

Is Female Labour Force Participation Really Low and Declining in Pakistan? A look at Alternative Data Sources

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INTRODUCTION

For working out appropriate strategies and action programmes in order to fully utilize human resources for development and to advance the role and the status of women in society, it is essential that the statistical data collected on female participation in economic activity should reflect their position adequately and accurately in all the relevant sectors.

In Pakistan, and other developing countries, the rural-agricultural segments, in the overall population have a large number of female workers who, directly and indirectly, contribute to agriculture, household and other unregistered rural activities. Similarly, in the urban organized sector, the work participation rate of women has registered a constant increase as a result of the social, economic and cultural changes which are taking place in these countries due to their development programmes.

In Pakistan, like other countries, the main source which has been providing statistical information on population and labour force, with a comprehensive coverage, is the Population Census. Since the censuses are conducted after a period of 10 years, sample surveys have also been used to provide current measures of labour force participation. In Pakistan, the survey series which focuses mainly on the economic activity of males and females are called the Labour Force Surveys and their results are published on a yearly basis. Apart from these two sources, household surveys have also been conducted whose primary objective has been to collect information about population, work participation of females, and also in some cases, for both males and females.

In this paper, an attempt is made to first examine the estimates of labour force participation and work participation rates, as given by the Census data for 1973

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and 1981; and the corresponding rates for different years, given by the Labour Force Surveys, with special reference to the levels and trends of female activity rates. The validity of female rates based on Census and Labour Force Survey data will then be examined and then a comparison will be made with the estimates from some other independent survey sources.¹

Census and Survey-based Activity Rates

Table 1, which provides a comparative view of the labour force participation and work participation rates based on the 1973 Housing, Economic and Demographic (HED) Survey, the 1981 Census, Labour Force Surveys and Fertility-related surveys; show that (1) the female activity rates, on the whole, are much lower than the corresponding male rates, and (2) the female rates, given in the 1981 Census, are lower by more than 50 percent for urban areas and more than 60 percent for rural areas in comparison with the levels reported in the 1973 HED. It looks obvious that the female activity rates reported at such low levels are unbelievable, especially for rural areas where the evidence of women's contribution in various types of productive activities is very strong. However, before going further into this issue, it would be appropriate to have a look at the estimates, given by the labour force surveys and some other surveys.

For urban areas, the female labour force participation rate, as given by the 1973 HED, is indicated to be more than twice the rate based on the 1971-72 Labour Force Survey, but for rural areas, the rates from both the sources are almost the same. However, the work participation rates given by the two sources for urban areas, are not much different, but for rural areas, the rate derived from the Labour Force Survey is almost double the rate, worked out from the 1973 HED Survey data.

As compared to the level of 1971-72 the female labour force participation rates, based on the Labour Force Survey for 1978-79 and 1982-83, are shown to be slightly higher for urban, but more prominently higher for rural areas. The 1981 Census-based rates are indicated to be much below the corresponding rates derived from the labour force surveys. In fact, if rates given in Table 1 are taken to reflect variations in levels over the years, then both, the 1973 HED Survey and the 1981 Census indicate declining trends in female activity rates, while the labour force surveys, conducted over the same period, show increasing trends, especially for the rural areas.

On the whole, the comparison of the labour force survey, rates with those based on the 1973 HED and the 1981 Census shows that the coverage and the reporting of activity status of males is more or less of the same quality, in the two

¹A number of studies done in Pakistan, have dealt with the issues relating to Female Labour Force Participation. See for example Abbasi (1982); Afzal (1986); Ahmed (1986); Farooq (1975); Irfan (1983); Sathar (1986) and Shah (1986).

Table 1

Labour Force Participation Rates and Work Participation Rates (in percentage) in Urban and Rural Areas of Pakistan

Source	Urban		Rural	
	Male	Female	Male	Female
Labour Force Participation Rate (Based on population aged 10 years and over)				
1971-72 LFS	69.8	3.9	81.6	9.5
1973 HED	70.6	8.8	80.4	9.3
1981 Population Census	70.6	3.5	76.5	3.0
1978-79 LFS	70.3	5.3	80.1	14.3
1982-83 LFS	71.2	4.1	79.8	10.7
Work Participation Rate (Percentage working/employed among those aged 10 years and over)				
1968-69 NIS	—	9.0	—	22.3
1968-69 LFS	—	4.4	—	8.2
1971-72 LFS	67.3	3.7	80.3	9.3
1973 HED	61.3	3.2	74.0	4.8
1975 PFS	—	15.6	—	18.1
1974-75 LFS	—	4.1	—	8.1
1981 Population	60.1	3.2	74.8	2.8
1984-85 PCPS	—	7.9	—	24.6
2984-85 LFS	—	4.6	—	12.1

Source: [Government of Pakistan (n.d.); (1981); (1985); (1986); and (Various Years)].

Notes: 1. LFS: Labour Force Survey; HED: Housing, Economic and Demographic Survey; NIS: National Impact Survey; PCPS: Pakistan Contraceptive Prevalence Survey; PFS: Pakistan Fertility Survey.

2. NIS, PFS and PCPS were the fertility-related surveys.

sets of data sources; but for females of rural areas, there seems to be a better coverage in the labour force surveys. However, even the relatively higher estimates of females rates from the latter source seem to be much below the actual levels, in both rural and urban areas.

As mentioned earlier, there are some other surveys which were conducted for different purpose but which also provided estimates of female work participation. The three surveys which are being referred to in this paper, were conducted primarily to look into the patterns of fertility behaviour and contraceptive use in Pakistan. These surveys also collected data on the work status of females, which provided a basis for getting independent sets of work participation rates for married women in the age groups from 15 to 49 years, Table 1 also provides the rates given by the National Impact Survey (NIS) 1968-69; the Pakistan Fertility Survey (PFS) 1975 and the Pakistan Contraceptive Prevalence Survey (PCPS) 1984-85. The table shows that in comparison with the Labour Force Surveys, the fertility-related surveys provided higher female work participation rates for both urban and rural areas. The levels of rates given by the fertility-related surveys are at least more than twice the Labour Force Survey rates. If the urban estimates from the 1975 Pakistan Fertility Survey are taken at their face value, it implies that with appropriate efforts, improved statistical assessment of female work participation is possible. It also implies that the urban female work participation rate, if properly assessed, is much higher than the estimates given by the censuses or the labour force surveys. Similarly, the rural estimates can be further improved from what is indicated by the labour force surveys. The main difference between the methodologies of the two types of surveys, for which the results have been compared in Table 1, is that in the labour force survey, the regular enumerating staff of the Federal Bureau of Statistics, which consists of males only, collected information from a male respondent in respect of all the members of the sampled household including the females. In the fertility-related surveys, especially trained female enumerators were used to collect data about females from female respondents. It shows that, with the use of specially trained and better motivated interviewers, who could also develop a better rapport with the respondents, far better results can be obtained in the field of data collection, as was done through the fertility-related surveys. This phenomenon is clearly reflected from a comparison of census-based rates (which are the lowest), the labour force survey-based rates which show better results as compared to the census, and the estimates from the fertility-related surveys which show substantially improved results in comparison to the labour force surveys.

In order to see whether the variations apparent in the levels of female work participation rates, given by NIS 1968-69, PFS 1975 and PCPS 1984-85, reflect any trend over time, one has to keep in view the fact that these surveys were not conducted through a regularly established field organization, like the Federal Bureau of Statistics. Thus, the variations in their questionnaires, the quality of training imparted to the enumerators and their efficiency in the field, may have affected the comparability to some extent between these three sources. This phenomenon is indicated by the differences between female work participation rates and their

urban-rural differentials, as given by the PFS 1975, in comparison to the rates and differentials shown by the NIS 1968-69 and the PCPS 1984-85. While the urban rates for the PFS 1975 may reflect a relatively efficient field operation in the urban areas, the level of rural rates do not indicate such an improvement with the result that the rural-urban differentials are unrealistically narrowed. The relatively higher rural rate, given by the PCPS 1984-85, in comparison to the NIS 1968-69, may not necessarily reflect an increasing trend and for that matter, the marginally lower urban rate may not necessarily reflect a declining trend, because such variations can also be due to sampling and non-sampling errors, unless there is some independent evidence in support of these observations. It has, however, to be kept in view that the estimates of work participation, given by the labour force surveys, suggest that the levels of female work participation for rural areas has increased since 1968-69. In any case, the labour force surveys and fertility-related surveys suggest no decline in female work participation rates from the levels indicated for 1968-69 (as given by NIS) or 1970-71 (as given by LFS).

Participation Rates from Agricultural Censuses

An independent data source on male and female work participation is the Pakistan Census of Agriculture. Unlike the population censuses, which do a complete enumeration, the agricultural censuses have been conducted on a sampling basis with their scope restricted to cover the agricultural farms (Pakistan Census of Agriculture). In Pakistan, three agricultural censuses have been conducted so far. The first census was taken in 1962, the second in 1972 and the third in 1980. The data regarding work participation was collected in the 1972 and 1980 censuses, the timings for which almost correspond to the 1973 HED survey and the 1981 Population Census. The fact that the 1973 HED Survey was conducted to supplement the 1972 Census, and the reason that for the 1981 Census, detailed information about population characteristics, including their work status, was collected from a nearly 10 percent sample, provide, to some extent, a parallel basis for comparing the estimates, given by the two sets of data sources. However, the scope of the agricultural censuses, being limited to agricultural farms, its data relating to work participation can be taken to reflect, primarily, the situation in the rural areas. But, it has to be kept in view that the principal concern of this paper is to look for the statistical basis, from alternative sources, to verify the 'visible' evidence that female work participation in the rural areas could be many times more than what is indicated by the Population Censuses or for that matter even by the labour force surveys.

Before discussing the estimates of work participation rates from the two agricultural censuses, a few words should be said about the type of interviewers used, the respondents and the information collected.

The Agricultural Census collected the required data from the selected agricultural households by using the *Patwaris* and *Tapedars* of the provincial revenue departments as the census enumerators. The enumeration work was supervised by Kanungoes/Supervising *Tapedars*. In explaining the choice of enumerators and supervisory staff, the 1980 Agricultural Census report states as follows:

“The choice of revenue staff was made after testing several other agencies like the School Teachers, Agricultural Field Assistants and Stock Assistants. It was observed that the revenue staff was more effective in getting information from rural population due to their pivotal position in the village life. Besides they were already conversant with agricultural statistics terminology and were acquainted with Mouza (sampling unit) boundaries”p. 23

Thus, the interviewers used in the agricultural census as well as the respondents from the households, were males. The questions asked about work status were simple with no reference period used for this purpose.

A look at the work participation rates for males and females as provided in Table 2, from the 1972 and 1980 Censuses gives the following picture. For males, the work participation rates, including full-time and part-time workers, are of the same

Table 2

A Comparative View of the Work Participation Rates (in percentage) of Persons Aged 10 Years and Over Engaged in Agricultural Work in their Own Holdings, from 1972 and 1980 Pakistan Censuses of Agriculture

Sex	1972			1980		
	Working Full-time	Working Part-time	All Workers Full-time+ Part-time	Working Full-time	Working Part-time	All Workers Full-time + Part-time
Male	60.4	5.1	65.5 (67.4)*	56.0	9.4	65.4
Female	23.4	15.6	39.0 (40.8)*	21.0	33.4	54.4

Source: Pakistan Census of Agriculture.

*Include the category of occasional workers for which information was collected in the 1972 Agricultural Census.

level i.e. 65-66 percent for both the census years. These rates are lower than the average level of male work participation rates for rural areas given by the 1973 HED survey, the 1981 Census of Population and the Labour Force Survey series, as shown in Table 1. This difference can be attributed to the fact that the rates given in Table 2 represent only those males and females who were involved in the agricultural work of their own holdings. Obviously, such males and females who were involved in non-agricultural work for their own households and those doing agricultural and non-agricultural work for others were not included and hence the rates given in Table 2 are relatively low.

The work participation rates of females, involved in agricultural work on their own holdings for 1972 (39 percent) and 1980 (54.4 percent) shown in Table 2, are substantially higher in comparison with those given by the labour force surveys and also by the fertility-related surveys. The Agricultural Census-based female rates are not only higher but also show a clear increasing trend from 1972 to 1980, which is apparently due to a 100 percent increase in part-time work participation in agricultural activities.

Obviously, the participation rates given by the Agricultural Censuses of 1972 and 1980, for males and females, are much higher than those given by all other sources. This difference is not so much for males, as it is for females. Table 2 shows that the estimates of female work participation in their own agricultural work has become substantially higher due to the part-time work participation, the data on which have perhaps been picked up by the Agricultural Censuses alone. In fact, it is this component of part-time participation of females in agricultural work (and even non-agricultural work) the data about which have not been collected in the other surveys, including the labour force surveys. The importance of realistic coverage of female's part-time work participation lies in the fact that most of the women, especially in agricultural households, have the dual responsibility of normal household duties as well as doing agricultural and related work. A large proportion of such women, therefore, gets involved in work participation on part-time basis, which is reflected from the estimates of part-time work participation of females as given in Table 2.

SUMMARY AND CONCLUSIONS

Beginning with the concern that activity rates for females in Pakistan, especially for the rural areas, as given by the Population Censuses or Census-related surveys, are extremely low, and their uncritical comparison indicating to a common user, a highly artificial and erroneous declining trend over the period between 1972-1973 and 1981, this paper has attempted to provide a more realistic view of the situation by scanning the other available evidence from alternative data sources in the country. As has been observed in this paper, the labour force surveys, the

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fertility-related surveys and the Agricultural Censuses clearly suggest that the female work participation, especially in the rural areas, has gone up substantially. The findings, in this paper, also suggest that sample surveys, how-so-ever routinely conducted, show relatively better results than the Population Censuses. This improvement can be attributed to factors such as better training to the relatively smaller number of enumerators used in the surveys as compared to the census, a better field control and supervision and the way questions are formulated and are asked in the field etc.

For the future, it is important that the Agricultural Census should continue to maintain its earlier standards, but at the same time, efforts may be made for its further improvement. However, keeping in view the fact that the scope of the Agricultural Census is limited primarily to the rural areas, efficiency in systems of data collection for the labour force survey and for the Population Census, should be substantially improved so that the results generated by them can provide meaningful and realistic reflections of the prevailing work participation of both males and females.

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Comments on “Is Female Labour Force Participation Really Low and Declining in Pakistan? A Look at Alternative Data Sources”

The authors have provided detailed insight into a topic which has recently attracted the attention of labour force experts, agricultural economists and women analysts in Pakistan. While examining the female labour force participation rates from population censuses, labour force surveys, fertility-related and contraception prevalence surveys and agricultural censuses of Pakistan, the authors conclude that:

- (i) The declining trend of female labour force participation rates as derived from population census surveys of 1973 and 1981 does not depict a true picture of the phenomenon under consideration, mainly because of the employment of not well-trained male enumerators on such a gigantic operation where all the respondents are in fact males;
- (ii) The increasing trend of female labour force participation rates as obtained from labour force surveys depict a more or less true picture of the phenomenon under consideration mainly because of the employment of well-trained enumerators, better field coverage and control in spite of the fact that both interviewers and respondents in these cases were males;
- (iii) The labour force participation rates derived from fertility-related surveys predict a *more accurate picture* of the phenomenon under consideration mainly because of the employment of well-trained female enumerators, better field coverage and control and direct interaction between female enumerators and female respondents;
- (iv) The much higher labour force participation rates of the rural population reported by agricultural censuses predict a *highly accurate picture* of the phenomenon under consideration mainly because of the employment of *Patwaris* and *Tapedars* who have developed a better rapport with the rural population.
- (v) What emerges from the discussion is that the enquiry in respect of female labour should be conducted particularly through the sample surveys with better educated and trained female interviewers and also *Patwaris* and *Tapedars*.

The study has, however, concentrated itself beyond the period 1973 only, although interesting observations prior to 1971, from population censuses and labour force surveys, could be ascertained. Data from the 1973 HED deserve some careful consideration. The 1972 Population Census of Pakistan was undertaken after the separation of Pakistan under conditions of political turmoil and is believed to have been affected seriously by political events and floods which hit several areas of Pakistan. Since the sampling frame of the 1973 HED survey was based on the 1972 Census, there is every likelihood that the 1973 HED estimates of female labour force have inherited all the inaccuracies of the 1972 Census.

The study has not stressed much on two important determinants of the coverage of labour force in Pakistan. These are, the definition of the economic activity or the wording of the labour force question in censuses and surveys, and the reference period of the labour force. Analysis has shown that the variations in these two factors has caused substantial variations in the size of the labour force in Pakistan, especially in the agricultural sector.

In Pakistan, there is a dire need of establishing a standard definition of the labour force which could be applicable to all the future censuses and surveys, taking into account the desired reference periods, both in rural and urban areas of Pakistan. A committee consisting of demographers, labour force experts and representatives of data collection agencies should be formed to arrive at a mutually agreed definition of economic activity, the length of reference period, the timing of the censuses or surveys and the concepts and methods to be utilized in measuring agricultural workers.

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