METHODOLOGY

Introduction

Labour Force Survey (LFS) has, more or less, been a regular activity of the Federal Bureau of Statistics (FBS) since 1963. As an ongoing process to keep abreast with emerging standards, the survey's questionnaire was revised in 1990. Major improvements constitute the addition of probing questions on marginal economic activities that tend to go unrecorded with conventional questions and, are carried out by women presumably. The questionnaire was further improved in 1995 to reckon with the size and composition of migration and informal sectors. The scope of the survey was extended in 2001-02 to occupational safety and health as well. The questionnaire was further articulated to conduct the 1st ever quarterly representative LFS 2005-06.

2. The current LFS 2010-11-30th one in the series-is the sixth one being carried out on quarterly basis. For this purpose, the total sample size is evenly distributed into four distinct sub-samples, each to be enumerated in a given quarter. The quarterly sample is designed to chalk up national level estimates with rural-urban breakup.

Objectives and Coverage

3. The main aim of conducting LFS on quarterly basis is to provide lead assessment of a set of pivotal indicators of employment and literacy. It is pertinent to mention that quarterly estimates don't add up to annual estimates due to inter quarterly variation.

4. 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.

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 collection of data through censuses/surveys.

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 spot-checking the collection process.

Data Processing and Editing

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

8. Editing 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.

9. **Sampling Frame:** Federal Bureau of Statistics (FBS) has developed its own sampling frame for urban areas. Each city/town is divided into a number of enumeration blocks. Each enumeration block is based on 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 have been taken as sampling frame. Enumeration blocks and villages are considered as Primary Sampling Units (PSUs) from urban and rural domains respectively.

Stratification Plan

10. **Urban Domain:** 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.

11. **Remaining Urban Areas**: After excluding the population of large cities from the population of respective ex-administrative division, the remaining urban population of ex- administrative division from provinces is grouped together to form another stratum called other urban. Thus each ex-division in remaining urban areas in the four provinces constitutes a stratum.

12. **Rural Domain:** Each administrative district in the Punjab, Sindh and Khyber/Pk is considered an independent stratum whereas in Balochistan, each ex-administrative division constitutes a stratum.

13. **Universe:** The universe for LFS consists of all urban and rural areas of the four provinces of Pakistan defined as such by 1998 Population Census.

Sample Design

14. **Procedure:** A stratified two-stage sample design is adopted for the survey.

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 have been 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 and respective population of 1998 Census for a stratum is considered as measure of size.

16. **Selection of secondary sampling units (SSUs):** The constituent 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 have been selected with equal probability using systematic sampling technique with a random start.

17. **Sample Size and Its Allocation:** Methodologically, a sample of 9116 households is considered appropriate to provide reliable estimates of key labour force characteristics. The entire sample of households (SSUs) is drawn from 645 Primary Sampling Units (PSUs) out of which 301 are urban and 344 are rural. As urban population is more heterogeneous therefore, a higher proportion of sample size is allocated to urban domain. As a means to get 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	Enumeration Blocks/Villages (PSUs)			Sample Households (SSUs)		
	Rural	**Urban**	**Total**	**Rural**	**Urban**	**Total**
Punjab	153	131	284	2448	1572	4020
Sindh	81	86	167	1296	1032	2328
Khyber/Pk	64	44	108	1024	528	1552
Balochistan	46	40	86	736	480	1216
Pakistan	**344**	**301**	**645**	**5504**	**3612**	**9116**

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	Coefficient of Variation (Cvs) in Percentage
Total Persons	1.09
Employed Persons	1.95
Employed Persons by Formal Sector	4.40
Employed Persons by Informal Sector	2.68
Literacy Rate	1.67
Household Size	0.77
Sex Ratio	0.88

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 enumeration Blocks in urban areas and mouzas/dehs/villages in rural areas have been enumerated. The number of sample households 9072 (99.5% of the total sample) enumerated is less than the estimated sample size 9116 due to non-contact and refusal cases in urban and rural areas.