

PERCEPTIONS, PROBLEMS AND METHODS OF PREPARING LABOUR FORCE ACCOUNTS IN INDIA

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The paper concerns the links between labour force accounts and national accounts. It first discusses the variation in the perception of labour force among countries which results in much disparity in recorded participation rates. This obviously makes international comparison difficult. Since benchmark labour force information is often tied to population censuses which are infrequent and vary in concepts and approaches, even comparisons within a country over time are difficult. Finally a discussion of the use of labour force data to estimate the unrecorded economy is followed by suggestions on the direction for future work.

INTRODUCTION

National income estimate/national accounts make use of statistics on gainful employment in some form or the other. Scientific estimates of national and regional (state) income in India always contained basic tables on gainful employment by type of economic activity (Rao, 1940; Tiwari, 1951; CSO, 1967, 1980 and 1989). These data were generally derived from decennial population censuses for preparing base year estimates, as well as growth rate for use in preparing current employment statistics.

Two concepts were used over the years for determining the gainful status of persons, namely: income concept and labour force concept depending upon the perception of users of census data and census experts. The former was used in 1881 to 1951 censuses and the latter as a part of World Population Census Programme during 1961 to 1991. In India annual data on employment in public sector and organized private sector are available since 1961. In respect to unorganized sectors, five yearly economic censuses followed by follow-up surveys in the intervening years have been regularly conducted since 1977. In addition household labour force surveys have been conducted by the National Sample Survey Organisation since 1972-73 in order to evolve suitable techniques and collect data on labour force at periodic intervals (Ray and Pandey, 1992).

The present paper describes the two concepts and their use in preparing comparable estimates of gainful employment and the way they have been used in the national and state accounts. It also presents a comparable picture as obtained from some of the data sources with their limitations. Finally it suggests directions for future work.

PARTICIPATION RATES

Of 126 countries for which information is available for total and economically active population, employment and unemployment (Population Censuses) from

the ILO, 1990, it is found that the age limits for determining economically active population is 6 years and over in Cameroon, Islamic Republic of Iran, Peru, Rwanda and Senegal, 10 years and over in 31 countries, 11 years and over in Thailand; 12 years and over in 12 countries; 14 years and over in 6 countries; 15 years and over in 38 countries; 16 years and over in 10 countries and other age groups in the remaining countries. Thus while 30 percent of the countries use 15 years and over as the age group, others use various groupings from 6 years and over to 16 years and over etc.

Most countries use weekly, some both weekly and yearly, some monthly, some other daily/yearly, 2 weekly/yearly reference periods for determining employment status.

For information on working hours, some countries such as Indonesia, Malaysia, Netherlands, New Zealand, Syrian Arab Republic and Venezuela collect data on both the usual and actual working hours, some others on actual hours and a few on usual hours of work. Thus practices differ the world over depending upon the conditions of the countries. This makes it difficult to effect international comparability.

India did not adopt any age specific participation rate. In the population census it has collected data relating to all age groups on the main and subsidiary activities.

INCOME AND LABOUR FORCE CONCEPTS

The data on the economic activity of the people collected up to the 1951 population census were based on income and dependency concepts (Thorner, 1958). 1901, 1911 and 1921 censuses adopted the income concept and gathered economic information on principal and secondary occupation (means of subsistence) of actual workers. In the case of dependents, information on principal occupation or means of subsistence of the person on whom they depended was obtained. In 1931 the concept related to earners and their working dependents. Data on principal and subsidiary occupation of earners was also collected. In the 1951 census, data on workers were collected on the basis of gainful employment approach, classifying a person as (i) self supporting, (ii) earning dependent, and (iii) non-earning dependent. These variations in concepts from one census to the other made comparison of data difficult.

From the 1961 census onwards the concept of work measured in terms of time or the labour force concept has followed the ILO recommendations. However, the criteria adopted for classification of worker into seasonal worker and regular worker varied from one census to the other during 1961, 1971 and 1981 census.

These changes resulted in a sharp decline in the work participation rate in 1971 as compared to the 1961 census. This non-comparability of data made them unusable to most users including estimation of national and regional income. The problem was broadly resolved by resorting to collection of data through two interpenetrating sub-samples over the period December 1971 to July 1971 in which both sets of census questions were canvassed and the results were used to establish comparability. Further, a decision was made not to change the approach in subsequent population censuses.

It was thought that under the Indian conditions the enquiry relating to the usual status of a worker was more appropriate than the current status in view of predominance of the agriculture sector. Therefore, the economic questions of 1981 census were so formulated as to first divide the population into two groups viz. (a) those who had worked any time at all during the year preceding the census and (b) those who had not worked at all. Irrespective of regular or seasonal work the former were further classified into main and marginal workers depending upon whether they had worked in some activity for the major part of the year or not. A uniform reference period of one year for all activities was adopted.

LABOUR FORCE STATISTICS AND NATIONAL ACCOUNTS

In national accounts statistics in India, as stated earlier, use is made of the distribution of working force by kind of economic activity for the base year (currently 1980-81). Greater reliance is placed on the production approach in the estimation of GDP and limited use is made of working force estimates wherever the production approach cannot be applied. In the case of general government, reliance is placed on their annual budgets for data on compensation of employees etc.

It is generally in the unorganised industries in the private sector where greater reliance has to be placed on the use of working force. In these industries, annual estimates of working force are obtained with the help of current physical indicators, presuming that production changes in relation to change in working force. In case no such physical indicators are available, use is made of inter-censal growth rates for estimation purposes.

In 1981 as in 1971 census, secondary and marginal workers were tabulated only by broad groups. In addition, these categories of workers in the two censuses are not comparable, as such inter-censal growth rates have been obtained primarily on the basis of main workers which are adjusted with the help of National Sample Survey Organisation's *Report on Employment and Unemployment* for 1983 which provides information on distribution of main and marginal workers separately at two/three-digit level of National Industries Classification for rural and urban areas. The situation is not at all different for 1991 which has the same tabulation programme as the 1981 census.

OTHER DATA SOURCES

The other sources of data which have not generally been used in national accounts are as follows:

(1) Surveys on employment and unemployment by National Sample Survey Organisation.

(2) Economic censuses and follow up surveys by Central Statistical Organisation.

In addition data collected through *Employment Market Information* are available for public sector and non-agricultural organized private sector. Detailed data on agriculture including employment in agriculture are available from

agricultural censuses. Data through employment exchanges on unemployment are collected by the Directorate General of Employment and Training.

POPULATION CENSUS VIS-A-VIS NATIONAL SAMPLE SURVEY ON
EMPLOYMENT AND UNEMPLOYMENT

In view of variations in the concept of employment and unemployment especially in respect of female workers in rural areas, marked differences have been found between the participation rates as obtained from population censuses

TABLE 1
WORK PARTICIPATION RATE IN INDIA, 1971-91
(based on population census)

Year	Total Rural Urban	Persons	Males	Females
1	2	3	4	5
1971	Total	34.17	52.75	14.22
	Rural	35.33	53.78	15.92
	Urban	29.61	48.88	7.18
1981	Total	36.70	52.62	19.67
	Rural	38.79	53.77	23.06
	Urban	29.99	49.06	8.31
1991	Total	37.68	51.56	22.73
	Rural	40.24	52.50	27.20
	Urban	30.44	48.95	9.74

Note: Figures exclude Assam where the 1981 census could not be held and Jammu and Kashmir where the 1991 census has not been held. The 1971 census figures include workers and non-workers with secondary work. The 1981 and 1991 census figures include main workers and marginal workers.

and national sample survey data, as seen from Table 1 and Table 2. Although the work participation rates of male workers in rural and urban areas were not markedly different, differences were found to be very high for female workers. Hence until the perception of the two agencies in respect of household and non-household work of women is not the same, the differences would continue. These variations in work participation rates automatically get reflected in the number of persons engaged in various industrial activities in principal or subsidiary status.

The National Sample Survey Organisation collects data on all such aspects as are vital in respect of labour force, namely persons of the age of 15 years and above by usual/weekly/daily status and by education categories etc.

ECONOMIC CENSUSES AND FOLLOW-UP SURVEYS

The Central Statistical Organisation made concerted efforts to fill in data gaps in the unorganised sectors of the non-agricultural economy by undertaking economic censuses and follow-up surveys since 1977. The census collects basic information including persons usually working. Based on the framework of the

TABLE 2
PERCENT OF PERSONS EMPLOYED ACCORDING TO USUAL STATUS
BASED ON NATIONAL SAMPLE SURVEY

Year	Category of Worker	Usually Employed			
		Rural		Urban	
		Male	Female	Male	Female
1	2	3	4	5	6
1972-73	All	54.5	31.8	50.1	13.4
1977-78	Principal status	53.7	24.8	49.7	12.3
	Subsidiary status	1.5	8.3	1.1	3.3
	All	55.2	33.1	50.8	15.6
1983	Principal status	52.8	24.8	50.0	12.0
	Subsidiary status	1.9	9.2	1.2	3.1
	All	54.7	34.0	51.2	15.1
1987-88	Principal status	51.7	24.5	49.6	11.8
	Subsidiary status	2.2	7.8	1.0	3.4
	All	53.9	32.3	50.6	15.2

economic censuses, a sample survey of non-registered establishments employing six or more workers (including household and hired) is conducted. The follow-up surveys are conducted covering trade, transport, hotels and restaurants, storage and warehousing and services. In addition, own account enterprise surveys are also conducted with a view toward obtaining alternative sectoral estimates. However, examination of data over the years reveals that in a number of areas there is a consistency between these estimates and those available from other sources. However, in many other areas the overtime trend does not present a meaningful picture.

ADMINISTRATIVE STATISTICS (INCLUDING EMPLOYMENT MARKET INFORMATION)

The Ministry of Labour annually collects data on employment in non-agricultural establishments in the private sector employing 10 or more persons (coverage in construction is known to be inadequate). It also collects data from central and state governments, quasi-governments and local bodies. Data collected relate to 31st March of each year and are available since 1961 by nine broad groups of economic activity. The Bureau of Public Enterprises collects data annually in respect to central government undertakings on number of employees with their emoluments.

The Director General of Employment and Training obtains data from employment exchanges in the country (numbering 854 in 1991) on registration of persons, vacancies notified, placement, and number on live register as at the end of each calendar year. These data, although not very satisfactory, due to double counting etc., do indicate broad trends in unemployment.

LINE OF FUTURE WORK

Future work among others should be directed to the following:

- (a) In depth analysis of labour force and their links to compensation of employees etc. by age and sex for organized and unorganized activities over time and space.
- (b) Reduction in the short run and elimination in the long run of deficiencies in population censuses and in administrative statistics on working force, employment and unemployment.
- (c) To undertake surveys to fill-in the gaps in data for compilation of annual labour force statistics.
- (d) Compilation of estimates of compensation of employees at constant prices on scientific lines.

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