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International  
Labour  
Organization

# An Assessment of the Labour Statistics System in India

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# 1. Introduction: Background, Objectives and Methods

## 1.1 Uses and Users of Labour Statistics

Labour statistics are collected, compiled and disseminated in a country to meet the requirements of different goals and objectives sought to be achieved by different stakeholders and interest groups. These groups and uses to which they put the statistics could broadly be grouped into the following four categories:

- i. Planners, policy makers and administrators: for planning and monitoring socioeconomic development and formulation and implementation of policies, laws and rules for overall development and welfare of labour.
- ii. Research workers, media, civil society and public at large: seeking to improve understanding, awareness and knowledge about labour and related subjects.
- iii. Workers' organisations and employers' associations: to analyse, represent and lobby for their respective constituencies, namely, workers and industry, and;
- iv. International agencies: for presenting international perspective and comparisons and monitoring progress in the well-being of labour and assess the labour situation for utilisation as part of the assessment of the overall socio-economic situation of the country from the view point of their own mandate.

In India, users and purpose under the first category assume special importance for the reason that the socio-economic development of the country is managed through a system of economic planning. Thus, it is not only the Ministry of Labour and Employment and some other welfare ministries and departments responsible for making labour policy and laws and their implementation that are the users of labour statistics, but agencies engaged in planning socioeconomic development, particularly, the Planning Commission, become other major users of data on different aspects of labour. The Commission uses data on employment and unemployment extensively in its assessment and projections and also for setting targets for employment generation and strategy for their achievement in every Five Year Plan. Importance of such data has increased over the years with greater emphasis in plans on employment generation and poverty reduction. Of late, the subject of skill development has emerged as another important area of planning for which the Commission needs detailed data on demand and supply of skills among workers.

With poverty reduction and inclusive growth becoming major objectives of planning and development policy, new demands have been put on the labour statistics system to generate data in greater detail and on aspects on which data is not conventionally collected. Data on employment, earnings and social protection, by not only gender, but also socio-economic groups have become essential items of statistical menu. Data on wages and earnings, not only of wage and salary earnings in more disaggregated categories and on more regular basis than earlier, but also of the own-account workers, are in demand. New concerns of development policy also have their reflections on matters of labour policy and the Ministry of Labour, the other major user of statistics, will require data to deal with them. The condition of workers in the unorganised sector, minimum wages and social protection are some of the areas in which the Ministry would require detailed data to contribute to the development policy of inclusion and poverty reduction.

Demands from research workers, media, civil society and public at large on labour statistics system also reflect, to a large extent, the concerns of public policy on development. Themes like informal and unorganised sector, employment and earnings in rural non-formal sector, informal employment in the

organised sector, are some of those in which research questions are being asked; yet data for their detailed analysis are not available.

So far as the concerns of the two major stakeholders in labour matters – workers and employers organisations – are concerned, the entire controversy and confusion on labour reforms is confounded by the lack of statistics on the coverage and effectiveness of labour statistics on the one hand, and degree of protection effectively provided to workers and cost of compliance for employers under the controversial legislations like the Industrial Disputes Act and Contract Labour Act. Collection and dissemination of comprehensive and reliable data at regular intervals can lead to a better understanding and facilitate an informed discussion among the concerned stakeholders and a rational solution of the problem.

Among the international users of Labour statistics, the principal stakeholder is International Labour Organisation (ILO). ILO is responsible not only for compiling labour statistics but also to monitor progress in labour standards set by its conventions and recommendations, on that basis. India has ratified only a small percentage of ILO conventions, but reports on several others to inform to the extent to which it is adhering to the principles without ratifying the concerned convention. The most important subject which is the core of the ILO current programme and is also central to India's development objective of inclusive growth, however, is the concept and contents of decent work. It is, therefore, important to see whether the Indian statistical system provides adequate and regular data to measure the indicators of decent work.

Other agencies like the World Bank, UNDP, UN Women and UNICEF also make use of labour statistics as part of the overall assessment of the status and prospects of socio- economic situation and to devise programmes in the areas of their mandate.

## **1.2 Framework for Assessment**

A systematic assessment of the statistical system needs a frame work that takes care of the requirements of all the above users. In this context, while it is possible to narrate and list the items on which statistics would be in demand and such list would also change from time to time with changing character of economy and society, no standard frame work is available in so far as the requirements of the first three groups of users are concerned. The International Labour Organization has, however, developed and uses a standard list of subjects and items on which labour statistics are collected from member countries and made available on a comparable basis. It may be noted that the subjects and items on which data are collected by ILO and presented in its database entitled ILOSTAT<sup>1</sup>, by and large, coincide with the subjects and items of interest of other users. In fact, most countries have, over the years, evolved a framework for the collection of labour statistics following the ILO framework. It is, therefore, only reasonable that an assessment of the labour statistics system in a country starts with this framework as the basis.

ILOSTAT includes labour statistics under 13 major headings: Population and Labour Force, Employment, Unemployment, Persons outside the Labour Force, Youth, Working Time (hours of work), Earnings and Employment Related Income; (also Price Indices to gauge real earnings), Labour Costs, Occupational Injuries, Trade Unions and Collective Bargaining, Strikes and Lockouts, Working Poor (based on households income and expenditure data) and Labour Inspection. Within each of these subjects several sub-themes are covered. For example, under Employment, separate category of 'employees' and time related

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<sup>1</sup> See <http://www.ilo.org/ilostat>.



underemployment are also included. Data are expected to be collected and compiled by age, gender, sector, economic activity, employment status and occupation, wherever relevant. Recognising the importance of certain specific dimensions of labour situation, probably due to their special relevance in developing countries, statistics are also compiled under such themes as rural labour statistics and employment (of women and men) in informal economy in the ILO's site LABORSTA internet.

With the adoption of Decent Work (DW) as the core of its agenda, ILO has developed several indicators for measuring and monitoring of DW achievement and deficit in member countries. There are reported to be as many as 60 indicators – 18 main, 30 additional and 12 others relating to economic and social context. The questionnaire and the framework for the collection and compilation has to be obviously changed/reoriented to meet the requirements of estimating these indicators. And the national statistical systems also need to reorient their data collection and compilation system to comply with ILO questionnaire. It appears that ILO is also trying to adjust its list of DW indicators by groups of countries according to their socio-economic context and development. For example, a set of DW indicators has reportedly been developed for countries in Asia and Pacific, which contains 21 main indicators (though some of them also have a few sub-indicators)-three under Rights at Work, 11 under Employment, three under Social Protection and four under Social Dialogue.

A combination of items in the ILO framework and those considered of particular significance in the Indian context has been included in the present assessment.

### **1.3 The Indian Labour Statistics System: A Brief Outline**

Labour statistics are collected, compiled and disseminated by several agencies and through several mechanisms in India. The Ministry of Labour and Employment (MoLE) has been traditionally the most important source of labour statistics. It has been collecting data on different dimensions of labour; first, on the basis of the periodical administrative reports and returns on over four dozen labour laws that it administers and implements. These laws relate to conditions of work, employment, wages and earnings, social security and trade unions and industrial relations. Some of them are also sector specific (e.g. mines, plantations, construction etc.) The Ministry also collects data through a number of regular, periodic and ad-hoc surveys and studies undertaken by its specialised statistical agencies, Labour Bureau. The Ministry of Statistics is the other major producer of labour statistics in India. It collects, compiles and publishes data through its two important offices, the Central Statistical Office (CSO) and the National Sample Survey Office (NSSO). Here, again, data are collected through regular, periodic and ad-hoc surveys. The Census Commissioner of India under the Ministry of Home Affairs (MoHA) also collects, processes and disseminates data on population, labour force and workforce once in ten years, through the population census.

In so far as the subjects and dimensions are concerned, labour statistics are collected and are available on practically all the major themes and items of labour and employment recognised as important internationally. Going by the heads under which labour statistics are reported in the official publication of MoLE, *Indian labour Statistics*, aspects covered under labour statistics system in India include labour force, employment and unemployment, labour market indicators such as persons on live registers of employment offices and vacancies notified to them and placements made, vocational training, wages and earnings (and price indices to gauge real earnings), trade unions, industrial injuries, absenteeism and turnover, social security and welfare, industrial disputes and labour cost. Within each of these heads, statistics are available for disaggregated categories and different segments. For example, under Employment, the categories

include age, sex, institutional sector, economic activity and industry sector; and, segments include mines, plantations, motor transport, and shops and commercial establishments. In most cases, statistics are available by states and size of employing establishments. The figures actually reported in this publication, however, include, in most cases, only the workers that are working in establishments covered by different labour laws, but information on many of these and also some other dimensions such as rural-urban location, employment status etc. is available for the entire workforce from surveys undertaken by the NSSO.

#### **1.4 The Present Assessment: Objective and Methods**

The present assessment describes in detail the sources and contents of labour statistics in India with a view to identifying gaps with respect to the requirements of various users, the national policy makers, researchers and international organisations, specially ILO. It begins by describing the agencies and their statistical activities in the sphere of labour and then reviews the availability of statistics by different subjects as listed in the national and ILO system of statistics. Assessment is made of statistics in different subjects in terms of the following:

- i. Sources – single, multiple, comparability and compatibility
- ii. Coverage – categories of labour: all, wage labour etc., institutional sectors: public/private, organised/ unorganised, economic activity sectors, regions and states
- iii. Method –Census, sample, and its adequacy for generalisation and estimation
- iv. Frequency – ad-hoc or regular or periodic, suitability for assessing short and long term changes
- v. Time taken in dissemination
- vi. Extent to which collected data are processed and disseminated by collecting agency
- vii. Accessibility to the unpublished raw data.

Based on the assessment of sources and contents of available statistics on these criteria, attempt has been made to identify limitations, inadequacies and major gaps in data system. Certain items and subjects of emerging importance on which data are not or not regularly available, are also identified. Finally, a set of recommendations is presented for improvements in the Indian labour statistics system. Assessment and identification of gaps as well as recommendations are based, besides on a study of documents and systems and discussions with data producing agencies, also on extensive consultations and discussions with the users, the researchers and policy makers. Official agencies producing and using labour statistics were consulted both at the centre and in some selected states. Similarly, discussions with the researchers in the field of labour were held both at the national and regional levels. A list of consultations and discussions held and participants in them is given in Annexure II.

## **2. Agencies and Sources**

As mentioned earlier, the major agencies involved in the collection of labour statistics at the national level are the Ministry of Labour and Employment, through Labour Bureau and offices like the Directorate General of Employment and Training (DGE&T), Directorate General of Labour Welfare (DGLW) and Directorate General Factory Advice Service & Labour Institutes (DGFASLI); Ministry of Statistics through the National Sample Survey Office (NSSO) and the Central Statistics Office (CSO); and, Office of the Registrar General & Census Commissioner of India. State governments also collect labour statistics, mostly

through the departments of labour, which is compiled at the state level and some of which are also transmitted to central government. While some of the data are collected through the Census or Sample Surveys, certain others are collected through administrative returns. The statistics collected by various agencies at the national level are described below briefly.

## 2.1 Ministry of Labour and Employment

The **Labour Bureau** collects data on various aspects through statutory or voluntary returns under different labour acts. The state governments compile the data at the state level and the Bureau consolidates the same for the country as a whole and brings out periodical reports. It also conducts surveys on specific aspects or sections of labour on all-India or regional level, at regular intervals or on an ad-hoc basis. The Labour Bureau also undertakes compilation and maintenance of consumer price index (CPI) figures for industrial, agricultural and rural workers. Of late, the Labour Bureau has also started conducting a countrywide Annual Employment and Unemployment Surveys and has carried out three such surveys during 2010, 2011-12 and 2012-13. The data compiled and made available by the Labour Bureau are collected through the following different ways:

- i. Collected by the state labour departments as a by-product of the administration of various Labour Laws,
- ii. Collected through the Annual Survey of Industries (ASI) (collected by NSSO), Rural Retail Prices for Consumer Price Index (CPI) for Rural Labour/Agriculture Labour (collected by NSSO), Rural Labour Inquiries, Occupational Wage Surveys, and Working Class Family Income and Expenditure Surveys, and
- iii. Collected through other regular and ad-hoc field surveys and studies.

The **Directorate General of Employment and Training (DGE&T)** has been collecting statistics for the organised sector of the economy, under the provisions of the Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 and the Employment Market Information Programme (EMIP). The Programme covers: (a) all establishments in the public sector (except defence establishments and armed forces) and, (b) non-agricultural establishments in the private sector, employing 10 or more workers.

The programme provides information at short intervals about the structure of employment in the public and private sectors and also helps monitor changes in the levels of employment, disseminating information on types of jobs, extent of demand and qualifications that employers have set so that job seekers are informed of various job requirements. It also serves to provide estimates of the utilisation of labour force in different sectors, industries, occupations, etc. The information is collected through two forms called the Employment Return – I (ER-I) and Employment Return – II (ER-II). The form ER- I is a quarterly return containing items on total employment by sex on the last day of the quarter, number of vacancies that occurred and were filled during the quarter with details of occupations for which manpower shortages have been experienced by establishments. Form ER-II is a biennial return and is used for collection of information on the educational and occupational pattern of employees.

National Employment Service programme of the DGE&T also purports to be a source of information on unemployment, seen in terms of the number of persons on the Live Register of Employment Exchanges located throughout the country.

The DGE&T brings out a number of publications based on the data collected through the Employment Market Information Programme (EMIP) and the National Employment Service (NES). The data collected through EMIP is disseminated through various publications, which provide estimates of the utilisation of labour force in different sectors, industries, occupations, etc. the excess and shortage of manpower and the level of employment generation in various industries. The publications of DGE&T include the Quarterly Employment Review, Quick Estimates of Employment in the Organised Sector (Quarterly), Employment Review (Annual), Occupational-Educational Pattern of Employees in India (for public sector and private sector in alternate years), Employment Exchange Statistics (Annual), Apprenticeship Training in India (Annual) and Census of Central Government Employees.

**Directorate General Factory Advice Service & Labour Institutes (DGFASLI)**, an attached office of the Ministry of Labour & Employment, functions as a technical arm of the Ministry in matters concerned with safety, health and welfare of workers in factories and ports. It maintains a liaison with Factory Inspectorates of states/union territories in regard to the implementation and enforcement of provisions of the Factories Act, 1948, enforces the Dock Workers (Safety, Health & Welfare) Act, 1986, undertakes research in industrial safety, occupational health, industrial hygiene, industrial psychology, etc. Based on information received under the provisions of the Factories Act, it releases statistics *inter alia* relating to fatal and non-fatal injuries, state-wise figures of hazardous industries, factories having safety committees, factories having emergency plans, medical facilities available in factories, etc. Studies and surveys are undertaken to ascertain status of working conditions and standards of safety in select group of industries and operations as well as the enforcement of the provisions under the said rules.

**Directorate General of Mines Safety (DGMS):** The Directorate collects, maintains and publishes statistics relating to various provisions which are enforced by it. These statistics are collected in the process of performing administrative functions of inspection of mines, investigation of fatal/serious accidents, approval of mines safety equipment, appliances and material, etc. Statistics of earnings of employees in mines are also collected and maintained by the DGMS under the Mines Act, 1952. The DGMS publishes the following:

- i. Statistics of Mines in India Vol. I (Coal) – annually
- ii. Statistics of Mines in India Vol. II (Non-coal) – annually
- iii. Monthly Review of Accidents

## **2.2 Ministry of Statistics and Programme Implementation (MoSPI)**

### **2.2.1 National Sample Survey Office (NSSO)**

The National Sample Survey Office (NSSO) conducts quinquennial surveys on employment and unemployment. These surveys provide estimates on various characteristics pertaining to employment and unemployment in India at the national and state levels. The conceptual framework for conducting such surveys is based on the recommendations of a Committee set up by the Planning Commission in the year 1970, “Expert Committee on Unemployment Estimates” (popularly known as the Dantwala Committee). The first survey on employment and unemployment was conducted during October 1972 – September 1973 {NSSO (2013, ii)}. Eight more such comprehensive surveys have been carried out by the NSSO since then; the last two, however, having been done with a gap of one year only viz. during July 2009 –June 2010 and July 2011 –June 2012.

Apart from these quinquennial surveys on employment and unemployment, NSSO has also been collecting information on certain key items on employment and unemployment, annually, from a smaller sample of households in each round, since its 45th round (July 1989 - June 1990).

Data on certain sectors or some specific aspects relating to labour statistics such as migration, unorganized manufacturing enterprises, unincorporated non-agricultural enterprises, and unorganized service sector, have also been collected by NSSO in specific surveys.

## 2.2.2 Central Statistics Office

The Central Statistics Office (CSO) has, amongst its various activities, the responsibility of conducting the Annual Survey of Industries and the Economic Census. It also compiles the Consumer Price Index Rural/Urban/Combined) on monthly basis.

The **Economic Census** is a count of establishments/units engaged in production of goods or services. So far six Economics Censuses have been conducted in the years 1977, 1980, 1990, 1998, 2005 and 2012-13. It covers both agricultural (other than crop production and plantation) and non-agricultural activities (excluding establishments engaged in public administration, defence, and compulsory social security). It would collect basic information on the number of establishments/units, their employment location, type of activity, and nature of operation. It will provide information *inter alia* on the number of persons working and the number of hired employees in these units.

The **Annual Survey of Industries (ASI)** is the principal source of industrial statistics in India. It provides statistical information to assess and evaluate, the changes in the growth, composition and structure of the organised manufacturing sector, comprising activities related to manufacturing processes, repair services, gas and water supply and cold storage. The Survey is conducted annually under the statutory provisions of the Collection of Statistics Act 1953. It covers all factories registered under Sections 2m (i) and 2m (ii) of the Factories Act, 1948, i.e. those factories employing 10 or more workers using power; and those employing 20 or more workers without using power. The survey also covers bidi and cigar manufacturing establishments registered under the Bidi & Cigar Workers (Conditions of Employment) Act, 1966. Defence establishments are excluded from the purview of the Survey. Information is collected on assets and liabilities, employment and labour cost, receipts, expenses, input items: indigenous and imported, working-days, man days worked, absenteeism, labour turnover, etc.

The CSO has also started compiling every month **Consumer Price Index (CPI)** for all-India and the states/UTs for rural and urban areas separately as well as rural and urban combined, with effect from January 2012.

## 2.2.3 Development Commissioner, Micro, Small and Medium Enterprises

The Office of the Development Commissioner, Micro, Small and Medium Enterprises (MSME) is entrusted with the responsibility of collecting data pertaining to Small Scale Industries (SSI) / MSME sector. It has conducted four censuses so far. The small scale industry sector comprises two sub-sectors, viz., registered SSI sector and unregistered SSI sector. Registration in the MSME sector is voluntary. In the first two surveys conducted during 1973-74 and 1990-91, only the units in the registered SSI sector were surveyed. The Third (2001-02) and Fourth (2006-07) Censuses were conducted with provision to cover unregistered

SSI units, in addition to the registered ones. The coverage in this Census was of all enterprises with investment in plant & machinery up to ten crore rupees (Rs. 100 million) in the manufacturing sector and five crore rupees (Rs. 50 million) in the service sector. The registered enterprises were covered through complete enumeration and the unregistered enterprises through sample survey. Information collected related to economic activity, type of organizations, type of management, employment, fixed investment, products, gross output, exports, and sickness and its causes.

#### **2.2.4 Office of Registrar General and Census Commissioner of India**

The Decennial Census conducted by the Office of the Registrar General and Census Commissioner of India provides data on various characteristics of the labour force for the entire country, once in every 10 years. The data collected on workers are tabulated for main workers and marginal workers under various demographic, social and economic characteristics, including classification by industrial activity and occupation. The tabulation also gives the spatial distribution of workers by rural/urban residence at national, state and district levels.

### **3. Nature and Characteristics of Data: Subject-wise Account and Assessment**

This chapter describes the nature, scope and coverage of statistics on major dimensions of labour as available from different sources and attempts an assessment of their adequacy to meet the requirement of various users. Dimensions for which this account and assessment has been attempted include: labour force, employment and unemployment, wages and earnings, consumer price index numbers, labour cost and productivity, absenteeism and turnover, trade unions, industrial disputes, safety, social security, skills and training, migration, child labour, contract labour, and workers in the unorganized/informal sector.

#### **3.1 Labour Force, Employment and Unemployment**

As mentioned in Chapter 2, there are several sources of data on employment and unemployment. They, of course, have different coverage and methodology and, sometimes, different concepts as well. Employment and unemployment statistics, as available from different sources, are described in the following paragraphs.

##### **3.1.1 NSSO Surveys on Employment and Unemployment (EUS)**

The quinquennial surveys on employment and unemployment conducted regularly by the NSSO are by far the most comprehensive surveys on the subject in terms of scope and coverage. They include information on most dimensions of employment and unemployment, cover all sectors of the economy and have a country-wide geographical spread. The main objective of these surveys is to get estimates of various employment and unemployment characteristics at the national and state/UT level. They generate activity participation characteristics of persons by age, education, gender, social group, level of living, industry and occupational category and facilitate generation of estimates for labour force participation rate, worker population ratio, unemployment rate, industry and occupational distribution of workers, extent of underemployment, wages of employees, etc.

The NSSO surveys cover the whole of the Indian Union with minor exceptions, which could be due to logistic considerations. For instance, the geographical coverage of the NSS 68<sup>th</sup> round survey (July 2011 -

June 2012) was the whole of the Indian Union except (i) interior villages of Nagaland situated beyond five kilometres of the bus route and (ii) villages in Andaman and Nicobar Islands which remain inaccessible throughout the year <sup>{(NSSO (2013, ii))}</sup>. The survey is conducted over a year. The survey period is divided into four sub-rounds, each with duration of three months and equal number of sample villages/ blocks is allotted for survey to each of the four sub-rounds with a view to ensuring uniform spread of sample over the entire survey period.

In NSSO surveys, persons are classified into various activity categories on the basis of activities pursued by them during specified reference periods. Three reference periods are used in NSS surveys, viz. (i) one year, (ii) one week and (iii) each day of the reference week. Based on these three periods, three different measures of activity status are arrived at. The activity status determined on the basis of the reference period of one year is known as the usual activity status (US) of a person, that determined on the basis of a reference period of one week is known as the current weekly status (CWS) and the activity status determined on the basis of the activities pursued by a person on each day during the reference week is known as the current daily status (CDS) The survey schedule captures a range of information on the following aspects:

- i. Household characteristics, like household size, religion, social group, land possessed, land cultivated, etc. – to study the employment and unemployment characteristics with the level of living of the population, information on monthly consumer expenditure of the household is also collected.
- ii. Demographic particulars like, age, sex, educational level, status of current attendance and vocational training.
- iii. Particulars of usual principal activity, subsidiary economic activity, current weekly activity and current daily activity of all the members of the sample households.
- iv. Particulars of the enterprise for all the usual status workers (excluding those engaged in growing of crops and growing of crops combined with farming of animals) viz., location of work place, type of enterprises, number of workers in the enterprise etc. and some particulars on the conditions of employment for the employees, like type of job contract, eligibility for paid leave, availability of social security benefits, etc.
- v. Extent of underutilization of the labour time and the qualitative aspects of employment, like changes in activity status, occupation/industry, existence of trade unions/associations, nature of employment (permanent/temporary), etc.
- vi. Participation in specified activities by the household members who are classified as engaged in domestic duties in the usual principal activity status.

As stated earlier, information regarding the activity status of a person is collected by three different approaches viz. usual status approach, current weekly status approach and current daily status approach. In the usual status approach, the broad activity status of a person viz. employed unemployed and 'not in labour force' is decided by major time criterion. In the current weekly status and current daily status approach, the broad activity status of a person is decided by priority-cum-major time criterion where work activity gets priority over unemployment which in turn gets priority over 'not in labour force'. A person could be in one or a combination of the following three broad activity statuses during a reference period <sup>{(NSSO (2013, ii))}</sup>:

- i. Working or being engaged in economic activity,
- ii. Being not engaged in economic activity (work) but either making tangible efforts to seek 'work' or being available for 'work' if the 'work' is available, and

- iii. Being not engaged in any economic activity (work) and also not seeking/available for 'work'.

Broad activity statuses mentioned at (i) and (ii) above are associated with 'being in labour force' and activity status (iii) with 'not being in the labour force'. Within the labour force, broad activity statuses (i) and (ii) are associated with 'employment' and 'unemployment' respectively.

NSSO generates three different estimates of work participation from the data collected through its quinquennial employment and unemployment surveys. They relate to:

- i. The number of persons usually employed in the principal status (ps) only and a wider set of 'all' workers, taking into consideration the subsidiary economic status (ss) of persons categorized 'not working' in the principal status (ps), termed as work force according to the usual status (ps+ss) which includes (a) the persons who worked for a relatively long part of the 365 days preceding the date of survey, and (b) those persons from among the remaining population who worked at least for 30 days during the reference period of 365 days preceding the date of survey.
- ii. The workforce measured in terms of current weekly status (CWS) gives number of persons employed on an average in a week of 7 days during the survey period. The estimate of workforce, according to CWS provides the number of persons who worked for at least 1 hour on any day during the 7 days preceding the date of survey.
- iii. The workforce measured in terms of current daily status (CDS) gives the average picture of the person-days where a person is found employed on a day during the survey period. For each person, 7 person-days are assigned for the 7 days preceding the date of survey and the estimate of the number of person-days worked in the reference week is obtained on the basis of the person-days worked according to the CDS approach. The number of person-days worked on a day during the survey period is obtained by dividing the person-days worked in a week by seven.

Any activity resulting in production of goods or services that add value to national product is considered as an economic activity for the employment and unemployment survey. Such activities include production of all goods and services for market (i.e. for pay or profit), including those of government services, and, the production of primary commodities for own consumption and own account production of fixed assets. The full spectrum of economic activities as defined in the UN System of National Accounts is not covered in the definition adopted for the NSSO Surveys of Employment and Unemployment. Production of any good for own consumption is considered as economic activity by UN System of National Accounts but production of only primary goods for own consumption is considered an economic activity by the NSSO. While the former considers activities like own account processing of primary products as economic activities, in the NSS surveys, processing of primary products for own consumption is not considered an economic activity <sup>{NSSO (2013, ii)}</sup>.

### **3.1.2 Labour Bureau Surveys on Employment and Unemployment**

Realising the importance of the need of employment-unemployment statistics at regular and frequent intervals, the Labour Bureau under the Ministry of Labour & Employment, has started conducting Annual Employment-Unemployment Surveys. It has conducted three such surveys in the series so far. The first survey was conducted in 28 states/UTs by covering 300 districts in the country during the year 2010 for a



fixed reference period of financial year 2009-10. The second survey was conducted in all states/UTs covering all the districts in the country for reference period of agriculture year 2011-12 (July, 2011-June, 2012). The third survey was conducted during October, 2012 - May, 2013 in all the states/UTs covering all the districts in the country. The concepts and definitions adopted by the Labour Bureau are similar to those used by the NSSO.

Results are presented giving distribution of persons in employed, unemployed and not in labour force category pursuing different activities based on the reference period, distribution of workers by National Industrial Classification 2008, distribution of workers by National Classification of Occupation, persons who received vocational training and by education status <sup>{Labour Bureau (2013, iv)}</sup>.

### 3.1.3 Population Census

Collection of data on economic activity has traditionally been a part of the population census of India. The census collects basic information inter alia on main workers and marginal workers classified by four broad industrial categories: (i) cultivators, (ii) agricultural labourers, (iii) household industry workers, and (iv) other workers as also non-workers. These are presented distributed by sex, rural-urban break-up and by state, Districts and Cities.

‘Work’ has been defined as participation in any economically productive activity. Such participation may be physical or mental in nature. Work involves not only actual work but also effective supervision. According to this definition, the entire population is classified into three main categories: Main workers, Marginal workers and Non-workers as follows:

- **Main workers:** Main workers are those who worked for the major part of the year preceding the date of enumeration i.e., those who were engaged in any economically productive activity for six months or more during the year.
- **Marginal workers:** Marginal workers are those who worked any time at all in the year preceding the enumeration but did not work for a major part of the year, i.e., those who worked for less than six months.
- **Non-workers:** Non-workers are those who have not worked any time at all in the year preceding the date of enumeration.

#### Activity Status:

The following parameters are kept in view while deciding the activity status of a person.

- The main activity of a person who is engaged in more than one activity is reckoned in terms of time disposition. For example, if a person had worked as a daily wage labourer for four months, as an agricultural labourer for one month and as a cultivator for two months, he is reckoned as daily wage labourer since he had spent more time in this activity than as a cultivator or agricultural labourer.
- A man or woman engaged primarily in one's own household duties or a boy or a girl primarily a student, even if helped in the family economic activity, but not as full time worker, is not treated as a worker. On the other hand, if a person was primarily engaged in some economic activity for major part of the year but at the same time also attended to some household chores or attended a night school etc., is treated basically as a worker.
- An adult woman engaged in household duties but doing no other productive work to augment the family's resources was not considered as working. If, however, in addition to her household work, she engaged herself in work such as rice pounding for sale or wages or in domestic services for

wages or minding cattle for wages or selling firewood etc., or any other work like cultivation etc., she was treated as working.

The marginal workers and non-workers are asked an additional question to ascertain as to whether they were 'seeking or available for work'.

Tabulations are made available for the population classified as main workers, marginal workers and non-workers, sex-wise and age group-wise, with rural-urban break-up, at national, state district and city levels. The main and marginal workers are also classified into the four categories based on the economic activity performed by them during the last one year. These are Cultivator, Agricultural Labourer, Worker in Household Industry and Other Worker. Tabulations are also available by religious communities, social groups and education level. Main Workers are also classified by industrial category, education level, age, sex and religious community. The number of marginal workers and non-workers 'seeking or available for work' is also tabulated.

### **3.1.4 Employment Market Information (EMI) Programme**

The Directorate General of Employment and Training (DGE&T) in the Ministry of Labour & Employment is an important source of data pertaining to employment market information, educational and occupational pattern of employees, placement statistics of all categories of employment seekers and census of central government employees. DGE&T collects employment statistics under the Employment Market Information (EMI) programme. The objectives, coverage and reference period of EMI programme <sup>(DGE&T (2013))</sup> are described below:

#### **Objectives:**

- i. To provide information at short intervals about the structure of employment in the public and private sectors at the area, state and national levels and also to monitor changes in the level of employment.
- ii. To present occupational composition and educational profile of employees in public and private sector establishments.
- iii. To identify the occupations, which are characteristic to a given industry.
- iv. To assess manpower shortages in the organized sector.
- v. To make available information required to improve and add to the services offered by the National Employment Services.
- vi. To monitor the progress in generating employment during the five year Plans.

#### **Coverage:**

The data collected under the EMI programme covers only the organised sector of the economy which covers all establishments in the public sector irrespective of their size, and non-agricultural establishments in the private sector employing ten or more persons. While the information from non-agricultural establishments in the private sector employing twenty five or more persons is collected statutorily, data from the establishments employing ten to twenty four persons is collected on a voluntary basis.

Under the EMI programme, collection of data is done following the establishment reporting system. The establishments are required to furnish, at regular intervals, details about the number of persons they employ, by sex, vacancies that have occurred and the type of persons, which are in short supply.

### **Geographical Coverage:**

The EMI programme is being implemented in all the states and union territories of the country except Sikkim, Dadra & Nagar Haveli and Lakshadweep. The programme could not be extended to these states/UTs so far owing to administrative reasons. The smaller establishments employing ten to twenty four persons in the private sector in metropolitan areas of Greater Mumbai and Calcutta are also not being covered owing to administrative reasons.

### **Reference Period:**

The establishments furnish the EMI data through ER-I and ER-II returns. The form ER-I is used for collection of information from the establishments at quarterly intervals. ER – II is the occupational return to be submitted to the local employment exchange once in two years.

### **3.1.5 Economic Census**

The basic purpose of conducting the economic census is to prepare a frame of establishments for the conduct of various censuses for collection of detailed data particularly on non-agriculture sector of the economy and follow up surveys between two economic censuses. The economic census is the official count of all entrepreneurial units located within the geographical boundaries of the country, involved in any economic activity. The economic census covers the whole of the Union of India. All economic activities except those involved in crop production and plantation are covered under the economic census.

Information is collected on items which include establishment premises, description of broad/major activity, nature of operation – perennial or seasonal or casual, ownership type of establishment – government or private – proprietary or partnership or corporate or non-profit institutions or cooperative societies or self- help groups, social group of owner, power/fuel used, years of operation, ownership type, gender, religion and social group of owner, registration under the act, source of finance, total number of persons usually working and hired persons with break up in male/female and adult/child categories.

In the Economic Census, persons (including children under 15 years of age) working for the establishments as owners, members of the household working as or helping the owner in running the establishment, whether hired or not hired, besides regular and salaried employees, casual/daily wage labourers are considered as workers. A worker may serve the establishment in any capacity – primary worker or supervisory. Salespersons appointed by an establishment for selling/marketing its produce or services as apprentices, supporting workers, paid or unpaid are also treated as workers. The owners, running the establishments would also be considered as workers <sup>{CSO (2012)}</sup>.

### **3.1.6 Annual Survey of Industries (ASI)**

The primary unit of enumeration in Annual Survey of Industries (ASI) is a factory in the case of manufacturing industries, a workshop in the case of repair services, an undertaking or a licensee in the case of electricity, gas and water supply and an establishment in the case of bidi and cigar industries <sup>{CSO (2013, i)}</sup>.

All the factories in the ASI frame are classified in the industry groups on the basis of the principal product manufactured. Items on which data is collected in ASI include number of workers, number of employees, man days, 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.

‘Workers’ are defined to include all persons employed directly or through any agency whether for wages or not and engaged in any manufacturing process or in cleaning any part of the machinery or premises used for manufacturing process or in any other kind of work incidental to or connected with the manufacturing process or the subject of the manufacturing process. Labour engaged in the repair and maintenance or production of fixed assets for factory’s own use or labour employed for generating electricity or producing coal, gas etc. are included.

‘Employees’ include all workers defined above and persons receiving wages and holding clerical, supervisory or managerial positions engaged in the administrative office, store keeping section and welfare section, sales department as also those engaged in purchase of raw materials etc. or purchase of fixed assets for the factory and watch and ward staff.

‘Total persons engaged’ include employees as defined above and all working proprietors and their family members who are actively engaged in the work of the factory even without any pay and unpaid members of the co-operative societies who worked in or for the factory in any direct and productive capacity. The number of workers or employees is an average number obtained by dividing man-days worked by the number of days the factory had worked during the reference year.

Man-days represent the total number of days worked and the number of days paid for during the accounting year. This is obtained by summing-up the number of persons of specified categories attending in each shift over all the shifts worked on all days.

### **3.1.7 Survey of the Micro, Small and Medium Enterprises (MSME)**

As stated earlier, The Office of the Development Commissioner, Micro, Small and Medium Enterprises (MSME) is entrusted with the responsibility of collection of data pertaining to Small Scale Industries (SSI)/MSME sector. In the Fourth All India Census of Micro, Small and Medium Enterprises, the coverage was of all enterprises with investment in plant & machinery up to Rupees ten crore in manufacturing sector and Rupees five crore in service sector <sup>(MSME)</sup>. Information was collected on economic activity, type of organizations, type of management, employment, fixed investment, products, gross output, exports, and sickness and its causes. Data on employment relates to all persons engaged by the unit whether for wages or not, in the work connected directly or indirectly with the entrepreneurial activity and includes all administrative, technical and clerical staff as also labour in production of capital assets for factory’s own use. It also includes all working proprietors and their family members who are actively engaged in the work of the unit even without any party and the unpaid members of the co-operative societies who work for the unit in any direct or production capacity.

## 4. Comparative Assessment of Employment and Unemployment Statistics from Different Sources

### 4.1 Work Participation Rate, Labour Force Participation Rate and Unemployment Rate

Let us begin this comparison with the sources providing comprehensive data for the entire economy and country, namely the Population Census, and Employment and Unemployment Surveys (EUS) conducted by NSSO and the Labour Bureau. Population Census has, of course, the widest coverage and is the only source that gives the distribution of labour force by various categories at the National, state and District levels. However, the Census data is not able to capture the seasonal and intermittent nature of work characteristics of India. The Census definition of a ‘worker’ as a person who has worked ‘any time at all’ in the 365 days in economic activities seems to correspond closely with the UPSS concept of NSSO survey, as is evident from the similarity in the work participation rates of total workers of Census 2011 and NSS Survey of 2011-12 work participation rates, as seen in the following Table.

**Table 4.1: Work Participation Rates (%): Census 2011 & NSS 2011-12**

	Total		Rural		Urban	
	Census	NSS(upss)	Census	NSS(upss)	Census	NSS(upss)
<b>Persons</b>	39.8	38.6	41.8	39.9	35.3	35.5
<b>Males</b>	53.3	54.4	53.0	54.3	53.8	54.6
<b>Females</b>	25.5	21.9	30.0	24.8	15.4	13.8

Source: RG&CSI (2013) & NSSO (2013, ii)

A 10 year interval between the two Population Censuses is, however, too long for assessing and monitoring employment and unemployment.

There are no significant differences in the methodology adopted and in concepts and definitions followed by NSSO and Labour Bureau in their Employment and Unemployment Surveys. However, while in NSSO Surveys, activity status details are collected for all the persons, in the Labour Bureau Surveys, the same are collected only in respect of persons of age 15 years and above. An important difference between the two surveys is of the criteria used for selection of households. NSSO stratifies the households on the basis of affluence in rural areas and monthly per capita expenditure in urban areas. This is primarily so because NSSO conducts Employment and Unemployment Survey as a subset of the larger Household Consumer Expenditure Survey. Labour Bureau uses the total number of members aged 15 years and above in the households as criteria for selecting the households, assuming that the number of members aged 15 years and above or economically active population is a better criterion for stratification under the Employment-Unemployment Survey <sup>{Labour Bureau (2013, iv)}</sup>.

In NSSO surveys, the field work is spread over one complete agriculture year, starting July. In the Labour Bureau survey, the field work is completed within 6-7 months from the launch of survey. There is, therefore, a possibility of seasonal variations under the Current Weekly Status and Current Daily Status approach as the fieldwork is not spread over uniformly throughout the year. Accordingly, estimates from the two sources

are likely to be different and, as revealed by the following Tables, the differences are pronounced in case of Unemployment Rates.

**Table 4.2: LFPR (per 1000 persons) 2011-12: Rural**

Approach	Male		Female		Person	
	NSSO	Labour Bureau	NSSO	Labour Bureau	NSSO	Labour Bureau
UPS	805	788	257	280	533	548
UPSS	813	794	358	339	587	579
CWS	801	794	305	344	554	582
CDS	785	760	255	279	522	533

**Table 4.3: LFPR (per 1000 persons) 2011-12: Urban**

Approach	Male		Female		Person	
	NSSO	Labour Bureau	NSSO	Labour Bureau	NSSO	Labour Bureau
UPS	760	733	178	179	478	472
UPSS	764	737	205	191	493	480
CWS	760	735	197	195	487	481
CDS	753	719	181	175	476	463

**Table 4.4: Unemployment Rate (per 1000 of Labour Force) 2011-12: Rural**

Approach	Male		Female		Person	
	NSSO	Labour Bureau	NSSO	Labour Bureau	NSSO	Labour Bureau
UPS	21	27	27	56	23	34
UPSS	17	24	17	41	17	29
CWS	32	34	36	63	32	42
CDS	55	57	63	82	56	63

It may be noted that the Labour Bureau surveys are conducted annually while NSSO conducts them generally once in five years. The former should have naturally been preferred by users, but, perhaps due to better familiarity and availability of comparable data for past quinquennial years, most users, policy makers and researchers have been using the data from the NSSO surveys. Accessibility to unit level data, which is found very useful by many researchers to get into more detailed and disaggregated analysis, is another reason for preferring to use NSSO data.

**Table 4.5: Unemployment Rate (per 1000 of Labour Force) 2011-12: Urban**

Approach	Male		Female		Person	
	NSSO	Labour Bureau	NSSO	Labour Bureau	NSSO	Labour Bureau
UPS	32	34	67	125	38	50
UPSS	30	31	54	112	34	47
CWS	40	40	66	133	43	58
CDS	49	47	77	134	55	63

Source: Labour Bureau (2012, I) & NSSO (2013, iii)

Notes: All rates are for population 15 years and above

LFPR: Labour Force Participation Rate

UPS: Usual Principal Status, UPSS: Usual Principal and Subsidiary Status, CWS: Current Weekly Status, CDS: Current Daily Status

By and large, the data from the EUS of NSSO (and by implication from Labour Bureau surveys since they use common concepts, methods and coverage) are found to be adequate for analyzing the trends and structure of employment and unemployment, and have been used very widely. Even where doubts are expressed in respect of the 'true reflection of reality' by data or their international comparability due to limitation of the concept (e.g. employment and unemployment by CWS), information is available to modify the estimates as per the concept acceptable to the user.

Because of limitations on account of the sample size, the estimates from these NSSO employment-unemployment surveys have been made available at national and state level only. Some states have, however, derived district level estimates of certain key variables by pooling the central and state level data. Labour Bureau has, however, offered to the state governments to generate district level estimates on important parameters relating to employment and unemployment, in case the states covered a matching sample along with the Labour Bureau sample { Labour Bureau (2013, iv) }.

Let us now turn to the other sources of information on employment which cover only some sectors and segments of the workforce.

The EMI scheme covers employment only in the organised sector, defined as consisting of establishments employing 10 or more workers each, excluding those in agriculture and allied occupations in the private sector. Data from this source compiled and published by the Directorate General of Employment and Training (DGE&T) in the Ministry of Labour have been widely used as estimate of employment in the 'organised' sector despite limitations of coverage and collection.

Employment data collected under the Economic Census pertains to number of persons working in establishments with details about their status as owner or hired age, gender and employment status. The focus of the Census is, however, on preparation of an official list of establishments for use as a frame for census/ surveys for collection of data on various aspects. To the extent data on establishment characteristics are collected in it, employment data can be usefully analysed to describe the employment structure by different types of establishments. It cannot, however, be used for estimation of employment and portraying its characteristics in general, due to its limited coverage, i.e. only establishments in the non-agricultural sector.

Similarly, the Annual Survey of Industries (ASI), collects detailed data on employment, including workers and others, person days, wages and salaries, total emoluments, besides those on fixed and working capital, total output and net value added. Data are thus useful in working out not only average earnings of workers and other employees, but also such other analytical ratios like fixed and total capital per worker, share of wages in output and value added, value added per worker and total labour productivity. The Survey, however, has limited coverage, namely, organised manufacturing, gas and water supply and bidi and cigar industries.

The MSME Census, similarly, collects very useful data on different dimensions of the working of Micro, Small and Medium Enterprises including those relating to employment, which facilitates presentation and analysis of a few labour dimensions like portrayal of size-structure of units by number of workers and estimation of capital intensity in the MSME sector.

## 4.2 Wages and Earnings

### Statistics Collected Under Labour Acts

#### **i. Payment of Wages Act 1936**

Labour Bureau collects and compiles data annually on average daily employment, gross wage bill, per capita annual/daily earnings of workers etc., from the annual statutory returns submitted by the state governments/Union Territories under the Payment of Wages Act, 1936. This Act is applicable to workers employed in construction industry, civil and transport services, motor transport services, mines, plantations, oil fields, docks, wharfs, jetties and establishments declared as factories under the Factories Act, 1948.

The returns received from the states/Union Territories contain industry-wise information on the following items:-

- i. Number of factories covered under the Act and submitting returns;
- ii. Average daily employment during the year;
- iii. Total man-days worked during the year; and
- iv. Total gross wage bill, before deductions, broken up into components like basic wages, cash allowances, bonus, arrears and money value of concessions, etc.

Average daily employment in an industry is derived by dividing total attendance during the year by the number of working days observed by that industry. Total gross wage bill for an industry when divided by the corresponding average daily employment yields the per capita annual earnings. Per capita daily earnings are computed by dividing the gross wage bill by total man-days worked <sup>{Labour Bureau (2012, ii)}</sup>. Data are compiled and published state-wise and industry-wise in the '*INDIAN LABOUR YEAR BOOK*'.

Coverage of the Payment of Wages Act has been extended over the years to new sectors and activities and, in some states, it has also been made applicable to enterprises registered under the Shops and Commercial Establishment Act. Its applicability has also been extended to all workers in the covered establishments, removing the earlier ceiling on earnings. As such the Act could have provided a relatively comprehensive source of data on earnings in different activities in the non-agricultural establishment sector. But there is found to be a serious deficiency in the actual receipt of returns. For example, for the figures published for 2007 and 2008, information was received only from 10 states/U.Ts; and, even in these states, only 30% and



26.2% of the factories submitted returns for 2007 and 2008 respectively. Even this highly incomplete information was received with a delay of 3 to 4 years.

## **ii. The Minimum Wages Act, 1948**

The Minimum Wages Act, 1948 provides for fixation/periodic revision of minimum wages in employments where labour is vulnerable to exploitation. The Labour Bureau brings out an annual report on the working of Minimum Wages Act, 1948 on the basis of returns/reports received from various state/UT governments containing information on employments added, employments in which the minimum wages were fixed for the first time, the minimum wages in different scheduled employments prevalent during the year, the range of minimum wages, comparative minimum wage rates prevailing in scheduled employments and number of inspections, etc. <sup>{Labour Bureau (2012, ii)}</sup>. As the data on minimum wages are supplied by the state governments as and when they are fixed and revised, it can safely be assumed that the information on the rates of minimum wages fixed for different employments/ activities in different states/regions is complete and up to date. This source, however, cannot provide information on whether the minimum wages fixed for any category of workers are actually paid, except when cases of non-compliance are detected and acted upon. The NSSO EUS for 2009-10 reported that 54 per cent of casual workers were not getting minimum wages fixed for them.

## **iii. The Mines Act, 1952**

Director General Mines Safety (DGMS) collects and maintains statistics, under the Mines Act, 1952, on earnings of employees in mines. For coal mines, such statistics relate to per capita weekly earnings and are available on a monthly basis. The monthly returns on coal mines give average daily attendance, total wages and other payments made in cash for work done on any complete working week of the month. The per capita weekly cash earnings are then computed by dividing the total payments by average daily employment during the week. For mines other than coal, statutory returns showing the above data are also collected by the D.G.M.S. Based on these statistics the DGMS compiles index numbers of money earnings for workers employed in different mining industries. These data are considered to be complete and reliable and used by the official agencies and by researchers. It may, however, be noted that a large part of unorganized mining is outside the purview of the Mines Act.

## **Wage Data Based on Surveys**

### **i. Rural Wages**

The Labour Bureau has been regularly publishing 'Wage Rates in Rural India' on the basis of data collected by the National Sample Survey Office (NSSO) in the respect of 18 agricultural and non-agricultural occupations involving manual work: Ploughing, Sowing, Weeding, Transplanting, Harvesting, Winnowing, Threshing, Picking, Herdsman, Well digging, Cane crushing, Carpenter, Blacksmith, Cobbler, Mason, Tractor driver, Sweeper and Unskilled labourers. The wage rate data are collected along with rural retail prices from 603 sample villages spread over 20 states. Data collection from these sample villages is staggered over the four weeks of a month with one-fourth of the villages being covered every week. The days of canvassing of schedule are fixed. The village functionaries like the *panchayat* secretary, *patwari* and other village or block officials are the primary informants for collection of data on wage rates. The data on normal working hours and the prevailing wage rates in cash and kind are collected sex-wise.

The month-wise average wage rates are worked out at state level and also at the all-India level. At the first stage, the data received from the different villages for duration of less or more than the normal working

hours are adjusted for eight hours working day. Similarly, payments in kind such as food-grains, cooked food, tea, fodder, etc. are converted in cash at the prevailing local retail prices. In the next stage, a simple arithmetic average of these normalized daily wage rates is worked out occupation-wise and sex-wise for each state <sup>{Labour Bureau (2014)}</sup>.

Data from this source has been found useful by researchers and policy makers even though they relate only to selected occupations. It has been pointed out that the occupations covered in the survey were identified almost 40 years back and have not been revised to represent the changes in rural occupational structure. It is understood that a proposal to revise the list is under consideration.

## **ii. Agricultural Wages**

The Directorate of Economics and Statistics (DES) in the Ministry of Agriculture (MoA) collects data on wages of selected agricultural and non-agricultural occupations through the state governments. Data are actually collected by the local officials, *patwaris*, *mamlatdars* and primary teachers and are transmitted through district and state authorities to DES. DES publishes data in the form of simple averages of daily and monthly wage rates, in its annual publication titled 'Agricultural Wages in India' (AWI).

Wage data from AWI has been widely used by MoA officials and researchers, particularly to construct long-term time series of agricultural wages. Its coverage has, however, been found to be limited. Though the state governments are expected to cover all the districts, failing which at least one in five districts, actual coverage is much smaller in many states. Small sample size, only one village in a district, is also seen as another limitation of this data. It also needs to be noted that the list of occupations is not revised to include new occupations (as also true of the other Labour Bureau Survey, discussed above, which also has most occupations in common with the AWI).

## **iii. Wages in Organised Manufacturing**

### **a. Annual Survey of Industries**

Data on worker's earnings in the organized manufacturing are collected through the Annual Survey of Industries (ASI) under the Collection of Statistics Act, 1953. This includes basic wages, dearness allowances, house rent, other allowances and regular bonuses. The statistics of wages/salaries of employees in establishments covered under ASI are thus available annually for all the states/U.Ts as well as for All-India. These are compiled separately for male workers, female workers and contract workers. ASI data has been extensively used for computing certain averages and ratios for the organized manufacturing sector, as mentioned earlier.

### **b. Occupational Wage Surveys**

The Occupational Wage Surveys carried out by the Labour Bureau provide occupation-wise data on employment structure, wage rates and earnings in selected manufacturing, mining, plantations and service sector industries. The information is presented by sex, age, system of wage payment and industry. Labour Bureau has already completed five rounds of the Occupational Wage Survey and sixth round is in progress. It would cover 56 industries (consisting of 45 manufacturing, 4 mining, 3 plantations and 4 service sector). Occupational Wage Surveys have the potential of being a comprehensive source of wages in the non-agricultural sector; but the coverage and non-regularity constrain their use for that purpose.

### **c. Employment/Unemployment Surveys (EUS) of NSSO**

Data on the average daily wage earnings received by casual labourers and regular wage/salaried employees during each of the seven days of the reference week is collected in the NSSO surveys on Employment and Unemployment. These are compiled and published state and gender-wise. Data on wages are collected for three categories of casual labours: casual labour in public works other than under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA), casual labour in MGNREGA public works, and casual labour in works other than public works. Bonus and perquisites such as free accommodation, reimbursement of expenditure for medical treatment, free telephones, etc. received by regular wage/salaried employees are evaluated and duly apportioned and included in their earnings.

Wage data from NSSO—EUS has been widely used for research purposes to assess the changes in wages of different category of workers in different sectors and economic activities, particularly because it is the only set of data on the subject which covers all category of workers in the entire economy and is amenable to disaggregation by rural, urban, gender, social group and states. The data may, however, suffer from certain limitations and cannot be used for analyzing such aspects as wage structure at a disaggregated level.

## **4.3 Consumer Price Indices**

Three sets of Consumer Price Indices (CPIs) are currently prepared at the national level, relevant for three groups of workers: CPI for Industrial Workers (IW), CPI for Agricultural Labourers (AL)/ Rural Labourers (RL) and CPI (Rural/Urban/Combined). While the first two are compiled and released by the Labour Bureau, the CPI (Rural/Urban/Combined) is compiled and released by the Central Statistics Office (CSO). Price data for CPI, which is based on retail prices, are collected by investigators visiting markets. CPI weights are derived from consumer expenditure survey data. Salient features of these price indices include the target population, weights used, price collection mechanism and method of release of monthly indices are as under <sup>{CSO (2013)}</sup>:

### **i. CPI for Industrial Workers**

Target population for this index is the working class family. A working class family was defined as one which (i) was located within the centre (industrial area), (ii) had at least one member working as a manual worker in an establishment in any of the seven sectors of employment covered viz., factories, plantations, mining, ports and docks, public motor transport undertakings, electricity generating and distributing establishments, and railways; and (iii) derived 50 per cent or more of its income during the calendar month preceding the day of enquiry through any manual work.

The present series of CPI (IW) is on base 2001=100. The weighting diagrams for the purpose of compilation of index numbers had been derived on the basis of average monthly family expenditure of the working class as obtained from the Working Class Family Income Expenditure Survey conducted during 1999-2000.

For CPI (IW), the retail prices in respect of selected items of goods and services are collected from 78 centres by the officials of various state Directorates of Economics and Statistics or state Labour Commissioners. The number of items in the consumption baskets of different centres generally varies, depending upon the consumption pattern of the centre. The items of goods and services are classified into six groups namely, (i) food, (ii) *pan, supari*, tobacco and intoxicants, (iii) fuel and light, (iv) housing, (v) clothing, bedding, and footwear, and (vi) miscellaneous. The prices of items like cereals, vegetables, oils

and fats, etc., which change frequently, are collected on a weekly basis, and the prices of items such as clothing, furniture, utensils, household appliances, durable goods etc. are collected on a monthly basis. The data on prices of commodities, which are supplied through subsidized outlets (fair price shops), and their availability in these outlets are also collected so that weighted average prices can be worked out.

CPI (IW) is released every month (on the last working day of the following month) for each of the selected 78 centres as well at all India level. It is mainly used for the determination of dearness allowance being paid to central/state government employees as also to the workers in the industrial sectors besides fixation and revision of minimum wages in scheduled employments.

## **ii. CPI for Agricultural Labourers and Rural Labourers**

Target populations of these indices are agricultural and rural labour households. A rural labour household is defined as one, which derived major income during the last 365 days from wage paid manual employment (rural labour) vis-à-vis wage paid non-manual employment as well as self-employment. From amongst the rural labour households, those households, which earn 50% or more of their total income (from gainful occupation) during the last 365 days from paid wage manual labour in agriculture, are categorized as agricultural labour households

The present series of CPI (AL/RL) is on base 1986-87=100. Estimates of consumer expenditure generated from the results of the NSS 38th round (1983) form the source of weights for the different items of goods and services used in compilation of CPI (AL) and CPI (RL).

For both the series of CPI (AL) and CPI (RL), the retail prices in respective goods and services are collected on monthly basis from fixed markets in 600 sample villages in 20 states by the National Sample Survey Office. The various items of goods and services are categorized into four main groups namely, (i) food, (ii) fuel and light, (iii) clothing, bedding and footwear, and (iv) miscellaneous. The collection of retail prices is staggered over four weeks of a month with one-fourth of the sample covered every week.

CPI (AL/RL) is released on 20th day of every month for each of the selected states as well at the all-India level. It is mainly used for the determination/ fixation and revision of minimum wages in agricultural sector.

## **iii. CPI separately for rural and urban areas and also combined (rural and urban)**

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation has started compiling Consumer Price Indices (CPI) on base 2010=100 for all-India and states/UTs separately for rural, urban and also rural-urban combined, every month with effect from January, 2011. These indices reflect the changes in the price levels of various goods and services consumed by the rural and urban population.

The weighting diagrams for these series of CPI have been derived on the basis of average monthly consumer expenditure of an urban/rural household obtained from the results of the Consumer Expenditure Survey conducted by the National Sample Survey Office during 2004-05. Number of weighted items (having consumption share) varies among states/UTs and it is around 175 in the rural and about 200 in the urban areas. These items include services such as railway fare, airway fare, telephone charges, barber/beautician charges, washing charges, tailoring charges, etc.

## **Data collection:**

### **i. CPI (Rural)**

Two villages are selected generally from each district. There are in total 1181 villages. These villages are distributed more or less equally among the four weeks to take into account weekly variations in the prices. Number of items for price data collection identified through the market survey varies among states/UTs and also among the villages within the state/UT and it is around 225. Price data are collected from the selected shops in the villages every month by the Department of Posts.

### **ii. CPI (Urban)**

All cities/towns having population of more than 9 lakh (900,000) (as per the 2001 Population Census) and all state/UT capitals not covered therein were selected and other towns were selected randomly. Total number of selected towns across the country is 310. Total number of quotations is 1114. The quotations have been distributed more or less equally among the four weeks of the month to capture week to week variations. Number of items for price data collection identified through the market survey varies among states/UTs and also among the markets within the state/UT and it is around 250. Each selected market is visited every month for price data collection from shops/outlets. For rent data collection, each of 6684 sample rented dwelling is visited once in six months. Data collection in the urban areas is undertaken by the National Sample Survey Office.

Different sets of Consumer Price Indices mainly serve different purposes. CPI - IW, for raising dearness allowance of workers, CPI -AL/RL for fixing/revising minimum wages and CPI by CSO for the purpose of deflating expenditure. They are also based on sound and well-tested methodologies. They have, however, been criticism about dated weighting diagrams and base-years. The CSO proposes to revise regularly (five years interval or so) the weighting diagrams of CPI (Rural/Urban/Combined) on the basis of the results of the five yearly Consumer Expenditure Survey (CES) conducted by the NSSO. The weighting diagrams of CPI for Industrial Workers (IW) and CPI for Agricultural Labourers (AL)/Rural Labourers (RL) seem to be overdue for revision.

## **4.4 Labour Cost and Productivity**

The main objectives of the collection and dissemination of labour cost are to provide comparative information on total labour cost in different industries and states and to study the extent of expenses incurred by employers on social welfare and social security at his/her cost, for the benefit of workers. Data on labour cost is being collected under the Annual Survey of Industries. Social security charges met by employers for the benefit of their employees such as contribution to Provident Fund, Pension, Gratuity, Employees' State Insurance, Compensation for work injuries and Occupational disease, Retrenchment and Lay-off benefits, are included under the head "Contribution to Provident and Other Funds". "Workmen and Staff Welfare Expenses" include expenditure on maternity benefits and crèche, supply of food, beverages, tobacco, clothing and group lodging at concessional rates; educational, cultural and recreational facilities and services; and grants to trade unions and co-operative stores meant for employees. Statistics are compiled for the average labour cost, percentage of labour costs on employees to total cost of production and labour cost by components, by industries as well as by states/union territories <sup>{Labour Bureau (2013, i)}</sup>. Needless to reiterate that the statistics compiled are limited to establishments/units covered under the Annual Survey of Industries. Detailed data collected for various items of inputs and products under ASI enables computation of various parameters relating to productivity for the factory sector.

## 4.5 Absenteeism

Absenteeism is taken as the failure of a worker to report for work when he/she is scheduled to work. Authorised absence is also treated as absence. Absence on account of strikes, lockout, layoff, weekly rests or suspension is not treated as absence. Thus, it relates to only voluntary absence due to personal reasons of the individual concerned. Statistics on absenteeism amongst the directly employed regular workers are being collected on a regular basis as a part of the Annual Survey of Industries. Absenteeism rate amongst these workers in an industry or a state are worked out as percentages of man-days lost on account of absence to the man-days scheduled to work in the respective industry or state. Statistics on number of factories reporting absenteeism, percentage of such factories, man-days scheduled to work, man-days lost due to absence and percentage of absenteeism by states, Industries and Sectors during a year are compiled by the Labour Bureau <sup>{Labour Bureau (2013, i)}</sup>. It may be noted that the above mentioned data on absenteeism relates to organised sector manufacturing covered under ASI.

## 4.6 Trade Unions Statistics

Under the Trade Unions Act, 1926, a registered trade union is required to submit to the Registrar of Trade Unions, information regarding its affiliation to All India Federations; on its membership – at the beginning of the year, members admitted and those who left during the year, membership at the end of the year, by sex; income and expenditure and liabilities and assets statements, etc. The Labour Bureau, which finally compiles the information at the national level, publishes state-wise and all-India statistics pertaining to (a) number of trade unions registered under the Act, (b) number of unions submitting returns, (c) sex-wise membership of the unions, (d) average membership per union of those submitting returns, and (e) income and expenditure of unions submitting returns, separately, for workers' and employers' unions. The number and membership of workers' and employers' unions classified according to industries are also compiled.

It is to be noted that these statistics relate only to the unions which have been registered under the Trade Unions Act, 1926. It is not obligatory on the part of the Trade Unions to secure registration under the Act. Even among the registered unions, a large number either fail to submit their annual returns as required under the Act or submit 'defective' returns to the state Authorities which do not find place in the consolidated returns furnished by the state governments to the Bureau. Further, some states which do not furnish the returns in time are also not included in All-India Statistics.

During 2009, only 17.3% of the registered trade unions from 11 states/union territories and during 2010 only 15.8 % of the registered trade unions from 12 states/union territories submitted returns to the concerned authorities. As the data pertains to responding states/UTs only, the number of registered trade unions reported by the Labour Bureau in the publication '*Trade Unions in India 2010*', show sharp fluctuations from year to year. For example, the figure for 2009 and 2010 is 22,284 and 18,602 only as against 95,783 and 84,642 for 2007 and 2008 respectively <sup>{Labour Bureau (2013, iii)}</sup>.

Since registration is not obligatory, it is not possible to get data on all unions on the basis of the administrative returns under the Trade Union Act. But the facts that all registered trade unions do not submit returns and all states do not send data to the centre, clearly shows that the data as reported and published are grossly incomplete.

The NSSO, in its surveys on employment and unemployment also captures information from workers of age 15 and above on their membership of any union/association. Union/association in NSSO surveys means any registered/recognised body whose membership is open to a section of those engaged in a specific activity or trade and whose main objective is to look into the interests of its members. Thus, besides the usual trade unions, this category also covers the association of owners, self-employed persons, etc. A report of the NSS 66<sup>th</sup> Round (2009-10) viz. 'Informal Sector and Conditions of Employment in India' <sup>{NSSO (2012, i)}</sup> presents the distribution of usual status workers of age 15 years and above by existence of union/association in their activity and its membership for each broad usual activity status including self-employed, casual labourers, self-employed workers and the regular wage/salaried employees. The NSSO Surveys, however, cannot get into details of the nature and structure or finance and activities of trade unions, as their main purpose is different.

## 4.7 Industrial Disputes

The Labour Bureau has been bringing out statistics on "Industrial Disputes, Closures, Retrenchments and Lay-offs in India" based on the voluntary returns received every month from the labour departments of the states and union territories and the regional labour commissioners, who are responsible for collecting the basic information in respect of the work stoppages from the affected primary units, whenever such occurrence of a work-stoppage becomes known either directly or from the supplementary sources like police records etc. They collect the required information in standard formats and furnish the same in consolidated monthly returns to the Labour Bureau.

The statistics on industrial disputes brought out by the Labour Bureau include information in respect of only those temporary work-stoppages, which include (a) strikes, (b) lockouts, and (c) *gheraos* followed by lockouts and involving 10 or more workers, whether directly and/or indirectly. Data is also presented on closures, retrenchments and lay-offs. The publication contains various important components of the statistics on Industrial Disputes such as, the number of disputes, duration of disputes, the number of workers affected, the number of man-days lost, wages lost, and the value of production loss, presented by various cross-classifications, including analysis of the work stoppages by months, by states/union territories and by industries, for the public and private sectors.

*The Indian Labour Year Book* also publishes figures of strikes and lockouts state-wise, with the number of workers involved and man-days lost. Industry division-wise statistics are presented showing the number of disputes, again with the number of workers involved and number of man-days lost. The Year Book also gives the break-up of the industrial disputes by their causes, separately for the disputes in the public sector and the private sector.

It is quite obvious that the statistics on various types and dimensions of industrial disputes are far from complete. First, the information would relate only to the establishments to which Industrial Disputes Act applies and where they are required to refer or report a dispute to the labour department. Second, returns are voluntary and not all incidences of disputes are reported. Third, all the state governments do not necessarily send returns regularly and completely. Fourth, collection of statistics is not necessarily looked upon by administration as important an objective as settlement of disputes and maintenance of peace.

## 4.8 Safety: Industrial Injuries

Under the Factories Act, 1948, statistics of injuries resulting from industrial accidents by reason of which persons affected are prevented from attending to work for a period of 48 hours or more immediately following the injury, are required to be reported to the Factory Inspectors. The Labour Bureau receives the data under the Act. The frequency rate of injuries is calculated by dividing the total number of injuries by the corresponding man-days worked in lakh. Incidence rates in terms of injuries per 1,000 persons employed are also compiled. The injuries/incidence and frequency rates are classified by type (fatal/non-fatal), by states, by industry groups and by causes.

Statistics relating to injuries in mines are compiled by the Director General of Mines Safety and published in the annual publication “Statistics of Mines in India”. The injuries/frequency rates are classified by type (fatal/non-fatal/serious), by the mineral to which the mine relates and by Causes. Fatal accidents are those in which at least one death is involved. Serious bodily injury is defined as any injury which involves or in all probability will involve, the permanent loss of any part or section of a body or the permanent loss of or injury to sight or hearing or any permanent physical incapacity, etc.

The statistics of injuries to railway employees resulting from work accidents are provided by the Railway Board. The figures relate to injuries to all railway employees which are inclusive of those due to the movement of trains and railway vehicles, train accidents and casualties on railway premises and workshops. A railway servant is considered as injured when injured in an accident or due to failure of railway equipment etc. and prevented from returning to work 48 hours after the occurrence of the accident

The Dock Workers (Safety, Health & Welfare) Act, 1986 is administered by the Directorate General Factory Advice Service and Labour Institutes (DGFASLI) of the Ministry of Labour & Employment. Under the Act, an accident which either causes loss of life to a dock worker or disables him from work on which he is employed for more than 48 hours following the accident, is a ‘reportable’ accident, for which notice is to be given to the Inspector in a prescribed form by the employers of the dock workers. The reported accidents are classified by type (fatal/non-fatal/serious) and by Causes. This information is furnished to the Labour Bureau by DGFASLI <sup>{Labour Bureau (2013, ii)}</sup>.

## 4.9 Social Security

**Data from Employment/Unemployment Surveys of NSSO:** Information regarding availability of social security benefits is collected in some detail from persons found to be workers, by usual status, in the NSSO Surveys on Employment and Unemployment. Besides the type and duration of job contract and eligibility for paid leave, the following information is collected about social security benefits:

- i. Availability of social security benefits: eligible for: only PF/ pension (i.e., GPF, CPF, PPF, pension, etc.); only gratuity; only health care & maternity benefits; only PF/pension and gratuity; only PF/pension and health care & maternity benefits; only gratuity and health care & maternity benefits; PF/pension, gratuity, healthcare & maternity benefits; not eligible for any of above social security benefits <sup>{NSSO (2013, ii)}</sup>.
- ii. It is noted that the design of the questionnaire does not provide a separate code for each benefit. As a result, the data collected cannot be analysed to yield information segregated by type of benefits and coverage of workers under specific benefits. Besides, data is not collected on the extent/quantum of benefits, their financing pattern, social security provider, etc.



**Data from Returns on Social Security Legislations and Schemes:** Statistics relating to social security provided to workers under various legal provisions are compiled by the Labour Bureau <sup>{Labour Bureau (2013, ii)}</sup>. Important among them are as mentioned below:

**i. Workmen’s Compensation Act, 1923**

Information relating to compensated injuries and the amount of compensation paid under the Workmen’s Compensation Act, 1923 is based on annual returns received under the Act, from state governments, Posts and Telegraphs and the Railway Board. As all the injuries are not compensated, the number of compensated injuries does not reflect the total number of injuries occurring. In establishments covered by the Employees’ State Insurance Act, compensation in respect of injuries is paid under that Act and not under the Workmen’s Compensation Act.

Labour Bureau has been bringing out reviews/reports on the working of the Act based on the returns received from state governments/union territories every year. The Act applies to workers employed in factories, mines, plantations, mechanically propelled vehicles, construction work and certain other hazardous occupations and specified categories of railway servants. Information is published on:

- i. Number of compensated accidents and the amount of compensation paid by the establishments submitting returns
- ii. Industry/establishment wise break-up of number of compensated accidents and the amount of compensation paid
- iii. Industry-wise accident rate per thousand workers employed, average amount of compensation paid and cost of compensated accidents per worker
- iv. Deposits and disbursements under Section 8 of the Employee’s Compensation Act, 1923
- v. Status of disposal of appeals

Many of the establishments covered by the Workmen’s Compensation Act fail to submit returns and hence information received by the state authorities about the number of compensated injuries and the amount of compensation paid is incomplete (average daily number of workers employed in establishments submitting returns declined from 17,12,127 in 2008 to 16,62,342 in 2009 and further to 10,63,802 in 2010)<sup>{WECA}</sup>. It may be noted that over the years, more and more establishments have shifted from Workmen’s Compensation Act to Employees’ State Insurance Act.

**ii. Maternity Benefit Act, 1961**

The central Act applies to every factory, mine or plantation and to Shops and Establishments in which 10 or more women workers are employed. The areas where Employees’ State Insurance Act has been implemented, the employers are absolved of their liability under the Maternity Benefit Act. The statistics are published state-wise in “Indian Labour Statistics”.

**iii. Employees’ State Insurance Act, 1948**

The ESI Act, 1948 provides medical care and cash benefits in the contingencies of sickness, maternity and disablement or death due to employment injury. The Act applies to non-seasonal factories using power and

employing 10 or more persons and non-power using factories employing 20 or more persons for wages. The appropriate governments are further authorised to extend it partially or wholly to any establishment, industrial, commercial, agricultural or otherwise. Under the enabling provision, the scheme has been extended to new classes of establishments such as theatres, cinemas, hotels, restaurants, motor transport undertakings and newspaper establishments employing 20 or more persons, employed directly by the principal employer and indirectly through an intermediate employer including a contractor, but does not apply to a person whose wages exceed Rs.15,000/- per month. State-wise number of factories and employees covered under the Employees' State Insurance Scheme and attendance (at dispensaries of insured persons), admissions, home visits and cash benefits paid under the Employees' State Insurance Act are published in "Indian Labour Statistics".

#### **iv. Employees' Provident Funds and Miscellaneous Provisions Act, 1952**

Under the provisions, a worker is eligible for membership at the time of joining the employment if getting wages up to Rs.6,500. The rate of contributions to the Provident Fund by the employees and the employers prescribed under the Act is 12 per cent in respect of 182 industries/classes of Establishments which are employing 20 or more employees (smaller establishments can also voluntarily participate in the Fund now) except in the case of certain specified industries, where the normal rate of contribution is 10%. State and industry-wise position of establishments and membership is published in "*Indian Labour Statistics*".

Details about contributions, investments, payments under the Act are collected and available with the Employees' Provident Fund Organisation (EPFO), which administers the Employees' Provident Fund Scheme of 1952 along with Employees' Deposit Linked Insurance Scheme, 1976 and Employees' Pension Scheme, 1995.

Thus, detailed data are available about the social security benefits available and received by workers in the establishments covered by the above acts. There is, however, no source which gives a consolidated picture of social security coverage and benefits from all enactments, schemes and programmes. EUSs of NSSO, as pointed out earlier, do provide an estimate of the coverage, but do not collect information on policy relevant aspects of the extent of benefits and financing of the scheme.

### **4.10 Skills**

The national surveys carried out by the NSSO are the only source providing information on educational achievements, skills acquired and the activity status of workers. Information on educational particulars of the individual household members has been collected regularly in all the quinquennial employment and unemployment surveys of the NSSO. In the NSS 60th round (Jan.-June, 2004), data on vocational training was collected for the first time, through the employment and unemployment schedule.

In the NSS 66th round (July 2009 – June 2010), NSSO collected data on educational particulars like educational level attained – both general and technical, current attendance in educational institution, type of institution, vocational training received/ being received, etc. from the household members NSSO<sup>{(2013, i)}</sup>. From each person of age 15 to 59 years, information on formal and non-formal vocational training received and formal vocational training being received was collected. For the formal vocational training received/being received, information on field of training, duration of training, source from where degree/diploma/certificate was received was also collected.

- i. **General educational level:** For all the individuals who were found to be literate, the general level of education was collected in terms of highest level of education successfully completed. The highest level of education successfully completed by each member of the household was decided by considering his/her all general/technical/vocational educational level and was recorded in terms of 12 categories viz. (i) not literate, (ii) literate without formal schooling, (iii) literate but below primary, (iv) primary (v) middle, (vi) secondary, (vii) higher secondary, (viii) diploma/certificate course, (ix) graduate, and (x) postgraduate and above.
- ii. **Technical educational level:** The highest level of technical education successfully completed by each member of the household was recorded in terms of categories as (i) no technical education, (ii) technical degree in agriculture/engineering/technology/medicine etc. (iii) diploma or certificate below graduate level in: (a) agriculture, (b) engineering/technology, (c) medicine, (d) crafts, (e) other subjects, and (iv) diploma or certificate equivalent to graduate and above level in: (a) agriculture, (b) engineering/technology, (c) medicine, (d) crafts, and (e) other subjects. Technical diploma or certificate in 'other subjects' included diploma or certificate in management, applied arts, etc.
- iii. **Vocational training:** A vocational training was broadly defined as a training, which prepared an individual for a specific vocation or occupation aiming at imparting training to persons in very specific fields through providing significant 'hands on' experience in acquiring necessary skill in the specific vocation or trade, which make them employable or create for them opportunities of self-employment.
- iv. **Formal vocational training:** The vocational training that took place in education and training institutions which followed a structured training programme and led to certificates, diplomas or degrees, recognised by state/central government, public sector and other reputed concerns was considered as formal vocational training.
- v. **Field of training:** For persons who received/were receiving vocational training, their field of training was also recorded from amongst (1) mechanical engineering trades , (2) electrical and electronic engineering trades, (3) computer trades, (4) civil engineering and building construction related works, (5) chemical engineering trades, (6) leather related work, (7) textile related work, (8) catering, nutrition, hotels and restaurant related work, (9) artisan/craftsman/handicraft and cottage-based production work, (10) creative arts/artists, (11) agriculture and crop production related skills and food preservation related work, (12) non-crop based agricultural and other related activities, (13) health and paramedical services related work, (14) office and business related work, (15) driving and motor mechanic work, (16) beautician, hairdressing & related work, (17) work related to tour operators/travel managers, (18) photography and related work, (19) work related to childcare, nutrition, pre-schools and crèche, (20) journalism, mass communication and media related work, (21) printing technology related work, and (22) other.

The tabulations *inter alia* present distribution of persons in the age group 15-59 who received/were receiving formal vocational training cross classified by field of training and broad usual principal activity status (whether employed, unemployed or not in labour force and broad occupation division in case of employed persons). The tables are also made available sex-wise and for rural and urban areas separately as well. It would be relevant to note that in employment and unemployment surveys of the NSSO, data is also collected on the occupation of workers and it should be possible to do appropriate tabulations of educational levels/ skills of workers and their occupations.

With the recent focus on development of skills to improve employability and productivity of workers and with the constitution of national mission and national authority for this purpose, importance of statistics on

skill status of labour force and skill requirements of employing sectors and activities has increased manifold. While information on skill status of the labour force is available from EUSs, though only once in five years, there is no source for comprehensive data on the emerging trends and composition of demand for skills.

## 4.11 Migration

The decennial Population Census and the NSSO Surveys are the main source of migration statistics. Census of India is the single largest source of data on migration characteristics for the people of India. Various surveys conducted by the NSSO are also the important sources of migration data.

**Population Census:** Migration in the Census of India is of two types – migration by birth place and migration by place of last residence. When a person is enumerated at a place different from her/his place of birth, she/he is considered a migrant by place of birth. A person is considered a migrant by place of last residence, if she/he had last resided at a place other than her/his place of enumeration. Question on ‘Reason for migration’ was introduced in the Population Census in 1981. The Census captures the following reasons for migration from place of last residence: work/employment, business, education, marriage, moved after birth, moved with household and any other.

**NSSO:** To assess the volume and structure of migration in India, NSSO has conducted a number of surveys to collect data on migration as part of its employment and unemployment enquiries since 1955 (9th round). The 64th round (July 2007-June 2008) of NSS was earmarked inter alia for survey on ‘Employment-Unemployment and Migration’. Information on various facets of employment and unemployment as well as on migration in India was collected through the employment-unemployment schedule <sup>{NSSO (2010)}</sup>. Regarding migration particulars, information was collected on household migration, out-migrants, migrants and seasonal short-term migrants using the following definitions:

- i. **Usual place of residence (UPR):** Usual place of residence of a person was defined as a place (village/town) where the person had stayed continuously for a period of six months or more.
- ii. **Migrant:** A household member whose last usual place of residence (UPR) was different from the present place of enumeration was considered as a migrant member in a household.
- iii. **Return migration:** A phenomenon in which the migrants return back to their earlier usual place of residence is termed as return migration. The phenomenon of return migration was captured through a question, whether the place of enumeration was usual place of residence (UPR) any time in the past.
- iv. **Short-term migrants:** Persons who had stayed away from the village/town for a period of 1 month or more but less than 6 months during the last 365 days for employment or in search of employment.
- v. **Out-migrant:** Any former member of a household who left the household, any time in the past, for stay outside the village/ town was considered as out-migrant provided he/ she was alive on the date of survey.

From each of the sample migrants, information on reason for migration, period elapsed since migration, location of last usual place of residence, usual activity pursued at the time of migration, whether a return migrant, etc., was collected. The reasons for migration recorded included:

- i. In search of employment: Persons, who were not already in employment at the time of leaving the last UPR, when migrated to another village/ town in search of employment were considered as migrated in search of employment.
- ii. In search of better employment: These included those persons who were employed at the time of leaving last UPR, but had come to the place of enumeration in search of better employment, in terms of emoluments, job satisfaction, etc.
- iii. To take up employment/better employment: This is different from the first two cases and relates to persons who had come to the place of enumeration to take up employment. These persons were not in search of employment but were offered jobs or were offered better jobs than the one they were having at the time of leaving last UPR.
- iv. Business: Those who had migrated to start a new business or due to shifting of the existing business were considered as migrated for business.
- v. Transfer of service/contract: Transfer of service/contract included persons who as part of the employment contract or service liability migrate from one place of posting to another.
- vi. Proximity to place of work: This included persons who had moved in order to be nearer to their places of work.

Migration statistics are available up to the district level from the Census data and up to state level from the National Sample Surveys. Migration is a variable on which data at an interval of five years can be regarded as adequate, as annual changes in migration trend and structure are not of much meaning for analytical and policy purposes.

#### **4.12 Contract Labour**

Contract labour has recently emerged as important form of employment. No comprehensive information on contract labour is available, either from official records or through any census or survey. Administrative reports on the **Contract Labour (Regulation & Abolition) Act, 1970**, are the only potential source of data on the subject. The Act aims at regulation of employment and conditions of work of workers employed through contractors. The Act applies to (i) every establishment in which 20 or more workmen are employed or were employed on any day in the preceding 12 months as contract labour and (ii) every contractor who employs or who employed 20 or more workmen on any day of the preceding 12 months. It does not apply to establishments where the work performed is of intermittent or seasonal nature. The work performed is not deemed to be of intermittent nature if it is performed for more than 120 days and of seasonal nature if performed for more than 60 days in a year. The Act also applies to establishments of the government and local authorities as well <sup>{NSSO (2013, iii)}</sup>.

Under the rules, every principal employer falling within the provisions of the Act as defined above, has to register the establishment and furnish annual returns and every contractor covered under the Act has to seek license and furnish half yearly returns giving details of nature of work carried out in the establishment, nature of work in which contract labour is employed, list of workmen employed by the contractor, number of days worked by each contract labour, daily wages, etc. with sex and age of the worker, daily hours of

work and man-hours of overtime worked, if payment made on weekly holidays and provision of facility of canteen/rest-room/drinking water/crèches/first-aid etc.

Therefore, from the official records, information regarding number of contract labour and particulars regarding their employment and wages and facilities provided to them should be available for the contract labour coming under the coverage of Contract Labour (Regulation and Abolition) Act, 1970. It is, however, observed that such information even if statutorily collected are not available in a consolidated form. The Director General of Labour Welfare, the authority responsible for administration of the Act at the Centre, reported 800 employers, 12,996 labour contractors and about 18.44 lakh contract workers in 2011-12. These figures, however, relate to the 'central sphere' only and do not include figures for states which obviously would be very large. States do not send and are not legally obliged to send information on the subject to the centre. But even if states are legally made to send information, it must be recognised that all employers and contractors fulfilling the conditions for registration, do not, in fact, register. Further, the contract labour is employed not only by those covered under the Act, a large number of other establishments and other employers also do so. Thus even full compliance of the Act will not yield complete count of contract labour.

### **Labour Bureau Surveys**

Labour Bureau has conducted several ad-hoc surveys in specified industries/establishments to collect information on employment, wages and earnings, working conditions, welfare amenities, social security provided by the contractors and details of jobs performed by contract workers but these surveys are mainly restricted to manufacturing and mining sectors and no aggregate estimates have been developed from these surveys.

**Annual Survey of Industries (ASI)** conducted by CSO gives estimates of number of contract labour and their wages in each year for the manufacturing sector but information relating to other characteristics of contract labour is not available from these surveys.

### **4.13 Child Labour**

Estimates of child labour, as persons below a certain age, defined as children in the work force, are available from Population Census, once in ten years and from NSSO EUSs generally once in five years, as these sources identify the activity status of persons by age. Estimates of children, below 14 years of age, working in activities legally prohibited under the Child Labour Act, resulting from actions under the Act, which depend on identification of such 'illegal employment' of children, cannot be taken as complete even in a situation of an effective implementation of the Act.

Data on child labour in the country is primarily available from the Census and the NSSO surveys. State-wise distribution of working children in the age group 5-14 years across gender, rural-urban areas, occupational categories etc. is available from the decennial Population Censuses. Distribution of persons by principal usual activity available from the NSSO quinquennial surveys on employment and unemployment also provides estimates of child workers in the age groups 5-9 and 10-14, gender-wise and separately for rural and urban areas.

The National Sample Survey Organisation (NSSO), in the fifth quinquennial survey on employment and unemployment, carried out during July, 1993 to June, 1994, attempted to generate an education and activity

profile of children (age-group 5-14 years). Information was collected on school attendance and participation in household chores and work related activities. To identify participation by a child in economic activity, instead of 'major time' criterion used in the 'usual' status approach, a 'reasonable regularity' criterion was adopted. A child was considered 'working' if he/she had spent some time, albeit nominal, in any 'work' with some regularity which might be seasonal. For children who were working, information on type of work pursued, whether working in manufacturing or building construction industry, reason for working and effect of work on studies at home and schooling were collected. Estimates were provided of children helping in household chores, distribution of working children by type of activity i.e., whether worked in household enterprise or as hired worker, further classified in agricultural and non-agricultural occupations and number of children whose work helped households economically <sup>{NSSO (1997)}</sup>.

To elicit information on children working in specific hazardous activities in manufacturing and building construction industry, the processes in which the children worked was collected. These were, *bidi* making, carpet weaving, cement mfg., cloth printing/dyeing and weaving, manufacture of matches, explosives and splitting, mica cutting and splitting, shellac mfg., soap mfg., tanning, wool cleaning, bldg. and construction industry, mfg. of slate pencils (including packing), mfg. of products from agate, mfg. process using toxic materials and, others.

Estimation of child labour poses a complicated and a multi-dimensional problem and is likely to suffer from under enumeration. Child labour being predominantly in agriculture in rural areas and in non-household industry, services, etc. in urban areas, the data needs to be collected through household survey in rural areas and an establishment approach in urban areas <sup>(MoLE,1999)</sup>.

#### **4.14 Employment in the Unorganized Sector**

Employment in 'unorganized' or 'informal' sector has assumed special significance in socio-economic analysis and policy making in recent years due to its persistent dominance in the economy, contrary to earlier expectations. No direct estimates are, however, available of the employment in the unorganized sector. Defining as employment in households and in private unincorporated enterprises, it is possible to estimate it on the basis of data collected in EUSs of the NSSO. In these surveys, information on the type of enterprise in which the persons are engaged is collected. The enterprises are broadly classified in the following categories:

- i. Proprietary
- ii. Partnership
- iii. Government/public sector
- iv. Public/private limited company
- v. Co-operative societies/ trusts/other non- profit institutions
- vi. Employer's households
- vii. Others

Besides, information is also collected on the number of workers in the enterprise, if a size criterion is chosen to identify an informal enterprise. Among these enterprises, proprietary and partnership enterprises are classified as informal sector enterprises. Besides collection of information on the characteristics of the enterprises essential for identification of informal sector, a set of probing questions relating to conditions

of employment are asked to those engaged in economic activities in the principal status and subsidiary status in the capacity of regular wage/salaried employment and casual status, to categories their jobs as informal or otherwise.

Thus it is possible to estimate ‘informal sector’ and ‘informal’ employment from the data collected under EUS. Defining unorganized (informal) sector as consisting of “all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis and with less than ten total workers”, National Commission for Enterprises in the Unorganised Sector, estimated around 86 percent of the Indian workforce to be in the informal sector in 2004-05. Further, defining informal workers as those without any employment security or employer-provided social security, about 93 percent of Indian workers were estimated to be in informal employment [NCEUS (2009)]. Extending the exercise further to the data from 2009-10 EUS, employment in the informal sector and informal employment have been estimated to be 84.2 and 91.2 percent respectively {Kannan, K P (2012)}.

A question can, however, be raised whether the respondent, a household head or member, who need not necessarily be the worker in question, can provide correct information of the characteristics of the enterprise including the employment size, in which the worker works. Is there any way to validate the estimates of employment in the unorganized/ informal sector arrived at on the basis of EUS data? These estimates are made by separating organized from unorganized sector; thus simultaneously providing estimates for the two. Estimates for the organized sector are also separately made by on the basis of the EMI data compiled by DGE&T of MoLE. The two estimates, however, are far from comparable. For example, for 2009-10, estimates based on EUS, using the NCEUS methodology would be 72.73 million while the DGE&T reports a total organized sector employment of around 28 million. Obviously either former is an overestimate or the latter an underestimate.

In NSS 67<sup>th</sup> round enterprise survey (July 2010 to June 2011), the subject coverage is exclusively of unincorporated non-agricultural enterprises in manufacturing, trade and other services, excluding construction. The main aim of this survey was to estimate the total number of enterprises, number of workers, gross value added per worker, fixed capital per enterprise, gross fixed capital formation (GFCF) per enterprise, outstanding loan per enterprise, capital productivity (GVA/Fixed Capital) and other operational/economic characteristics of enterprises.

For construction, there is hardly any enterprise survey at all.

## **5. Major Gaps and Limitations**

Gaps and limitations in the available statistics on different aspects of labour have already been identified in the preceding chapter while making subject-wise assessment. Here we have highlighted those relating to subjects of economy wide importance and need further elaboration with a view to arriving at clear recommendations.

### **5.1 Employment and Unemployment Statistics**

- i. Comprehensive information is available usually at an interval of five years from the NSSO, Employment and Unemployment Surveys (EUS), though NSSO conducted a survey in 2011-



12 only two years after quinquennial survey in 2009-10. Non-availability of data on employment and unemployment on a regular annual basis, no doubt, leaves little scope for monitoring the trend on a regular basis. For analytical purposes, availability of data once only in five years poses problems in deriving trends particularly when the year of survey is not a normal year, agriculturally or otherwise. Labour force, for example, is a variable primarily dependent on population and its size and its growth rate do not fluctuate sharply from year to year. Generally, it shows a secular trend. But labour force, as estimated using NSSO quinquennial surveys shows sharply different trend from one 5-year period to another, as seen in the following figures:

Period	Increase in labour force(million)		Annual growth rate (%)
	total	per year	
1993-94/1999-2000 (6 years)	27	4.5	1.2
1999-2000/2004-05 (5 years)	61	12.2	3.0
2004-05/2009-10 (5 years)	negligible	negligible	-
2009-10/2011-12 (2 years)	14.0	7.0	1.52

It is not clear whether such changes from one period to another reflect the trends or are a result of the abnormal conditions in the year of survey. In the absence of availability of data for continuous years, there is no way to find out.

- ii. Labour Bureau has been conducting surveys annually since 2010. For the year 2011-12, data are available from two sources: the NSSO and Labour Bureau. Two agencies conducting similar surveys not only involves avoidable cost, but also creates confusion in so far as estimates from the two vary. Even if the NSSO conducts surveys only once in five years and Labour Bureau annually, there will still be duplication in the year of NSSO survey. If surveys are conducted annually by one agency or the other, is a similar quinquennial survey required?
- iii. Need has also been felt of employment/unemployment estimates with a periodicity lower than one year, viz., on a quarterly basis, especially in the context of the volatility in the labour market arising out of global crises since 2008. Exercises to establish a system of data collection on a quarterly basis, including actual surveys on a pilot basis, have been carried out. A decision is yet to be taken and the issue whether it should only aim at capturing short-term changes in employment or should ultimately evolve as a full-fledged periodic labour force survey (PLFS) needs to be cleared. The content and coverage of the survey would depend on that decision.
- iv. It has been pointed out that the labour force surveys like the EUS of the NSSO tend to underestimate or not document adequately the workforce and labour force, particularly among women and women workers in the informal sector. For example, worker participation rate was estimated to be 38 per cent for persons and 25 per cent for women in rural India as per NSSO-EUS for 1999-2000 while these rates were estimated to be 61 and 58 respectively on the basis of the Time Use Survey (TUS) for 1998-99 conducted by CSO <sup>(Hirway & Jose, 2011)</sup>.

## 5.2 Estimates of Unorganized Sector Employment

- i. Separate estimates for unorganized sector employment are not available from any source. Nor can they be reliably made through an independent survey due to the absence of a suitable frame. They have to be seen as a sub-set of total employment estimates.

- ii. Conventionally, such estimates at the aggregate level have been derived by deducting organised sector employment reported by DGET, from the total employment estimated on the basis of EUS of NSSO. This method seems to overestimate the unorganized sector due to incomplete coverage of organized sector by DGET data.
- iii. Using the institutional sector, incorporation and size characteristics of enterprises (by and large following the ILO definition with a size cap of 10 workers) reported to be their employing establishments by the respondents in the NSSO-EUS, organized and unorganized sector employment have been separately estimated by National Commission for Enterprises in the Unorganized Sector (NCEUS) and others.
- iv. There is a vast difference between the estimates made on the basis of (ii) and (iii); the estimates of the organized sector employment by the two methods being 28 and 73 million respectively for 2009-10. There is urgent need to find ways to reconcile the two estimates and to arrive at firm and reliable estimates for the two segments of the economy and in different economic activity sectors.

### **5.3 Contract Labour**

- i. Employment of labour indirectly through contractors has increased rapidly over the past two decades in establishments in all sectors. This segment of labour not only has no job security but is also frequently denied equal wages and social security. Data relating to their number and characteristics are, therefore, required for evolving programmes for their welfare.
- ii. Data available at the moment seem to cover only a small proportion of contract labour employed in the economy. One source of data consists of returns from registered employers of contract labour and licensed labour contractors under the Contract Labour (Regulation and Abolition) Act. The Act applies only to employers/contractors with at least 20 contract workers. Only a small number seem to secure license. All those licensed do not provide regular returns as statutorily required. Annual Surveys of Industry (ASI) provides data on the number of contract labour employed. Here again, coverage of ASI, as explained earlier, is incomplete and reported number of contract labour is also likely to be lower than the actual.
- iii. There is no regular/ad-hoc survey that can give a comprehensive picture of employment of contract labour. NSSO-EUS provides information on self-employed, regular and casual categories, but not on the category of contract labour.

### **5.4 Rural Wages**

Data on wage rates in rural areas collected by NSSO and published by Labour Bureau on a regular basis relate to 18 agricultural and non-agricultural occupations. These occupations were selected way back in 1974. Since then the occupational structure of rural India has significantly changed and need, therefore, is strongly felt to revise the list of occupations. There also seems to be a duplication of effort in data on similar occupations using similar methodology being collected by Labour Bureau as well as by Directorate of Economics and Statistics, Ministry of Agriculture.

### **5.5 Earnings of the Self-Employed**

- i. Data on wages and earnings of wage-labour (regular and casual) are available from NSS-EUS for all workers in that category and, from several other sources in respect of different segments,

occupations and economic sectors. No information is, however, available on the earnings of the self-employed who constitute more than one-half of all workers.

- ii. NSSO survey of unorganized enterprises, in so far as it covers own-account enterprises, provides data on the basis of which some estimates can be made of earnings of the self-employed in manufacturing and service enterprises. But that is not comprehensive enough, as it leaves out agriculture and non-enterprise employment.
- iii. Two reasons why data on earnings of the self-employed are important are: one, for a comparison between wage-labour and self-employment, especially when for most workers in the latter category, earnings are primarily a return on their labour, as they use very little capital or other resources in their activity; and two, estimation of the number of the 'working poor' – an item on which ILO also compiles and publishes estimates internationally – who are in both wage labour and self-employed categories.

It may, however, be noted that the estimates of the 'working poor' can be and are being made by cross-tabulating activity status with consumption expenditure data, which is the basis on which poverty estimates, in general, are made at present. Yet, data on earnings of the self-employed, certainly need to be collected and if it involves more rigorous methodology, it could be independent of EUS and Consumer Expenditure Survey and may also have longer interval between the years of survey.

## **5.6 Administrative Returns versus Statistical Method of Data Collection**

An important issue that has not been adequately discussed in the context of collection of labour statistics in India is whether statutory and administrative returns required to be furnished by enterprises/employers/organizations, which at present constitute the source of data on many aspects of labour, can be relied upon for this purpose. In India, most labour laws apply only to establishments and that too, of a relatively larger size. All the establishments to which laws apply also do not furnish returns. Data compiled on the basis of their returns is not complete even for the entities to which the laws apply. Should the data collection on more and more aspects, therefore, not be increasingly done on the basis of survey/census by statistical agencies?

## **6. Some Issues at the State Level**

At the state level, the Bureau/ Directorates of Economics and Statistics are responsible for compilation of data on different aspects. Most of the statistics provided by these agencies are compiled on the basis of information, generally based on administrative reports and monitoring of development programmers by respective departments. They, however, also undertake special surveys and studies on certain aspects of the state's economy and society, on a regular or *ad hoc* basis. They also participate in the surveys undertaken on an all-India basis by national agencies like National Sample Survey Office, Central Statistics Office and Labour Bureau.

Statistics on labour is not a major area of activity of the state bureaux of economics and statistics. They participate in all-India surveys on Employment and Unemployment conducted by NSSO on quinquennial basis, which also has a state sample parallel to the central sample and some of them also generate state and lower (district) level statistics on some key labour force characteristics. They are also participating in similar annual surveys being conducted by Labour Bureau since 2010. They also report in their state level

publications such statistical data relating to labour, as is provided by the Department of Labour; but the items on which such information is given are limited and not uniform across the states.

Most labour statistics at the state level are collected, compiled and disseminated by and also submitted to the Ministry of Labour and Employment and its agencies, based on administrative reports and returns relating to different labour laws. It may be noted that the state governments administer/ implement about two dozen central and half a dozen state Laws. Administrative reports are based on the 'actions' taken by and/or reported to the labour departments {e.g. registration of 'principal employers' and 'contractors' under the Contract Labour (Regulation and Abolition) Act, registration and licences issued under Inter-State Migrant Workers Act, industrial disputes referred to the department under the Industrial Disputes Act, cases registered and dealt with under the Child Labour Act, etc.}. Statistics base on returns under Labour Acts relate to trade unions, factories, mines, plantations, motor transport, shops and commercial establishments, etc., on all of which registration statistics are separately available. It is observed that registration is far from complete even when statutorily required. In some cases, e.g., trade unions, it is not statutorily required. Actions by the authorities are not necessarily exhaustive enough to capture the incidence/ information completely (e.g. in the case of child labour). Further, whatever data get collected and compiled at the state level through this process, are also not all sent to the central government to enable it to prepare all India estimates. The state governments are not statutorily required to send such data to the Centre in some cases (e.g. contract labour) and not all states send them even when required. As per the Labour Bureau report (2012) on the trade unions, 10 out of 19 major states did not send returns or submitted defective returns for the year 2010. In most cases, data are not submitted on time, often involving a delay of up to two years. At the state level itself, they are not finalized even after two years (In one of the states visited, the 'At-a-glance Report' on The Achievements of the Labour Department, was available only for the year 2012 (up to January), in March, 2014!

Data are collected at the level of district/ sub-district, and are transmitted through district and regional/zonal offices to the state headquarters. No validation or assessment of data is done at different levels, but they are just aggregated and sent to higher levels. The process involves delays at various levels and it is further compounded because of dependence mainly on manual processing. Facilities for digital processing are not available at sub-district and district level and even at the zonal level, such facilities are available in some states only. Digitisation of registration, renewal and returns is being done in some states with much better results in coverage, completeness and timeliness of data at the state level.

Labour departments in most states lack statistical support. Most states have a senior officer designated as responsible for statistics –Deputy Commissioner (Statistics) or Officer on Special Duty (OSD) Statistics. This officer, who has no expertise in statistics, is expected to be supported by personnel from the state statistical cadre on deputation to the labour department. In most states, these posts of statistical officers have been lying vacant for several years. The reason mostly given is the shortage of statistical officers in general in the state due to limited number of or non-fulfilment of posts. Even when the statistical officers are in place at the state level, absence of statistical personnel at the lower level has handicapped smooth flow of data from these levels to the headquarters. Some states have now proposals to have such personnel at least up to the regional/zonal level.

Weaknesses of the system of labour statistics at the state level largely arise out of the nature and limitations of the labour administration system itself. First, the legal framework does not have universal application and, therefore, the coverage of action and statistics is often legally restricted. Second, even where

applicable, legal machinery is not able to attain complete coverage due both to the non-cooperation of enterprises and lack of adequate capacity of administration. Third non-submission of returns/statistics, even when returns are statutorily necessary is legally only a “minor” offence and the cost of non-compliance is negligible. Fourth, when statistics are based on action, they are dictated by the capacity and resources for action. Statistics on child, bonded and inter-state migrant labour often suffer from this limitation.

Based on the assessment and discussions, both at the central and state levels, it is quite clear that the issue of suitable mode of data collection – administrative action and returns in relation to labour laws or independent statistical surveys – needs to be closely examined on some aspects. Better effective coverage and administration of laws and ensuring near universal and timely returns can ensure comprehensive and reliable statistics and is probably also the preferable mode of data collection in some cases. In others, even the effective implementation of laws and regular reporting of action and submission of returns is not likely to result in complete and reliable statistics and independent surveys are necessary.

## **7. Recommendations**

Based on the assessment of the available statistics and identification of gaps and limitations attempted in the earlier parts, following recommendations are made towards improving coverage, quality and usability of data on different aspects of labour.

### **7.1 Labour Force, Employment and Unemployment**

- i. There is a widespread recognition of the need for availability of comprehensive and reliable data on employment and unemployment on annual basis. It is, therefore, recommended that the Employment and Unemployment Surveys may be undertaken on an annual basis.
- ii. Labour Bureau has, in fact, been conducting such surveys on an annual basis since 2010. For the year 2011-12, there are surveys both by NSSO and Labour Bureau. Cost and confusion resulting from such duplication must be avoided and annual surveys should be conducted by one or the other agency depending on their comparative strength and capability. If that requires strengthening of either agency that must be undertaken. Once, the system of regular annual surveys is in place, the NSSO quinquennial surveys on employment and unemployment should be discontinued. Instead there should be quinquennial surveys on other aspects, as are subsequently indicated in these recommendations.
- iii. The idea of a Periodic (quarterly) Labour Force Survey has found favour in recent years with recognition of the need to monitor short term changes in the labour market resulting primarily from global economic fluctuations. The process of conducting such a survey has already been initiated. At the moment it appears to be a somewhat limited exercise confined only to the urban areas. Once it gets well-established, the possibility of its becoming a full-fledged labour force survey, not only providing data on a quarterly basis but also capable of generating annual estimates, and thus replacing even the annual EUS, could also be explored, with a view to economizing on resources and avoiding duplication and confusion.
- iv. With a view to capturing multiple activities and often ‘invisible’ informal sector and household work recognized as productive in the new NAS, regular Time Use Surveys (TUSs), possibly with a quinquennial periodicity, may be conducted.

## **7.2 Wages and Earnings**

- i. Wage data covering all wage and salary earners are available at present only from NSSO-EUS generally conducted once in five years. Need for data on an annual basis is obvious both for analytical and policy purposes. Once EUS is conducted on an annual basis as recommended above, this need would also be met.
- ii. EUS covers several aspects of employment and, therefore, cannot get into as much details as a special wage survey. Such surveys are regularly conducted on rural and agricultural wages by Labour Bureau and Directorate of Economics and Statistics of Ministry of Agriculture. There appears a large commonality between the two surveys involving duplication of effort and cost. That needs to be examined and only one agency, preferably the Labour Bureau, which appears to have a better coverage and data collection set up, should be entrusted the task. Also, revision of the list of occupations which was decided upon almost four decades back, should be undertaken to reflect the socio-economic and occupational changes that have taken place in rural India. A Working Group appointed by the National Statistics Commission has also examined this issue and submitted its report.
- iii. Occupational Wage Surveys conducted by Labour Bureau are the only source of detailed occupation wise wage data for the non-agricultural sectors. Their coverage and periodicity require to be streamlined and regularized so that they generate regular data with wider coverage.
- iv. There has been frequent demand for collection of data on earnings of the self-employed, which constitute half of the workforce, parallel and comparable with the wages of the wage/salary earners in the EUS. Such data have also been projected as necessary and useful for estimating 'working poor' among the self-employed. For this purpose, however, use can be and has been made of the household consumption expenditure which is the commonly used basis for measuring poverty. Still non-availability of information on earnings of half the workforce is major gap in statistics. In view of the rigour that is required to collect information to arrive at earnings of the self-employed, it could be the subject of special survey once in five years, instead of a part of the regular EUS, which is being recommended to have an annual periodicity.

## **7.3 Social Security**

- i. Information on availability of any social security benefit by some major categories, as is collected in NSSO quinquennial EUS should continue to be collected in the proposed annual surveys.
- ii. Information on social security schemes their coverage and benefits as is available from the administrative/statutory returns/reports in respect of individual legislations, programmes and schemes should be compiled and consolidated by Labour Bureau with a view to providing a complete picture of the government provided/assisted social security coverage in the country.
- iii. A special survey should be conducted every five years covering all workers as in EUS, collecting details of all social security benefits, including their extent and financing, to get a complete picture of the coverage, extent and funding of social security for workers.

## **7.4 Employment in the Organized and Unorganized Sector**

- i. Estimates of employment in organized and unorganized sectors should result from the same source so as to be comparable with each other and the two together yielding estimates of

aggregate employment. The surveys on the lines of current EUS form the suitable frame for this purpose. Items of information likely to be used as criteria to separate organized (formal) from unorganized (informal) (e.g. institutional sector – public/private, registration/incorporation and size of enterprise employing the worker(s) of the respondent household) should be clearly comprehensible to the respondent, so as to minimize possibility of erroneous assignment of a worker to one or the other sector.

- ii. Coverage of data collection under EMIS must be made effective for the entire organized sector, namely, public sector plus all private establishments employing 10 or more workers by (a) making submission of returns compulsory for all establishments (instead of voluntary for establishments employing 10 to 24 workers as at present) and (b) bringing in all areas of the country within its purview (instead of leaving areas like metropolitan Mumbai and Kolkata out of it as at present). This will not only yield near total count of organized sector employment of DGET (which is officially reported as such by Government of India, e.g. in the Annual Economic Survey), but will also help in vetting estimates on organized and unorganized sector as derived from employment and unemployment surveys, by separating the two using the same criteria of institutional sector and size.

## **7.5 Contract Labour**

- i. Data on employment of contract labour in the establishments and by contractors covered by the Contract Labour (Regulation and Abolition) Act, all over the country, should be collected and compiled systematically by (a) improving implementation of the Act and enforcing compliance of return by principal employers and contractors, and (b) making it obligatory on the part of the state governments to submit the collected and compiled information to the relevant agency (DGLW) and Labour Bureau at the centre.
- ii. There is need, however, to have estimates of contract labour in different sectors of the economy including in establishments outside the purview of CLRA Act. In view of the difficulty in having a suitable frame for and soliciting cooperation for correct reporting from respondents in an establishment survey, it is preferable to collect information for such estimates from household surveys like EUS. In fact, basic background data about workers is already collected in these surveys; one only needs to add a module on conditions of their employment in the case of contract workers once identified as such. A working group appointed by the NSC has already examined the issue and made detailed recommendations on the subject.

## **7.6 Migration**

- i. In a dynamically changing economic and demographic geography, it is important to have reliable information with same regularity on migration. At present such data on migration are available from population census once in ten years. Tabulation of data, however, takes long time, almost five years. It should be possible to bring this time lag down to, say, less than two years.
- ii. Ten years, however, is too long an interval for data even for a variable like migration. NSSO has been including migration in some of its survey rounds. That is, however, not done with a fixed and regular periodicity. It would be desirable to have information on migration available once in five years, by conducting NSSO survey mid-way between the two population censuses.

## **7.7 Trade Unions**

- i. Data on trade unions as collected and compiled at present appear to be far from complete due to both legal framework and its enforcement and lack of interest and cooperation from the unions themselves. A statistical route to collect information on trade unions does not appear feasible both for the reasons of a lack of a frame and difficulties of getting cooperation from respondents. Information from workers (in household survey) about existence of union in the activity and their membership is already being collected in EUS.
- ii. Change in and better enforcement and compliance of the legal framework regarding registration, renewal and returns appears the only way to improve statistics on trade unions. Some states reported that there is a lack of cooperation from unions and even though submission of returns is statutorily necessary for the registered trade unions, they refuse to comply, often using their political connection and prowess. In any case, non-compliance with the statutory provision of submission of returns (in this as well as in the case of several other labour laws), is legally a 'minor offence' and penalties attached to it are negligible. It appears there is an urgent need to modify legal framework including the process and conditions of its enforcement. It also needs to be ensured that the states submit information to the centre regularly.

## **7.8 Industrial Disputes**

- i. Data are collected, compiled and published on items like work stoppages, strikes and lockouts, person-days lost etc. All these terms are legal in their connotation and information is reported only on events/episodes which receive legal cognizance. In other words, 'disputes' internally settled through negotiations/bargaining do not necessarily get reflected in statistics. Further submission of returns to authority at the state level and from state to Centre is far from regular. A re-look at the legal and procedural aspects of recording, reporting and onward submission of information and returns is necessary in order to improve the coverage and quality of statistics on industrial disputes.

## **7.9 Administrative Returns v/s Statistical Methods for Data Collection**

- i. Labour statistics on a large number of subjects are collected as a bye-product of the administration of labour laws. As illustrated by some of the cases described above, this method is seriously flawed as a source of comprehensive and reliable statistics. In some cases, it seems desirable to move to statistical method of a census or a survey for collecting comprehensive statistics, while continuing to improve legal framework and administration in the concerned subject sphere. At the same time, there are subjects in which improvement in framework and implementation of labour laws appears to be the only way to collect statistics. It is recommended that this issue is examined closely in respect of different aspects of labour, all of which are not dealt with in detail here.

## **7.10 Time Lag, Extent of Publication and Accessibility to Primary Data**

- i. There has been a significant improvement in the speed with which collected data are made available, in tabulated and published form. A system of releasing quick results/estimates has also been increasingly adopted. There is, however, still a large scope for improvements. Lack of equipment and personnel and bureaucratic procedures could be among the problems and they all need to be reviewed and modified.



- ii. It is not possible nor is it necessary to process, tabulate and publish all the data collected by the data producing agency. Different users have different interests and requirements for which primary data may be available, but not processed and published. It is important, therefore, that primary (unit level) data are accessible to users for tabulation and analysis to meet their specific requirements. The NSSO has over the years provided such accessibility in case of most of their surveys. Unit level ASI data are also now accessible. This practice must be extended to all the large scale survey data sets, as a rule. If necessary, a provision should be made in the Collection of Statistics Act to this effect.

## **7.11 At the State Level**

- i. It is necessary to strengthen the statistical machinery at the state level, in general and at the level of the departments of labour, in particular. The departments need to be equipped with statistics personnel adequately and permanently. Most state governments have a few positions of statistical officers at the headquarter level but in most cases they are not in position, often for years, as either because the statistics bureaux do not have enough posts or existing posts are not filled up, or labour departments are not necessarily a priority for posting. It is necessary that provision is made to have statistical support to labour departments not only at the headquarters but also at lower, divisional and district level, as quite often qualitative deficiencies and delays in transmitting data from the field are a result primarily of the lack of personnel to check, validate and forward them.
- ii. In most states, data are handled manually at the levels below the headquarters. In some states, where equipment have been provided at lower levels, the data transmission has been timely and better streamlined. Obviously, there is an urgent need of providing computing equipment both to the labour administration (producers of statistics) and data handling statistical personnel at all levels.
- iii. Similarly, the experience of introducing online registration, renewal and submission of returns in respect of some laws has brought forward extraordinary results in terms of coverage, enforcement, information collection and dissemination, including timely submission of returns/data to the centre, as was seen in the case of one of the states studied by us. It is recommended that all states adopt the online processes for registration and renewal and undertake digitization of data to improve both administration and data system. Efforts should be made to develop a state level portal of labour statistics in which labour statistics are regularly deposited and where monitoring of collection and submission of data are also undertaken.
- iv. Above measures for strengthening and streamlining labour statistics would require both technical and financial support from the centre. Attempt should be made to have a relatively large central/centrally-sponsored scheme and/or an internationally supported/funded technical assistance programme through an agency like the ILO, to give a boost to the effort.

## **7.12 Resources**

- i. Most of the above recommendations would require much larger human and financial resources than are presently available with the statistical system and agencies, either at MOSPI and MoLE, especially Labour Bureau, at the centre or with the statistics directorates at the state level. It is necessary that required funds are made available for the purposes of strengthening the labour statistics system so that comprehensive, timely and regular data are available for better planning and monitoring of socio-economic development and welfare of labour.

## Annexure I: Basic Information relating to Statistics on Important Labour Aspects

	Major Sources	Coverage	Method	Frequency	Approx. Time lag
<b>Labour Force, Employment/ Unemployment</b>	(i) NSSO Surveys Quinquennial EUS	All Labour Force, all sectors, all regions/states	Sample survey	Quinquennial	One year
	(ii) Labour Bureau Surveys	All sectors and regions/states; Population: age 15&above	Sample survey	Annual	Three months
	(iii) Population Census	--All states/districts/cities -- Main workers, marginal workers and non- workers, as defined	Census	Decennial	Two years
	(iv) EMI Programme of DGE&T	Organized sector; State-wise as well as industry-wise; some geographical exceptions in coverage	Administrative returns; partly collected on a voluntary basis	Annual	Two years
	(v) Annual Survey of Industries	Factory sector	Partly census and partly survey	Annual	Two years
	(vi) Economic Census, CSO	Establishments in non-farm sector	Census	Five conducted since 1977; 6 <sup>th</sup> in Progress	Two years
	(vii) Development Commissioner, Micro, Small and Medium Enterprises	Small scale industries	Census	Not regular; four conducted so far	Two years
Annual/daily earnings of workers	(a) Administrative returns on Payment of Wages Act	Workers employed in construction industry, civil and transport services, motor transport services, mines, plantations, oil fields, docks and factories	Statutory returns	Annual	Three years
Minimum wages	(b) Administrative Report of Working of Minimum Wages Act	Scheduled employments under Minimum Wages Act	Statutory returns	Annual	15 months
Rural wage rates	(c) All India regular Survey	18 agricultural and non-agricultural occupations involving manual work	Survey	Annual	One year
	(d) Occupational Wage Surveys	Selected occupations	Survey	Not regular	Varies
Wages/salaries of employees	(ii) Annual Survey of Industries, CSO	Establishments covered under the Factories Act	Survey	Annual	Two years
	(iii) Director General Mines Safety	Different mining industries in the country	Statutory returns	Annual	Four years
Average daily wage earnings	(iv) NSSO EUS	Casual labourers and regular wage/salaried employees; All-India	Survey	Generally quinquennial	One year
Agricultural wage rates	<b>(v) Directorate of Economics and Statistics, M/o Agriculture Regular surveys</b>	Selected occupations	Surveys-cum-returns	Monthly	Quarterly

<b>Consumer Price Indices</b>					
For industrial workers	<b>Labour Bureau</b>	All-India	Survey	Monthly	One month
For agricultural workers	-do-	All-India	Survey	Monthly	20 days
CPI(Rural/Urban/combined)	<b>CSO</b>	All-India	Survey	Monthly	12 days
<b>Labour Cost and Productivity</b>	<b>Annual Survey of Industries, CSO</b>	Factory sector	Survey	Annual	Two years
<b>Absenteeism</b>	-do-	-do-	-do-	-do-	-do-
<b>Trade Union Statistics</b>					
	<b>(i) Labour Bureau</b>	Registered Trade Unions	Statutory Returns	Annual	Three years
Workers membership of unions/associations	<b>(ii) NSSO EUS</b>	All workers	Household Survey	Quinquennial	18 months
<b>Industrial Disputes</b>	<b>Labour Bureau: administrative returns</b>	work-stoppages involving at least 10 workers	Voluntary Returns	Annual	Three years
<b>Safety And Social Security</b>					
Industrial Injuries in Factories, etc.	<b>(i) Labour Bureau : administrative returns</b>	Factories	Statutory Returns	Annual	Two years
Industrial Injuries in mines	<b>(ii) Director General Mines Safety: administrative returns</b>	Mines	Statutory Returns	Annual	One year
Social security	<b>Labour Bureau: administrative returns</b>	Social security provided under certain Statutes	Statutory Returns	Annual	Two years
<b>Skills</b>	<b>NSSO EUS</b>	All-India	Survey	Quinquennial	Three years
<b>Migration</b>					
	<b>(i) Population Census</b>	All-India	Census	Decennial	Five years
	<b>(ii) NSSO</b>	All-India	Survey	Not regular	Two years
<b>Contract Labour</b>					
	<b>(i) DGLW, Ministry of Labour and Employment</b>	Establishments and contractors employing 20 or more contract labour	Statutory Returns	Annual	One year
	<b>(ii) Annual Survey of Industries, CSO</b>	Factory sector	Survey	Annual	Two years
<b>Unorganised Sector</b>	<b>NSSO</b>	All-India: Enterprises in the unorganised non-agricultural sector	Survey	Not regular	18 months

## **ANNEXURE-II**

### **Consultations and Discussions**

#### **1. Ministry of Labour and Employment (Shram Shakti Bhawan, 5th February, 2014)**

##### **Participants**

- i. Dr. P.P. Mitra, Labour and Employment Adviser
- ii. Mr. Pravin Srivastava, Dy. Director General (Employment), Ministry of Labour and Employment
- iii. Mr. Debasish Choudhari, Dy. Director General, Ministry of Labour and Employment
- iv. Dr. Sher Verick, ILO

#### **2. Ministry of Statistics and Programme Implementation (21<sup>st</sup> March, 2014)**

##### **Participants**

- i. Dr. T.C.A. Anant, Secretary
- ii. Mr. A.K. Mehra, Director General, NSSO
- iii. Ms. S. Jeyalakshmi, Director General, CSO
- iv. Dr. G.M. Boopathy, Addl. Director General, Social Statistics Division, CSO
- v. Mr. K.K. Lamba, Dy. Director General, National Accounts Division, CSO
- vi. Mr. Rakesh Kumar, Dy. Director General, Co-ordination & Publication Division, NSSO
- vii. Dr. Praveen Shukla, Director, Social Statistics Division, CSO
- viii. Dr. Sher Verick, ILO

#### **3. Panel Discussion: Labour Statistics in India: Issues and Perspectives**

**55th Conference of the Indian Society of Labour Economics, Jawaharlal Nehru University, New Delhi, 18th December 2013, 9:00AM – 11:30AM**

##### **Participants**

**Chairperson:** Professor T.C.A. Anant, Chief Statistician and Secretary, Ministry of Statistics and Programme Implementation, Government of India, New Delhi

##### **Panelists**

- i. Dr. T.S. Papola, Panel Coordinator
- ii. Dr. K.P. Kannan, Ex-Director, CDS, Trivandrum
- iii. Dr. B.N. Goldar, Professor, Institute of Economic Growth, Delhi and Member, National Statistics Commission, Govt. of India
- iv. Dr. Sudha Deshpande, Professor (Retd.), Department of Economics, Mumbai University
- v. Dr. Ravi Srivastava, Professor, CSRD, Jawaharlal Nehru University, New Delhi
- vi. Dr. P.P. Mitra, Labour and Employment Adviser, Ministry of Labour and Employment, Govt. of India
- vii. Dr. Saraswati Raju, Professor CSRD, Jawaharlal Nehru University, New Delhi

And about 30 other participants.

**4. Consultation with Researchers, Gujarat Institute of Development Research (GIDR), Ahmedabad, 12th February 2014, 2:30 P.M.**

**Participants**

- i. Dr. N. Lalitha, Professor
- ii. Dr. Tara S. Nair, Associate Professor
- iii. Dr. Itishree Patnaik, Asst. Professor
- iv. Dr. Amrita Ghatak, Asst. Professor
- v. Dr. Partha Pratim Sahu, Associate Professor
- vi. Mr. Chandra Sekhar Vahinipati, Associate Faculty
- vii. Mr. Madhusudan Bandi, Asst. Professor
- viii. Dr. P.K. Viswanathan, Associate Professor

**5. Consultation with State Government Officials and others at Centre for Development Alternatives (CFDA) Ahmedabad, 12th February 2014, 5:00 P.M.**

**Participants**

- i. Dr. Indira Hirway, Professor and Director, CFDA
- ii. Mr. D.C. Bakshi, Deputy Commissioner, Labour, Government of Gujarat
- iii. Mr. Vishal Mandalya, Deputy Director (Statistics), Department of Labour, Government of Gujarat
- iv. Mr. P.M. Shah, Joint Director, Industrial Safety and Health, Department of Labour, Government of Gujarat
- v. Mr. P.H. Patel, Asstt. Director, Safety and Health, Department of Labour, Government of Gujarat
- vi. Mr. Vipul Pandya, General Secretary, Bandhakan Mazdoor Sangathan (Contract Labour Association), Ahmedabad

**6. Consultation with the State Government Officials, Karnataka, Office of the Labour Commissioner, Government of Karnataka, Banarhata, Bangalore, 15th February 2014, 11:00 A.M.**

**Participants**

- i. Ms. Anuradha, Deputy Labour Commissioner
- ii. Mr. Narsimhamurthy, Joint Labour Commissioner
- iii. Mr. Jinkalappa, Joint Labour Commissioner
- iv. Mr. Manjunath, Deputy Labour Commissioner
- v. Mr. Srinivas, Joint Labour Commissioner
- vi. Mr. V.K. Hegde, Managing Director, ZOOMIN Software Pvt. Ltd. (Consultant on digitisation of registration and returns)
- vii. Mr. M. Prakash, IAS, Labour Commissioner (separate meeting)

**7. Discussion with Planning Department, Government of Karnataka (Bureau of Statistics), in the office of Adviser, Planning, Govt. of Karnataka and some academics, 15th February 2014, 3:00 P.M.**

**Participants**

- i. Dr. M. Madheswaran, Advisor, Planning Department, Government of Karnataka
- ii. Mr. Rai, Director, Economics and Statistics
- iii. Mr. Subrahmany, Deputy Director, Economics & Statistics
- iv. Mr. Pani, Asstt. Director, Economics and Statistics
- v. Mr. R. Vasavaraju, Deputy Director, Grameen Research and Advisory Movement, An SVYM Initiative, Mysore (working on child labour)
- vi. Ms. Vani, Associate Professor, Institute for Social and Economic Change (ISEC), Bangalore

**8. Discussion with Scholars at University of Mumbai on the occasion of Conference on Growth and Equity, ICSSR Western Regional Centre, Mumbai, 4th March 2014, 5:00 – 7:00 P.M.**

**Participants**

- i. Dr. L.K. Deshpande, Former Professor, University of Mumbai
- ii. Dr. Sudha Deshpande, Former Professor, University of Mumbai
- iii. Dr. S. Mahendra Dev, Professor and Director, Indira Gandhi Institute of Development Research (IGIDR) Mumbai; Member, National Statistics Commission
- iv. Dr. K.P. Kannan, Former Director, CDS, Trivandrum and Member NCEUS, Govt. of India
- v. Dr. Praveen Jha, Professor, CESP, Jawaharlal Nehru University, New Delhi
- vi. Dr Alakh N. Sharma, Director, Institute for Human Development, New Delhi

**9. Consultations with State Government Officials, Government of Maharashtra, at Maharashtra Institute of Labour Studies, Parel, Mumbai, 5th March 2014, 11:00 A.M.**

**Participants**

- i. Dr. R. M. Tungare, Director, Maharashtra Institute of Labour Studies
- ii. Mr. V.S. More, Director, Industrial Safety and Health, Department of Labour, Govt. of Maharashtra
- iii. Mr. A.S. Jagdale, Manager, Industrial Count, Mumbai
- iv. Mr. Umesh Patil, Deputy Director, Boilers Directorate, Mumbai
- v. Mr. S.M. Kadam, Deputy Labour Commissioner, Mumbai
- vi. Mr. Sanjay Dhumal, Asst. Labour Commissioner, Maharashtra Labour Welfare Board, Mumbai

**10. Consultative Workshop on Labour Statistics, Giri Institute of Development Studies, Lucknow, 6th March 2014, 11:00 A.M.**

**Participants**

**a) Government Officials**

- i. Mr. G.S. Katiyar, Director, Economics and Statistics
- ii. Mr. R.C. Yadav, Deputy Commissioner, Labour Commissioner's Office, Kanpur
- iii. Ms. Alka Dhaundhiyal, Deputy Director, Economics and Statistics
- iv. Dr. S.N. Yadav, Deputy Director, Economics & Statistics
- v. Mr. Hemant Kumar, Economics and Statistics Officer, Directorate of Economics and Statistics
- vi. Mr. A.K. Rai, Asst. Director, Directorate of Census Operations, U.P.
- vii. Dr. S.S. Sharma, Asst. Director, Directorate of Census Operations, U.P.
- viii. Mr. Pradeep Kumar, Asst. Director, Directorate of Census Operations, U.P.
- ix. Mr. A.K. Pandey, FOD, NSSO, Lucknow
- x. Mr. U.P. Srivastava, FOD, NSSO, Lucknow
- xi. Mr. Pradeep Srivastava, Asst. Labour Commissioner, Labour Commissioner's Office, Kanpur

**b) Faculty/Research Staff of Giri Institute of Development Studies**

- i. Professor Surinder Kumar, Director
- ii. Dr. G.S. Mehta, Professor
- iii. Dr. Fahimuddin, Professor
- iv. Dr. R.P. Mamgain, Professor
- v. Dr. Nomita Kunur, Asst. Professor
- vi. Dr. Kavita Baliyan, Asst. Professor
- vii. Dr. R.C. Tyagi, Asst. Professor
- viii. Dr. Jaya K. Pandey, Senior Research Associate

**11. Consultative Workshop at Centre for Economic & Social Studies (CESS), Hyderabad, 18th March 2014, 11:00 A.M.**

**Participants**

**Chairperson:** Professor R. Radhakrishna, Chairman CESS and former Chairman, National Statistics Commission.

**State Government Officials**

- i. Mr. Dakshinamurthy, Director, Economics and Statistics
- ii. Mr. Vijaya Kumar, Deputy Director, Economics & Statistics

**Academics**

- i. Professor S. Galab, Director, CESS
- ii. Professor D.N. Reddy, ICSSR National Fellow
- iii. Dr. P. Prudhvikar Reddy, CESS
- iv. Professor Ravi, CESS
- v. Professor Vijay, University of Hyderabad

**Others**

- i. Mr. Murali Krishna, UNICEF/Formerly ILO

- ii. Dr. Madhusudan Bhattarai, ICRISAT

**12. Meeting at the Office of the Commissioner of Labour, Government of Andhra Pradesh, Hyderabad, 18th March 2014, 4:00 P.M.**

**Participants**

- i. Mr. Surya Prasad, Additional Labour Commissioner
- ii. Mr. Venkata Ramana, Statistics Officer





## References

- CSO. 2013. "Guide for Enumerators and Supervisors, Economic Statistics Division, Central Statistics Office", Ministry of Statistics and Programme Implementation, Government of India, India.
- \_\_\_\_\_. 2013a. "Summary Results for Factory Sector, Industrial Statistics Wing", Annual Survey of Industries, Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India, India.
- \_\_\_\_\_. 2013b. "National price indices and inflation during 2012", Central Statistics Office, Ministry of Statistics and Programme Implementation, Government of India, India.
- DGE&T. 2013. "Employment Review", Directorate General of Employment and Training, Ministry of Labour & Employment, Government of India, India.
- Hirway, I; Jose, S. 2011. "Understanding Women's Work Using Time Use Statistics: The Case of India", *Feminist Economics*, 17:4, 67-92.
- Kannan, K.P. 2012. "How Inclusive is Inclusive Growth in India?" *Indian Journal of Labour Economics*, Vol. 55, No. 1, January-March.
- Labour Bureau. 2012a. "Report on Employment and Unemployment Survey 2011-12", Ministry of Labour & Employment, Government of India, India.
- \_\_\_\_\_. 2012b. "Indian Labour Year Book 2009 and 2010", Ministry of Labour & Employment, Government of India, India.
- \_\_\_\_\_. 2013a. "Report on Absenteeism, Labour Turnover, Employment & Labour Cost", Annual Survey of Industries 2009-10, Ministry of Labour & Employment, Government of India, India.
- \_\_\_\_\_. 2013b. "Indian Labour Statistics 2011", Ministry of Labour & Employment, Government of India, India.
- \_\_\_\_\_. 2013c. "Trade Unions in India 2010", Ministry of Labour & Employment, Government of India, India.
- \_\_\_\_\_. 2013d. "Report on Employment and Unemployment Survey 2012-13", Ministry of Labour & Employment, Government of India, India.
- \_\_\_\_\_. 2014. "Wage Rates in Rural India", Ministry of Labour and Employment, Government of India, India.
- MoLE. 1999. "Report of the Study Group on Labour Statistics", Ministry of Labour, Government of India, India.
- MSME. 2007. "Fourth All India Census of Micro, Small & Medium Enterprises 2006-07", Unregistered Sector, Ministry of Small & Medium Enterprises, Government of India.
- NCEUS. 2009. "The Challenge of Employment in India-An Informal Economy Perspective", National Commission for Enterprises in the Unorganised Sector, India.
- NSC. 2001. "Report of the National Statistical Commission", Government of India, India.
- \_\_\_\_\_. 2012. "Report of the Committee on Unorganised Sector Statistics", National Statistical Commission, Government of India, India.
- NSSO. 1997. "Economic Activities and School Attendance by Children of India 1993-94", National Sample Survey Organisation, Department of Statistics, Government of India, India.
- \_\_\_\_\_. 2010. "Migration in India 2007-08", National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, India.
- \_\_\_\_\_. 2011. "Key Indicators of Employment and Unemployment in India 2009-10", National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, India.

\_\_\_\_\_. 2012a. “Informal Sector and Conditions of Employment in India 2009-10”, National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, India.

\_\_\_\_\_. 2012b. “Key Results of Survey on Unincorporated Non-agricultural Enterprises (Excluding Construction) in India-2010-11”, National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, India.

\_\_\_\_\_. 2013a. “Status of Education and Vocational Training in India- 2009-10”, National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, India.

\_\_\_\_\_. 2013b. “Key Indicators of Employment and Unemployment in India- 2011-12”, National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, India.

\_\_\_\_\_. 2013c. “Report of the Working Group on Survey of Contract Labour”, Survey Design & Research Division, National Sample Survey Office, Ministry of Statistics and Programme Implementation, Government of India, India.

RG&CSI. 2013. “Primary Census Abstract: Data Highlights: Series-1”, Registrar General and Census Commissioner, India.

WECA. 2010. “Report on the Working of the Employees’ Compensation Act, 1923”, Labour Bureau, Ministry of Labour & Employment, Government of India, India.