

GENDER STATISTICS IN INDIA

A SHORT NOTE WITH A FOCUS ON THE RURAL
ECONOMY

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This Note examines gaps in gender-disaggregated data on the rural economy of India.

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Summary and Recommendations

For a sound understanding and analysis of women's position in Indian society and economy, we require adequate and good quality data. After examining gender-disaggregated data on the economy, the rural economy, in particular, the following are the main recommendations of this Note. I have drawn upon my experience of village-based field surveys conducted in 21 villages between 2005 and 2012 by the Foundation for Agrarian Studies (see <http://www.fas.org.in/pages.asp?menuid=16>).¹

First, strengthen the report published by the Central Statistical Organisation titled *Women and Men in India*. Make it the handbook for all those concerned with women's issues including academics, activists and policy makers. Include all available gender-disaggregated data, such as on banking. Compile and provide more data from the NSSO and other sources on gender segregation of occupations and on the male-female earnings gap. Provide data from government publications on women-specific benefits and schemes. Given the large variations in status of women across states, provide state-wise statistics for selected indicators.

Secondly, move away from the concept of head of household, and accompanying focus on female head of household, for analytical and policy purposes. Data on head of household, based on the recognition criterion, is useful for household identification, but the category of female-headed household is heterogeneous with respect to many characteristics and therefore a blunt policy indicator.

Thirdly, given the importance of ownership of assets, there is urgent need to undertake a pilot survey on women's ownership of assets, particularly, land, livestock and housing.

Fourthly, prepare a comprehensive study on women's role in the livestock economy. This will include compiling existing data, such as on the extent of women's participation in livestock activity from the NSS 66th round (on participation of women in selected activities in addition to domestic duties) and unutilised data on hours spent on livestock management in the Cost of

¹ In these surveys, we have incorporated some new modules in the household questionnaire such as on pattern of land ownership and incomes.

Cultivation surveys. It will also require a pilot survey to elicit information on women's ownership of livestock, income generation from such activity and the share of income from livestock activity accruing to women. In short, a pilot survey on women in livestock farming should be initiated.

Fifthly, improve collection of gender-disaggregated data in respect of several other indicators. For example, widen the scope of the Basic Statistical Returns of the banking sector to ensure that it provides gender-based information all major heads. Provide gender-wise data on all employees including contract workers and wages in the Annual Survey of Industries.

Sixthly, set up an expert working group to undertake a comprehensive review of current data on violence against women. The working group should also propose guidelines for a crime survey, similar to the British Crime Survey or the US National Crime Victimization Survey, to supplement existing data from law enforcement agencies.

Lastly, this note has not dealt with the issue of women's work, paid and unpaid, as separate expert attention has been paid to this issue over the last decade with consequent modifications in survey design, conducting of pilot time use surveys, and so on.

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1 Introduction

For a proper understanding and analysis of women's position in Indian society and economy, we require adequate and good quality data. There are a variety of sources that provide information on a range of variables disaggregated by sex, that is, for men and women separately. In this note, we examine some of these sources, specifically those providing information on economic characteristics, and identify shortcomings and areas for further research and data collection. This note concentrates on gender gap in statistics pertaining to the rural economy.

In approaching the need for better statistics on gender, the following features of gender statistics as identified by UN organisations should be kept in mind (Corner undated):

- (a) all statistics on individuals should be collected, collated and presented disaggregated by sex;
- (b) all variables and characteristics should be analyzed by and presented with sex as a primary and overall classification;
- (c) specific efforts should be made to identify gender issues and to ensure that data addressing these are collected and made available.

In addition, the Statistics Sweden publication *Engendering Statistics* has suggested that research on gender statistics include:

- (i) formulation of concepts and definitions used in data collection that adequately reflect the diversity of women and men and capture all aspects of their lives;
- (ii) development of data collection methods that take into account stereotypes and social and cultural factors that might produce gender biases.

The material covered in this note is divided in to seven sections. Section 2 examines the CSO publication titled *Women and Men in India* in order to identify gaps and suggest improvements. In my view, this document should become the single most important source of information on the gender gap for policy makers, scholars and activists. To serve that purpose, it needs to be strengthened.

For all data that are collected at the household level such as land and asset ownership or indebtedness, the unit of analysis is the household and often the only gender disaggregation is in

terms of sex of the head of household. In Section 3, I argue that we need to move away from use of the “female head of household” category, as the definition of head of household is neither analytically helpful nor useful for policy action.

Women play an important role in agriculture and allied activities such as livestock rearing, even though this is not accurately measured on account of their work often being unpaid family labour. Increasingly, agriculture and livestock rearing is becoming “feminised” as men move towards non-agricultural occupations. It is thus more important than ever before to collect statistics on women in agriculture and livestock farming. Sections 4 and 5 discuss major gaps in data on women in these two spheres, namely ownership of assets (primarily land and housing) and role in the livestock economy.

Section 6 briefly discusses the gender gap in statistics on a range of other variables, section 7 lists the limitations of this note, and section 8 concludes with major suggestions for further action.

One area where there has been detailed discussion internationally, and in India, is on capturing women’s work, both unpaid work and paid work that is inadequately measured such as work in the informal sector. There have been major improvements in collection of data on women’s work in recent years including through time use surveys, new definitions of SNA, and a revised methodology for employment surveys. For this reason, I will pay less attention to measurement of women’s work per se.

2 *Women and Men in India*

The Report *Women and Men in India* (WMI, henceforth) is published by the Social Statistics Division of the Central Statistics Office (CSO). The WMI reports for 2002, 2004, 2006, 2010, 2011 and 2012 are available on the internet. The 2012 Report is the 14th in the series. The WMI 2012 data are presented under the following sections: Vital statistics, Health and Well being; Participation in economy; Literacy and education; Participation in decision making; Crimes against women.

I have three major concerns about this Report.

1. First, the type and quality of data reported depends on the source, and the problems with different sources in respect of data on gender need to be clarified.
2. Secondly, most of the information in this Report is at the all-India level. This is not very useful since the status of women varies hugely across States of India. At least for some of the economic variables, like daily wages of agricultural labourers, state level disaggregation should be provided.
3. The third and most significant point is the huge gaps in the Report. I shall elaborate on this point in respect of participation of women in the economy.²

In the section on participation in the economy, the following are the main items on which data are provided in the latest Report, *Women and Men in India 2012*.

- (i) Workforce participation, labour force participation rates and unemployment rates
- (ii) Employment by status (self-employed, regular, casual, etc.)
- (iii) Employment in the organised sector (public, private, central government and banks)
- (iv) Average wage of regular/salaried employees by gender
- (v) Number of bank accounts and deposits by gender
- (vi) Women beneficiaries of NREGA and swarojgaris
- (vii) Time use data on time spent in house work

Let me now illustrate the limitations of the reported data on participation of women in the economy.

² A quick look at similar reports for China, South Africa and Brazil reveals that they provide more information on wages and earnings and on benefits to women employees including maternity benefits, medical benefits, pensions, etc.

Employment statistics

The Report shows the degree of work participation by women and also gives a broad breakdown by employment status or type, with details on employment in the organised sector. The majority of women workers, however, are in the unorganised or informal sector.

To understand women's role in the economy, we require information not only on aggregate participation in the labour force (by sector) but need to know the nature of occupational segregation or diversification of women's employment. In WMI 2012, the items on employment (i, ii and iii above) do not help us to understand the types of jobs and occupations of women. Information needs to be provided not only on broad sectoral (rural/urban or agriculture and non-agriculture) shares of women workers, but separately on the major occupations of women.

So, first, we require data on detailed occupational structure of men and women. Secondly, we require some information on the occupations in which there is a concentration of women. For example, in rural India, this would include beedi workers and textile workers in addition to agricultural workers. In urban India, this would include domestic maids, teachers and nurses. For each of these major occupations, the number of women engaged in such work and the changes over time would be a very useful indicator of changing patterns of employment among women. These data are easily available from Census and NSS surveys.

For each of these occupations, some description of the nature of work (e.g., home-based in the case of beedi), the degree of employment security (e.g. none in the case of domestic maids), the skill requirements (e.g. for nurses) and so on can be provided based on sectoral surveys or other industry-level studies.

Data from the Economic Census on women workers by type of enterprise, sector and activity, can also be reported.

To sum up, the section on employment must be strengthened with further information on women's occupations.

Wages and earnings

Item (iv) above tells us the average wage of women in salaried employment relative to that of men. This is a highly aggregated figure which makes little contribution to understanding women's earnings and discrimination in wages by gender. Much more information on wages and earnings needs to be compiled and presented. At the very least, average earnings from NSS

surveys by sector (agriculture, non-agriculture) can be provided. Some data from the minimum wage notifications (available from the Labour Bureau) can be provided. The NSS report on *Wage Rates in Rural India* gives wage rates of men and women by activity (sowing, harvesting, etc.), and some data from this regular report can be provided.

To sum up, the section on gender differences in wages and earnings is very thin, and has to be supplemented with more data from available sources including NSS employment and unemployment surveys, *Wage Rates in Rural India* and compilations of the Labour Bureau.

Banking statistics

Currently, information is provided only on the number of accounts and amount outstanding in each account (item v). As discussed in section 6.1, there are data available from the Small Borrowal Accounts that tell us about credit available to women (by occupation, by size class of interest rate, and so on). Some information on women's access to credit can be usefully added to the WMI document.

Beneficiaries of government schemes

At present, data are only provided on two national schemes (item vi) and no information is provided on a range of other government schemes including women-specific schemes such as pensions for widows or maternity benefits for women employees or pregnant women using ICDS. There are a variety of women-specific schemes across States. Data on the coverage of women-specific schemes in different states should be compiled by respective State governments and be made a part of the WMI.

In addition to the above, there are, of course, items for which no data have been provided. Three important gaps in my view are the following.

Land and asset ownership

Only one table on land owned by female-headed households is provided. As discussed in the next section, the use of female head of household category has its limitations. Some attempt can be made to provide information on land distributed to women (even joint pattas given as part of land distribution) or houses given in the name of women or in joint names. Information on women proprietors of own-account establishments (available in the Economic Census) can be provided.

Data on asset ownership among women is a big gap, and discussed further in Section 4.

Amenities or social infrastructure

There is no information provided on access to amenities. Water and toilets are two critical concerns for women, but these are not mentioned. These are of interest not only in themselves (and affect all persons), but because they affect women in terms of drudgery, time spent in housework and time available for outside employment.

Multiple deprivations

Last but not least, to the extent possible, data on women needs to be further disaggregated by caste/tribe status. Persons belonging to the Scheduled Castes and Scheduled Tribes have suffered deprivations over generations, and it is well recognised that women belonging to these social groups are often the most deprived. It is essential therefore to disaggregate data by both gender and caste status, and not just by gender and caste status separately, as is often done. To illustrate, in banking statistics, data are provided separately for “weaker sections” including persons belonging to the Scheduled Castes and Scheduled Tribes and for men and women. However, if we look at the access to credit for Scheduled Caste women (not usually reported as such), the picture is shocking (Chavan 2012).³

To conclude, the report titled *Women and Men in India* needs to be greatly strengthened so as to become the reference point for all those concerned about women’s position relative to men in the Indian economy. Even if all types of available data are not reported, at least there should be an indication of the type of data on women available in different sources. For example, detailed information from the Economic Census may not be provided, but an illustration of the type of information available can be given. Similarly data on all activities in the report *Wages Rates in Rural India* need not be provided but some examples can be given.

³ In 2008, Dalit women, on an average, received only about Rs. 4 of bank credit per Small Borrowal Account (SBA) for every Rs. 100 received by non-Dalit and non-Adivasi women. In 2008, Dalit women obtained less than one rupee of credit per SBA for every Rs. 100 received by non-Dalit and non-Adivasi men (Chavan 2012).

3 Concept of female head of household

The Census of India, as well as surveys of the NSSO, uses the concept of the head of household as part of the data collection process. Data are often disaggregated by sex of head of household and such data are used for analysis (for example, incidence of poverty among female-headed versus male-headed households) as well as for policy (targeting female-headed households for specific programmes).

In my view, the female head of household, as identified in the Census of India and NSSO, is not a useful analytical category and should be avoided for both research and policy intervention. To elaborate on this point, I have taken a long quote from some earlier work (Ramachandran, Swaminathan and Rawal, 2001) to discuss the definition of female head of household in the Census and its limitations.

Quote begins:

“The definition of the term “head of household” appears in the *Instruction Manual for Filling Up the Household Schedule* issued by the office of the Registrar General of the Census of India at every decennial Census. The first part of the instructions regarding this category reads as follows:

The head of household for census purposes is a person who is recognised as such by the household. She or he is generally the person who bears the chief responsibility for managing the affairs of the household and takes decisions on behalf of the household. The head of household need not necessarily be the oldest male member or an earning member, *but may be a female member or a younger member of either sex*. It may be remembered that there are female-headed households and in such a case the name of the female head should be recorded at serial number 1. (Census of India 2000, p. 48, italics in original)

There is clearly some tension here between the first sentence and the second. There are indeed many households in which a single person manages the affairs of the household, takes decisions on its behalf *and* is recognised by other members of the household as being its head. In many households, however, a person – often a woman – in the household “bears the chief responsibility for managing the affairs of the household” and/or “takes decisions on behalf of the household” *without* being recognised by other members of the household – or by the community – as being the head of household. An example of this dilemma from our fieldwork is given in Box 1.

BOX 1

Let us take an example, one that follows closely our village-level survey experience. A household has four members, Vellayammal, her husband Karupayya and their two sons. Karupayya was an agricultural wage-worker; he is now an invalid, unable to work or afford medical treatment. The earnings of the household come from wages from work at agricultural and non-agricultural tasks earned by Vellayammal and her elder son. Although wage rates for women are lower than wage rates paid to men, Vellayammal works more days a year than her son, and her total earnings in the year are higher than her son's. She works at home and at wage labour from very early morning until after the night meal. Household decisions (shall we take a loan? should our younger son stay in school? should Vellayammal spend two weeks away from the village to work at harvesting groundnut with a group of workers from the village?) are, in effect, taken jointly by Vellayammal and Karupayya, though Karupayya's views are crucial and generally accepted by Vellayammal.

If the head of household were to be identified on the basis of the parts played by different individuals in the household, we think, on balance, that Vellayammal would be identified as the head of household. (the criteria for "headship" would have, of course, to be specified with care and take into account the part played by the individual in household management and decision-making).

Nevertheless, if we were to sit with the members of the household and begin a questionnaire with the question: "Who is the head of household?", the answer from all its members could well be an unhesitating "Karupayya". Further, the household is known in that quarter of the village as "Karupayya's household". If we were to use a "recognition criterion", then, Karupayya is the head of household. This near-automatic "recognition" of Karupayya as head of household is an important aspect of social reality and of the subordinate status of women.

Source: Ramachandran, et. al., 2001

There is a tension between the *functions* of a head of household as envisaged by the Census and the *recognition* by others in the household of the performance of these functions as being the

criterion for considering a person the head of the household – particularly, we may add, when that person is a woman.

A Census enumerator has to collect information on a large number of parameters for each member of a household, and cannot engage in a discussion on the identification of a head of household. While the Census definition of a head of household does refer to the functions of the head of household, the final instruction to the enumerator is clear:

You need not enter into an argument as to who is the actual head, but record the person recognised by the household as its head. (Census of India 2000, *ibid.*)

It thus opts for a *recognition* criterion for identifying a head of household. If on the other hand, it was able to gather information on who in each household performs certain specified *functions* expected of a head of household, a different picture would appear (and more households would, if the definition were so designed, be recorded as female-headed households). It is likely, however, that these questions cannot be asked as part of the general Census enumeration; they require special investigation.

This is not to suggest that the recognition criterion is unimportant. Among other things, it reflects the important social fact that society does not recognise a person who makes crucial contributions to the maintenance and survival of a household as being its head (and in fact assigns an inferior position to her).

Some conclusions follow. First, if the application of the recognition criterion excludes many households from being classified as female-headed households, so also will a functional definition of a head of household. If the head of household is defined as the chief income-earner of a household, households in which women are not the chief earners (and may not be earners at all), but work round the clock to ensure the maintenance and survival of the members of the household, will not be counted as female-headed. If the head of household is defined as the “chief decision-maker”, households where women are the main workers or earners will not be counted as female-headed, and so on.

Secondly, if a field worker chooses to identify heads of households on the basis of a functional criterion, the functions of the head of household must be specified clearly (and this is no easy task). The field worker must also remember that identification by a functional criterion involves discussion and the collection of separate data on the parameters that are deemed to qualify a

person for the status of a head of household. In short, to use a criterion other than a recognition criterion can take up a great deal of survey time.

Thirdly, while it is correct that gender bias in various forms can (and does) affect the Census count of female-headed households, in practice, it is almost impossible for the Census to use an other-than-recognition criterion as a last resort when listing the head of household.

This is not to argue against collecting information on the head of household. Let us suggest two reasons. First, a head of household as identified by a recognition criterion remains an important social reality. The correct application of this criterion also identifies those households of which women are *recognised* to be the heads. Secondly, for the field worker, the name of the person recognised as the head of household often serves a purpose similar to a house address in a village. (Many houses have no formal address at all other than the village in which they are located, and some households are homeless altogether.)”

Quote ends.

The point I wish to make here is that the sex of the head of household is not a very useful categorisation for understanding the economic situation of women vis-a-vis men. It is also not a very useful indicator for policy intervention.

Let me illustrate from another set of village surveys. A detailed study of the status of women and children in 14 villages surveyed by the Foundation for Agrarian Studies (FAS) showed that the proportion of female-headed households (using the recognition criterion) was less than one-tenth in 8 of the 14 villages and around one-tenth in three others. It was a little higher at one-seventh in two villages, and at one-sixth in Rewasi, a village from Sikar district of Rajasthan, with significant out-migration of males, both domestic and international (FAS, 2012). The first point is that numerically, the category of female-headed households is not very large.

The second and more important point about female-headed households is that they do not signify women’s empowerment but rather the absence of an adult male to head the household. We examined the composition of female headed households in detail. A good proportion of female headed households are headed by widows. Generally, females heading a household were elderly women. Sometimes, women were in single person households. To put it differently, the

default option for head of household in the villages surveyed was male. It is only when the male spouse was either dead or not a resident of the household that a female was regarded as the head. This is inevitable given the recognition approach.

Thirdly, in terms of work participation, occupational diversity, land ownership, presence of children, presence of other adults, literacy rate, and so on, the group of female-headed households was found to be diverse. Thus, it does not seem particularly fruitful to use the gender of the head of household as an indicator of exceptional deprivation or, at the other end, of female empowerment.

In public policy, often special attention to women is reflected in programmes that identify and target female-headed households. We argue that “female headship” is a very blunt and unsatisfactory policy instrument. Our analysis showed that female-headed households are a residual category. In all the villages, it generally comprised households headed by widows, often elderly. So, while there may be pensions for widows or for elderly persons, it is clear that for other policies, say related to child welfare or to wages and employment, female-headed households are far from the appropriate or ideal focus of attention.

To sum up, while household surveys will continue to identify a head of household, I would like to argue that the sex of the head of household is not a useful analytical category. It is also of little use for policy purpose. If widows are to be assisted, then widows can be identified. If single women are to be identified, that category can be defined. If women with young children are to be identified, that is a separate category. If landless women are to be assisted, that would require a different identification. Grouping all types of assistance to women under the category of assistance to female-headed households will not aid women’s economic empowerment.

It is clear that more individual level data (see the following sections) on women per se needs to be collected rather than on the head of household alone. Breaking the black box of the unitary household is going to be a difficult task but needs to be attempted.

4. Ownership of Assets

It is well recognized in the literature that enhancing women's status in Indian society requires changes in ownership or control over property and other assets. In the rural economy, land is the asset par excellence. In this section, we discuss availability of data on women's ownership of land and other assets.

Land

The decennial Land and Livestock Holding surveys of the NSSO collect data on area of land owned and operated by households.⁴ Estimates of agricultural land and homestead can be separately obtained in the most recent survey (2003). The All India Debt and Investment surveys provide estimates of the net value of land owned by household. However, both these surveys consider a 'household' as the primary unit. Hence there is no information on area or value of land legally owned by female members of a household.

The only estimate that can be computed from unit-level data is the land area owned and operated and value of land owned by female-headed households. As already discussed, this categorization has severe limitations.

The other important source of data on land is the World Agricultural Census. The Agricultural Census uses data consolidated from the land revenue surveys of most States, and considers operational holdings as the primary unit. Hence, there is no disaggregated data for male and female title holders, as all land held by any member of a household constitutes a single operational unit.

It may be possible to obtain data on land titles held by women from official land records. There has been no effort to consolidate or publish such data. It may be an extremely difficult task since land records for the whole nation are not yet digitized. In the land title recording system in India the responsibility of mutation and registration of land titles lie with the land holder. Land records are often outdated and inaccurate when land holders do not report transfers in land title.

Nevertheless, we urgently need to improve the data on land registration. One of the outcomes of such improvement can be availability of data on land titles held by women.

⁴ I thank Aparajita Bakshi for her inputs to this section.

Housing

The second most important asset after land is housing. Data on Housing are collected by the Census of India, NSSO Surveys and National Family Health Surveys (NFHS).⁵ The Census of India collects data on ownership status of houses (NSSO and NFHS do not collect data on this variable), but the response is given as ‘owned/rented/other.’ There is no information on the owner: whether it is singly or jointly owned and whether the women in a household have any ownership rights.

Given the need for women to have independent collateral and for asset security in general, some information on the status of property ownership status among females needs to be collected in future.

This is, of course, not going to be an easy task.

A recent Gender Asset Gap Project in three countries of Ecuador, Ghana and India attempted to identify asset ownership among women (Deere *et. al.* 2012). The Karnataka study found, for example, that ownership of land was primarily reported among single women (widowed/divorced, etc.) and rarely among married women (Swaminathan *et. al.*, 2011).⁶ In other words, as discussed in section 3, only when men are absent, do women get counted as head of a household, and in such cases, land may be reported in their name.

Nevertheless, an attempt needs to be made to document ownership of assets among women. The NSSO should undertake a pilot survey on women’s ownership of assets, including land and housing.

⁵ I am grateful to Shamsheer Singh for information on housing data.

⁶ In total, about 14 per cent of women owned agricultural land, corresponding roughly to the proportion of female-headed households.

5. Livestock economy

The livestock economy is growing in importance in rural India. In three villages of Andhra Pradesh, the proportion of households participating in livestock or related activities was over 50 per cent in each of the villages, and incomes from animal husbandry accounted for between 17 and 28 per cent of total incomes of resident households (Ramachandran, Rawal and Swaminathan, 2010). Further, livestock resources are particularly important in drought-prone areas (Rajasthan is a case in point) and critical often to the economies of small cultivators. So, from the national perspective as well as perspective of poorer regions and cultivators, the livestock economy is an important contributor.

Data and experience from a series of village studies over the last seven years suggest that many women are engaged in various livestock activities, typically as unpaid family labour. Women clean and feed animals. They prepare dung cakes (in the case of milch animals). They milk animals, make milk products such as butter and ghee, market milk and milk products, and take the decision on how much to keep for home consumption. They are also engaged in non-milch animal up keep such as duck and poultry farming, goat rearing and so on.⁷

Given that women participate in large numbers in livestock rearing and also that the livestock economy provides employment and incomes to women, it is clearly important for data to capture

- (a) women's participation in livestock activities,
- (b) the level of incomes generated by such activity,
- (c) the extent to which these incomes are controlled by women and,
- (d) the extent of ownership of livestock assets by women.

The Land and Livestock surveys of the NSSO collect and publish data on type and number of livestock owned by households and the Debt and Investment surveys publish data on value of livestock owned by households. As with land ownership, the primary unit is the household and there are no gender-disaggregated data on ownership or control of livestock within the household. If such data were available, it may have revealed interesting patterns and segregation of the livestock economy. From the unit-level data in these surveys one does get some indication

⁷ In the village surveys conducted by the Foundation for Agrarian Studies, block 18 of the questionnaire titled Animal Resources has provided us detailed information on the nature of incomes from animal resources.

of the fact that women are engaged in raising livestock. However, we do not have information on women's control over the livestock economy.

We urgently need to modify the Land and Livestock Holding survey to try to capture asset ownership by gender to the extent possible.

In terms of labour force participation, women's participation in livestock rearing can be gauged from the Employment and Unemployment Surveys of the NSS by examining the sector of activity (e.g., identifying women workers in NIC 2004 code 012 that pertains to farming of animals).

The NSS 66th 2009-10 round has made some important modifications and asked useful probing questions, on the basis of which three reports have been published: one on the informal sector, one on home based workers, and one on participation in activities alongside domestic duties.

The 2009-10 EUS asked some probing questions from self-employed workers and these data were used to produce a report on home based workers (NSSO 2012). Unfortunately, the categorisation used in the published report does not bring out the role of women in livestock maintenance. The Report uses a two-fold classification: AGGC (primary sector activities comprising crop production (code 011) and crop production with animal farming (code 013)), and AGEGC (primary sector excluding 011 and 013) and non-agriculture,

A significant new report, again based on the NSS 66th round, provides data on women's participation in specified activities along with domestic duties (NSSO 2013). Some major findings emerge from this report. At the all-India level, in rural areas, of women engaged in domestic duties (codes 92 and 93) in the principal usual status, but classified as subsidiary workers (codes 11 to 51), a majority – 51.4 per cent – worked in household poultry, dairy, etc. As the report notes, almost 82 per cent of women in this group (codes 92 and 93) were also engaged in some economic activity (code i in the report).⁸ Further, 70 per cent of women (currently not counted as workers) were willing to participate in work if available on their premises and related to dairying.

In my view, this is the first report that brings out what every field researcher has observed, namely, large-scale participation by women in different livestock rearing activities. The findings

⁸ Interestingly, this proportion was as high as 87 per cent in Rajasthan.

of this report need to be widely disseminated, especially among those making policy on livestock-related issues.

A further useful addition to understanding women's work in rural areas can come from the Cost of Cultivation surveys. These surveys collect data on hours of work involved in animal up-keep, by operation, for family members (the data are for daily activity and recorded on a weekly basis). To my knowledge, this information has not been utilised for any analysis of women's role in livestock farming.

Lastly, in terms of income, the only estimates available are from the Situation Assessment Survey of 2003. However, there are methodological problems with the SAS estimates of income (see Bakshi *et. al.* 2012).

In sum, while we now have some data on women's participation in livestock related activities, from the NSS 66th round, we still have no information on women's ownership of livestock assets and on women's share of or control over income from livestock activity. In my view, this is a serious gap, and we urgently need a pilot survey on women in the livestock economy of India.

6 Other Variables

In this section, I briefly discuss data on banking, crop production and incomes, household amenities, and employment in the manufacturing sector.

6.1 Banking statistics⁹

Gender-disaggregated data are available for the following variables.

On an annual basis, from the Basic Statistical Returns (BSR), we get information on the following heads:

- (i) Number of deposit/loan accounts (and amount outstanding therein) in the name of women at the all-India, region and State level;
- (ii) Number of deposits/loan accounts (and amount outstanding therein) in the name of women at various types of branches (rural, semi-urban, urban and metropolitan branches) and types of banks (public sector banks, private sector banks, foreign banks and Regional Rural Banks)
- (iii) Number of women employees at various grades (officers, clerks and subordinates) for various types of banks (public sector banks, private sector banks, foreign banks and Regional Rural Banks)

On a periodic basis, from the RBI Survey on Small Borrowal Accounts (SBAs) (or loan accounts with credit limit of up to Rs. 2 lakh), we get information on

- (i) Number of SBAs (and amount outstanding therein) in the name of women at the all-India level
- (ii) Number of SBAs (and amount outstanding therein) in the name of women belonging to Scheduled Castes, Scheduled Tribes and Other Backward Classes
- (iii) Number of SBAs (and amount outstanding therein) in the name of women under types of loan schemes (IRDPA, Prime Minister's Rojgar Yojana and SGSY).
- (iv) Occupation-wise distribution of credit taken by women in SBAs (agriculture, industry, trade, finance and other professional services)
- (v) Classification of credit taken by women in SBAs by size class of rate of interest
- (v) Number of SBAs (and amount outstanding therein) in the name of women under Kisan Credit Cards and other types of loans, from 2008 onwards.

⁹ I am grateful to Pallavi Chavan for preparing a note for this section.

Gaps

The BSR is an annual publication providing account-level information on all major heads *viz.*, number of accounts, amount of credit and deposits outstanding, interest rates and occupations for various types of banks and branches.

Over time, the BSR has started disseminating separate information on accounts held by women. However, there are some heads on which information is still not available. For example, the BSR does not provide information on credit taken by women either by occupation or by size class of interest rate.

Therefore, there is a need to widen the scope of the BSR and ensure that it provides gender-based information all major heads.

Note that on certain heads on which annual information is not available from the BSR, some periodic information is available from the Survey of SBAs. However, the latter is published with a considerable lag.

As mentioned earlier, the available gender-disaggregated data on loans and deposits should be presented in the report on *Women and Men in India*.

6.2. Crop statistics

The main source of information on crop-wise costs and incomes is the cost of cultivation surveys of the Ministry of Agriculture (and collected by various Agricultural Universities).

No gender-disaggregated information is available in the published reports. However, the following items are included in the questionnaire.¹⁰

(i) Information on female attached farm servant's (if any). Data are collected on age, type of work, contract period, remuneration in cash and kind, payment frequency, holidays taken etc', by attached farm servants.

(ii) Information on crop-operation-wise hours of work and payment have been collected for female casual workers. Data on hours of work are also collected for female exchange and family workers.

¹⁰ I am grateful to Biplab Sarkar for his inputs to this section.

(iii) Data are collected on hours spent by members of the family on animal up-keep. Data are also collected on operation on hours and payment for female casual workers engaged in animal husbandry.

This information in the questionnaire of the Cost of Cultivation survey can, perhaps, be used to identify the share of female labour in total labour used in crop production, both in respect of family labour and in respect of hired labour. It can also be used to gauge the role of women in animal husbandry activities.

This source of information on women's participation in crop production and in livestock rearing is currently unutilised.

6.3 Amenities

Data on Housing and Amenities are collected in the Census of India, NSSO Surveys and National Family Health Surveys (NFHS).¹¹ Some of this information, particularly on water and sanitation, is highly pertinent to the social and economic situation of women.

Water: Who collects water? The NSSO does not collect information on this question. Only the NFHS collects data on age and sex of the person from a household who collects water from a specified source. What is the time taken in collecting water? Again, only the NFHS collects data on time taken in collecting water per trip. The Census and NSSO collect information on distance of the source of water from the residence, but time taken appears to be a more practical and relevant variable.

Toilets: The NSSO, NFHS and Census collect information on whether a household has access to a lavatory (owned/shared). We know that women suffer disproportionately in the absence of a lavatory. However, there is no information in any of these surveys on whether women/children/other members use the available lavatory facility and if so, whether it is used throughout the year. This is an important variable in the present context where it is not just toilet-building that is important but also ensuring toilet use.

In short, data on access to water and actual toilet use are two basic amenities that are particularly relevant to women's lives (their drudgery, their health, and so on), and data collection on these two variables needs to be improved.

¹¹ I am grateful to Shamsheer Singh for providing inputs for this section.

6.4 Data on Organised Manufacturing

The discussion on work and employment will be brief, as this has been discussed widely in the literature and has led to some changes in the statistical system. In particular, since there has been much discussion and subsequent changes in the methodology of the NSS Employment and Unemployment Surveys, I will focus here only on the Annual Survey of Industries (ASI).¹²

The Annual Survey of Industries provides data on India's factory sector, that is, the organized manufacturing sector. The data on employment are presented under three heads: workers directly employed; workers employed through contractors and employees other than workers. Among directly employed workers, data are disaggregation by sex. However, the same is not the case for contract workers.

It is of note that contract workers as a proportion of total workers in India's factory sector increased from 19.7 per cent in 1999-2000 to 32.8 per cent in 2009-10. Given that contract workers are growing in number, more vulnerable to layoffs during recession,¹³ and that women are likely to form a sizeable proportion of contract workers, it is important that gender-disaggregated data on contract workers be provided.

On wages, there is no disaggregation of data by gender.

I therefore recommend that the Annual Survey of Industries provide the following information on a gender-disaggregated basis:

- i. The number of women and men among contract workers (employed in the factory sector as a whole as well as in individual industries).
- ii. Wages received by men and women workers – directly employed as well as contract workers (employed in factory sector as a whole as well as in individual industries).
- iii. Hours of work a year for men and women workers– directly employed as well as contract workers (employed in factory sector as a whole as well as in individual industries).

¹² I am grateful to Jayan Jose Thomas for the information provided in this section.

¹³ Among directly employed workers, only women lost jobs between 2006-07 and 2007-08, a period of slowdown for India's organized manufacturing.

7. Violence against women

Lastly, there are specific issues of concern to women that require additional data collection. Here, I would like to highlight the issue of violence against women. The problem of violence against women is widespread, and may even be growing. The problem has been highlighted in the media. However, there are questions about the nature and quality of data on crimes against women.

The major source of data is the annual report titled *Crime in India* published by the National Crime Records Bureau (NCRB) of the Ministry of Home Affairs. This report is based on statistics provided by law enforcement agencies. Only crimes reported to law enforcement agencies and recorded by them are collated and presented in this Report. As a result, there may be many incidents and types of violence that are not in the statistics because they are not reported to law enforcement agencies. One example is mental violence, on which we have no information (Jaisingh 2005).

The first task is to examine concepts and definitions used by law enforcement agencies in the compilation of statistics provided to the NCRB. Is a gang rape by four men to be counted as one incident of rape or four incidents of rape? Is the victim of a caste conflict to be classified as a murder victim or under a category of caste related violence? Why are data on crimes registered under the SC-ST Prevention of Atrocities Act not classified by gender? I am sure there are many issues that experts in the field can identify in terms of existing data collection.

My second observation is that it has become imperative now to supplement police records with survey data for at least two important reasons. First, not all violence (and crime) is reported and so without a survey, we cannot get an estimate of the true degree of violence/crime. Secondly, without a survey, it is not possible to examine or investigate the socio-economic and other characteristics of the victims (and perpetrators) of violence.

From 1973 onwards, the United States has conducted an annual National Crimes Survey (now termed National Crime Victimization Survey) with a nationally representative sample. The four objectives of this survey, according to Chakraborty, are:

- (i) to develop detailed information about the victims of crime and the consequences of crime;
- (ii) to estimate the number and types of crimes not reported to the police;
- (iii) to provide uniform measures of selected types of crimes; and
- (iv) to permit comparisons over time and types of areas.

Similarly, there is a British Crime Survey. Questionnaires and other information relating to the US and British surveys are available on the internet. Clearly, these surveys are very important in providing data on crimes not reported and recorded as well as on the social and economic condition of victims.

Given the scale of crimes against women today, it is important to undertake a sample survey on the problem of violence against women on the lines of the British Crime Survey or the US National Crime Victimization Survey.

We require an urgent review of existing statistics on crimes against women. An expert working group may be set up to undertake a comprehensive review of both current data and propose a supplementary survey. This group should comprise, in addition to statisticians, legal experts and women actively engaged in dealing with victims of violence.

8. Caveats

This note is not comprehensive in terms of the variables studied and sources of data. Given my experience, the focus has been on economic variables and not, for example, on health. I have not discussed data from sources such as the Sample Registration System and National Nutrition Monitoring Bureau on health and nutrition related information.

Secondly, a key economic variable, measurement of women's work, particularly in the informal economy, has not been discussed as this has been extensively examined in recent years.

Thirdly, I have also not dealt with gender sensitivity in collection of data and related issues such as including women investigators in data collection, addressing questions to both men and women, asking question differently to women, etc. This is also an area that has been addressed to some extent in recent years by statisticians in India.

9. Key Recommendations (not in order of importance)

9.1 The first recommendation made is to improve the regular report titled Women and Men in India in order to make it a useful handbook for all those concerned with women's issues. Specifically, I examined the data provided in the section "participation in the economy" and found it lacking in respect of much detail on women's occupations, wages, and access to benefits. I therefore suggest that Report should include already available gender-disaggregated data. Specifically, the report can provide data on:

- (i) gender segregation of occupations from the Census or NSSO surveys,
- (ii) data on women from the Economic Census,
- (iii) male-female earnings gap, from the NSSO as well as from Wage Rates in Rural India,
- (iv) credit available to women from the survey of Small Borrowal Accounts,
- (v) information on women-specific benefits like widow's pensions and maternity benefits,
- (vi) caste-wise disaggregation of key variables (e.g., unemployment or work participation, occupational segregation, wages, access to banking), and
- (vii) disaggregation at the state level for selected variables (e.g., wages).

9.2 Move away from the concept of head of household and the accompanying focus on female head of household. There are many ways to define the head of household. Given the nature of Census and other large-scale surveys, inevitably, the head of household is based on the recognition criterion and not on an economic criterion such as main decision-maker or main earner. Further, the category of female headed households thus identified is small and does not exceed 10 per cent of all households. The group of female-headed households is also diverse in respect of employment, incomes, access to land, and so on. Therefore, I have argued that the category of female-headed household is a blunt policy instrument.

9.3 In a rural economy, land is the asset par excellence. Women's economic empowerment will ultimately depend on their ownership of assets, land and housing in particular. Collection of data on female ownership of assets is difficult but must be attempted. On the one hand, gender-disaggregated information from existing sources, such as data on land titles, on housing acquired through state subsidies or housing schemes, or land distributed (say as joint pattas) through land

reform, needs to be compiled. On the other hand, a pilot survey can be undertaken to collect data on women's ownership of assets, particularly land and housing.

9.4 The livestock economy of India is growing, and data from village surveys as well as from the recent NSS 66th round on participation of women in selected activities in addition to domestic duties indicate that women play an important role in the livestock economy. While we have some information on participation in livestock activity, we have absolutely no information on women's ownership of livestock or their share of incomes from livestock. I recommend a comprehensive study on women's role in the livestock economy. This will include compiling existing data, such as on the extent of women's participation in livestock activity from the NSS 66th round and unutilised data on hours spent on livestock management in the Cost of Cultivation surveys. It will also require a pilot survey to elicit information on women's ownership of livestock, income generation from such activity and the share of income from livestock activity accruing to women. In short, a pilot survey on women in livestock farming should be initiated.

9.5 Fifthly, collection of gender-disaggregated data can be improved in respect of several other indicators. This note discussed banking statistics and suggests that the scope of the Basic Statistical Returns of the banking sector be widened to ensure that it provides gender-based information all major heads. The Annual Survey of Industries needs to provide gender-wise data on all employees including contract workers as well as on wages. Information on certain key indicators of basic amenities such as use of toilets and access to water needs to be gender-disaggregated.

9.6 Lastly, given the reports on violence against women, I strongly recommend the setting up of an expert working group to undertake a comprehensive review of current data on violence against women. In addition to reviewing concepts and definitions in existing data collection, the working group should propose guidelines for a crime survey, similar to the British Crime Survey or the US National Crime Victimization Survey, to supplement existing data from law enforcement agencies.

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