contrasted with those from other sources of data were clear and conclusive. The Latin American population censuses do not, to date, appear to have been valid instruments for the measurement of female economic participation. Although this conclusion may not surprise those persons who have repeatedly written or read of census underestimation of female activity, it is however, new in more than one sense. To date, the accent has been placed on the low level of validity of the census as a source of data on the economic activity of women and in particular on the underestimation of women employed in agricultural activities and unpaid female family workers. The novelties consist in the quantification, although for only a few cases, of the magnitude of this underestimation and the detection, through the analysis of operational definitions - of inconsistency among different instructions, or between instructions and the wording of questions, for example - and once again the analysis of the quantifications made, of the fact that the problem is more general: the underestimation would seem to affect not only female agricultural workers and unpaid female workers, but also economically active women in some other occupations. The conclusions are therefore somewhat depressing for the users of the census data for the investigation of female labour in the past. Not only are they depressing but also difficult to accept. How can the use of the source of data for the study of past trends in female participation be renounced? Is there no part of the data which is acceptably valid?

As has been seen, the operationalization of the concept of labour force which so notably affected the female population did not seem to meet with major problems when it was the male population which was involved. This would seem to respond to distortions of perception of a cultural nature which means that both the enumerators and the informers perceive women - and even they themselves do so - as inactive when in fact they participate in an economic activity, while this does not happen with men. It is far more...
probable, however, that this erroneous perception – which therefore leads to wrong reporting – occurs with a much higher relative frequency in the cases in which the economic activity is carried out part-time or in the home environment, in other words, outside the organized capitalist sector of the economy or State activities. Following a similar line of thought and with the object of improving the low level of validity of census measurements, Boserup (1975) proposed the use of a measure of female participation in activities which she describes as "modern". Her hypothesis, accepted here, is that the group of modern-sector activities engaged in fulltime and for payment, will always be more fully registered than other activities. Her idea in proposing this new measurement of female activity was comparability between countries at a given moment and in time for the same country. This is what is considered essential here too: arriving at more valid measurements of female participation which will make it possible to study trends and also give more reliable comparisons of participation among Latin American countries and countries of the region compared with other countries and/or regions of the world.

In this section various measurements of female economic activity are presented for the Latin American countries which took population censuses in the 1970s. The data available for each of the countries of the region, however, does not always have the necessary degree of disaggregation for calculating the rate which is considered to give the most valid and at the same time most comparable measurement among the countries, i.e., that which takes into account modern-sector activities, as was said earlier. What it is possible to calculate for practically all the countries of the region is a rate which underenumerates active women; this is the refined rate of total participation, defined as the quotient of active women aged 15 years of age and over and the total number of women of the same ages.\footnote{A rather high lower age limit is preferred not only because it improves comparability between countries but also because, as regards the denominator of the rate, a great part of the differences in the age structure among countries is eliminated by excluding all women under 15 years of age.}
This rate gives a picture of female activity in Latin America in which Haiti emerges as a country which stands well apart from the rest of the region owing to its very high level of participation (table 9). In fact, its refined rate of total participation practically doubles that of the country following it in order of importance - Jamaica - whose rate is in turn two and a half times that of Guatemala, which, according to this measurement, would seem to have the lowest rate of female participation of the countries of the region. Up to this point the picture presented does not differ significantly from studies such as those of PREALC (1978) for the same period or Elizaga (1974) and Durand (1975) with data from the previous decade. But it is a known fact that this is not a reliable picture of female participation in the region. Each of the figures presented must have very different degrees of validity in that they come from collections also differing in their degree of validity. Using the measure proposed by Boserup (1975), and as far as the available data allow, an endeavour will be made below to improve the measurement.

This new measure will be termed "refined rate of participation in modern-sector activities". It is defined as the quotient of the women of 15 years of age and over who work in modern-sector activities and the total number of women of the same ages. This means that the denominator of this measure is the same as that used in the previous case. The numerator includes the following occupations: professionals, technicians and similar in all occupational groups; managers, directors and higher administrators in all occupational groups; office-workers and similar wage-earners; wage-earning sales women; non-agricultural workers and operatives and similar wage-earners.

* It should be noted that this is a rate and not the proportion of active women in modern-sector occupations, which means that the underenumeration in the rest of the occupations does not affect this measurement. In the cases for which the data on the female labour force were not available by occupations for active women of 15 years of age and over, the available figure was used in the numerator (for example, women of 10 years of age and over in modern-sector activities) but the age limit of the denominator was maintained: 15 years of age. In this way comparability is ensured to a greater extent, since although there are very few women of less than 15 years of age in modern-sector activities, a change in the denominator would significantly affect the magnitude of the rate.

/Table 9
### Table 9

**SOME MEASURES OF FEMALES PARTICIPATION FOR THE LATIN AMERICAN COUNTRIES**

**WITH DATA FROM THE CENSUSES OF THE 1970s**

<table>
<thead>
<tr>
<th>Country</th>
<th>Refined rate of participation (15 years of age and over) per hundred</th>
<th>Gross years of active life, urban area (15 to 59 years)</th>
<th>Refined rate of participation (15 years of age and over) per hundred</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Modern-sector occupations</td>
<td>Wage-earners</td>
</tr>
<tr>
<td>Argentina b/</td>
<td>27.3</td>
<td>13.0</td>
<td>21.0</td>
</tr>
<tr>
<td>Barbados</td>
<td>34.1</td>
<td>13.0</td>
<td>21.0</td>
</tr>
<tr>
<td>Bolivia b/</td>
<td>23.9</td>
<td>5.5</td>
<td>9.4</td>
</tr>
<tr>
<td>Brazil</td>
<td>21.1</td>
<td>7.1</td>
<td>15.1</td>
</tr>
<tr>
<td>Colombia</td>
<td>22.9</td>
<td>7.1</td>
<td>15.1</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>20.7</td>
<td>10.7</td>
<td>19.0</td>
</tr>
<tr>
<td>Cuba</td>
<td>18.3</td>
<td>18.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Chile d/</td>
<td>21.9</td>
<td>9.0</td>
<td>16.2</td>
</tr>
<tr>
<td>Ecuador</td>
<td>17.1</td>
<td>5.6</td>
<td>10.2</td>
</tr>
<tr>
<td>El Salvador b/</td>
<td>25.7</td>
<td>8/</td>
<td>14.4</td>
</tr>
<tr>
<td>Guatemala</td>
<td>14.2</td>
<td>4.2</td>
<td>9.5</td>
</tr>
<tr>
<td>Haiti</td>
<td>70.3</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Honduras b/</td>
<td>16.8</td>
<td>5.8</td>
<td>10.6</td>
</tr>
<tr>
<td>Jamaica</td>
<td>36.1</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Mexico d/</td>
<td>17.9</td>
<td>6.5</td>
<td>12.0</td>
</tr>
<tr>
<td>Nicaragua b/</td>
<td>21.6</td>
<td>9.7</td>
<td>14.2</td>
</tr>
<tr>
<td>Panama</td>
<td>30.3</td>
<td>12.0</td>
<td>11.0</td>
</tr>
<tr>
<td>Paraguay d/</td>
<td>22.4</td>
<td>6.0</td>
<td>11.6</td>
</tr>
<tr>
<td>Peru</td>
<td>19.9</td>
<td>6.1</td>
<td>10.0</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>26.7</td>
<td>3.8</td>
<td>10.4</td>
</tr>
<tr>
<td>Uruguay</td>
<td>29.4</td>
<td>20.7</td>
<td>29.7</td>
</tr>
<tr>
<td>Venezuela</td>
<td>22.5</td>
<td>10.7</td>
<td>17.0</td>
</tr>
</tbody>
</table>

**Source:** National population censuses and CEILABE Data Bank (OMUECE 70). The total rates calculated with both sources coincide reasonably well except for El Salvador - where the difference is so great that it was decided not to incorporate the OMUECE data - and to a lesser extent Colombia.

* a/ Including unknown activities.
* b/ Females EAP of 10 years of age and over.
* c/ Females EAP of 7 years of age and over.
* d/ Females EAP of 12 years of age and over.
* e/ Data available from OMUECE absolutely not comparable with those of the national publication.
* f/ Apparently data referring to the year.

/In other
In other words, the calculation required the cross-classification of female labour according to occupation and occupational group (the occupational classification used corresponds to COTA-1970 and the data come from the CELADE Data Bank - ONUCE 1970). It should be pointed out that this does not provide a solution to the problem of measuring correctly the female labour force in its entirety. On the contrary, data are lost, precisely for all the occupations which are not modern-sector, but there is a gain in validity and comparability, as was said earlier.

The refined rates of participation in modern-sector activities for each country are also contained in table 9. The image shown by these new figures is completely different from the earlier one, not only because they are all lower - as was logical since fewer occupations were included - but fundamentally because if the countries are placed in order of magnitude of female participation measured by both rates, they turn up in completely different positions with only a very few exceptions. This can be seen in the number of cross-classifications shown on the left of Figure 1, where the countries are placed in order from greater to lesser female participation in economic activity according to different rates. Figure 2 completes the differential images resulting from the two measurements simply by observation of the bars corresponding to the total rate and modern-sector activities - since here the differences of magnitude between the two can be more easily appreciated. According to the rate of participation in modern-sector activities there are four Latin American countries in the lead: Panama, Argentina, Costa Rica and Venezuela, with rates ranging from 10.7 to 13.7%. Chile follows with 9% of a female population of 15 years of age and over in modern-sector activities and finally the rest of the countries with 7% or less. How are these countries situated with respect to those of other regions of the world? Some figures are available from the article by Boserup already quoted, with data for around 1960 for 34 countries. The group of those with the highest level of female participation in modern-sector activities showed an average rate of 21.7%, the next group 18.0% and the group of countries next in order 8.6%. This means that the Latin American countries with the highest rate of female participation in modern-sector activities would come between the countries grouped in the second

/Figure 1
ORDER OF LATIN AMERICAN COUNTRIES ACCORDING TO REFINED RATES OF TOTAL FEMALE PARTICIPATION IN MODERN-SECTOR AND WAGE-EARNING ACTIVITIES, CENSUSES OF THE 1970s

<table>
<thead>
<tr>
<th>Total</th>
<th>Modern-sector activities</th>
<th>Wage-earning activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Panama</td>
<td>1. Panama</td>
<td>1. Panama</td>
</tr>
<tr>
<td>5. Venezuela</td>
<td>5. Chile</td>
<td>5. Chile</td>
</tr>
</tbody>
</table>

Source: Table 9.
Figure 2

Refined rates of total female participation, rates for wage-earners, and rates for modern-sector activities, Latin American countries with data from the 1970 censuses.

Source: Table 9
and third of Boserup's groups, and closer to the last-mentioned. At the
other end of the scale, none of the Latin American countries shows a rate
as low as Boserup's lowest average rate (1.0%) not even that of the next
group of countries (2.4%). The lowest of the Latin American rates corresponds
to the Dominican Republic, with 3.8%.

The disturbing aspect of this presentation is that six countries of the
twenty-two for which the refined rate of total participation had been
calculated were left out of the comparison for lack of data. As the reader
may well suspect, if the comparison were also attempted in time, for earlier
dates, the "loss" would probably be even greater. The calculation of other
rates was then attempted, to test whether the picture which they give is a
good substitute for the supposedly better rate: that of modern-sector
activities. The following measurements were calculated: refined rate of
participation in non-agricultural activities, refined rate of participation
of wage-earners and gross years of active life in urban areas. With each
series of rates the order of the countries was re-established - only the 15
for which the refined rate of participation in modern-sector activities had
been calculated - from greater to lesser, to make up Figure 3, similar to
Figure 1. From an observation of these two figures it may be concluded that
the only rates which result in a similar order to that of the modern-sector
activities are those of female wage-earners. In fact, very few countries
significantly changed their position; Nicaragua and secondly the Dominican
Republic. This is also to be observed in Figure 2: this shows, generally
speaking, with the exceptions noted, that the rates of the female wage-earners
reproduce at a higher level the rates for women employed in modern-sector
activities. But this figure does not discriminate so clearly between the group
of countries with relatively high rates and those with relatively average
rates, and it is more difficult to draw a dividing-line. Account must be
taken of the fact that in the category of wage-earners, in addition to the
modern-sector occupations already mentioned, are included some which may be

*/ This last-mentioned calculation was made instead of the refined rate
of participation in urban areas because the starting point was data
for urban rates of participation by age. The order of the countries
would not have changed fundamentally if the refined rate had been
used.

/Figure 3
Figure 3

ORDER OF LATIN AMERICAN COUNTRIES ACCORDING TO THEIR REFINED RATES OF FEMALE PARTICIPATION IN NON-AGRICULTURAL, MODERN AND URBAN AREA OCCUPATIONS, CENSUSES OF THE 1970s.

<table>
<thead>
<tr>
<th>Non-agricultural occupations</th>
<th>Modern occupations</th>
<th>Urban area activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Panama</td>
<td>1. Panama</td>
<td>1. Panama</td>
</tr>
<tr>
<td>6. Venezuela</td>
<td>7. Mexico</td>
<td></td>
</tr>
</tbody>
</table>

Source: Table 9.
described as very traditional, such as domestic service. As table 9 illustrates both some of the countries with the highest rates of participation in modern-sector activities and those with the lowest rates coincide in having very high rates of participation in domestic service. To return to the rates of wage-earners, the number of countries which can be compared - the necessary data were available for 20 cases - is now greater. Uruguay is in a position very close to those occupied by Argentina and Panama; Cuba, although not so high up the list - it should be recalled that this country does not include paid domestic service among active jobs - is among the Latin American countries with a high rate of female participation, and lastly Brazil would seem to be in an intermediate position - although probably in any case wrongly located owing to the exceedingly poor operationalization of the question on activity status.

The other rates, on the contrary, give a totally different picture from that given by the rates of participation in modern-sector activities, so that it is not possible to take them as substitutes, not even as an approximation, of the first-mentioned. The idea implicit in calculating these latter measurements was that non-agricultural or urban could almost be a synonym of modern. It has been reliably proved, however, that this is not so. Many of the activities which take place in the urban area - like the group formed by all non-agricultural occupations - include traditional activities such as the domestic service already referred to, plus a wide range of tasks which may even be of an occasional nature, as are probably many of those carried out by persons who are part of the labour force as unpaid family workers or own-account workers.

The last conclusion is therefore that census data can be used, although with great caution, since as has been seen they usually underestimate active women in general, and particularly agricultural workers, unpaid family workers and generally speaking all those engaged in non-modern-sector activities. On the other hand, the women best covered by the population censuses would seem to be those who carry out tasks which according to Boserup were termed "modern-sector".

*/ The very low rates of participation in domestic service of Mexico and Colombia are worthy of note. They seem excessively low and unacceptable as valid measurements. It is, however, outside the limits of this study to investigate their true volume. Coding problems are suspected.
sector". Since not all the countries have the necessary data for calculating these rates - which could also be calculated with a much greater degree of specificity: according to age groups, marital status, etc. - a fairly acceptable substitute may be the calculation of the rates of participation of wage-earners. Lastly, it is considered that a realistic picture has been given of the relative place occupied by each of the Latin American countries in terms of female participation in modern-sector economic activities. The position of female participation in all economic activities remains unestablished. This question cannot be answered on the basis of an investigation using census data.

4. Additional processing of data available from censuses

For the reasons already given in chapter III as regards difficulties in analysing all the material from household surveys (quantity, frequency of modification from one application to another, variety of models, inadequacy of data, etc.), this section concentrates on the population censuses.

One of the most fundamental points with reference to such processing as may be carried out on the basis of the data available has already been discussed (see 2), when the importance of ensuring the possibility of reconstructing the households on the basis of the census data was noted. This reconstruction - which presupposes the recording of individual data - will make it possible to progress in the direction proposed using the framework of neoclassical economics (new home economics) and the recent development within marxist economics. The suggestion particularly concerns the importance given by both lines of thought to the consideration of the characteristics of other members of the domestic unit to explain the economic behaviour of women. In the case of neoclassical economics, in particular, the work supply of each member of the family unit is conceived of as the result of a decision which takes into account the circumstances of other members.

To switch attention from the individual to the household does not necessarily presuppose a change of unit of analysis (which is possible); it is feasible to keep the individual as the unit, but not by treating him in isolation but as a member of a group, thus ensuring the possibility of investigating the effect of contextual determining factors on his behaviour. Among these determining factors are the position of women in the household
unit and the socio-demographic and economic characteristics of the other members of the unit. García and Oliveira (1977) for example, suggest the desirability of data on female economic participation being analysed separately for women who are heads of households and those who are not heads but are wives, daughters and other relatives or non-relatives of the head (male or female). This is a proposal which has already been reflected in studies which, like those of Buvinić, Youssef and Von Elm (1978) or that of Barroso (1978) are concerned with the situation of women who in their role as heads of families have to assume economic responsibility for their own survival and that of their children either because of spinsterhood, widowhood, dissolution of their marriage, temporary absence of the spouse (seasonal migration) or his economic incapacity or marginalization.

There is already evidence, although not much, that the reconstruction of households on the basis of census data is feasible. One piece of evidence is provided by the ongoing research of Recchini de Lattes (1979), one of the objectives of which is to study the economic participation of women in Argentina in 1970 in relation to various characteristics of the family unit such as: the type of unit (nuclear versus extended and composite), the occupational position of the head (male or female) of the household, the stage of the life cycle (measured in terms of the age of the wife and children) and the number of other active or inactive members of the household unit. This piece of research, which uses data from ONUCEC 70, began the work of tabulation by preparing a register of households. Another case, although carried out on the basis of data from household surveys, is the work of Argüello (1977) the objectives of which include the description of the socio-demographic characteristics of low-income families in Costa Rica in 1966-1967. To achieve this the author had to construct a family register on the basis of data originally collected for individuals. Using the family as the unit of analysis, Argüello was able to discover that in Costa Rica the rate of participation of the wife of the head of the household varies according to her level of education, the income of the head of the household, the size of the family, the type of union (legal or consensual) and the geographical area.

/But it
But it is not only the reconstruction of census households which as a source of additional processing would make substantial progress possible in investigating the economic participation of women. A number of tabulations on the basis of the individual unit and its characteristics normally not supplied by the organizations responsible also exist and would also contribute to an advance in this area. The comment on the tabulations which are not provided was made with exclusive reference to the tabulations published in the countries of the region, i.e., only those available to any user and not those existing but unpublished - such as those contained in the Boletín del Banco de Datos No 6 */ nor those which have been and could be made if specially commissioned from a Data Bank such as that of OMUECE or CELADE.

Table II of Appendix C sums up the tabulations published in each country of the region, on the basis of the census data taken around 1970 for the female economically active population. It was prepared taking account only of the variables for which the majority of censuses collected data (see table Ia), but not such variables as income or number of hours worked a week, which were only measured by a few countries. In other words, only variables in respect of which, without any doubt whatsoever, all the organizations responsible could prepare tabulations have been included. It should be noted that these are tabulations which do not include more than three variables, i.e., of very simple design. Variables relating to insertion in the occupational structure for which available tabulations do exist were not included either (industry, occupational group and status in employment). This was because this study has concentrated on the variables contained in the conceptual frameworks reviewed (chapter II) which in their majority were concerned with the supply of rather than the demand for female labour.

A rapid glance at table II of Appendix C suffices to reveal the overwhelmingly inadequate use of the data collected. Excluding data relating to the occupational position of women, the only census tabulations available in the majority of the countries for the female economically active population are those referring to: marital status, educational attainment and urban-rural location. There are very few countries which published tabulations including */ An examination of the tabulations is a task which goes beyond the limits of the time available for the present study. /
the number of children nor, of course, marital status and number of children, these being characteristics which innumerable studies have shown to have tremendous relevance for the working behaviour of women. Slightly less than half the countries do not provide tabulations showing educational attainment, another of the characteristics which in the case of women has an enormous influence on the probabilities of their entering the labour market, as may be seen from numerous pieces of research. With one exception, none of the countries published tabulations which included the migratory status of the active women. None of the characteristics of the other members of the family unit are included, of course, among the tabulations published.

What is the conclusion from this picture? Since the function of the census data is to provide very general information to the users but not information which would satisfy the innumerable interests which researchers, technicians and planners may have, depending on their theoretical and practical interests, it does not seem advisable to propose here a long list of tabulations which would satisfy the variety of present and potential interests. However, owing to the relevance which some variables already referred to have been shown to possess (see the pertinent research in chapter II), it is considered advisable to recommend that all the countries should tabulate data on the female population of active age by activity status, age, marital status, number of children, educational attainment and migratory status. The suggestion refers to tabulations of three variables (two of which should always be activity status and age) and tabulations of five and up to six variables, naturally reducing the number of categories for each, for example, reconceptualizing marital status in terms of the presence versus the absence of a companion.

Apart from this recommendation, it seems more important to propose that the organization responsible should enable the data analysts to obtain the special tabulations which their work requires to further the progress of knowledge (the suggestion is also valid for the data from household surveys). There is evidence that some researchers use the possibilities provided by a data bank such as ONUCE. This is the case of the studies by Fucaraccio (1978), Galeano (1978) and Wainerman (1979), prepared on the basis of data from samples of censuses in Chile, Paraguay and Argentina, respectively, contained in the ONUCE 70 programme. These studies were aimed at the analysis of factors which, like marital
like marital status, number of children and educational attainment, affect the supply of women of different age groups in the labour market. But the limited use made to date of these data, which are available but not tabulated, suggests that the problem does not reside in the lack of imagination or interest of the researchers but rather in the difficulties they encounter in obtaining access to the data.

Although it is obvious, it seems advisable to clarify that the recommendations made have been formulated on the basis of an optimistic vision of the future, in which the causes of the low level of validity of census measurements have been obviated. If this were not the case, there would be little point in suggesting further processing on the basis of inadequate data.

5. Conclusions and recommendations

The immediate objective of the study described here has been to detect the defects afflicting the census statistics and household surveys taken in Latin America and the Caribbean for the analysis of the participation of women in economic activity. The ultimate objective has been to prepare some suggestions aimed at overcoming them. The task implied an appraisal of the quality and quantity of the statistical data collected around 1970. This was done on the basis of the conceptual frameworks proposed for the study of female labour, the analysis of the forms of operationalization employed, the biases detected in the measurements of census origin and the tabulations which have been prepared and published. Some of the conclusions reached have been advanced as progress was made in developing the different topics, some more explicitly than others. The moment has come to bring them together in order to give them prominence and evaluate them. Those which are considered to be of greatest importance will be described below.

Firstly, among the persons responsible for the 1970 Latin American censuses — especially those in charge of the wording for the questionnaire and the instructions to enumerators — prejudices and stereotypes were to be observed as regards the role of women in society and therefore the activities which they carry out. The prejudices and stereotypes, when they appear in the operationalization of the concept of labour force used in the censuses, take validity from the measurement of female labour.

/Secondly, serious
Secondly, serious inconsistencies were identified in many Latin American censuses between different instructions, or between the wording of the question and instructions, and even flagrant failure to comply with the rules applicable to any social investigation. Among the inconsistencies, one of those most frequently noted concerned the minimum time worked stipulated for considering a person as active and that stipulated for their inclusion in the category of unpaid family worker. Although in principle these facts affect men as much as women, they in fact affect women more, since it is more common for them to work part-time and as unpaid family workers.

Lastly, the endeavour to quantify the underestimation of female labour, although carried out on only a few cases, revealed very conclusive results: the population censuses taken in Latin America and the Caribbean in the 1970s do not provide a valid measurement of female labour, particularly the sector comprising women occupied in agricultural activities and unpaid family workers, nor that formed by women employed in non-modern-sector activities in general.

The problem of the low level of validity of census measurements is so serious that although large gaps were observed in the spectrum of variables on which data are collected, no recommendation was made to expand the collection except in one item which would make it possible to identify activity status: time worked. In the case of the household surveys, for which the problem of validity does not seem so serious, recommendations were made to collect additional data.

It should, however, be pointed out that not all defects come from the forms in which the Latin American censuses operationalized the concept of labour force. Some of the problems detected would seem to have been dragging on from a long time ago and not only to be due to the persons responsible for the censuses but also to the social researchers (an example of this is the fact that, just as it is common to find appraisals of the quality of the Latin American censuses in terms of the coverage of the total population and coverage by age and sex, there are almost no examples of attempts to appraise the quality of the data on the economically active population). The very concept of "work" continues without sufficient elucidation and in spite of the recent developments originating in the framework of marxist economics and the time budget approach, old patterns persist, such as that of continuing to consider only productive activities and not others - for example, household duties - as economic.
On the basis of the results obtained from the appraisal made, it should not be concluded that the census is necessarily a poor instrument for measuring the female labour force. There are examples of censuses taken in other regions which apparently have successfully covered female activity. Past experience, therefore, can and must improve. Some suggestions for improving the validity of the data collected on activity status were already given in earlier sections of this chapter. These are obviously not definitive since more research is required in order to be able to formulate more precise recommendations, for example, as regards the time-reference period, the time worked and the wording of the sequence of questions for measuring activity status.

Both in the case of censuses and in that of surveys it was emphatically suggested that further processing of the data collected should be carried out. One proposal is that the organizations responsible for censuses and surveys should ensure the possibility of carrying out reconstructions of census households, in such a way that the individual information for women can be analysed - as various currents of thought suggest - in terms of their most immediate social context which determines a great part of their conduct - the family. Another proposal, referring to censuses, recommends that all the countries which take censuses during the next decade should tabulate the female population by activity status and age, marital status, number of children, educational attainment and migratory status, not only in terms of two or three variables each time - as was generally the case in the past - but including up to five or six variables, although with a lower degree of disaggregation in each. Lastly, and once again the proposal is valid both for the censuses and the household surveys, it is very specially recommended that the organizations responsible should endeavour to facilitate to analysts and users of these important and irreplaceable sources of information an expedite means of obtaining the cross-classifications or tabulations which are perhaps not anticipated in the general programmes of tabulations, but are equally indispensable for continuing with the scientific research and thus allowing the advance of knowledge and the statement of policies on increasingly solid bases.
Up to now the recommendations formulated have ignored the fact that the data available for the past contain certain basic defects which would invalidate any continued indiscriminate use. In order to overcome this obstacle, Boserup proposed in 1975 the calculation of refined rates of activity for modern-sector activities - rather than the measurements generally used - since these would be the activities which the censuses record most completely. Here this proposal is enthusiastically adopted to further validity and comparability in space and time. However, since the cross-classifications of the variables presupposed by the calculation of this measurement are not always available, it was proved in this investigation that a fairly acceptable substitute requiring data more easily obtained is the refined rate of participation of wage-earning women. But once again, this topic has raised questions which require further research to answer them. Are the occupations or activities recommended by Boserup the most adequate or would it be advisable to redefine modern-sector activities in order perhaps to propose different groupings?

As has already been said, some of the many topics which merit reflection were selected for the study presented here. Many others have been identified but could not be included. One concerns the problem of how much of the census underestimation of the female labour force is due to an inadequate operationalization of the variable and how much to the characteristics proper to the operation of collection (time in which it should be carried out, number of enumerators used, their training, etc.).

All other series of topics which remained outside this review, which no doubt merit and require investigation, concern the characteristics of the taking of censuses and household surveys, for example, those relating to the enumerators. It would be desirable to try to evaluate how the censuses and surveys analysed were influenced by the population groups among which the enumerators were recruited (students, teachers, etc.), the fact of the enumerators being paid or not, the type of training given them, etc. It should also be investigated how the seasonal nature of certain agricultural and/
non-agricultural activities affected the coverage of female labour in censuses and surveys and also how the definition of the head (male or female) of the household and the selection of the informer influenced women's reporting of activity. These and many other topics require additional research in order to be able to formulate recommendations with a view to improving the data on the situation of women in the economic sphere.
BIBLIOGRAPHY

ARGUELLO, Omar (1977), Pobreza, población y desarrollo. Las familias pobres de Costa Rica, Santiago, Chile: CELADE, mimeographed.


CELADE (1974), Boletín del Banco de Datos, Santiago, Chile: CELADE.


FUCARACCIO, Angel (1978), "El trabajo femenino en Chile: un estudio de caso de las áreas urbanas", in COVARRUBIAS, Paz and Rolando FRANCO (eds.), Chile: mujer y sociedad, Santiago, Chile: UNICEF.

GALEANO, Luis (1978), Las mujeres como proveedoras de fuerza de trabajo en el Paraguay, Vol. III, Asunción: CPES.

GARCIA, Brígida y Orlandina de OLIVEIRA (1977), Reflexiones teórico-metodológicas sobre el estudio de las relaciones entre el trabajo de la mujer y la fecundidad en la ciudad de México, presented at the V Meeting of the Working Groups on the population reproduction process, of the Comisión de Población y Desarrollo (CLACSO), Guarujá (Brazil), April.


OSTRY, Sylvia
OSTRY, Sylvia (1968), The Female Worker in Canada, Ottawa, Dominion Bureau of Statistics.


COLOMBIA, Departamento Administrativo Nacional de Estadística (DANE) (1975), XIV Censo Nacional de Población y III de Vivienda, Muestra de Avance, Población, Bogotá, D.E., DANE.


CUBA, Junta Central de Planificación (1975), Censo de Población y Vivienda 1970; La Habana, Editorial Orbe.


/HONDURAS, Dirección


PANAMA, Dirección de Estadística y Censos (1975), Censos Nacionales de 1970, Séptimo Censo de Población. Tercer Censo de Vivienda, 10 de mayo de 1970, Resultados Generales, Volumen III, Compendio General de Población; DEC.

PARAGUAY, Dirección General de Estadística y Censos (1975), Censo Nacional de Población y Viviendas, 1972; Dirección General de Estadística y Censos.


DOMINICAN REPUBLIC, Oficina Nacional de Estadística (1972), Comentarios sobre los resultados definitivos del V Censo Nacional de Población, Segunda parte, Santo Domingo, R.D., mimeographed.


CELADE, "Banco de datos: Operación Muestra de Censos 1970 (OMUECE 70)".

/APPENDIX A
APPENDIX A

QUESTIONS AND INSTRUCTIONS REFERRING TO THE ACTIVITY STATUS IN POPULATION CENSUSES, HOUSEHOLD SURVEYS AND OTHER SOURCES IN SEVERAL LATIN AMERICAN COUNTRIES

I. QUESTIONS TAKEN FROM QUESTIONNAIRES (INCLUDING ALL THE INDICATIONS APPEARING IN THEM)

(a) ARGENTINA (GREATER BUENOS AIRES)

i. 1970 census

What did you do most of the time during the week from 21 to 26 September?

1- Did you work?
2- You did not work but you had a job?
3- You had worked before and were seeking work?
4- You were seeking work for the first time?
5- You were retired or a pensioner and did not work?
6- You had a private income and did not work?
7- You studied and did not work?
8- You kept house?
9- Others?
10- Don't know.

Ask one question at a time in the order indicated (did you work?; you did not work but you had a job?; etc.) and when you receive an affirmative answer tick the appropriate box and go on to question N° 14. The concept of "most of the week" refers to 4 normal working days according to the person's occupation or if they worked more than 35 hours.

ii. 1970 family survey or employment and unemployment

8- Did you work one or more hours in the week? YES - NO

Hours worked in all occupations

  9- Sunday
  10- Monday
  11- Tuesday
  12- Wednesday
  13- Thursday
  14- Friday
  15- Saturday

/Hours -
Hours - Week

16- Main occupation
17- Secondary occupation and others (2)
18- Total

19- Would you like to work more hours?

[NO  YES  LOOKING FOR MORE  YES  NOT LOOKING FOR MORE]

You had a job but you were absent

20- YES (Go on to column 21)
    NO (Go on to column 22)

21- Reasons for your absence:

1. Illness
2. Strike
3. Vacations
   Laid off:
4. Up to 1 month
5. More than 1 to 2 months
6. More than 2 to 3 months
7. Other reasons

You were actively seeking work during the week

22- YES (Go on to column 24)
    NO (Go on to column 23) (State whether you are looking for a half day or a full time job)

23- Reasons for not seeking work:

- Illness
- You have a job lined up
- You don't think you can find a job
- You are waiting for an answer for a forthcoming job

24- How long have you actively been seeking work?
    (In months and/or days)

25- Reasons for leaving your last job?

- Poorly paid
- Laid off (state reasons)
- Lack of work
- Others (specify)

//B) BOLIVIA
(b) BOLIVIA

i. 1976 Census

What did you do for most of last week (prior to the day of the census)?

1. Did you work?
2. You did not work but you had a job?
3. Unemployed?
4. You looked for a job for the first time?
5. Only household duties?
6. Only a student?
7. Retired and/or with a private income?
8. Others? (specify)

You should only ask questions 13, 14 and 15 if you ticked boxes 1, 2 or 3. If you ticked one of the other boxes go straight on to question 16.

ii. National population survey of 1975

What was your main activity last week?

1. Did you work?
2. You did not work but you had a job?
3. Out of work? (You looked for a job since you had worked before)
4. You looked for a job for the first time?
5. Household duties?
6. Retired or have a private income?
7. Student?
8. Others? (specify)

Investigate each possibility in the order indicated and tick only 1 of the 8 boxes, i.e., the first giving a positive reply. If the person enumerated reports 2 or more activities, record whichever takes up more time.

/(c) BRAZIL
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>If you do not work nor are seeking work, which occupation of situation do you consider your main one?</td>
</tr>
<tr>
<td></td>
<td>Household chores&lt;br&gt;Student&lt;br&gt;Pensioner&lt;br&gt;Private income&lt;br&gt;Sick person or invalid&lt;br&gt;Detainee&lt;br&gt;Unemployed&lt;br&gt;Working or seeking work</td>
</tr>
<tr>
<td>23</td>
<td>Occupation, profession, post, function, etc. engaged in for most time</td>
</tr>
<tr>
<td></td>
<td>Public employee&lt;br&gt;Private employee&lt;br&gt;Employer&lt;br&gt;Partner or part-owner&lt;br&gt;Unpaid worker</td>
</tr>
<tr>
<td>24</td>
<td>Type of activity in which you engaged in the occupation reported in question 23</td>
</tr>
<tr>
<td></td>
<td>Only in usual occupation&lt;br&gt;Only in other occupation&lt;br&gt;Unemployed</td>
</tr>
<tr>
<td>25</td>
<td>Category in the occupation reported in question 23</td>
</tr>
<tr>
<td></td>
<td>Public employee&lt;br&gt;Private employee&lt;br&gt;Employer&lt;br&gt;Partner or part-owner&lt;br&gt;Unpaid worker</td>
</tr>
</tbody>
</table>
| 26 | During last week (25 to 31-8-1970) you were engaged:
| | Only in usual occupation<br>Only in other occupation<br>Unemployed |
| 27 | If the answer to question 23 was an agricultural occupation or one connected with farming, state the number of months you worked in the 12 months prior to the date of the census. |
| | Less than 3 months<br>From 3 to 6 months<br>From 6 to 9 months<br>9 months and over |
| 28 | How long have you been seeking work? |
| | Less than 3 months<br>3 months<br>Working
| 29 | If the answer to question 23 was not an agricultural occupation or one connected with farming, state the number of hours worked during the last week. |
| | Less than 15 hours<br>15 to 39 hours<br>40 to 49 hours<br>50 hours and over |
| 30 | During last week (25 to 31-8-1970) you were engaged. If the answer to question 23 was an agricultural occupation or one connected with farming, state the number of months you worked in the 12 months prior to the date of the census. |
| | Less than 3 months<br>From 3 to 6 months<br>From 6 to 9 months<br>9 months and over |
| 31 | If the answer to question 23 was not an agricultural occupation or one connected with farming, state the number of hours worked during the last week. |
| | Less than 15 hours<br>15 to 39 hours<br>40 to 49 hours<br>50 hours and over |
(d) COSTA RICA */

i. 1973 Census

ACTIVITY STATUS

Mark only 1 circle in accordance with the instructions on page 47 of the Enumerator's Handbook.

<table>
<thead>
<tr>
<th>Work</th>
<th>Did not work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sought work for the first time</td>
<td>Student</td>
</tr>
<tr>
<td>Household duties</td>
<td>Pensioner or private income</td>
</tr>
<tr>
<td>Others (Specify)</td>
<td></td>
</tr>
</tbody>
</table>

II. INSTRUCTIONS TO ENUMERATORS- TAKEN FROM THE "ENUMERATOR'S HANDBOOKS" OF THE DIFFERENT SOURCES CONTRASTED

(a) ARGENTINA (GREATER BUENOS AIRES)

i. 1970 Census

- The Census will be taken on 30 September.

You should ask each of the persons to be enumerated: What did you do for most of the week from 21 to 26 September?

The question refers to the week immediately preceding "census day."

- To complete the following table consult the census schedule, question 13.

The concept of "most of the week" refers to (A) normal working days, according to the person's occupation, or whether he worked more than (B) ______ hours per week.

- You will observe that question 13 contains ten alternatives set out in a column. Once you have read question 13, without waiting for a reply begin reading each of the ten alternatives. If the person enumerated answers one of alternatives 1, 2 or 3 affirmatively, tick the corresponding box and then go on to question 14.

*/ No copy could be obtained of the declaration of employers affiliated to the Social Security Fund of Costa Rica.

/ Miss García
Miss Garcia answers "Yes" to alternative 2 (You did not work but had a job?). Tick 2 and go straight on to question ________.

Family survey of employment and unemployment

1.a. EMPLOYED PERSON WHO WORKED DURING THE REFERENCE WEEK

Columns 2 to 7 should be completed as explained above.

In this case, in column 8 the person enumerated should answer and this should be noted on the form.

At this point we already know that the person enumerated is "employed", since he reported that he worked during the week.

We have now to find out whether he has only one occupation or more. Supposing he has two occupations, it is the enumerator's job to determine which is the "Main occupation" and which the "Secondary occupation". In the majority of cases, this distinction is determined by the importance which the person himself gives to each, so that to a large extent his choice will be subjective. This decision will, however, be based on the number of hours worked, greater seniority or stability or the relative importance of the income in each case. Consequently, once the person enumerated has chosen one of his occupations as the main one, the enumerator should ask him what the reason for this choice was; if it shows points of coincidence with some of the criteria mentioned the answer proposed should be accepted. If the person enumerated shows indecision, the objective criteria mentioned earlier should be adopted.

On the general form, white and grey sections may be observed for each member of the family group. The latter will be used exclusively for aspects of the secondary occupation. The white sections are intended for information relating to the main occupation.

If the person enumerated has a third occupation, once the main occupation has been identified, detailed indications will be given below for giving details of the secondary occupation.

The hours worked daily during the reference week should be noted in columns 9 to 15, both for the main and the secondary occupation. It should be noted that if the person has more than two occupations, the hours worked daily in the main occupation should be noted in the white sections and the hours devoted to the other occupations totalled and noted per day in the grey sections.

Note that
Note that the hours "actually worked" should be reported and not those formally fixed as the working timetable, which may not actually be those worked. By hours "actually worked" we mean those in which the person remained in the physical place of work carrying out the tasks proper to his trade or professions during all that time (except for stops for lunch, snacks, etc.).

It is fundamental to investigate the situation of the person enumerated during each of the days of the reference week. If the interviewee did not work on one or more days of that week, the reasons for not doing so should be noted in the observations section, with an indication of whether this is usual or whether it was incidental.

The total number of hours worked during the week should be entered in columns 16, 17 and 18; in column 16 the total for the main occupation; in column 17 the total for the secondary occupation; and in column 18 the total number of hours in all the occupations of the persons enumerated.

If the person enumerated normally engages in a secondary activity, and did not do so during the reference week, it should be noted in "Observations" what were the reasons for the suspension of this activity.

Column 19: This column is to determine whether the person who worked during the reference week wishes to work more hours. Here the answers can be: YES or NO.

In the former case (affirmative) he should be asked whether he is actually trying to obtain more hours of work either in his usual occupation or in another; in this case the note in this column should be: "Yes, looking for more" or "Yes, not looking for more".

It should be pointed out here that the question is not whether the person enumerated wishes to earn more by working the same number of hours, but whether he is looking for more hours in order to obtain more income.

For the case we are describing (persons who worked during the reference week), the enumerator should go straight on to columns 26, 27 and 28 after completing column 19.

We should repeat, before explaining the content of these columns, that if the person enumerated worked in more than two occupations, the data for the occupation determined as the "main" one should be given in the white section of these columns. The data for the occupation considered as the main one among the person's remaining occupations should be given in the grey section; this decision should be taken on the basis of the same criteria as those used to identify the "main
the "main" occupation. For example, if a person works as an accountant in an enterprise and also does the book keeping for some business at home, and at the same time is a teacher in a secondary school, the procedure would be as follows: let us suppose that it was determined that the main occupation is his post as accountant; the data for this occupation should therefore be given in the white section of columns 26, 27 and 28. Of the other two occupations, following the criteria already explained, it is concluded that the main one is secondary school teacher; these data should then be noted in the grey section (of columns 26, 27 and 28). The data on the remaining occupation should be noted under "Observations", and it should be made clear that the hours reported in the grey section of columns 9 to 15 do not correspond in their entirety to the occupation specified in the grey sections of columns 26, 27 and 28 but to the total of the two supplementary occupations.

1.b. EMPLOYED PERSON WHO DID NOT WORK DURING THE REFERENCE WEEK

In this case, columns 2 to 7 will be completed as has been explained.

In column 8, the person enumerated whose situation during the reference week corresponds to that reported should answer NO. According to the logical sequence of the form, the enumerator should go on to column 20 which asks whether the person enumerated has an occupation from which he was absent during the reference week. In this case, the person enumerated should answer affirmatively. It is then necessary to go on to investigate the reasons for his absence from his work. These reasons are listed in categories in column 21. In this column should be given the code number identifying each of the possible reasons. If the reason for the absence cannot be classified in categories 1 to 6, a 7 should be noted in column 21 and an explanation given under "Observations" of the reason for the absence from work.

Each of the columns from 9 to 15 should be completed with the initial corresponding to the reason for the absence from work; for example, if this was lay-off, columns 9 to 15 should be completed with the letter H; if it was a strike, with the letter S, etc. If code number 7 was entered in column 21, columns 9 to 15 should be completed with the O.R. (other reasons).

It should be mentioned here that the case may occur of a person who has been absent from his main occupation but has worked in his secondary occupation. Here the person enumerated should answer YES in column 8, since he worked in his secondary occupation during the reference week. The data for the hours worked should be entered in the grey section of columns 9 to 15 and the initial of the reason for which he was absent from his main occupation should be entered in the white section of these columns. If necessary, appropriate explanations should be given under "Observations". In this case, columns 20 and 21 do not require any to be completed.

/After following
After following the procedure given up to this point, the enumerator should go on to columns 26, 27 and 28 which will be completed as explained for case 1.a. Lastly, he should go on to column 31 which we already know how to complete.

2.a. UNEMPLOYED PERSON WHO ACTIVELY LOOKED FOR WORK DURING THE REFERENCE WEEK

It is unnecessary to repeat that columns 2 to 7 should be completed as for the previous cases.

In column 8 the person enumerated should answer in the negative. It should be checked whether what happened was that the person was absent from his job during the reference week, and then go on to column 20 which the person enumerated should answer in the negative. Up to this point we have already found out that the person is not employed, but we have to determine whether he is "Unemployed" or "Not economically active". This will be established from columns 22 and/or 23. In column 22, for this case (2.a), the person enumerated should give an affirmative answer. A supplementary clarification of great importance should also be made as to whether he is seeking fulltime or up to half day employment (for example: Yes - fulltime; or, Yes - half day).

It has been determined in this way that the person enumerated is unemployed according to the definition given earlier. Letter U, the initial for unemployed will be noted in columns 9 to 15.

The enumerator should in this case then go on to column 24 where the time of unemployment should be noted. Since the unemployed person is defined in terms of an active search for work, the time elapsed from the moment in which the person enumerated actively began to look for work should be given in months and/or days.

It is perhaps appropriate to stress the distinction which should be made between time during which he actively looked for work and "Time during which he did not work", in an express endeavour to determine the former situation.

In column 25 the interviewee's reasons for leaving his former employment are investigated (if he worked previously). If the reasons were other than those detailed at the head of this column, they should be described as briefly and clearly as possible.

It is of particular interest to identify the group of persons who wish to join the economically active population for the first time. When the person enumerated is in this situation (i.e., when he has not worked before) the annotation in this column should read: "Has not worked before".

/In this
In this case, columns 26, 27, and 28 should be completed with the data requested in them but referring to the last job the interviewee had. The form of completing them is governed by the same criteria as we described for case 1.a. If the person enumerated had never worked before, columns 26, 27, and 28 should be completed with the words "New worker" (making an effort to cover the 3 columns so that it is quite clear). For unemployed persons who have worked before, the length of time spent in their last job should be reported in column 23.

In this case (2.a) column 29 should be completed in order to collect data on the job the interviewee is looking for: the type (whether he is intending to set up on his own account, as an entrepreneur, or whether he is looking for a job as a wage-earner), and his trade or profession, indicating the position in the job sought or aspired to. The annotation should be, for example: wage-earner, semi-skilled lathe-operator; own-account worker, seamstress; employee, general office duties; etc.

Finally, column 31 should be completed.

2.b. This case is conceptually similar to the preceding one, the difference being that in column 22 the interviewee answers in the negative. But he also reports having actively looked for work during the period immediately preceding the reference week, and had well-founded reasons for not having looked for work during the week itself (these reasons are classified in column 23). The reason for which the person enumerated did not actively look for work during the reference week should therefore be given in column 23.

In this case too the time the interviewee was expecting to work should also be reported in column 22, whether fulltime or half day (for example: no - fulltime; or, no-half day).

It should be stressed that the enumerator should investigate carefully the truth of the affirmations made by the interviewee as regards his active search during the period immediately preceding the reference week, and if he had no job ensured his intention of making a fresh start on an active search for one, once the reason determining the impossibility of doing so during the period investigated is removed.

Columns 24, 25, 26, 27, 28, and then 31, should be completed as indicated for the previous case (2.a).
3. NOT ECONOMICALLY ACTIVE

Columns 2 to 7 should be completed as in the preceding cases.

In column 8 the person enumerated should answer in the negative since he did not work during the reference week. He should then go on to column 20 where he is asked whether he has a job from which he might have been absent during the period investigated. The answer here too will be negative.

He should then go on to the question in column 22 where it is ascertained whether the interviewee actively looked for a job during the reference week. Column 23 should not be completed since the enumerator is not dealing with the previous case, i.e. the interviewee made no attempt to look for a job, did not do so in the period prior to the reference week nor plans to do so in the immediate future.

Although a "desire" to work may be expressed, for the purposes of the survey this will be considered as not economically active. If the interviewee's declaration is clear as regards his lack of real interest in obtaining a job, his identification as not economically active is an easy task for the enumerator, but even if this is not so, he should endeavour to make this identification using the criteria laid out in this handbook.

When column 22 has been completed, the enumerator should go straight on to column 30, at the head of which are given the categories of the different groups comprising the not economically active population.

It should be made clear that these categories are not absolutely exclusive, since for example there may be the case of a housewife who is also a retired person. To understand the sense of this column we should consider that there is a partial tendency to identify the reasons for which a person does not work, for example: it may be that he does not work because he is a student, or because prevented from working by household chores (the person would then be categorized as a housewife), etc.

It is unnecessary to stress that this column should only be completed in the cases of persons who are not economically active. The fact that a working woman is also a housewife is of no interest, since in this case it is a primordial fact that she is economically active. The same also goes for the case of a retired person who works; he should be defined as economically active (the fact that he receives a pension is noted separately in column 31).

Lastly, as in the other cases, column 31 should be completed.

/(b) BOLIVIA
i. **1976 Census**

Questions 12, 13, 14 and 15 of Economic Data should be put to all persons of 7 years of age and over.

Question 12: How did you spend most of your time last week (prior to the day of the Census)?

In putting the question, read the alternatives in the order given: Did you work? You did not work but you had a job? and so on until you obtain an answer, then mark the appropriate box. If you mark boxes 1, 2 or 3, you should ask questions 13, 14 and 15. If you mark one of the other boxes (4 to 8), go straight on to question 16.

(Seven drawings follow, corresponding to each of the pre-coded alternatives. It should be noted that only female figures appear for the alternatives of household duties and student. In the rest of the alternatives there are male figures.) (Author's insert.)

ii. **National Population Survey 1975**

Activity status. This question endeavours to determine the economically active and the not economically active population.

Before answering, the person enumerated should be read all the eight alternatives, so that he can identify the most suitable answer. Investigate each possibility in the order indicated and mark only one of the eight boxes, i.e., the first registering an affirmative answer. If the person enumerated reports two or more activities, register the one which takes up most time, as accurately as possible, i.e., by investigation. The following definitions should be taken into account:

- **Worked**: This is the person who actually worked the week prior to the census and received payment either in money or kind.

- **Did not work but had a job**: This is a person who had a job for which he receives payment, but who did not work because of vacations, illness, industrial dispute, etc.

- **Out of work**: This person is considered to be unemployed. For a person to be considered out of work he must fulfil the following condition: have looked for a job during the reference week (prior to the interview) having worked before for payment in cash or kind.

/- Looked
- **Looked for work for the first time:** This is a person who has never worked before and who was looking for his first job the week prior to the interview.

- **Household duties:** Generally speaking it is housewives who occupy themselves with household duties without engaging in any income-producing economic activity. Excluded from this category are:
  (a) Paid servants and domestics, who should be classified in one of the first three alternatives.
  (b) Persons who in addition to household duties engage in economic activities which occupy more of their time than that spent on household duties.

- **Retired pensioner:** A person who does not engage in economic activities but receives income from private or public institutions.

- **Student:** A person who (the previous week) attended an educational establishment for the purpose of receiving education; included in this category are persons who are regular students but did not attend the educational establishment owing to strikes, illness, vacations, etc.

- **Others:** Included under this heading are all persons who could not be classified under any of the preceding alternatives.

(c) **BRAZIL (SAO PAULO)**

i. **1970 Census**

- Question 22. If you did not work or looked for work, what occupation or situation do you consider to be your main one?

**Report:**

(a) One of the following situations for those who did not engage in any occupation and are not looking for work:

- Household chores - a person who carries out household duties in their own home without payment;

- Student - a person who is attending school;

- Pensioner - a person who receives income from a pension from his former job (pensioner, retired person, etc.) or a pension from Social Assistance Funds or Institutes left on the death of the person of whom he was a dependent.

/Lives on
Lives on private income - a person who has income from the use of his own capital.

Sick person or invalid - a person who did not work during the year prior to the date of the census because of illness or permanent disability, without being a pensioner or having private means. Persons of 70 years of age and over who have no job will be included in this case.

Detainee - a prisoner carrying out a sentence or a person who has a job in a prison.

No occupation - a person who does not have an occupation but does have the capacity. This will include persons who are able to work but live on gifts, aid, etc.

(b) Working or seeking work - a person who engages in an economic activity, i.e., who receives payment in money or kind (from the products obtained from agricultural, mining or industrial operations), and a person seeking work even if they never have worked.

Also considered as economic activity is the work done by members of the family of the owners or associates of a firm, even if they do not receive payment, and the services of persons in religious orders (priests, ministers, monks, nuns, etc.).

Question 26 - What did you do last week (25 to 31/8/1970)?

(Only for persons of 10 years of age and over who worked during the twelve months prior to the date of the Census or are seeking work for the first time).

Report:

Only the usual occupation - for persons who, the week before the date of the Census, engaged only in the occupation reported in question 23;

Usual or other occupation - for persons who, the week before the date of the Census, in addition to the occupation reported question 23 were engaged in another occupation;

Another occupation - for persons who, the week before the date of the Census, only engaged in an occupation different from that reported in question 23;

Out of work - for persons who engaged in an economic activity during the twelve months prior to the date of the Census and were out of work during the last week;

/Seeking work
Seeking work for the first time - for persons who have never worked and were seeking work at the date of the Census.

ii. Definitions from the 1970 Household Survey

6. LABOUR FORCE

The manpower investigated covers persons of 14 years of age and over, and contains two distinct groups: the LABOUR FORCE comprised by the group of employed and unemployed persons, and the rest comprised by persons considered OUTSIDE THE LABOUR FORCE.

6.1. Employed persons: The persons considered as employed are those who worked during the reference week and those who although not working had an enterprise or business from which they were temporarily absent for reasons of illness, holidays, mourning, industrial dispute, etc.

6.2. Unemployed persons: The persons considered as unemployed are those who did not work during the reference week and had no enterprises or business from which they were temporarily absent, but who had taken steps in the last two months to obtain work. The activities and status in employment are those referring to the last post occupied.

6.3. Agricultural activities: These comprise agriculture and forestry, stock and small animal-breeding and farming.

7. PERSONS OUTSIDE THE LABOUR FORCE

The persons so classified are those who, during the reference week, were not employed and could not be considered unemployed since they were not looking for a job, such as for example, students, housewives, disabled persons, pensioners not engaging in any activity and the voluntarily idle.

7.1. Household chores: The persons comprised under this heading were those whose main activity was housekeeping or attending to household duties. Paid household duties, however, are not included in this category (domestic servants, etc.).

7.2. Attending school: Those persons whose only activity during the reference week was to attend classes in any type of school including vocational institutions, where the students receive no payment in money or kind, were classified as "attending school".

7.3. Cannot work: The persons comprised under this heading are those who due to physical or mental incapacity cannot do any work.
Only one circle should be ticked per person. Ask what the person does and then allot them to the appropriate place.

23.1. Worked: Refers to all persons of 12 years of age or over who worked one hour or more during the week from 7 to 12 May or had a job. For their work they may have:

23.1.1. (a) Received payment in money or kind or both.

23.1.2. (b) Received income or not, as in the case of the own-account worker.

23.1.3. (c) Not received either payment or income, as in the case of the unpaid family worker.

Persons should be included who had a job during the week from 7 to 12 May, although during that week they were on holiday, ill, on strike, absent for reasons of force majeure, etc.

Persons were not considered to have worked if they were exclusively occupied in household duties or activities at home such as painting the house, gardening, house-repairs, etc.

23.2. Did not work: This refers to all persons of 12 years of age or over, able to work who had no job during the week from 7 to 12 May, either because they were seeking work or were not seeking work because they thought they would not find it.

23.3. Looked for work for the first time: This refers to persons of 12 years of age or over, able to work, who have never worked and are looking for work for the first time, including persons who have taken steps to work on their own account or as employers.

23.4. Student: This refers to persons of 12 years of age and over who were exclusively occupied in studying during the week from 7 to 12 May, i.e., if a person worked during that week it should be reported.

23.5. Household duties: This refers to all persons of 12 years of age or over who were exclusively occupied in looking after their own home during the week from 7 to 12 May. Generally speaking, it comprises women, and exceptionally men.

Servants and other paid domestics in the home should be reported as having worked.

23.6. Pensioners,
23.6. Pensioners, persons with private incomes and retired persons: This refers to persons who live exclusively on a pension, retirement benefit or private income. These should always be reported as such, although they are occupied in household duties or housekeeping.

23.7. Others: These are all persons of 12 years of age and over who cannot be classified under the foregoing headings. The persons referred to in this group are:

23.7.1. Persons in institutions: These are persons living permanently in prisons, convents, asylums, etc.

23.7.2. Other persons: This includes persons such as: blind persons, beggars, paralytics and others with physical or mental deficiencies when they do not engage in any occupation. Children who have completed their primary schooling or are no longer at school, who are not working or seeking work for the first time, should be included in this group. All those persons not included in the foregoing classifications should also be included here, such as: very old people of over 65 years of age or over, vagrants, criminals, etc.

Social Security Fund of Costa Rica: definitions

1. INTRODUCTION

These statistics only include PERSONS DIRECTLY INSURED grouped globally according to location and employer's activity. In other words their location corresponds to their geographical position with reference to their centre of work; in coding the activities as all the persons insured by the employer are taken together (workers, office-workers, administrators, technicians, etc.).

2. TIME-REFERENCE PERIOD

For the purposes of these statistics the month of June was taken as representative of 1973, and considered as the total average for the year.

3. COVERAGE

Forming part of the statistics:

(a) WORKERS or wage-earners registered on the payroll by their employers.

(b) VOLUNTARY CONTINUATION are persons who were wage-earners but are now own-account workers.

/(c) MEMBERS
(c) MEMBERS OF CO-OPERATIVES are persons who sign bilateral agreements with the Social Security Fund of Costa Rica.

NOTE:

Insured persons not included in these statistics are:

(a) Dependents of the person directly insured, calculated on a mathematical basis of 3:1 (three family members per worker).
(b) Pensioners.
(c) Dependents of pensioners.
(d) Central Government day-workers.
(e) Directly insured persons on leave or incapacitated.

4. METHODOLOGY

The statistics were prepared from the computerized lists for June 1973.

The FUND's monthly lists are totally computerized with IBM-360-25 equipment. They are submitted each month to the active employers who return them with the respective corrections when necessary. This minimizes the human error in making up statistics.

The Central Government statistics for the month of June were obtained from the tabulated payrolls and the tape programmed by the Mechanized Technical Office.

(Taken from: COSTA RICA. CAJA COSTARRICENSE DE SEGURO SOCIAL (1974), Estadística de patronos, trabajadores, salarios y cuotas, 1973, Actuarial and Statistical Department, Statistical Section.)
APPENDIX B

QUESTIONS REFERRING TO ACTIVITY STATUS IN THE
HOUSEHOLD SURVEY OF CHILE

2. What did you do most of last week?
   Select one
   [Worked?]
   [Household chores?]
   [Went to school?]
   or ............... Other?

   1- Worked
   2- You have a job but are not working
   3- Looking for work
   4- Household chores
   5- Went to school
   6- Cannot work (invalid)
   7- Other (Specify)

   T. (Jump to 3a.)
   TE
   BT (Go on to 3)
   QD
   AE
   NT (Jump to 8)
   OT (Go on to 3)

3. Did you work last week, without counting household duties?
   YES (Go on to 3a)
   NO (Jump to 4)

3a. How many hours did you work last week in all your jobs?

   (Hours) (If 35 hours or more, jump to 3f.)
   (If less than 35 hours, go on to 3b.)

3b. Do you normally work 35 hours or more per week
    (in your main job)?

   YES
   3c. Why did you not work the usual number of hours last week?

   NO
   (Jump to 6)

/3d. Would
3d. Would you prefer to work 35 hours or more?

YES → 3e. Is there any reason why you cannot work 35 hours or more per week now?

YES (State why)   NO (Jump to 6)

NO (Jump to 6)

(If 35 hours or more in 3a.)

3f. Did you work in more than one job or for more than one employer last week?

YES → 3g. Did you include the hours spent in these jobs in the hours (see 3a.) reported above?

YES (Go on to 3h.)   NO (Correct 3a. and go on to 3h.)

NO (Jump to 6)

3h. Did you work extra hours or overtime last week?

YES → 3i. Did you include these hours in the hours (see 3a.) reported above?

YES (Go on to 3j.)   NO (Correct 3a. and go on to 3j.)

NO (Jump to 6)

3j. Did you lose working time or did you take any free time from your job last week for any reason such as illness, public holiday or lack of work?

YES → 3k. You said above that you worked (reported in 3a.) hours last week. Is this the correct number of hours after subtracting the time lost last week?

YES (Jump to 6)   NO (Correct 3a. and jump to 6, or if the hours are less than 35 ask 3b.)

(IF TE
Although you did not work last week, did you have a job or business?

- YES (Go on to 4a.)
- NO (Jump to 5)

4a. Why were you absent from work last week?

1- Your were ill
2- Bad weather
3- Vacations
4- Labour dispute
5- New job you will be starting within 30 days
6- Temporary lay off (less than 30 days)
7- Indefinite layoff?
8- Seasonal factors...
- Other (Specify)

(If TE was reported in 2, jump to 4a.)

4b. Are you receiving a day-wage or regular wage for the time not worked last week?

1- YES
2- NO
3- Own-account worker

(If BT in 2, jump to 5a.)

5. Have you taken steps to obtain a job in the last two months?

- YES (Go on to 5a.)
- NO (Jump to 7)

/5a. What
5a. What have you done in the last two months to obtain a job?

1- Consulted a public-employment agency
2- Consulted a private employment agency
3- Consulted the employer directly
4- Placed or answered advertisements
5- Consulted friends, relatives
6- Other (Specify)
7- Nothing (Jump to 7)

5b. When was the last time you took any of these steps?

_________________________ (date) (Go on to 5c.)

5c. For how many weeks have you been looking for a job (or temporarily or indefinitely laid off)?

_________________________ (Weeks) (Go on to 5d.)

5d. The job you were looking for or the one you were laid off from (temporarily or indefinitely) or the new job you were going to start within 30 days was:

1- Fulltime
2- Parttime

(Go on to 5e.)

5e. When did you last work in a fulltime job or an activity lasting two consecutive weeks or more?

_________________________ (Date) or - Has never worked

If the answer to question 4a. was temporary or indefinite layoff or new job starting within 30 days, jump to 6. If not, ask 5f. and 5g.

5f. What type of work are you looking for?


5g. Is
5g. Is there any particular reason why you are not accepting a job now?

   YES (Specify)  NO

(Jump to 6)

(If NO in 5 or NOTHING in 5a.)

7. Will you attempt to look for work of some kind in the next 12 months?

   1- YES - definitely
   2- YES - probably
   3- Perhaps - depends (Specify)

   4- NO
   5- DON'T KNOW (Go on to 7a.)

7a. When did you last work in a regular job or activity?

   ___________ (Date) or - Has never worked

   (If this was less than 5 years ago, ask 7b.; otherwise jump to 8a.)

7b. Why did you leave that job?

   __________________________

   (Go on to 6 and describe the job in 6a., 6b., 6c.)
APPENDIX C

PARTIAL INVENTORY OF DATA AVAILABLE ON FEMALE LABOUR
OBTAINED FROM CENSUSES AND HOUSEHOLD SURVEYS
TAKEN IN LATIN AMERICA AND THE
CARIBBEAN AROUND 1970
Table Ia

VARIABLES IN RESPECT OF WHICH DATA ARE TO BE FOUND IN THE CENSUSES TAKEN IN LATIN AMERICA AND THE CARIBBEAN AROUND 1970

<table>
<thead>
<tr>
<th>Variables</th>
<th>Argentina</th>
<th>Bolivia</th>
<th>Brazil</th>
<th>Chile</th>
<th>Colombia</th>
<th>Costa Rica</th>
<th>Cuba</th>
<th>Ecuador</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Haiti</th>
<th>Honduras</th>
<th>Mexico</th>
<th>Nicaragua</th>
<th>Panama</th>
<th>Paraguay</th>
<th>Peru</th>
<th>Dominican Republic</th>
<th>Uruguay</th>
<th>Venezuela</th>
<th>Guyana</th>
<th>Jamaica</th>
<th>Trinidad and Tobago</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A/ Education; B/ Also ask for number of children living with the person enumerated; C/ Only agricultural workers; D/ Only non-agricultural workers; E/ Months worked in last six months.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For individual women

- Age
- Marital status
- Schooling
  - Educational attainment
  - Last course completed
  - Type of schooling
- Migratory status
  - Residence x years ago
  - Place and time of previous residence
  - Place of birth
- Urban-rural residence
- Relationship to head of household (male or female)
- Number of children
  - Born alive
  - Born living
  - Age
  - Activity status
  - Working time
    - No. of hours per week
    - No. of months per year
  - Length of working experience
- Physical relationship
- Income

For the other members

- Age of children
- School attendance of children
- Presence-absence of other adults
- Presence-absence of relatives
- Sex of relatives
- Age of relatives
- Activity status of others
- Activity status of relatives
- Occupation of husband
- Occupation of head of household (male or female)
- Income of husband
- Income of head of household (male or female)
- Income of other adults
- Family income
### Table Ib

**Variables in respect of which data are to be found in some household surveys taken in Latin America and the Caribbean around 1970**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Atlantica model</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Venezuela</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Marital status</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td><strong>Schooling</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Educational attainment</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>- Last course completed</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>- Type of schooling</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Migratory status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Residence x years ago</td>
<td></td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>- Place and time of previous residence</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>- Place of birth</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Urban-rural residence</strong></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Relationship to head of household</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>(male or female)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Number of children</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>- Born alive</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>- Now living</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Activity status</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Working time</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- No of hours per week</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>- No of months per year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Length of working experience</strong></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Physical relationship job-home</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>For the other members</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School attendance of children</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence-absence of other adults</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Presence-absence of relatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex of relatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age of relatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity status of other members</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Activity status of relatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation of husband</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation of head of household</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(male or female)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Income of husband</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income of head of household</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Income of other adults</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Family income</strong></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

*a/ Only time of residence.
*b/ In the present or last occupation, for unemployed persons.
Table II

Tabulations published on the female economically active population based on data from population censuses taken in Latin America and the Caribbean around 1970.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Argentina</th>
<th>Brazil</th>
<th>Chile</th>
<th>Costa Rica</th>
<th>Cuba</th>
<th>Ecuador</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Haiti</th>
<th>Honduras</th>
<th>Mexico</th>
<th>Nicaragua</th>
<th>Panama</th>
<th>Paraguay</th>
<th>Peru</th>
<th>Dominican Republic</th>
<th>Uruguay</th>
<th>Venezuela</th>
<th>Barbadros</th>
<th>Guyana</th>
<th>Jamaica</th>
<th>Trinidad and Tobago</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital status</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Marital status and no of children</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Educational attainment</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Migratory status</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Urban-rural residence</td>
<td>-</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Relationship with head of household (male or female)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Presence-absence of other adults</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Occupation of head of household (male or female)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Activity status of other numbers</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Note: MAD = Major Administrative Division.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a/ Tabulations of variables for which the majority of censuses collected data (see Table Ia). Those relating to economic position (industry, group and status) were not included.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b/ Only available to data for the Department of La Paz.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c/ Tabulation by age exists.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d/ Only by size of locality.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>