# METHODOLOGY

*Introduction*

Federal Bureau of Statistics has been carrying out Labour Force Survey (LFS) since 1963. As an ongoing process, the survey's questionnaire was revised in 1990. Major improvement constituted the addition of probing questions on particular economic activities that tend to go unrecorded with conventional questions, and are mostly carried out by women. 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 occupational safety and health as well. The questionnaire was further articulated in 2005 for the present LFS 2005-06, the 1st ever held on quarterly basis. The surveys conducted so far are given at Annexure-I.

2. This report presents the results of LFS 2005-06. The pertinent information has been collected from a sample of 32,744 households, divvied 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. The survey profiles information 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 specific 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 Pakistan's labour force; i.e. number of persons employed, unemployed, 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 institution/organization;

- To profile statistics on employment status of the individuals, i.e. whether they are employers, own account workers, unpaid family workers or paid employees (regular/casual);

- To classify non-agricultural enterprises employing household member(s) as formal and informal;

- To put figure on the hours worked at main/subsidiary occupations;

- To provide data on wages and mode of payment for paid employees;

- To quantify occupational health and safety of employed persons by causes, type of injuries/diseases occurred, parts of body injured, type of treatment received and period of absence from work; 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.

## *Field Operation*

4.      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.

5.      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*

6.      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.

7.      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.

8.      *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 1999-2000 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*

9.	***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.

10.	***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.

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

12.	***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. The universe is adjusted for the extent of coverage.

***Sample Design***

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

14.	***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.

15.	***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 random a start.

16.	***Sample Size and Its Allocation:*** Methodologically, a sample of 32744 households is considered appropriate to provide reliable estimates of key labour force characteristics. The entire sample of households (SSUs) is drawn from 2319 Primary Sampling Units (PSUs) out of which 1090 are urban and 1229 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 NWFP 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) | | |
|---|---|---|---|---|---|---|
| | Urban | Rural | Total | Urban | Rural | Total |
| Punjab | 524 | 612 | 1136 | 6288 | 9792 | 16080 |
| Sindh | 312 | 256 | 568 | 3744 | 4096 | 7840 |
| NWFP | 136 | 224 | 360 | 1632 | 3584 | 5216 |
| Balochistan | 118 | 137 | 255 | 1416 | 2192 | 3608 |
| **Pakistan** | **1090** | **1229** | **2319** | **13080** | **19664** | **32744** |

*Reliability of Estimate*

17.     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 | NWFP | Balochistan |
| Total Persons | 0.6 | 1.1 | 0.8 | 0.8 | 1.4 | 1.3 | 4.3 |
| Employed Persons | 0.9 | 1.2 | 0.8 | 1.1 | 1.8 | 2.4 | 5.1 |
| Employed Persons in Formal Sector | 1.9 | 2.4 | 3.1 | 2.8 | 3.1 | 4.9 | 8.1 |
| Employed Persons in Informal Sector | 1.3 | 1.9 | 1.9 | 1.7 | 3.0 | 3.1 | 6.1 |
| Literate Persons | 1.0 | 1.5 | 1.3 | 1.3 | 1.9 | 2.3 | 6.2 |
| Household Size | 0.4 | 0.6 | 0.5 | 0.5 | 0.8 | 1.1 | 1.1 |

*Method of Data Collection*

18.     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*

19.     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.

20.     All enumeration Blocks in urban areas and mouzas/dehs/villages in rural areas have been enumerated. The number of sample households (32,640) enumerated is less than the estimated sample size (32,744) due to non-contact and refusal cases in urban and rural areas.