

## SECTION-I

### METHODOLOGY

#### *Introduction*

Federal Bureau of Statistics has been carrying out Labour Force Survey (LFS) since 1963. Along the way, the questionnaire and methodology of the survey have been undergoing pertinent improvements to keep current with best practices. The questionnaire was revised in 1990 to include probing questions on marginal economic activities, likely to be carried out mostly by women and tend to go unrecorded with conventional questions. The questionnaire was further improved in 1995 to reckon with the size and composition of migration and informal sector. The scope of the survey was extended in 2001-02 to take the stock of occupational safety and health of employed persons. The questionnaire was further articulated for undertaking 1<sup>st</sup> quarterly LFS 2005-06. This practice has since been continuing. The surveys conducted so far are given at Annexure-I.

2. This report presents annual results of LFS 2010-11. The survey's sample size comprises 36,464 households divided up into four distinct, nationally representative samples, each enumerated in a given quarter.

#### *Objectives*

3. The major aim of the survey is to collect a set of comprehensive statistics on the various dimensions of country's civilian labour force as a means to pave the way for skill development, planning, employment generation, assessing the role and importance of the informal sector and, sizing up the volume, characteristics and contours of employment. The broad objectives of the survey are as follows:

- To collect data on the socio-demographic characteristics of the total population i.e. age, sex, marital status, level of education, current enrolment and migration etc;
- To acquire current information on the dimensions of national labour force; i.e. number of persons employed, unemployed, and underemployed or out of labour market;
- To gather descriptive facts on the engagement in major occupational trades and the nature of work undertaken by the institutions/organizations;
- To profile statistics on employment status of the individuals, i.e. whether they are employers, own account workers, contributing family workers or paid employees (regular/casual);
- To classify non-agricultural enterprises employing household member(s) as formal and informal;
- To quantify the hours worked at main/subsidiary occupations;
- To provide data on wages and mode of payment for paid employees;
- To make an assessment of occupational health and safety of employed persons by causes, type of treatment, conditions that caused the accident/injury and time of recovery; and

- To collect data on the characteristics of unemployed persons i.e. age, sex, level of education, previous experience if any, occupation, industry, employment status related to previous job, waiting time invested in the quest for work, their availability for work and expectations for future employment.

### ***Reference Period***

4. Reference period is week i.e. seven days before the date of enumeration.

### ***Field Operation***

5. FBS is the national statistical organization responsible for collection, processing, compilation and dissemination of statistics. It has 34 Regional/Field Offices located all over Pakistan. These offices are equipped and manned with regular and trained field staff for the collection of data from the field.

6. In order to evolve dynamics of field enumeration in line with the survey's objectives, training is imparted to the concerned staff on interviewing techniques and other procedure to be used in the enumeration. For quality control, supervisors from Regional/Field Offices and headquarter, make frequent field visits to keep the collection process on track.

### ***Data Processing and Editing***

7. Soon after data collection, the supervisors edit, check and clean the filled-in questionnaires manually for consistency and completeness and refer back to field where necessary.

8. Editing and coding is done at headquarter by the subject matter section. Computer edit checks are applied to get even with errors identified at the stage of data entry. The relevant numerical techniques are used to eliminate erroneous data resulting from mistakes made during coding. The survey records are further edited and rectified through a series of computer processing stages.

### ***Sampling Plan***

9. ***Universe:*** The universe for Labour Force Survey consists of all urban and rural areas of the four provinces of Pakistan defined as such by 1998 Population Census excluding FATA and military restricted areas. The population of excluded areas constitutes about 2% of the total population.

10. ***Sample Design:*** A stratified two-stage sample design is adopted for the survey.

11. ***Sampling Frame:*** Federal Bureau of Statistics (FBS) has developed its own sampling frame for urban areas. Each city/town is divided into enumeration blocks. Each enumeration block is comprised of 200 to 250 households on the average with well-defined boundaries and maps. The list of enumeration blocks as updated through Economic Census 2003 and the list of villages/mouzas/dehs of 1998 Population Census are taken as sampling frames. Enumeration blocks & villages are considered as Primary Sampling Units (PSUs) for urban and rural domains respectively.

## ***Stratification Plan***

12. ***Urban Domain:*** Large cities Karachi, Lahore, Gujranwala, Faisalabad, Rawalpindi, Multan, Sialkot, Sargodha, Bahawalpur, Hyderabad, Sukkur, Peshawar, Quetta and Islamabad are considered as large cities. Each of these cities constitutes a separate stratum, further sub-stratified according to low, middle and high income groups based on the information collected in respect of each enumeration block at the time of demarcation/ updating of urban area sampling frame.

13. ***Remaining Urban Areas:*** In all the four provinces after excluding the population of large cities from the population of an administrative division, the remaining urban population is grouped together to form a stratum.

14. ***Rural Domain:*** Each administrative district in the Punjab, Sindh and Khyber Pakhtunkhwa (KP) is considered an independent stratum whereas in Balochistan, each administrative division constitutes a stratum.

15. ***Selection of primary sampling units (PSUs):*** Enumeration blocks in urban domain and mouzas/dehs/villages in rural are taken as Primary Sampling Units (PSUs). In the urban domain, sample PSUs from each ultimate stratum/sub-stratum are selected with probability proportional to size (PPS) method of sampling scheme. In urban domain, the number of households in an enumeration block as updated through Economic Census 2003 and village population of 1998 Census for rural domain is considered as measure of size.

16. ***Selection of secondary sampling units (SSUs):*** The listed households of sample PSUs are taken as Secondary Sampling Units (SSUs). A specified number of households i.e. 12 from each urban sample PSU, 16 from rural sample PSU are selected with equal probability using systematic sampling technique with a random start.

17. ***Sample Size and Its Allocation:*** A sample of 36,464 households is considered appropriate to provide reliable estimates of key labour force characteristics at National/Provincial level. The entire sample of households (SSUs) is drawn from 2580 Primary Sampling Units (PSUs) out of which 1204 are urban and 1376 are rural. The overall sample has been distributed evenly over four quarters independently. As urban population is more heterogeneous therefore, a higher proportion of sample size is allocated to urban domain. To produce reliable estimates, a higher proportion of sample is assigned to Khyber Pk and Balochistan in consideration to their smallness. After fixing the sample size at provincial level, further distribution of sample PSUs to different strata in rural and urban domains in each province is made proportionately. The distribution of sample PSUs and SSUs in the urban and rural domain of the four provinces is as under: -

### **SAMPLE SIZE AND ITS ALLOCATION**

(Nos.)

Province/ Area	Sample Enumeration Blocks/Villages (PSUs)			Sample Households (SSUs)		
	Urban	Rural	Total	Urban	Rural	Total
Punjab	524	612	1136	6288	9792	16080
Sindh	344	324	668	4128	5184	9312
Khyber Pk	176	256	432	2112	4096	6208
Balochistan	160	184	344	1920	2944	4864
<b>Pakistan</b>	<b>1204</b>	<b>1376</b>	<b>2580</b>	<b>14448</b>	<b>22016</b>	<b>36464</b>

## *Reliability of Estimate*

18. Notwithstanding complete observance of the requisite codes to ensure reliability of data, co-efficient of variations, computed in the backdrop of 5% margin of error exercised for determining sample size, are also given below to affirm the reliability of estimates.

### **COEFFICIENT OF VARIATION (CVs) OF IMPORTANT VARIABLES**

Characteristics/ Variables	Coefficient of Variation (Cvs) in Percentage						
	Pakistan	Rural	Urban	Provinces			
				Punjab	Sindh	Khyber Pk	Balochistan
Total Persons	0.55	0.15	0.63	0.71	1.11	1.23	1.18
Employed Persons	0.98	1.02	0.97	1.31	2.02	2.31	3.04
Employed Persons in Formal Sector	2.19	3.10	2.80	3.33	3.62	4.59	4.37
Employed Persons in Informal Sector	1.28	1.85	1.58	1.64	2.80	2.86	3.99
Literacy Rates	0.83	1.04	0.89	1.04	1.95	1.68	2.42
Household Size	0.39	0.50	0.60	0.49	0.76	1.10	0.90
Sex Ratio	0.45	0.55	0.75	0.63	0.75	1.13	1.20

## *Method of Data Collection*

19. Data are collected by direct interview method. Generally, the head of household is chosen to provide information about all members of the household. In case of his non-availability at the time of interview, some other informed member of the household down the line is interviewed. The total sample for the year is evenly distributed for enumeration on quarterly basis to offset the effect of seasonal variations. The information collected however relates to the week preceding the date of enumeration.

## *Coverage*

20. The survey covers all urban and rural areas of the four provinces of Pakistan defined as such by 1998 Population Census, excluding Federally Administered Tribal Areas (FATA) and military restricted areas. The population of excluded areas constitutes about 2% of the total population.

21. All sample enumeration blocks in urban areas and mouzas/dehs/villages in rural areas were enumerated except three sample areas (PSUs), due to law & order and recent flood. However, the number of sample households enumerated (36420) is high (equivalent) 99.9% of the total sample size) to the estimated sample size (36464).