

Report of the Task Force on Improving Employment Data

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Task Force on Improving Employment Data
Draft Report

<i>List of Abbreviations</i>	3
I. Introduction	4
II. Measuring Employment	5
III. Existing Sources of Employment Data in India.....	6
<i>III.1. Household Data</i>	6
<i>III.2. Censuses and Surveys of Enterprises or Establishments</i>	7
<i>III.3. Administrative Sources</i>	11
<i>III.4. Employment Generation through Government Schemes</i>	11
IV. Employment Surveys: Global Best Practice.....	11
V. Recommendations: The Way Forward	13
<i>V.1. Household Data</i>	13
<i>V.2. Enterprise Data</i>	14
<i>V.3. Use of Administrative Datasets</i>	15
<i>V.4. Use of Data on Government Schemes</i>	16
<i>V.5. Other Recommendations</i>	17
VI. Conclusion	19
<i>Annexure I</i>	20

List of Abbreviations

APS	Annual Population Survey
ASI	Annual Survey of Industries
BRES	Business Register and Employment Survey
CDS	Current Daily Status
CES	Current Employment Statistics
CPS	Current Population Survey
CSO	Central Statistical Office
CSS	Centrally Sponsored Schemes
CWS	Current Weekly Status
DDUGKY	Deen Dayal Upadhyaya Grameen Kaushalya Yojana
DGET	Directorate General of Technical Education
EPFO	Employees' Provident Fund Organization
ESIC	Employees' State Insurance Corporation
EUS	Employment-Unemployment Survey
GSTN	Goods and Services Tax Network
ICDS	Integrated Child Development Services
MGNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
MOHA	Ministry of Home Affairs
MoLE	Ministry of Labour and Employment
MOSPI	Ministry of Statistics and Programme Implementation
MSME	Ministry of Micro, Small and Medium Enterprises
MSMED	Micro, Small and Medium Enterprises Development
MUDRA	Micro Units Development and Refinance Agency
NPS	National Pension Scheme
NSS	National Sample Survey
NSSO	National Sample Survey Office
OAE	Own-Account Enterprise
PAN	Permanent Account Number
PLFS	Periodic Labour Force Survey
PMGSY	Pradhan Mantri Grameen Sadak Yojana
PMKVY	Pradhan Mantri Kaushal Vikas Yojana
QES	Quarterly Enterprise Survey
RBI	Reserve Bank of India
SSI	Small Scale Industries
U.K.	United Kingdom
U.S.	United States
US	Usual Status
VAT	Value Added Tax

I. Introduction

Job creation, employment and unemployment have been important subjects of debate in India. However, recently, this debate has been taking place in a vacuum. The available estimates are either out-dated or based on surveys with design flaws that render them unsuitable for inferring nationwide employment level.

Recognizing these facts, the Government of India appointed a Task Force for improving employment data in India on May 11, 2017 under the chairmanship of Vice Chairman, NITI Aayog (Annexure 1). The mandate of the task force includes assessing existing data systems and sources on job creation, examining prospects for using any existing data sources to obtain quick estimates of jobs created in recent years and recommending mechanisms for future data collection so as to place employment estimates on sound footing.

The Task Force held four meetings. This report is based on the conclusions of the discussions that took place at these meetings. The report summarizes the current state of data collection on employment, unemployment and wages in India, discusses the practices in this area in the United States and the United Kingdom and makes recommendations that would create a 21st century statistical system in India for the generation of comprehensive employment, unemployment and wage estimates on a sustained basis. Much has changed in terms of India's data needs as well data-collection technologies since our original data-gathering systems were instituted. Future debates on the labour force, employment, unemployment and wages should take place around reliable and high-quality estimates.

It is submitted that if the recommendations of the Task Force are implemented, we will acquire the capability of generating reliable estimates of a number critical variables for informed policy making. The following is a partial list of these variables:

- Estimates of the labour force, employment and unemployment on an annual basis in rural and urban areas and for the two areas combined at the national and state levels for the entire population
- Quarterly estimates of employment for the urban population at the national and state levels
- Distribution of workers by occupational status (self-employed, regular wage employee or casual labour) nationally and in states on an annual basis as reported by households
- Distribution of workers by occupation (for example, professional, technician or service worker) on an annual basis as reported by households
- Distribution of workers by industry sections (for example, agriculture, industry or services) on an annual basis as reported by households
- Average wages for regular wage employees and casual labourers on an annual basis as reported by households
- Allocation of time among various activities including different occupations, childcare, studying and leisure as reported by households
- Annual and quarterly estimates of employment by sub-sectors in industry and services as reported by enterprises
- Annual and quarterly wage estimates by sub-sectors as reported by enterprises
- Annual and quarterly wage estimates by sectors and type of work as reported by enterprises

- Annual employment in the government schemes as per government data
- The extent of formalization of the workforce as per coverage in formal social protection plans such as the provident fund, insurance and pension plans

The report is organized as follows. Section II provides an overview of potential methods of measuring labour force, employment, unemployment and wages. It also describes the challenges we face. Section III discusses in greater detail the existing sources of data on employment in India, highlighting the current state of affairs and gaps in the data. Section IV briefly reviews the practices in two major developed countries relevant to India: the United States and United Kingdom. Finally, Section V details recommendations for generating employment and unemployment data in India going forward.

II. Measuring Employment

There are four potential sources of measuring employment and unemployment:

- Household surveys
- Enterprise surveys
- Administrative data
- Data from Government schemes

An entirely new emerging field of study attempts to measure variables such as the Gross Domestic Product (GDP), employment and inflation using proxy data and real-time big data. The view taken here is that this approach is still in its infancy and at the research stage. So far, no country has adopted it to provide official estimates of employment and unemployment. Accordingly, this source is not mentioned in the above list.

In most countries household surveys are the primary method of generating employment and unemployment statistics. Of the available options, it is the only one that can comprehensively cover the entire labour force and, thus, provide the most statistically valid estimates of employment and unemployment for an entire economy. This is especially true in India, where an extremely large section of the workforce is either self-employed or spread over a vast number of small, unorganized enterprises.¹

Enterprise surveys, which offer the other common approach to measuring employment, do not adequately cover the self-employed and farm workers. As the report documents later, in the Indian case, even establishment census fails to capture the entire non-agricultural workforce. Additionally, available sample frames for drawing samples for such surveys often do not cover small, unorganized enterprises and therefore leave out workers employed by them. While not as exhaustive as household surveys in their coverage of the labour force, enterprise surveys have the advantage of capturing more accurately the industry structure of employment, associated wages and other enterprise characteristics. Enterprises have a more accurate idea of their industry classification than households, which increases the accuracy of workers' industry classification in these surveys.

Apart from household and enterprise surveys, administrative datasets created in the course of enrolling workers in pension and medical insurance programs as well as information contained in tax returns can provide data on the employment status of large groups of individuals. In the Indian context, employment statistics from these sources can be useful sources of counting workers engaged in formal employment. However, these sources are even more partial in coverage than enterprise surveys. Moreover, additions to these databases may not necessarily represent additional jobs. Instead, such additions may simply represent enrolment of individuals already working but not previously enrolled in the plans or programmes.

Government schemes can be another potential source of gathering data on job creation. In many countries, governments undertake large-scale social and economic programs that employ a significant number of workers. Education and health are particularly important sectors from this viewpoint. Jobs generated by these schemes can provide valuable information on certain categories of workers. Once again, this source is limited by its highly partial coverage and care must be exercised to avoid double counting when using this source.

III. Existing Sources of Employment and Unemployment Estimates in India

Several departments, agencies and ministries collect and disseminate employment data in India. Among the primary agencies devoted to the task are the Central Statistical Office (CSO) and the National Sample Survey Office (NSSO) of the Ministry of Statistics and Programme Implementation (MOSPI), the Labour Bureau of the Ministry of Labour and Employment (MoLE) and the Registrar General and Census Commissioner of India under the Ministry of Home Affairs (MoHA). Secondly, the Ministry of Micro, Small and Medium Enterprises (MSMEs) and the Directorate General of Technical Education (DGET) also occasionally collect employment data.

As discussed in the previous section, the existing data sources may be classified into four categories: household surveys, enterprise surveys, administrative data and data from government schemes. We discuss each of these categories below in detail.

III.1. Household Surveys

In India, two official household surveys and a population census collect employment statistics from households. These are the Employment-Unemployment Survey conducted by the NSSO under MoSPI, the Annual Labour Force Survey conducted by MoLE and the Population Census under the Office of the Registrar General & Census Commissioner.

Employment-Unemployment Survey (NSSO)

The Employment-Unemployment Survey (EUS) is the most comprehensive survey providing labour force statistics in India. It was first conducted in the 9th round of the National Sample Survey (NSS) in 1955. The current format of quinquennial surveys started in the 27th round in 1972-73, based on the M. L. Dantwala committee report. Since then, eight quinquennial surveys have been conducted with the last one taking place in 2011-12. The EUS survey is carried out over an entire year to account for seasonal variation in employment.

The survey measures economic activity for three different reference periods: a year, a week, and a day. Based on these reference periods, three different measures of activity status are given – Usual Status (US), Current Weekly Status (CWS) and Current Daily Status (CDS).ⁱⁱ The usual status definition represents the most liberal definition of employment while the daily status definition the most conservative one. Accordingly, the unemployment rate is the lowest as per the Usual Status definition, ranging between 2 to 3% and the highest as per the daily status, varying between 5 and 8%. According to the latest NSSO EUS survey, the total workforce in India was 47.36 crore in 2011-12. Of these workers, 23.16 crore were employed in agriculture and 24.2 crore in industry and services.

In addition to recording the employment status, the survey also collects data on household and individual characteristics, location of the household (urban or rural and the state), wages and earnings, form of employment (self-employed, wage earner or casual), industry classification of workers, particulars of the enterprise employing the worker and other variables. The biggest limitation of this survey is its low frequency and the time lag between data collection and availability of the results. Typically, data collection takes place once every five years. The survey results usually become available with a lag of more than a year. This makes the data less timely and relevant as policy inputs than desirable.

Annual Labour Force Survey (Labour Bureau)

To obtain more regular data on the labour force, the Labour Bureau of MoLE started conducting the Annual Labour Force Survey in 2010. It was first carried out during the period 2009-10. Four more surveys have been conducted since then. The most recent one was conducted during 2015-16. The survey employs the Usual Status definition of employment and generates employment and unemployment estimates based on this definition only. However, data collection takes place during part of the year, instead of being spread out over the entire year. It also reports data only for the population aged 15 and above, in contrast to the entire population being reported by the NSSO EUS survey.

Population Census (Office of Registrar General & Census Commissioner)

The Office of the Registrar General & Census Commissioner conducts the Population Census. It uses different concepts and definitions than the two surveys discussed above, collecting data on main, marginal and non-workers in the economy. The frequency of data collection at once every ten years is low, and estimates become available at lags of several years. As a result, these estimates rarely form the basis of media debates or policy formulation on employment.

III.2. Censuses and Surveys of Enterprises or Establishmentsⁱⁱⁱ

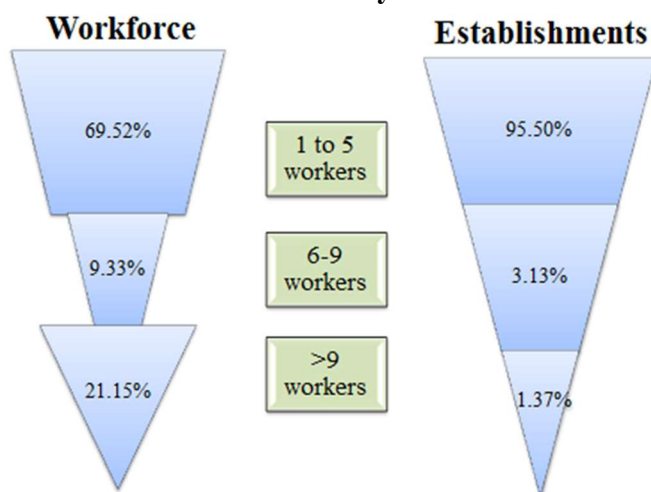
Setting aside the issue of low frequency of data collection, India has had a reasonably robust tradition of household employment-unemployment surveys. The same cannot be said of enterprise or establishment surveys. In part this has been due to the absence of a reliable sample frame of all enterprises that is updated with high frequency. The only potential sample frame of establishments that is maintained on a regular basis consists of enterprises registered under the Factories Act, 1948. But only industrial establishments with 20 or more workers if not using power and those

with 10 or more workers if using power are required to register under this Act. This leaves out all service sector establishments and all industrial establishments employing less than 10 workers if using power and less than 20 workers if not using power.

The Economic Census

The Economic Census covers the entire universe of non-agricultural establishments regardless of size or sector. As such, it extends to both industrial and services establishments. In principle, the Economic Census could serve as the sample frame for conducting enterprise surveys. However, it has been conducted at low frequencies and at irregular intervals in the past. The first such census was conducted in 1977. Subsequent censuses took place in 1980, 1990, 1998, 2005 and 2013-14 (January 2013 to April 2014).

Figure 1: Workforce and Industry Characteristics in India, 2013-14



Source: Constructed using data from the Economic Census, 2013-14, MOSPI (Table 7.7, p. 125)

According to the sixth and latest round of the Economic Census, the total workforce employed in all establishments in 2013-14 was 13.1 crore. Comparing this figure to 24 crore workers employed in industry and services as per 2011-12 NSSO household survey, we see that a substantial part of non-agricultural force is not captured by the Economic Census. This is because the Economic Census does not cover self-employed workers that are not a part of any establishment. Additionally, it is possible that many small establishments escape coverage.

The own-account enterprises (OAEs), which do not employ any regular workers, and enterprises employing less than 10 workers together accounted for almost 79% of India's workforce engaged in industry and services establishments in 2013-14. As Figure 1 highlights, nearly 70% of this workforce was employed in enterprises with five or less workers. As per the 2013-14 economic Census, only 2.7 Crore workers in India were employed in establishments with 10 or more workers. These establishments represented a tiny 1.37% of all establishments in India.

Annual Survey of Industries (MoSPI)

The Annual Survey of Industries (ASI) is the only regular and frequent establishment survey that India conducts currently. It uses the enterprises registered under the Factories Act, 1948 as its sample frame.^{iv} As such, it only covers industrial units with 10 or more workers if using power and 20 or more workers if not using power. Given that as per 2013-14 Economic Census, all establishments in industry and services with 10 or more workers employ 2.7 crore workers, this coverage is extremely limited. Unsurprisingly, the ASI has rarely been used to count the total number of workers in the economy.

The ASI collects data on the number of workers, number of employees, man days, product(s) manufactured, fixed capital, physical working capital, working capital, productive capital, invested capital, gross value of plant and machinery, wages and salaries, contribution to provident fund and other funds, workmen and staff welfare expenses, total emoluments, total input, total output and net value added. The ASI also estimates the number of workers employed as contract labour and their wages.

Despite providing a large number of employment-related indicators, the ASI has several gaps.

- **Limited Coverage.** It only covers industrial units registered under the Factories Act 1948. As already noted, this is extremely limited.
- **Out-dated frame.** Although the NSS has been updating the register of establishments under the Factories Act, 1948 from time to time, firm deaths are not recorded with rigour.
- **Time Lag.** There is a large time lag in the data. For example, for 2015-16, the reference year is April 1 2015 to March 31, 2016 and the data are collected in 2016-17. Currently, only 2014-15 survey results are available on the ASI website.

Unorganized Sector Surveys of Industries and Services (NSSO)

Using the Economic Census as the sample frame, the NSSO has occasionally conducted surveys of unorganized industry and services. While surveys of industry have excluded establishments covered by ASI, those of services have included establishments of all sizes. These surveys have generally been conducted following the Economic Census using it as the sample frame. In addition to their infrequent nature, there is a significant time lag between data collection and dissemination under these surveys. Like the ASI, these surveys have not been used to evaluate growth in employment.

Quarterly Employment Survey (QES) (Labour Bureau)

The Labour Bureau conducts the Quarterly Enterprise Surveys (QES) to measure employment in eight broad sectors of industry and services. The survey covers enterprises with more than 10 workers in both urban and rural areas. It had been rolled out in the aftermath of the 2008 financial crisis to track the impact of the crisis on employment. It began in the October-December 2008 quarter with approximately 3,000 units. However, by the October-December 2015 quarter, units covered in the sample declined to below 2,000. Beginning in the January-March 2016 quarter, the sample has been enlarged to a little more than 10,000 units across eight sectors including manufacturing, construction, trade, transport, education, health, hotels and restaurants and business process outsourcing.^v This expanded sample covers about 81% of establishments with more than 10 employees.

Despite its quarterly frequency, the QES has serious flaws for inferring the movements in employment at the national level.

- **Limited Coverage.** Since the majority of enterprises in India are small (less than 10 workers), in reality the sample only represents about 1.37% of all enterprises in the country or 21.15% of non-agricultural employment. Economy-wide, the QES covers only about 2.77 Crore workers out of a total of 47 Crore or more workers in total.
- **Lack of Representativeness.** Until December 2015, the sampling was purposive rather than random. *Purposive sampling renders any inference about the entire population statistically invalid.* Indeed, the survey reports have often noted that the multipliers used to convert sample estimates into population wide estimates “have their own limitation.”
- **Out-dated Sample Frame.** This problem is reinforced by the fact that sample frame of the survey is not updated until a new Economic Census is conducted. This means that the implications of the expansion of the relevant universe of enterprises are not taken into account in arriving at the population-wide estimates.
- **Changes in Coverage.** The sectors and states covered have also changed over time. This is particularly true between surveys conducted before and after 2015. Therefore, any comparisons across surveys prior to and after 2015 are not meaningful at all.

We note that much of the recent debate on jobs in the media has relied on the estimates from the QES. It is important to take cognizance of the severe limitations noted above when using these estimates.

MSME Census (Ministry of Micro, Small and Medium Enterprises)

The Office of the Development Commissioner, Micro, Small and Medium Enterprises (MSME) collects information on Small Scale Industries (SSI) and the MSME sector through the MSME Census. Till date, it has conducted four such censuses, in 1973-74, 1990-91, 2001-02 and 2006-07. The Census refers to firms defined by the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006. It covers manufacturing enterprises with investments in plant and machinery of up to INR 10 Crore and services enterprises with investments of up to INR 5 Crore. Data is collected on the number of units, economic activity, output and employment of MSMEs. Over time, coverage of the Census has expanded to cover MSMEds, and unregistered and registered SSIs.

Although the survey is an important source of information on a large share of enterprises in India, it faces two key challenges related to its coverage and frequency.

- **Partial Coverage.** The quality of coverage varies across type of enterprises. Unregistered enterprises are covered through a sample survey. In contrast, complete enumeration is carried out for registered enterprises.
- **Infrequent Data Collection.** The Census is conducted infrequently. The fourth and latest round was carried out in 2006-07.
- **Long Time Lag.** There is a time lag of about two years before the results of the survey become available.
- **Lack of Comparability Across Censuses.** Over time, the definitions of small and medium enterprises have been changing. This fact makes comparisons over time problematic.

III.3. Administrative Datasets

In India, data from administrative sources have not been used to infer information on the labour market. Possible sources for administrative data include the Employees' Provident Fund Organization (EPFO), the Employees' State Insurance Corporation (ESIC), the National Pension Scheme (NPS) and other similar sources relating to large private organizations.

An important limitation of these datasets as sources of estimates of job creation is that new entries into these datasets do not necessarily represent new jobs. For example, only firms with 20 or more workers are required to contribute to EPFO for their employees. This means that when a firm with 19 workers adds another worker to its payroll, it must begin contributing to the EPFO for all its employees. In the EPFO database, this will add 20 employees. Yet, only one out of these 20 employees represents a new job.

Nevertheless, these data sources can be useful in getting a count of formal jobs. In so far as enrolment in these databases signifies the extension of safety nets to the workers, it can be viewed as formalization of jobs. We will return to this issue later in the report.

III.4. Employment Generation through Government Schemes

In principle, data from several government schemes and programmes such as the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), Pradhan Mantri Grameen Sadak Yojana (PMGSY), Micro Units Development and Refinance Agency (MUDRA), Integrated Child Development Services (ICDS) programme, Housing for All, Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDUGKY), and various infrastructure projects and livelihood schemes create jobs. Till date, these sources have not been exploited to estimate job creation. The major limitation in using data from these schemes is that, in some cases, additions to payrolls may not represent new jobs and simply indicate employment shifts.

IV. Employment Surveys: Global Best Practice

In this section, we briefly review practices related to employment data collection in two countries: the United States and United Kingdom.

IV.1 United States

Employment data in the United States (U.S.) are collected from a variety of sources. Of these, three surveys are conducted regularly and at a reasonably high frequency. They form the backbone of employment and unemployment estimates in the U.S. and provide the basis for the discussion of employment scenarios among scholars, policy analysts, journalists and policy makers. The U.S. releases a "Monthly Employment Situation" that presents statistics from two of these surveys, the Current Population Survey (CPS) and the Current Employment Statistics (CES) survey. The CPS, a household survey, provides information on the labor force, employment, and unemployment that appears in the "A" tables. The CES, an establishment survey, reports data on employment, hours

and earnings in "B" tables. These surveys and an additional household survey capturing time use are described below.

Current Population Survey (CPS)

The CPS is a monthly sample survey of 60,000 households. It provides data on employment and unemployment for the entire population. It uses a rotating panel, where households stay in the sample for 4 consecutive months, are considered out of the sample for the next 8 months, and then return for another 4 months before leaving the sample permanently. The first interview is conducted face to face with subsequent interviews conducted over the phone. Typically, 70% of all the interviews are conducted over the phone. Data are collected for the preceding week. On average, the labour force portions of the interview take 6 minutes.

American Time Use Survey

This household survey is conducted annually and provides information on the amount of time spent on various activities, including paid work and non-market activities such as leisure, childcare, volunteering, and socializing. It has been conducted since 2003. Some quarterly data are also collected. The survey is useful for learning about multiple activities performed by individuals. It also covers productive activities that individuals perform without necessarily being paid for them. In particular, the time-use survey can be a good source of data for measuring the contribution of women who are not considered as being in of the workforce but contribute to the economic well-being of the family.

Current Employment Statistics (CES)

This programme is a monthly sample survey of 1,47,000 businesses and government agencies at the state and local level, representing 6,34,000 worksites. It provides data from the previous week on the number of jobs, hours and earnings on nonfarm payrolls. It also provides information on the sector-wise performance of the labour market.

IV.2 United Kingdom

Annual Population Survey (APS)

The APS is a household survey providing annual data on employment and unemployment in the United Kingdom (U.K.). It covers the population aged 16 and above. The sample size for the APS is approximately 1,22,000 households or 3,20,000 respondents. The data sets consist of 12 months of survey data but are disseminated on a quarterly basis. Around 62% of interviews are conducted over the phone. The first APS data set was published for the period January to December 2004.

U.K. Time Use Survey

The U.K. Time Use Surveys are household surveys conducted in 2000-2001 and 2014-2015. The main aim of the surveys is to measure the amount of time spent by the population on various activities. The 2014-15 survey covered about 9,388 individuals in 4,238 households.

U.K. Business Register and Employment Survey (BRES)

This survey collects data from approximately 80,000 businesses for each site operated in the U.K. on an annual basis. It provides data on employment, hours and earnings in the public and private sector. However, BRES does not cover very small business not registered for Value Added Tax (VAT) or Pay-As-You-Earn. Employment in these categories is captured by the U.K.'s Labour Force Survey.

V. Recommendations: The Way Forward

India needs to collect more reliable, timely and relevant labour market data to understand our employment situation. Much of the current discussion around jobs and growth has been taking place in the absence of accurate data or analysis. The Task Force's recommendations aim to address this challenge, focusing on conducting new surveys and making effective use of the data generated in administering programmes and schemes. The recommendations also deal with the institutional and legislative changes, physical and digital infrastructure and allocation of additional financial and other resources necessary for the effective implementation of recommendations related to data gathering and analysis.

V.1. Household Surveys and Censuses

As previously noted, quinquennial household surveys have existed in the past. However, they may not have accurately captured the employment situation. For example, the 2.77 Crore workers covered by the Economic Census only represent about 6% of the total workforce of about 47.36 Crore workers. Recognizing India's evolving circumstances and needs, we need to make at least three changes with respect to household data sources: conduct household surveys on an annual basis, introduce a time-use survey and progressively introduce the use of technology that can speed up data collection and reduce the time lags between data collection and processing.

An Annual Household Survey with a Quarterly Module in Urban Areas

Household surveys are the only means to generating economy-wide estimates of employment and unemployment. For this reason, it is extremely important to have regular household surveys. The NSSO has started an exercise named the Periodic Labour Force Survey (PLFS) that will provide annual estimates of labour force, employment, unemployment, industry structure of workforce, nature of employment and wages nationally and regionally on an annual basis. The survey will also generate the estimates for urban areas on a quarterly basis. Households in urban areas will be visited about four times, constituting a rolling panel for 3 quarters. This will facilitate the tracking of seasonal employment and changes in employment characteristics over time. The fieldwork for this survey is already underway, having commenced on April 1, 2017. The Task Force is of the view that this survey will go a long way towards fulfilling the current vacuum in the availability of information relating to India's labour markets. The PLFS replaces the NSSO's Employment-Unemployment.

A Regular Time Use Survey

The Task Force recommends that, in addition to the PLFS, a new time-use survey, to be conducted by MoSPI, be instituted. This survey may be conducted at three-year intervals. This survey will collect information on how individuals allocate their time over a specified time period, usually a day or a week. It will be useful for determining the extent to which individuals engage in multiple occupations and the share of their time spent in performing productive but non-market activities and time spent on leisure activities. The survey will also help us track how time spent by households has been changing and measure women's participation in unpaid work.

The survey can also be useful for assessing the reasons for shifts in labour participation rates and the effects of policy changes on the pattern of activities. For example, there was a sharp decline in labour participation rates of women between 2004-05 and 2011-12. The causes of this shift have been a matter of some speculation. Periodic time use surveys can be of immense help in understanding the sources of such a shift. Similarly, women are known to spend time bringing firewood and water from long distances to home in rural areas. When the government brings LPG and piped water to homes under such circumstances, time use surveys can be useful for studying how women use the time saved as a result.

Enhanced Use of Technology in Data Collection

The Task Force recommends that the use of technology be enhanced to reduce the time taken in data collection and processing. The first time a household is surveyed, face-to-face contact is required. But for subsequent interactions, at least for a limited set of core questions, data can be collected over the phone. In due course, it may also become feasible ask a subset of respondents to complete surveys electronically. This will help bring out estimates of some key variables almost in real time.

V.2. Enterprise Surveys

There is an acute need to strengthen sources of enterprise and establishment level data. We need wider coverage across enterprises in terms of enterprise size as well as sectors, bringing both industry and services into the fold. We also need to carry out enterprise surveys at a greater frequency. In addition, we need to carry out the Economic Census at regular intervals.

An Annual Enterprise Survey using GSTN as the Sample Frame

Limitations of the ASI, conducted by the CSO annually, and of unorganized enterprise surveys, conducted intermittently by the NSSO, were noted earlier. These surveys should be discontinued. In their place, we must institute an annual enterprise survey using enterprises registered with the Goods and Services Tax Network (GSTN) as the sample frame. Samples drawn from GSTN will have the virtue of covering enterprises of all sizes except those with turnover below INR 20 lakh and from industry as well as services sectors. Because the GSTN would get updated on a continuous basis, it would provide a fully updated sample frame at all times. The Task Force felt, however, that an expert group should be appointed to provide advice on this survey's design. This expert group may also consider the possibility of generating estimates of some key variables at a higher frequency, say, every quarter.

Economic Census at Regular Intervals

The GSTN will not adequately cover the own-account and other small enterprises. Since these enterprises employ a large proportion of the workforce, there remains a need for an Economic Census at regular intervals. For the Economic Census to be relevant, its frequency needs to be increased to once in every three years. In addition to providing a full picture of the workforce structure by enterprise size and sector classification, such a survey will also provide the sample frame for a periodic survey of enterprises of all sizes across all sectors.

Annual Survey of Enterprises Excluded from the GSTN

We should undertake an annual survey of enterprises excluded from the GSTN database. These would include all enterprises in health and education and those with turnover less than INR 20 Lakh in other sectors. The sample frame will be derived from the Economic Census, excluding enterprises registered under the GSTN. Whereas the Economic Census would collect data on a very limited set of variables, the proposed survey would cover many more variables. The expert group proposed above may also be asked to advise on the full design of this survey.

Higher Frequency Survey of Enterprises

A subset of enterprises in the Annual Enterprise Survey using GSTN as the sample frame should be tracked at a higher frequency. This will lead to the generation of monthly or quarterly enterprise-based employment estimates. Labour Bureau of MoLE should undertake this task.

V.3. Use of Administrative Datasets

Administrative data from a number of sources can be potentially exploited to collect data on certain category of workers. Some key examples are:

- Employee Provident Fund Organization (EPFO) database, which contains information on employees for whom employers make contributions towards provident fund. In addition, there are several privately sponsored provident funds, whose databases can complement the EPFO database.
- Employee State Insurance (ESI) database includes data on government employees receiving medical insurance. Similar datasets exist for private employees covered by privately run insurance companies.
- National Pension Scheme (NPS) database contains information on government employees enrolled in the scheme. In parallel, there exist private insurance schemes containing similar information.

There are two serious limitations in using these sources of information to glean data on job creation. First, there is very substantial overlap across them. Aggregation across them requires de-duplication. In turn, this requires providing a common identifier for individuals listed in these datasets. Modern statistical techniques allow de-duplication without a common identifier but this is not without error. The more conservative course of action is to use a common identifier across these datasets.

The second limitation is more serious. Additions to these datasets need not represent new jobs. For example, the law requires only companies with 20 or more workers to contribute to the EPFO in the names of its workers. Therefore, typically, a company joins the EPFO only when it crosses this threshold. But at the time of joining the bulk of its workers have already held their jobs for some time. They do not represent the addition of new jobs.

Therefore, administrative data can only be used to measure the extent of formalization in the workforce. But even this requires adopting a new definition of formal workers. The Task Force noted that currently India does not have a fixed definition of formal workers. Consequently, various definitions have been applied. A commonly used definition accepts only regular workers in enterprises registered under the Factories Act, 1948 as formal workers. The workers are called “organized” workers (NSSO) instead of formal workers, however. Under this definition, all workers in service sectors are classified as informal or unorganized workers. An alternative definition classifies all workers in enterprises with 10 or more workers and all government workers as formal workers (MoLE). This definition also uses the term “organized workers” instead of “formal workers”. Yet another definition classifies workers as formal provided they have a contract regardless of the size of the enterprise in which they work (Arjun Sengupta Committee Report). This definition draws a clear distinction between formal and organized workers but is extremely constraining for the Indian context.

All these definitions are highly restrictive and exclude many workers who have decent and steady jobs but either do not work in large enough enterprises or do not have written contracts. After considering various alternatives, the Task Force concluded that it was desirable to adopt a new, more pragmatic definition of formal workers. Accordingly, it is recommended that at least for the purpose of counting, the following be considered as formal workers.

- Workers covered under *any one of* the following Acts:
 - The Employees’ State Insurance Act, 1948 (or other similar insurance)
 - Employees’ Provident Funds and Miscellaneous Provision Act, 1952 (or other similar social security scheme)
- Government and other public sector employees
- Workers having coverage under private insurance or pension schemes or provident funds
- Workers subject to tax deduction at source on their income through submission of Form 16 or similar Income Tax form

The Task Force is of the view that, in the Indian context, where written contracts are not common and nearly three-fourths of employment is in enterprises with less than ten workers, the definition of a formal worker based on enrolment in provident funds, medical insurance or pension schemes represents a reasonable compromise.

This redefinition of formal workers, if officially adopted, would have implications for existing statutes. In turn, this would require amendments to the relevant existing Acts and Rules.

V.4. Use of Data on Government Schemes

Significant employment generation also takes place as a direct result of public investment in infrastructure and expenditure on government schemes. Loans extended to enterprises under special schemes also result in job creation. These public investments, expenditures and loans can serve as important sources of measuring job creation.

A Quick Survey of MUDRA Borrowers

A particularly important scheme sponsored by the government is the creation of Micro Units Development and Refinance Agency (MUDRA). MUDRA gives small, unsecured loans to enterprises. These loans have numbered several crore each year and constitute an important source of job creation. Till date, no count of these jobs exists. Accordingly, the Task Force recommends that MoSPI carry out a systematic survey of individuals or enterprises that have availed MUDRA loans. With banks providing details on these borrowers, it is a straightforward matter to quickly complete such as a survey. MoSPI will, of course, need to be provided necessary financial resources for the survey speedily.

Employment in Major Government Schemes and Programmes

In addition, various ministries and departments of the central government responsible for overseeing the Centrally Sponsored Schemes (CSS) and Central Sector Schemes may be asked to evaluate the employment impact of these schemes. It is hypothesized that government schemes and programs such as Housing for All, National Highway Construction, PMGSY, MGNREGA, PMKVY, DDUGKY and livelihood programmes make significant contribution to job creation. While measuring the employment created by these schemes, we need to ensure that no double counting is done due to convergence of schemes.

V.5. Other Recommendations

Over the course of discussing various approaches to employment data collection, the Task Force discussed some institutional and financial issues related to the future of India's statistical systems. These discussions led the Task Force to make four additional recommendations.

Universal Enterprise and Establishment Numbers

The Task Force discussed at length the issues of multiple identifying numbers for enterprises depending on the ministry, department or legislation under which the enterprise is required to file information. For example, GSTN, EPFO, ESI, Factories Act, 1948 and Shops and Establishment Act, 1953 each assign different sets of numbers to the enterprises. This is not only a source of much confusion for enterprises that must file information under different Acts but also makes correlating information in different datasets on the same enterprise impossible.

After deliberating different options, the Task Force concluded that the best option is to use the GSTN across all legislations, ministries and departments as the universal establishment number. This choice is ideal because GSTN number identifies the establishment and contains within it the Permanent Account Number (PAN), which identifies the enterprise owning the establishment.

Moreover, the enterprise also uses the PAN to file taxes. The PAN number will thus be the universal enterprise number.

As GSTN expands, more and more establishments will come into its fold and enterprise history will be built under a single number. Even own-account and small enterprises wishing registration may be given the GSTN number. Likewise, GSTN number may also be used to register non-commercial entities such as civil society groups wishing registration. This exercise should be made time bound with all entities required to complete registration within 12 months. In this manner, we will have a single registry listing virtually all of the commercial and non-commercial entities. Over time, this will create a truly 21st century frame for enforcement, regulation and research.

Create a Central Server for All Government Data

A central facility must be created from which all administrative data can be accessed. Currently, these data remain with the ministries and departments that generate them. As has been the usual practice, the ministries and departments work in silos with enormous possible synergies across different data sources going unexploited. If all data are available at a central facility and accessible only from that facility, potential analysts can come there to analyse data with no loss of privacy or leakage of data. The relevant ministries and departments can continue to own data with no data used without their permission.

Within India, we can draw lessons from agencies that are already working along these lines in various degrees. The Reserve Bank of India (RBI) operates an advanced system of financial data collection, warehousing and dissemination of information. This system functions well and provides access to data to various individuals, agencies and organizations. The Andhra Pradesh government contains a central data office reporting directly to the Chief Minister. The office has a legal mandate to collect data across all departments within the state government. This data is used to enhance governance. Finally, the Government of Gujarat has created a large data depository that allows it to do village-level quantitative analysis along many variables. The relevant office has the authority to pool data collected by different ministries in one place.

Investing in Modernizing and Revamping the Statistical System

While India began by giving great importance to data collection and evidence-based policy making in the 1950s, over time, the support for this activity has dwindled. The Task Force is of the view that this is a very unhealthy development and that it requires a major correction. The government needs to recognize the importance of high-quality surveys and data for policy making and policy discussions. All well-functioning economies today rely on a variety of statistical analyses for policy making. It is time that the government brings about serious institutional changes and provides necessary financial resources to revamp out statistical systems.

We need to allocate additional financial and human resources to this activity. The existing resources of MoSPI and MoLE are simply inadequate to implement the recommendations of the Task Force. In parallel, there needs to be a more streamlined approval process for the allocation of resources, both financial and human. It is recommended that a suitably empowered high-level

committee be formed to give rapid clearance to proposals for funds and human resources required to undertake the surveys and analyses.

Eliminate Duplication in Surveys and Harmonization of Reports

The Task Force noted that there exists duplication in data gathering. This duplication leads to wastage of resources and unnecessary confusion. It is recommended that MoSPI, MoLE and other ministries collecting employment data work together to eliminate such duplication and overlaps.

It is also important that in writing their survey reports, MoSPI and MoLE clearly spell out the limitations of their estimates. The reports must also explain the relationship among different surveys and explain why they are or are not comparable. This will help minimize the confusion in the media.

VI. Conclusion

This report considers the existing sources of employment data in India and assesses the strengths and weaknesses of each of these sources. It also examines global best practices in the collection of employment data, drawing lessons from the U.S. and U.K. At the outset, it was recognized that there is a lack of timely and periodic estimates on the number and types of jobs in India, the level of unemployment and employment being created by government schemes. We also lack a plausible definition of formal employment. The Task Force's recommendations focus on addressing these challenges. The timely implementation of these recommendations will help meet India's requirements of employment data. The report provides a partial list of variables for which we will be able to generate timely estimates through the recommended surveys.

Annexure I

DGE-Z-13011/08/2017-MP(G)
Government of India
Ministry of Labour & Employment

Shram Shakti Bhawan
Rafi Marg, New Delhi-110119
Dated: 11th May, 2017

OFFICE MEMORANDUM

Subject: Constitution of Task Force for Improving Employment Data

In pursuance to the Record of Discussions of the meeting taken by Principal Secretary to PM on 09.05.2017, a Task Force is being constituted to address the issue of timely periodic reliable data on job creation with the following composition:

- | | | | |
|-----|---|---|------------------|
| (1) | Vice Chairman NITI Aayog | - | Chairperson |
| (2) | Secretary, Ministry of Labour & Employment | - | Member Secretary |
| (3) | Secretary, Ministry of Statistics & Programme Implementation | - | Member |
| (4) | Prof Pulak Ghosh, IIM-B and NITI Aayog | - | Member |
| (5) | Shri Manish Sabharwal, Chairman, TeamLease Services and Director, RBI Board | - | Member |

2. The terms of reference (TORs) for the Task Force are as under:-

- (a) To assess the existing data systems and sources that provide information on jobs and job creation.
- (b) To identify alternate sources that could provide data on jobs and job creation.
- (c) To recommend mechanism(s) for capturing information on jobs and job creation on a regular basis for both informal and formal sector. This could include making recommendations on changes to existing schemes, legislation and rules to facilitate exchange of information on jobs/employment across platforms and strengthening of the available infrastructure.

3. The Committee may co-opt other Government Officials as Members on the Task Force to assist in taking decisions.

4. The Task Force will submit its report by 02nd June, 2017.

(Om Pal Singh)
Joint Director (E)

To
All Members of the Task Force

ⁱ In India, the term “organized enterprise” was originally used to refer to the enterprises registered under the Factories Act, 1948. Industrial enterprises with 20 or more workers if not using power and 10 or more workers if using power are required to register under this Act. But in some contexts, the term has been widened to include all enterprises with 10 or more workers in both industry and services. By implications, enterprises with less than 10 workers are called unorganized enterprises.

ⁱⁱ Under UPS, an individual who worked or sought work during more than half of the year (183 days or more) preceding the day of the survey person is classified as being in the labour force. All such individuals together define the total labour force. An individual working for more than half of the time or longer of her time in the labour force is considered as employed. Symmetrically, an individual working less than half of the time that she is in the labour force is defined as unemployed. Unemployed individuals as% of the labour force define the unemployment rate.

The estimate of workforce according to CWS provides the number of persons worked for at least 1 hour on any day during the 7 days preceding the date of survey.

Under CDS, the reference period is the week preceding the survey. Unemployment under CDS is defined in terms of person days instead of persons. For each person in the sample, we first determine the number of days she was in labour force. For each day preceding the week of the survey, the individual reports the number of hours she worked or sought work. If this is four hours or more, she is classified as being in the labour force for the full day. If this is more than one hour but less than four, she is classified as being in the labour force for half day. The total number of days in the labour force is thus determined for each person in the sample. Combining over all individuals, we get the total number of labour days available. Next, we define employment. Any individual working four or more hours on a day is classified as employed full-time on that day. An individual employed for more than one but less than four hours is defined as employed for half day that day. Combining over the entire week and all workers, we obtain the total number of person days of employment. The person days of employment as a% of the total person days in labour force gives us the employment rate. Subtracting this from 100 gives us the unemployment rate.

ⁱⁱⁱ An enterprise is the legal entity such as the corporation, which may have multiple establishments. In the economist’s language, the enterprise is the firm and establishment the plant. A firm can have multiple plants in different locations. Traditionally, surveys and censuses in India have focused on establishments.

^{iv} To be precise, the sample frame also includes enterprises registered under the Beedi and Cigar (Conditions of Employment) Act, 1966.

^vhttp://labourbureaunew.gov.in/UserContent/QES_Report_Jan_2017.pdf?pr_id=isPYUxqHP1M%3D