

Accounting for Women's Work in Censuses in Developing Countries—Nepal Experience

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Meena Acharya
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**Tanka Prasad Acharya Memorial Foundation
Kathmandu, New Banewore, P.O. Box, 20436
Nepal**

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Abstract: The paper examines two sets of issues, those related to activities which are already in SNA but still outside the labor statistics in developing countries and other those related to women's household maintenance activities, which are still outside SNA, the unpaid care work. On the basis of experience in Nepal, it argues that much of the activities in the first category can be recorded in censuses, while for the second category advocacy must go simultaneously at national and international levels. Given the time and cost involved in large scale time use data and given even the censuses are very sketchy in many countries, efforts should also be made to record time spent on house work in censuses as well as labor force surveys, with careful design and training.

I. Introduction

The fact that in economics services produced for household use is placed beyond the boundary of production and the System of National Accounts. Therefore not counted has been a subject of constant feminist criticism for last 25 years (Boserup, 1970; Acharya, 1979, 1981; Beneria, 1983). Further the exclusion of household care activities and its exclusion from the definition of work in economics and national accounts and its implications for macro economic policies have also been a subject of much discussion in the preceding decades (Goldschmidt - Clermont, Luisella. 1990, INSTRAW, 1995). With withdrawal of state from many welfare activities with resurgence of neo-classical economic policies and structural adjustments, these issues have gained prominence once again (Elson, 1994). It is argued that withdrawal of state from welfare activities are putting excessive burden on women. They are subsidizing globalization by their unpaid work. Feminist gender budget advocates and economists in UK and South Africa (Budlender 2000), and many other countries including South Asia have taken up these issues. In their overviews of the basic assumptions of neo-classical economics, structural adjustment policies based on such assumptions and their impact on women many feminist authors (Randy, 1997, Bakker and Gill, 2003) have discussed how the exclusion of household care-activities is part of the basic assumptions of neo-classical economics and how they lead to anti-women and anti- poor policies.

Such feminist advocacy in the last three decades has influenced the new manual of the United Nation's on the system of national accounts of 1993 (SNA, 1993) to some extent. The new manual makes a distinction between the general production boundary and the SNA production boundary. The general production boundary encompasses all production of goods and services as per the third person criteria. Only those activities which can not be effectively performed by others for a person (e.g. eating, sleeping, recreation etc.) are beyond the general production boundary. But it sets a different SNA boundary for the national accounts, which is limited to include production of goods and services for the market and production of goods for its own use by the households (except when the services are performed by paid domestic hands).

From a gender perspective, GDP calculations are still problematic in two major aspects.

- a) Many of the activities and production thereof, which are classified as services are still outside the SNA production boundary. Goods and services are distinguished on the basis of whether the acts of their production and consumption are separate in time and space or not (SNA, 1993 p. 123). On this basis, there seems to be little difference in value added in food processing for the market and cooking for self-consumption, but the first is in and the second is out of SNA. The 1993 SNA provides mainly practical reasons for that distinction (See §6.19ff. of the 1993 SNA) and advocates for a satellite account for household care activities.
- b) Further, most important in a developing country perspective, the SNA (1993) still retains a caveat that production considered insignificant from a national point of view may be ignored. But in a country where majority of households are subsistence level producers and where their survival depends on scattered small scale activities - one needs some baseline information to decide what is important and what is not important from a national perspective. Primarily women and children perform multiple economic activities to support the family, which are often not noticed and so not counted.

These problems are endemic to all labor accounting as well, since theoretically, an activity in census and labor force surveys is defined as economic or non-economic on the basis of whether the goods and services produced by the particular activity is included within the production boundary of the national accounts or not. People performing such activities are counted as economically active or not. Therefore even on the theoretical level, a large proportion of women devoting their time merely to household maintenance and care activities are considered economically not active.

In developing countries, statistics on women's work and economic activities have additional problems of incomplete accounting of even those products and services which should be within the SNA theoretically but are not counted because women performing them are not visible. A glaring example of such lapse is the processing of primary and secondary food products for household use.

A further problem in developing countries is that while the products and services may be estimated and counted in SNA, women performing them are not counted as economically active in censuses and labor force surveys due to the cultural biases. For example in many parts of the world, while subsistence agricultural production is estimated and constitutes a large proportion of GDP, women working on such farms are still not counted as economically active.

Women activists working in the field are constantly struggling with such problems and have made efforts at the practical level to extend the coverage and correctness of the censuses and labor force statistics on economic and non-economic work performed for the household consumption. It is very important, particularly in developing countries to mainstream such improvement in regular statistical systems because, they produce variety of data, they produce them regularly and carry out large censuses and surveys which provide informational base for the whole country and which are used regularly in all major policy decisions and at all levels. Not less important, they are already funded and they have experience and regular infrastructure – engendering is less expensive than producing new statistics.

One additional advantage of getting involved in such large scale exercise is the opportunity, to gender sensitize policy makers, statisticians and most of all a large number, government officials, teachers and students involved as supervisors and enumerators in the census, and finally the whole population at the grassroots on the concepts of work and non-work and the inherent gender injustice inherent in it. In Nepal 26,000 manual on these concepts were distributed throughout the country.

Nepal presents a long experience in this field. The methodology and coverage of census taking was already reviewed in late seventies and definite recommendations made as to how to improve the regular census taking so as to better reflect Nepal's realities (Acharya, 1979). Eight six to one-year time-use studies were also carried out, which proved extensive involvement of women in both so called economic and non-economic activities (Acharya and Bennett, 1982). These findings have influenced the regular censuses and surveys in Nepal. Collection of data on time budget, both economic and care activities, although only rudimentary because of recall method used, has become a regular part of the labor-force survey also.

Successive censuses in Nepal have improved a lot in coverage of economic activities and design of questions themselves, in addition to adding much more information on other aspects of women's lives. The Census, 2001 is of particular interest in the context of this workshop, since the definitions of economic and non-economic activity were thoroughly revised to comply with 1993 SNA manual. This paper discusses in brief what was achieved and what can still be done within the Census regarding the coverage and depth of information on economic and household maintenance and care. It also notes what seems to be beyond Census. Further it goes on to draw a few methodological conclusions from several time-use studies in Nepal conducted since 1978/79, which could be relevant for other developing countries.

II. To what extent the Census data on economic and non-economic activities can be improved - Nepal Example?

2.1 Specific Improvements in the Manual

In the Nepal 2001 Census, besides including much more information on women's lives to record ownership of property land, building and animals by women, marriage patterns to capture polygamy (which is banned since 1960s), living arrangements of children below 16, caste\ ethnicity and religion etc, specific improvements on definitions, coverage and data collection process concerning economic an non-economic activities were effected. The regular question "whether you are working or not-working" was dropped already in the 1991. The first question asked was what "do you do usually". How did you usually spend your time during the reference period (see table 6)? For 2001, the 1991 manual was further revised to incorporate:

- New definitions of economic and non economic activities as per the SNA,1993
- Examples of women enterprise owners/operators with explanation that they need not be men only.
- More examples with women and children's likely economic/extended economic/ non-economic activities. List of likely activities and occupations were thoroughly revised to include activities typical to Nepal, such as liquor making, sweets making, food processing for local sale (e.g. halawaii, roadside liquor seller, food seller, etc.),

porters, bullock cart operators, rikshaw pullers, dhobi, domestic worker, etc., rather than copying the ILO list in totality, which focus on occupations mostly found in developed countries.¹

- Clearer instructions on recording occupations and sectors of work. The manual was made clearer on the basis of occupational classification or sectors of work, dropping the work or income explanations as in 1991 manual. Examples were given to avoid misunderstanding, e.g. between trading vegetables and growing the same vegetable.
- Clearer definitions and explanations. For example in 1991 Census, service was expected to be performed for 'service charge' (sewa sulka). It had not been explained that service charge could be both in cash and kind. Such confusions were clarified.
- More probing questions. For example, in the definition of the "older person" in 1991 manual, if a person over sixty received pension or the home-makers declared herself/himself economically not active, she/he had been considered economically inactive automatically. In 2001 further probing was required to find out whether she/he looked after household agriculture, business, etc.
- Many of the explanations were illustrated with pictures.

2.2 Making women's work visible and its results

Much effort was concentrated on redefinition and refinement of concepts of economic activities as per the SNA 1993. To make the data comparable to past series, the newly added activities were recorded and processed as extended economic activity, as recommended earlier (Acharya, 1979 and 1982).

The definition of economic activity as featured in Table 1 includes extended economic activities. The category of extended economic activities is a new classification in 2001 Census. This category includes activities such as collection of water, fuel and processing of both primary and market purchased goods for household consumption. In the previous definitions, theoretically, the processing of secondary goods was considered non-economic in the case of the households, which were not selling the good or the service in question. What it means is that if a farmer did not sell the butter he produced in the market, then the time spent on producing butter for the household consumption would not be considered economic. But if he/she also sold a part of the butter produced, then his/her time spent on producing butter for the household would also be considered economic. In the new ILO definition of economic activity this distinction has been done away with so as to match the SNA (1993), but in Nepal for a comparative purpose, such activities have been recorded separately as extended economic activity.

All producers of primary agricultural goods e.g. grains, fruits, vegetables, milk, meat etc, were considered economically active even by 1968 SNA. But in the case of Nepal even

¹ For example in 1981 Occupational lists in Nepal the category of halwain or porters were mentioned no where, while bakery and Railway Station Master figured prominently. As a consequence in 1981 census only 600 bakers were registered. It is evident that halwainis were not included in this category. Every village has at least one halwain and there are almost 40 thousand of such villages in Nepal. Generically they should have been included in the category of bakers. Similarly, everyone knows that Nepal has thousands of people working as porters and only one Railway Station-Master. Porters should have been classified among the transport workers, while the Station-Master could have been included in the category of other among the managers. Such inconsistencies are expected to have been taken care of this time.

people, who devoted time to production of primary goods for household consumption were not captured fully in the field interviews, because of cultural bias about women's work. Attempts were made in 2001 Census to redress this deficiency by a more rigorous definitions and clearer examples.

Further, in the previous Censuses, people were asked to declare their occupation and place of work only if they had already declared themselves performing activities falling in the economic category. For example if a woman or a full time student declared herself/himself as house wife or student, then she/he was automatically excluded from the economically active category. In 2001 Census, irrespective of the responses to the preliminary question as to the kind of work they did usually, all people above 10 years of age were asked to describe the kind of work they performed. All those who performed any of the economic activities for at least one hour a day or looked for work in a similar period for 15 or more days in the preceding year are included in the category of economically active, irrespective of whether they had declared themselves as students, housewives, sick or old etc.

People describing themselves as full time students or house wives could also fall in the category of economically active, if they performed any one of the economic activities for at least one hour a day or more for any time during the reference year. Their responses to the previous question as to what they did most of the time during the year preceding the Census has no relationship to tabulations from the next question, which asked to account for their activities for 12 months in terms of four categories, e.g., economic work, extended economic work, search for economic work or not performing any economic work. For example if a student helped about one hour a day for 15 or more days in a month in agriculture or household enterprise or gave tuition for pay, he has been counted as economically active in this tabulation. Similarly, a women, who spent 11 month in household work and at least one hour a day for 15 or more days in the busy agricultural season in economic work is classified as economically active (Niraula, 2003). Thus the minimum time devoted to economic or extended economic activity or search for employment in the year for being counted as economically active in this tabulation is only one hour of work for 15 days in the year. With such improvement to capture multiple activities of both women and men, the Census in 2001 could capture additional 1.5 million people, who performed some economic activity.

However, the CBS has also published a table on economically active people classified by period of economic activity in terms of 12 months, divided in four segments, less than three months, three to five months, six to 7 months and eight months and above. Depending on the objectives of the study, any of the groups may be used for analysis (Niroula, 2003).

The reform in all three directions, capturing extended economic activities mostly performed by women and children, which were not captured before, taking account of multiple economic activities which is a better reflection of reality of subsistence economies, and more rigorous and clearer definitions are positive from a gender perspective, because with these reforms the statistics on economic and non-economic activity rates reflect women's realities much better. They contribute to making women's work much more visible. This fact can be illustrated partially by the fact that while only 3.2 million women were reported under usually economically active category, 4.3 million were reported engaged in economic activity for more than 3 months.

Table 1 presents comparative information on the coverage of the two concepts, in percentage terms. Columns 3 and 4 in this table, constructed on the basis of Table 23 in the Volume II of

the 2001 National Population Report (CBS, 2002), records responses to the question on what a person did most of the time during the year preceding the Census. These calculations are based on the principal of exclusivity, either one is performing economic activity or other activity most of the time. For example women who declared themselves performing household activities could not at the same time declare themselves as performing economic activity also. They are economically active (performing usually home-based agricultural or non-agricultural activities, wage work or seeking employment), home-makers or students or inactive. As discussed above. Figures in columns 1 and 2 include all those, who performed any of the economic activity at least one hour for 15 or more days in the reference year.

Asking people to say what they did most of the time seems to lead to underestimation of the economic activity rates for all age groups of men and women. Such underestimation seems to be much larger for 10-19 age children and adolescents and women in general. While the difference in the case of men is of about 8 percentage points, in the case of women it is about 18 percentage points. Therefore for a realistic evaluation of women's work in general it is necessary to ask more detailed questions and to look at their total work and not only their perceived economic work.

Table 1: Age specific economically activity rates by sex as per various definitions, 2001

Age Group	Taking Account of Econ. activities of homemakers, students, old etc.\1		Excluding those engaged usually in home-making, study & extended eco. activity and etc\2		Difference in 1 & 3 and 2 & 4		Performing Extended Economic Activities	
	1	2	3	4	5	6	7	8
	Male	Female	Male	Female	Male	Female	Male	Female
10-14	27.3	30.4	8.6	9.8	18.7	20.6	1.3	3.0
15-19	49.7	48.1	35.4	28.9	14.3	19.2	1.5	5.3
20-24	76.9	61.5	70.0	44.2	6.9	17.3	1.4	7.0
25-29	91.9	65.7	88.1	48.9	3.8	16.8	1.3	7.4
30-34	96.6	67.8	93.8	51.5	2.8	16.3	1.2	7.3
35-39	97.4	69.3	94.8	53.1	2.6	16.2	1.2	7.4
40-44	97.1	69.9	94.7	53.7	2.4	16.2	1.2	7.4
45-49	96.8	69.4	94.4	52.9	2.4	16.5	1.2	7.6
50-54	94.5	66.4	91.8	49.9	2.7	16.5	1.4	7.7
55-59	91.4	62.0	88.2	45.1	3.2	16.9	1.6	7.4
60-64	81.9	52.3	77.3	35.9	4.6	16.4	1.9	6.6
65+	59.7	34.3	52.9	20.3	6.8	14	2.1	4.5
Nepal	71.7	55.3	63.5	37.7	8.2	17.6	1.4	6.1

1/ CBS: National Report on Census 2001, Vol. II, Tables 25.

2/ Ibid, Table 23

Table 2 below, presents an example of making women's total work visible from the census itself. The table presents a picture of working population, irrespective of the kind of work they do. Any person engaged solely in home making is also considered working. Work is defined as an activity, which a second person can do for you, for example cooking, taking care of children, cleaning, washing - all unpaid work in the household maintenance and child-care. Only activities, which a second person can not do for you, for example sleeping, taking care of your own person, watching TV, study etc are excluded from the definition of work. By this definition of work, more than 90 percent of men and women in the 25-54 age groups are working; the difference is only in the kind of work they do. Overall and among most age-

cohorts larger proportions of women are working than men. While 22 percent of girls of 10-14 ages are working, only 12 percent of boys in the similar age group work. In the 15-24 age cohort, larger proportion of girls are working than boys, and more than half of them are engaged in economic activity. Among all age cohorts, larger proportion of women performs economic plus extended economic activities than just home-making. Even with all these exercises, household maintenance and care activities, the unpaid work of those who are counted as economically active is left out.

Table 2: Male/female proportion of workers, 2001

Age Group	Male				Female			
	Usually Performing		Home Maker	Total	Usually Performing		Home Maker	Total
	Eco. Activity	Ext. Eco.			Eco. Activity	Ext. Eco.		
10-14	8.6	1.3	2.2	12.1	9.8	3.0	9.6	22.4
15-19	35.4	1.5	1.7	38.6	28.9	5.3	20.1	54.3
20-24	70.0	1.4	1.4	72.8	44.2	7.0	34.6	85.8
25-29	88.1	1.3	1.2	90.6	48.9	7.4	39.1	95.4
30-34	93.8	1.2	1.0	96.0	51.5	7.3	38.0	96.8
35-39	94.8	1.2	0.9	96.9	53.1	7.4	36.7	97.2
40-44	94.7	1.2	0.9	96.8	53.7	7.4	35.8	96.9
45-49	94.4	1.2	0.9	96.5	52.9	7.6	35.8	96.3
50-54	91.8	1.4	1.1	94.3	49.9	7.7	35.1	92.7
55-59	88.2	1.6	1.5	91.3	45.1	7.4	35.5	88.0
60-64	77.3	1.9	2.3	81.5	35.9	6.6	30.5	73.0
65+	52.9	2.1	3.0	58.0	20.3	4.5	21.7	46.5
Nepal	63.5	1.4	1.6	66.5	37.7	6.1	28.6	72.4

Source: Acharya, 2003

2.3 Industrial and occupational distribution of the labour force

Much effort was devoted to improving information on industrial and occupational distributions also. As mentioned above, specific recommendations were made for preparation of Nepal's own industrial and occupational classifications focussing on activities mostly found in Nepal, rather than copying the international categories in totality. Two classifications were prepared.

The redefinition of economic activities as discussed above has effected the industrial and occupational distribution and composition of labour force substantially. While the majority of Nepalese labour force is still concentrated in agriculture, compared to 1991 men's engagement in the non-agricultural sector has increased by about 16 percentage points and women's by about 18 percentage points (Table 3).

Table 3: Distribution of economically active population by major industry, (1981- 2001)

Years/ Industry	Male			Female		
	Agriculture & Forestry	Non- Agriculture	Not Stated	Agriculture & Forestry	Non- Agricultur e	Not Stated
1981	88.7	9.2	2.1	95.8	2.9	1.3
1991	74.9	23.8	1.3	90.5	8.9	0.6
2001*	60.2	39.5	--	72.8	27.0	--

Source: Ibid

* Figures may not tally to 100 due to rounding effect.

Women constitute more than 43 percent of the labour force, 48 percent in agriculture and 34 percent in the non-agriculture sectors (Table 4). Women's proportion has increased almost in all occupations to some extent. But their greater concentration in agriculture is also visible. Women still constitute only a small proportion among administrative, technical and professional, and clerical worker categories. They constitute only about 14 percent among the administrative workers, i e, among the senior officers, legislators and managers and 19 percent among the professionals and technicians, which comprises teachers, trained nurses, doctors, engineers, professors etc. The increase in women's proportion in this group by 4 percentage point indicates a positive trend, reversing the decreasing trend observed in 1991 compared to 1981.

Table 4: Female proportion in labour force by occupation, (1981- 2001)

Occupations/ Sector	1981	1991	2001
I. Agriculture, Forestry and Fishery Workers	36.4	45.1	48.1
<i>Of Which:</i>			
Skilled and semi-skilled (own account farmers)			49.3
Elementary occupations			36.4
II. Non-Agriculture	14.3	20.2	34.3
Administrative workers (Legislators, senior off. & managers)	6.6	9.3	13.8
Technicians and associate professionals	16.6	15.1	19.0
<i>Of Which:</i>			
Professionals			23.3
Technician & associate professionals			14.4
Clerks or office assistants	5.8	10.0	12.8
Service, shop and market sales workers	14.6	23.9	24.7
Production workers	19.2	15.8	44.1
<i>Of Which:</i>			
Craft and related workers			44.6
Plant and machine operator & assemblers			13.0
Elementary occupations (other than agriculture)\1			48.6
Not Stated / others	15.1	35.9	50.9
Total	34.6	40.4	43.2

Source: Ibid

1/ Includes fuel and water collectors for domestic use, which were not counted as economic in earlier censuses

2.4 Employment Status

However the definition of self-employed followed ILO standard (1992), which had already been changed in the 1997 UN Statistical Office recommendations (UN, 1997)². As per the old definition, all full time workers engaged in the household enterprise were categorized as self-employed. Any individual of the household if he/she worked in the enterprise has been categorized as employer if the enterprise employed one or more outside labour. My recommendation was to make a clear demarcation line between the ownership and role in management to separate employers and self-employed and unpaid family worker categories effectively. Specifically arguments were presented along the following lines:

- Only those who own and operate the enterprise and employ other people should be listed as employers.
- The category of self-employed should be sub-classified into two sub-groups (a) who own and operate and (b) who are full time family workers only.
- Only in the case of joint ownership of the enterprise, other members of the household who also work in the enterprise could be registered in the same category as employers or own account workers in principle.
- Women should be listed as employers only if they also own the enterprise.

But the above recommendations were not accepted. The only attempt made was to specify better the categories as per ILO 1992 manual. In separating the categories of self-employed and unpaid family workers, the primary criteria used was engagement full time or part time in the family enterprise, irrespective of who in the family owned the enterprise. Consequently, an overwhelming majority of economically active population, both men and women, were still recorded self-employed. Sixty-two percent of men and nearly 84 percent of women were in the combined category of self-employment and family labour. Women constituted 51 percent in this category of workers.

Overall, women constituted 22 percent of the wage workers and 50 percent of the non-wage workers (employers + self-employed + family workers) in 2001 (Table 5)..

Table 5: Percent women by main sectors and wage \non-wage employment

	1981	1991	2001
I. Agriculture	34.4	45.0	48.1
Non-wage ¹	37.3	46.6	50.0
Wage	16.8	25.0	50.6
II. Non-agriculture	14.3	20.2	34.3
Non-wage	18.0	29.8	33.0
Wage	14.5	18.9	17.7
Overall	34.6	40.4.	43.2
Non-wage	36.8	45.3	50.2
Wage	14.7	22.6	22.4

Source: Acharya, 2003

¹/ Includes employers, self-employed and family workers

However their share in the non-agricultural wage labour was only about 18 percent, a decline of 1 percentage point from 19 percent in 1991, despite the development of carpets and garments. They constituted 33 percent of the agricultural wage labour. This reflects the

² It seems that the Central Bureau of Statistics in Nepal was not aware of this new manual. Neither I was, to argue more effectively on this issue.

impact of closer of mass scale household and cottage level industries due to the impact of the opening of the remote rural areas to out side competition by roads and the structural adjustment policies

III. How were the improvements achieved ---The process

The Census engendering effort in Nepal was part of a larger exercise to improve the quality of the Census data by the Central Bureau of Statistics (CBS)/HMG with the assistance of donors. An inter-agency group was established for this exercise involving UNDP, UNIFEM, UNFPA, and UNICEF in 1998. The engendering exercise started with a visit of a few senior officers of CBS and representatives of UNDP, UNIFEM and UNFPA to Pakistan and India to observe similar on-going exercises in those countries. After that, two workshops on gender concepts, one for senior staff and other for the mid-level management of CBS were conducted by the inter-agency group. The first workshop was inaugurated by the then Prime Minister.

SAHAVAGI, an NGO, from where I worked, was hired for assisting CBS in identifying gender gaps in the previous Censuses and improving the concepts and methodology involved in a gender perspective. Later on a media group was also hired for preparing publicity materials.

The process of identification of gender gaps in the census process and concepts was an intensely interactive process. The idea was to engender not only the outcome but the whole process of Census taking exercise, preparation, implementation and final data processing and to gender sensitize the CBS as an institution.

The process started with two workshops for Identifying Gender Related Data Gaps in the Census Questionnaires (November - December, 1998), from the previous census. The main objectives of the workshops were, gender orientation of the statisticians working on GDP and census, particularly to clarify the new concepts of GDP and labour as expounded by SNA (1993) and ILO Employment Manual (1992) and to recommend necessary reforms in the Census, 2001 from a gender perspective.

In the first workshop participants from India and Pakistan were invited to share their experience. In this workshop, four teams of two persons each consisting of one subject matter specialist from the CBS and one gender expert, were identified to write four papers, for reviewing the 1991 questionnaires and manuals and recommending necessary reforms for the 2001 Census. The topics selected for the four papers were: (a) Social aspects and the household rostrum, (b) Agriculture, (c) Manufacturing, and (d) Services. These papers were discussed intensively in the next 2-day workshop held after a month involving the whole CBS Census outfit at the Centre, the gender experts and the representatives from the Planning Commission, various government department and UN agencies.

These papers took the questionnaire forms, manuals and publicity materials used in the 1991 census as the basis for their study, discussions and recommendations on refinements, additions and reforms in the census procedures, definitions, concepts and instruments for the Census 2001. The 2001 questionnaires and manuals were prepared incorporating many of these recommendations. Particular attention was devoted to expanding and clarifying the

concept of economic activity as per SNA (1993), and making the sector-demarcations much clearer. Management and training needs were also extensively discussed. The need for female enumerators was also emphasized.

On the basis of these recommendations, a committee of CBS personnel, involved in the Census, prepared the first draft of the questionnaires and the associated manual. The draft questionnaires and the manual were reviewed several times by the gender expert from SAHAVAG, discussed and amendments recommended. The questionnaires and the manual were amended accordingly several times. A separate short manual on gender concepts and issues in the census was prepared and distributed along with the main manual in the training of the trainers and the enumerators. A total of 26,000 such manuals were distributed, which by itself was a big gender sensitizing exercise for the enumerators (mostly school teachers) and the statisticians working all over the country.

A high level Census Technical Advisory Committee consisting of CBS officials, representatives from the university, various data-user government agencies, NGOs/ INGOs, subject matter specialists from outside the CBS and gender experts was also constituted to provide guidance in the Census. This Committee met several times and contributed substantially to improving the content and quality of the Census.

Similar intensive efforts were made on the media front with publicity campaigns and interactions with the media personnel to create census awareness among the media and to plan for the 2001 census campaign at the national, district and local levels. A short video was also prepared and aired. A Media Core Group consisting of representatives of the major papers in the government and the private sector news agencies, Radio and TVs was also set up to provide technical guidance to CBS in the preparation of publicity materials and in the choice of appropriate medium of publicity for the Census.

Intensive training sessions were organised for all Census staff at national, regional and district levels, where women development workers from local and national NGOs also participated as trainers. These women-development workers, who had had some knowledge on gender issues, were also trained in trainers training for the statisticians so that they could be familiarized with the statistical definitions, concepts and methods and relate them to gender issues. They along with statisticians provided the training at lower levels and to both male and female enumerators. About 20 percent of the enumerators were women.

IV. What can be achieved further within Census for recording care work in the household?

It should be noted that Census is based on counting of people rather than time. So for classifying people as to whether they are economically active or not, one has to choose a limit on work-time. This presents several difficulties. By this requirement if one is economically active, she\he can not at the same time fall in the category of home-makers. Women world over, are the primary providers of household care, economically active or not. But in this statistics they can not be in both. Even the minimum limit on daily time spent on particular type of work, shrinks its coverage as household activities are performed regularly but at a pace suited to each individual and in small intervals. Similarly, many problems exist in accounting for simultaneous activities.

However, censuses do collect some information on time. For example, the economic part of the Nepal 2001-Census is reproduced in table 6 below. It had a question on time in terms of months spent by each individual on various kinds of work. Activities listed for response in this column were broad - economic activities, extended economic activities, search for employment and neither of above. As mentioned above if a person, spent at least one hour a day for 15 or more days in the month, this month would be counted as her/his active month. However housework was not listed. Further there was a limit set that the months could not add up to more than 12. As such if a person was engaged both in housework and economic activity in the month, this information could not be captured.

This column can be further developed by adding house maintenance and care-work (at home) and removing home-makers from the category of causes of inactivity. This will have simultaneously gender sensitizing impact on a large scale, as census covers each and every body and uses a large number of statisticians and enumerators.

Table 6: Activity Questions-Nepal Census, 2001

		Questions to be administered only to people 10 years and above (Mark Appropriate number)					
1	Other Qes.	15	16	17	18	19	20
Name/ sex		Please mark what did you do usually in last 12 months	How much time you spent on each activity (total months = 12)	Please describe what economic work, you did (If you did different kind of work, note the one you spent maximum time on)	Where did you do this work? (List the product and services you produce and also the institution or organization you are working for.	What is your status in this work -place?	What is the reason you did not work last year?
		1. Subsistence agriculture 2. Wage /salary work 3. Own business 4. Extended economic activities 5. Search for work 6. Housework 7. Student 8. Not working	1. Economic work 2. Extended economic activity 3. Search for economic work 4. No economic work			5. Employer 6. Employee 7. Own work 8. Helper	9. Study 10. House work 11. Old 12. Pension/ 13. other income 14. Physical or mental disability 15. Sick 16. Other

Further refinements can be introduced in recording and processing the data from rest of the columns as well. Since column 16 describes the institution or organisation, one is working with, during coding and processing formal and informal sector work can be separated. Such processing has been done partially in Nepal. For example, in Nepal about 56 thousand men and 36 thousand women work as paid employee in private households (CBS, 2002 p242). With further clarification and processing, domestic workers could also be identified. In column 18, my recommendations were to take out housework, as a cause of not being economically active and put in column 15 and adding pregnancy and delivery in this column. But they were not accepted. Earlier, both pregnancy and delivery was probably included in

sickness or disability. In 2001, it was listed under other, with specific instructions to specify. But the information was lost in coding.

V. Time-use data in developing countries— Lessons from Nepal

The seventies saw a series of small scale time-use studies in developing countries .Developed countries have generated time-budget data for various purposes from earlier periods (Goldschmidt-Claremont, 1983, 1987). Since then it has acquired momentum in some of the developed countries. Some middle-income countries such as South Korea, Philippines and India have also completed series of studies at various levels Debates have been going on what methods to use (INSTRAW,1995). Primarily recall methods have been used in large scale studies in developing countries while diary has been the obvious choice in developed countries. Dairy is evidently out in developing countries with low levels of literacy and education, although for the urban literate households that could be a better instrument even in developing countries.

At this time in Nepal, collecting large scale time-use data as a separate exercise regularly is beyond the financial and infrastructure capacity of the CBS. However, the country has a long experience of collecting and analysing time-budget information in small scale case studies as well as integrating its collection, as a part of larger surveys. Since the first Status of Women Study completed in late seventies, series of time use data have been collected both as a part of larger national surveys and more intensive case studies. Methodologies and results from some of them are listed in table 7 and 8 below. The two large data sets, MPHBS 84/85 (NRB, 1988) and the NLFS 1998/19990 (CBS, 1999) used recall method while the two Status of Women studies used observation of different longitude.

Table 7: Collection of Time use data in Nepal (Rural only, 15 +years)

Heading/year	Status of Women (1977/1978)		Women Development and Democracy (1993)		1984/85 MPHBS	
	Men	Women	Men	Women	Men	Women
Sample and Survey Particulars	Frequency observation, one year to six months, 8 villages – different ecological regions		Similar to 1977/78, but one day observation in busy and slack season to 11 rural villages		National sample, one day recall, in two seasons	
Sample Size	172 households,		578 households divided in batches for first and second obseravtions		16401 individuals in 3662 HHs	
Regular economic	5.81	4.62	5.77	4.78	4.65	2.34
Extended economic	0.91	2.16	0.85	1.69	1.34	2.23
Care Economy	0.79	4.03	1.22	4.47	1.94	5.58
Total	7.81	10.81	7.84	10.94	7.93	10.15

Sources: CEDA, 1981, NRB, 1988 and Shatrii Shakti, 1995

*Redefined as per SNA 1993, to include extended economic activities

Table 8: Time used - National Labour Force Survey, 1998/99 (15 +years)

Survey Particulars ---National sample, divided in three parts, single visit to each over 12 months		
Care time only	Men	Women
Urban--2249 individuals in 465 households	0.63	3.39
Rural --- 16855 individuals in 3273 households	0.38	3.61
Total – 19104 individuals in 3739 households	0.41	3.58
Urban employed only		
Economic work	6.7*	5.9*
Household care	0.7	3.3
Total	7.0	9.2

Source: Recalculated for adult population on daily basis from the Nepal Labour Force Survey (pp, 43, 136-137) for adult population

From the above table one can deduce following methodological conclusions:

1. Carefully designed multiple-recall with detailed weekly and monthly and seasonal time records and god supervision can give fairly accurate account of total work hours. The two Women's Status studies and the MPHBS are very consistent on total hours of work.
2. The MPHBS underestimates women's economic time and hence total work time, substantially, while overestimating both male and female care time. This must be because of definitions used at that time. We have no comparative data for later years to compare with NLFS statistics.
3. However, my own experience with smaller case studies, does show that recall must be multiple, spread over a year and with detailed activity list and cover different seasons to yield more accurate information on time-use. The quality of such information should not be less than the current income data from developing countries.

VI Conclusions

To conclude much can be done in censuses themselves, to improve the coverage of economically active women by reforms in several directions, capturing extended economic activities mostly performed by women and children, taking account of multiple economic activities, and providing more rigorous and clearer definitions in the manual. Collection of time budget information by multiple recall, with careful design to include activity lists, recording daily, weekly, monthly and seasonal information, and representative sample as also adequate training can generate fairly good time-use data in developing countries. Smaller scale more intensive studies could generate both time and production data to yield time-product coefficients. Along with larger surveys, such data could be used in any modeling, if required.

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