## CREATING STATISTICAL INVISIBILITY

Anybody walking through the commercial areas of Mexico City, Lima, or Quito will be immersed in a crowd of street peddlers --women, as well as men and children-endlessly offering their merchandise in the streets and markets. A casual observer, driving through the roads of the Caribbean islands or passing through the Bolivian Altiplano, will see women, jointly with men and children, working in the fields, preparing the land for planting, harvesting, or feeding the pigs. The traveler might also see women spinning or canning goods that will be later taken to the market. It is not difficult to verify the existence of working women. Yet, for a researcher or a planner to know the real size of the female labor force through official statistics will be impossible, even when they are designed to record all the workers who, irrespective of sex, contribute their labor to the production of economic goods and services.

The inaccuracy of female labor force statistics, especially in developing countries, has already been found to be commonplace by experts in the field. Population censuses underenumerate the females' economic contribution. This results from the specific ways that women are inserted in the labor market, and of the characteristics of the censal procedures, both dependent upon the cultural assumptions concerning the sexual division of labor.

the accuracy of the censal measurement of the labor force <u>is</u> different by sex. Ultimately, this is due to cultural reasons, more specifically, to the socially shared ideas about the sexual division of labor. They are embedded in the conceptual definitions of economic activity and labor force, in their operational translation into data collection instruments (census questions and interviewers' training), in the characteristics of the labor behavior of women, and in their own perceptions of the nature of their activities.

The social construction of the division of labor between the sexes that prevails in most known societies assigns the leadership of production to men and of reproduction to women. Thus, women that in addition to domestic activities are engaged in those defined as economic, are compelled to devise means to articulate their performance of both roles. Because of this, as well as because of the fewer opportunities for formal education and training for the world of productive work, it is more frequent for women to work part-time, seasonally, in activities which are difficult to differentiate from domestic ones, in the more traditional sectors

of the economy, in family enterprises without pay or on own-account basis, inside the household or family unit. Other difficulties are added in the rural areas, especially in the agricultural sector, which derive from the very characteristics of the agricultural activities —conducted in household units which integrate consumption and production, often difficult to distinguish. All this leads many women not to perceive their economic activity as such but as part of the homemaker's duties or of the "help" they owe to other productive members of the household, whether they are their fathers or their husbands. Hence, in certain sectors, though performing the same activities, women see themselves as homemakers (economically inactive according to the censuses) whereas men perceive themselves as workers (economically active according to the censuses).

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The definition of labor force

Starting in the fifties, the Latin American and Caribbean censuses have been designed after the international standards issued by the United Nations Statistical Commission (and by the Interamerican Statistical Institute). With respect to the economic characteristics of the population, these standards are grounded on the ones issued by the International Labor Organization (ILO). They refer exclusively to conceptual matters and say nothing about their operational translation into items of the censal questionnaire.

Up to the eighties, the definition of the "economically active population" in use by censuses all over the world was, with minor variations, the one adopted by the Eight International Conference of Labor Statisticians, in 1954. It follows the "labor force approach", one which investigates the economic characteristics of the population (above certain minimum of age) on the basis of its <u>current</u> activity status, i.e., during a brief (one week) reference period, close to the census

collection date. According to this definition, the "economically active population comprises all persons of either sex who furnish the supply of labour for the production of economic goods and services during the time-reference period chosen for the investigation." (United Nations: 1967). Persons defined as active are further classified as employed or unemployed, i.e., working or seeking work for pay or profit. Homemakers, students, retired or pensioned, rentiers, permanently sick people are defined as economically inactive.

These international recommendations have been severely criticized (among others, by Hauser: 1974; Horstmann: 1977; Blacker: 1978, 1980; Seltzer: 1978; PREALC: 1979; Beneria: 1982; Dixon: 1982; Anker: 1983).

In the first place, "activity status" is too loosely defined as "the relationship of each person to current `economic activity'". In the second place, it has been pointed out that

"economic activity" has been defined by following the model of developed economies, and the behavior of salaried, stable, full-time workers. Such a definition is inadequate to capture a sizable part of the labor force in developing countries where laborers are more likely to work seasonally, rather than all the year-round, to be unemployed rather than formally employed, and to engage in a fluid pattern of diverse and shifting economic activities. In the third place, the definition lacks conceptual neatness. The distinction between economic and non-economic (mostly domestic) activities is not based on clear criteria: it is not payment for the activity of unpaid family workers is counted as economic; it is neither the nature of the activity nor the context where it takes place for domestic work is considered economic if paid but non economic if unpaid and done for the consumption of the worker's household, whereas agricultural own-consumption production is economic even though it is done by unpaid workers producing for their own household. It seems the distinction is based on a set of arbitrary, non-rational conventions, established by the economists to estimate the national income. It could be asked, for instance, why the production of the raw material used for cooking is considered economic but the preparation and elaboration of the same raw material for consumption is not. According to some authors, there is no such arbitrariness but rather the evidence of the socially shared ideas regarding the sexual division of labor. This is the case with Blacker (1980) who says, in this respect:

Let us take, for example, the chain of processes leading to the production of a loaf of bread; the harvesting of the wheat, the threshing and winnowing of

the grain, the milling or pounding of the grain into flour, the kneading of the flour into dough, and the baking of the dough into bread. Where, it may be asked, in this series of actions does economic activity begin and end? I suggest that in practice the answer is determined not by the intrinsic nature of the operation, but by the point at which it is performed by "housewives" --i.e., by female unpaid family workers. (p.72)

In sum, what I am suggesting is that even though the definitions of "activity status" and "economic activity" have not made explicit sex-distinctions, the problems and inconsistencies they suffer affect differently women and men --as well as young and old people. (It should be noted that I am not discussing here whether domestic work should or should not be counted as economic and incorporated into the national accounting. I am discussing whether the <u>criteria</u> for demarcation are or are not neat.) <sup>1</sup>

The debate have recently originated abundant empirical research geared by the need to recognize the importance and value of unpaid domestic and household work for the sake of development and labor market planning and women's status enhancement. Irrefutable evidence on the importance of this kind of work, mostly done by women, comes from the analysis of Goldschmidt-Clermont (1987) of forty evaluation studies conducted in Third World societies on the contribution of domestic and related activities to the satisfaction of human needs. The conclusion of the study is that,

Around the mid-seventies a hot debate was launched around the role of played by this type of work in society, its productive or unproductive nature, its capacity to generate value. (See, among others, Harrison: 1973; Seccombe: 1973, 1976; Coulson, Magas and Wainwright: 1975; Gardiner: 1975; the Conference of Socialists Economists: 1976; Humphries: 1977; Collectif Remois: 1977; de Barbieri: 1978; Beneria: 1981). So far there is no agreement about whether this kind of work produces or not goods, whether it is to be considered productive or not, whether it is a need in capitalist economies or whether it can be replaced by alternative institutions. It is agreed, instead, that domestic work plays a vital role in (daily) maintaining and preserving and in (generationally) reproducing the labor force, hence, that it should be taken into account when analyzing the overall social production.

The short time reference-period adopted by the censuses of the last decades also contributes to underenumerate female workers

The definition of "economically active population" does not specify a minimum of working time except for unpaid family workers, for whom at least 15 hours or one third of the weekly hours are required. It is as if these were the only workers assumed to work less than full time, hence ignoring all other cases of part time work, more frequent among females than among men.

Many censuses use terms like "job", "employment", "for pay or profit" which induce interviewees to equate economic activity with formal, paid, full-time activity.

Prospects for the nineties

The conceptual criticisms and the empirical evidences that have cumulated, especially during the last fifteen years, point out to the conceptual and technical inadequacy of population censuses to enumerate women that supply labor to the economy, mainly in developing countries, and more so in the rural agricultural and the urban informal sectors. The recognition of this state of affairs and of the need to review and enlarge current norms and recommendations to improve the adequacy of labor statistics was taken up at the Thirteenth International Conference of Labor Statisticians held by ILO in 1982.

if economic value were given to unpaid household activities like caring of children, of the aged, of the ill and the handicapped, cooking, serving, cleaning up, laundering, ironing and mending, water fetching, firewood collection, national income estimates would be increased by somewhere between 25 and 50 per cent.

In response to these evidences, the United Nations System of National Accounts is under review. Among other topics, it will be examined "the possibilities and obstacles of further expanding the coverage of subsistence activities beyond the present SNA limits" (UN, ECOSOC: 1984), pp.17-18.

Two kinds of household's questionnaire were printed, differing only in the inclusion or not of the "self-consumption module", which we will later describe. Three kinds of individual's questionnaires were used: one, census-type, brief, requires information on activity status and economic characteristics for a brief weekly period; the other two, longer than the former, are similar in most everything except for they refer to different reference periods, weekly one of them, and yearly the other.

One single question followed by a set of pre-coded response alternatives, as can be seen in figure 2.1, was applied by interviewers with an average of three-hours training. According to the instructions, the interviewers were to read out the response alternatives <u>one by one</u> until they reach an answer. The question identifies the economically active persons, i.e., the employed (1 and 2) and the unemployed (4, 5, 6, and 7).

The CENEP-week and CENEP-year surveys used a group of questions for activity status, and two-days and one half interviewers' training. The former set the previous week as the reference period, the latter the previous year.

The CENEP questionnaires contain a group of seven questions when the reference period is one week, and five when it is one year. Its design transmits the principle "you are active unless you prove otherwise". It has the following characteristics: a) it displays the response alternatives of the (apparently) single CENSAL question into a set of mutually exclusive questions (Q7, Q9, Q10, and Q12 in CENEP-week, and Q7, Q9, and Q10, in CENEP-year); b) it makes the definition of "work" and "economic activity" explicit to the interviewees (Q8) by giving examples of concrete activities chosen among those generally invisible as such (carried out <u>inside</u> the household, for a <u>short</u> time, <u>helping</u> other worker, similar to domestic chores, etcetera); and c) it emphasizes the elicitation of agricultural workers who produce for their own consumption (SCM). An instruction heading this block of questions

and printed in capital letters reminded the interviewers of the meaning of "work" in the context of the research, thus emphasizing the instructions given to them during the training sessions.

The first question (Q7) resembles the CENSAL question with one major difference: it only allows to be answered by "yes" or "no". For those who answered it negatively, the question was re-iterated, this time with concrete examples of activities and of ways of carrying them on chosen among those usually not perceived, and consequently not reported as "work" by women, young and old people (Q8). The self-consumption module (SCM) was applied to the members of all rural households and of urban households who, having a plot of land that allowed to develop small-scale agricultural activities (growing vegetables, raising chickens, etcetera), had been classified as economically inactive according to questions 7 to 12 in CENEP-week, or 7 to 10 in CENEP-year survey. Because of our interest in assessing the extent to which the recording of these workers is inadequate and the extent to which it can be improved when special emphasis is put, the "self-consumption module" was presented at the end of the interview to all the members of the household. This prevented the learning that might have occurred if posed at the end of the interview to each active age member of the household since it frequently happened that the interview was carried in the presence of other prospective interviewees or else one of the interviewees would act as a proxy in the absence of other members. This is the reason why the self-consumption module was not printed in this section on activity status of the individual's questionnaire but in the back of the cover page of the household's questionnaire. As shown in figure 2.2, the phrasing of all questions required a "yes" or "no" answer before proceeding to the next one. The CENEP-W female activity rates are almost three and six times as great as the CENSAL rates of Leandro N. Alem and Piribebuy, respectively.

The CENEP-W and the CENSAL portraits of the male labor in both areas are significantly

similar. Both surveys give significantly different portraits of the female labor, instead (see Table 3.4). The weight of women occupied in the agricultural sector, mostly producing for their own consumption<sup>2</sup>, is much greater according to the CENEP-W than to the CENSAL survey. The latter gives more weight to (small scale) manufacturing, (petty trade) business and service sectors.

The fact that in the Argentinian locality, where most of male agricultural workers produce for the market, as well as in the Paraguayan locality, where the majority produces for own-consumption, a procedure like CENEP-W does not capture significantly more workers than other which reproduces the standard census, indicates that male who work in agriculture, either for sell or for own-consumption, define their activity as work, perceive themselves as workers and declare to be active.

The situation is quite different on the side of females. A very high proportion among them do not define their activity as work and do not perceive neither declare themselves as active but as housewives (economically inactive according to the censuses). The priority rule that according to international standards censuses is assumed to be applied is not put into practice among them. According to this rule, in case of multiple status, the active has to have priority over the inactive status (and the occupied over the unoccupied status).

The magnitude of these findings may be seen in another way. The proportion of the female population which although contributing labor to economic production do not perceive and do not declare to be economic actors and is, therefore, invisible in census statistics, amounts to two-thirds of the females in the Argentinian

<sup>&</sup>lt;sup>2</sup> It should be remembered that self-consumption producers were identified in two ways: by asking agricultural workers for the destination of their production (mainly for selling or mainly for own consumption) and by the SCM.

locality (67 per cent) and to five-sixths (84 per cent) in the Paraguayan locality (see Table 3.1). The statistically significant similarity between the female activity rates obtained by the CENSAL survey and by the population censuses of the 80's in both localities is another evidence of the importance of these findings.

Which are the workers who do not perceive and do not declare as such unless a special effort is made to capture them? The question is pertinent for females since the male labor force enumerated by either procedure are not only quite similar in size but in most socio-demographic and economic aspects, except for the relatively more workers who labor part-time or less that CENEP-W enumerates in both areas (see Table 3.4). The very few self-consumption producers brought in by the SCM are persons in the extreme stages of the life cycle: either old people identified as "retired or pensioned" (Leandro N.Alem) or young people identified as students (Piribebuy), as shown in Table 3.5, who work for only a few hours or half-time per day.

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## INSERT TABLE 3.4

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As regards females, in the Argentinian locality CENEP-W counts a working population much larger than the CENSAL survey. Both are similar in age-structure but differ in most other aspects. The CENEP is more liable than the CENSAL survey to elicit females who are wives of the household's head, the overwhelming majority being active in agriculture, producing mostly for own-consumption as unpaid family aids or on own-account basis at home, half-time or less. In Paraguay the situation is grossly similar.

The SCM contributes to capturing self-consumption producers who otherwise overwhelmingly declare to be housewives, and much less frequently students when initially responding to the interviewer (see Table 3.5).

The CENSAL survey undercounts 22 per cent of the Posadas women and 42 per cent of the Asunción women counted by the CENEP-W survey, but only 9 and 14 per cent of the males of both localities, respectively.

if the female workers elicited by both Q8 and the SCM of CENEP-W questionnaire are excluded, the urban activity rates significantly decrease in Asunción from 59.0 to 42.2 per cent, and in Posadas from 46.0 to 39.6 per cent. This is not the case for Q8 and the SCM separately. And in no case it is so for males.

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In Asunción, the capital city of Paraguay, the CENEP-W survey enumerates about three-quarters more female workers than the CENSAL procedure. Both surveys give portraits of the female labor force which differ significantly in terms of age, marital status, and position in the household and educational level. CENEP registers a female working population younger, less educated and more frequently married wives of the household's head than the corresponding population registered by the CENSAl survey. But both portraits differ even more in their modalities of insertion in the labor market. These clearly reveal which are the workers that are most invisible to the usual census statistics (see Table 3.9). enumerates more informal workers, self-employed or family aids than the CENSAL survey (55.6 versus 35.9 per cent). As a consequence, CENEP-W detects more females working in their homes (40.7 versus 22.0 per cent) than the CENSAL survey, where owners and salaried women prevail, most of them working outside, in an establishment (47.3 versus 24.4), and only a few inside their own homes (22.0 versus 40.7 per cent). More female workers in the CENEP-W than in the CENSAL survey devote only a short time a week to working (one third of CENEP-W workers compared with only 7 per cent of CENSAL workers invest less than 19 hours a week), and less than one half work full time, a figure which rises to 71 per cent among CENSAL workers (see Table 3.9). There is something built in the CENSAL procedure that makes it more sensitive to enumerate formal female workers, conversely, there is something in the CENEP-W procedure that makes it more sensitive to female workers with lower (cultural) probabilities of participating in the labor market and, when the occasion comes, to do it in the informal sector.

In Posadas the situation is rather similar. Even though relative to Asunción the Posadas female labor force is somewhat more educated and participate in a more developed, diversified economic structure where the percentage employed in the higher occupational categories as professional and technical workers (employers and employees) who work in an establishment, again it is evident that the CENSAL survey is more sensitive to record less visible informal own account and unpaid family workers, working at home, for less than twenty hours weekly.

This study was not especially addressed to measure informal labor but the information gathered makes it possible an approximation to it. For this study I operationally defined the "refined activity rate in informal occupations" in terms of employment status, place of work, and school level. According to the definition, informal labor includes own-account workers with only primary schooling or less and all unpaid family workers irrespective of the place of work and the school level; salaried workers and employers working outside establishments (on the street or route, at home, or in the employer's home) with primary schooling or less.

Most women in the informal sector in Posadas and Asunción are domestic servants (around fifty per cent of all informal female workers) and washerwomen, ironers, cooks and cleaning women who work for more than one employer for only a short number of hours per week. In Asunción, street vendors of food and other manufactured goods purchased for resale are also a sizable proportion of the informal workers. Most

informal men in both localities are own account workers with low schooling, who work in small industrial enterprises, commercial establishments and repair workshops at home or outside, at fixed premises.

As can be seen in Table 3.10, the CENEP-W informal activity rates are systematically higher than their corresponding CENSAL rates for both sexes in both localities.

INSERT TABLE 3.10

But it is worth highlighting again the greater sensitivity of the CENEP-W survey to capture formal employment among women than among men in the less developed economic context of Asunción than in Posadas. In fact, CENEP-W captures over fifty and over one-hundred and thirty per cent more informal female laborers than the CENSAL survey in Posadas and in Asuncion respectively. On the other hand, it captures about one third and over fifty per cent more informal male laborers in one and the other context.

The very few self-consumption producers captured by the SCM had originally declared themselves mostly as housewives, if women, and as retired or pensioned, if men, in both localities (see Table 3.11).

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The study consistently produced evidence that the usual Latin American

population censuses give a fairly valid portrait of the male labor force, but a quite invalid one of the female labor force. This is much more so in the rural than in the urban areas and in the less than in the more developed country. It showed that the type of questionnaire, of interviewer's training, the length of the reference period, and the length of the minimum working-time requirement are indeed responsible for the (sex-differential) underenumeration of women workers.

The study provided conclusive empirical evidence that, even though up to the censuses of the 80's international standards neither included nor excluded self-consumption production from the definition of economic activity, national census practices however, did capture it when performed by men, not by women.

In comparison with CENEP-Week, though using the same conceptual definition of "economic activity", the CENSAL procedure under enumerated as much as five-sixths of the rural female workers and close to one-half of their urban counterparts in Paraguay. Only about one-tenth of the male workers either rural or urban were victims of similar statistical invisibility. The corresponding figures for Argentinian females are two-thirds in the rural area and one-fifth in the urban one. The figures for males do not reach one-tenth in either the rural or the urban location.

The women workers made visible by the CENEP procedure in the rural areas of Argentina and Paraguay are overwhelmingly self-consumption producers working as unpaid family aids or on own-account basis at home, part-time or less. The women workers uncovered by the CENEP procedure in the urban areas are "secondary workers", engaged in informal activities also as self-employed or unpaid family aids, at home, part-time or less. Most of these women, either in the rural or in the urban areas, had originally self-identified as economically inactive housewives. Most of them belong to the central age-groups of the active life. The few men uncovered by the CENEP procedure had originally self-identified as either students, or retired or

sick persons; they belong to extreme age-groups who devote little time to working. The evidence is conclusive as regards the need to reexamine the current concepts and methods to improve the measurement of the female participation in economic activity. The international organizations have taken some steps in this direction. Indeed, the new recommendations issued by the ILO-UN for the coming 1990 round of censuses, if put into practice, will have a marked effect on the measurement of the female labor force, perhaps much more so than on the male population.