

[Home](#) » [Technical Notes](#)

Technical Notes on the Labor Force Survey (LFS)

Release Date: Friday, May 4, 2012

GENERAL BACKGROUND

The stability and growth of a country's economy hinges on its ability to produce goods and services for both domestic and international use. Labor represents an important factor of production, hence, the improvement of the quality of the labor force and efforts to make it more productive and responsive to growth are necessary for the development of the economy. A clear knowledge and understanding of the size, composition and other characteristics of the segment of the population is a big step in this direction. A continuing supply of data on labor force is indispensable to national as well as regional planning.

OBJECTIVES OF THE SURVEY

The Labor Force Survey (LFS) aims to provide a quantitative framework for the preparation of plans and formulation of policies affecting the labor market.

Specifically, the survey is designed to provide statistics on levels and trends of employment, unemployment and underemployment for the country, as a whole, and for each of the administrative regions, including provinces and key cities.

SCOPE AND COVERAGE

Starting July 1987, the LFS uses a new questionnaire design and adopts modifications in the concepts and definitions for measuring labor force and employment characteristics. The design is based on a past week reference period and new concept of availability and looking for work is adopted.

The July 1996 round of the Labor Force Survey (LFS) adopted a new sampling design constructed from the listings of the recently concluded 1995 Census of Population. The number of sample households increased from 26,000 to an expanded sample of 41,000 households deemed sufficient to provide a more precise and reliable estimates at the provincial/key city levels.

CONCEPTS, DEFINITIONS AND EXPLANATIONS

This section presents the important concepts used in the LFS. Concepts and definitions mentioned in previous Integrated Survey of Households (ISH) series are in most cases the same as those in this one.

2.1 Barangay

A city or municipality is composed of several barangays, the smallest political subdivision in the country. For purposes of enumeration in the LFS, a barangay is considered the basic geographic enumeration area.

2.2 Urban - Rural Areas

The following guidelines used in the 1980 Census of Population and Housing (CPH) are adopted in classifying urban areas.

- a. In their entirety, all cities and municipalities having a population density of at least 1,000 persons per square kilometer.
- b. Poblaciones or central districts of municipalities and cities which have a population density of at least 500 persons per square kilometer.
- c. Poblaciones or central districts not included in (a) and (b) regardless of the population size, which have the following:
 - i. Street pattern, i.e., network of streets in either parallel or right angle orientation;
 - ii. At least six establishments (commercial, manufacturing, recreational, and/or personal services at least once a month).
 - iii. At least three of the following:
 - 1) A town hall, church or chapel with religious services at least once a month.
 - 2) A public plaza or cemetery
 - 3) A public plaza or building where trading activities are carried on at least once a month.
 - 4) A public building like school, hospital, puericulture and health center or library.
- d. Barangays having at least 1,000 inhabitants meeting the conditions set forth in (c) above, and where the occupation of the inhabitants is predominantly non-farming or non-fishing.

All areas not falling under any of the above classifications are considered rural.

2.3 Household

A household is an aggregate of persons, generally but not necessarily bound by ties of kinship, who live together under the same roof and eat together or share in common the household food. Members comprise the head of the household, relatives living with him, and other persons who share the community life for reasons of work or other consideration. A person who lives alone is considered a separate household.

2.4 Reference Period

The reference period for this survey is the "past week" referring to the past seven (7) days preceeding the date of visit of the enumerator or interviewer.

2.5 Employment Status Concepts

2.5.1 In the Labor Force or Economically Active Population. This refers to population 15 years old and

over who are either employed or unemployed in accordance with the definitions described below.

2.5.2 Employed. Employed persons include all those who, during the reference period are 15 years and over as of their last birthday and are reported either:

- a. **At work.** Those who do any work even for one hour during the reference period for pay or profit, or work without pay on the farm or business enterprise operated by a member of the same household related by blood, marriage or adoption; or
- b. **With a job but not at work.** Those who have a job or business but are not at work because of temporary illness/injury, vacation or other reasons. Likewise, persons who expect to report for work or to start operation of a farm or business enterprise within two weeks from the date of the enumerator's visit, are considered employed.

2.5.3 Underemployed. Underemployed persons include all employed persons who express the desire to have additional hours of work in their present job or an additional job, or to have a new job with longer working hours. Visibly underemployed persons are those who work for less than 40 hours during the reference period and want additional hours of work.

2.5.4 Unemployed. Unemployed persons include all those who, during the reference period are 15 years old and over as of their last birthday who have no job/business and actively looking for work. Also considered as unemployed are persons without a job or business who are reported not looking for work because of their belief that no work was available or because of temporary illness/disability, bad weather, pending job application or waiting for job interview.

2.5.5 Persons Not in the Labor Force. Persons 15 years old and over who are neither employed nor unemployed according to the definitions mentioned. Those not in the labor force are those persons who are not looking for work because of reasons such as housekeeping, schooling, etc. Examples are housewives, students, disabled or retired persons.

2.5.6 Determination of Employment Status. The employment status of persons 15 years and over is determined on the basis of answers to a series of inter-related questions which are described below:

- a. Did ____ do any work at all even for only one hour during the past week?. This question is asked to identify the employed persons. "Work at all" for purposes of this survey means that a person reported to his place of work and performed his duties/activities for at least one hour during the reference week. If a person reported that he did some work, not counting chores around the house, he is still considered in the employed category although most of his time was devoted to household chores. All persons not identified by the above question as employed are asked the following questions.
- b. Although ____ did not work, did ----- have a job or business during the past week?/ Some persons may not have work at all during the past week but may actually have jobs or businesses which they are temporarily not reporting to, as in the following cases: an employee on strike; a person temporarily laid off due to non-economic reasons like machine breakdown; a person with a new job to begin within two weeks from the date of interview; regular and temporary teachers, excluding substitutes, during summer vacation who still receive pay and who expect to go back to their jobs in the next school year. These persons are considered employed even though they are not actually at work.

c. Did _____ look for work at any time during the past week?. This question is asked to determine who among those who had no job/business had really done something to look for work. If a person looked for work, he or she is classified as unemployed, otherwise, the next question asked is to determine whether a person should be classified as unemployed or not in the labor force.

d. Why did _____ not look for work?. This question seeks to determine if the main reason for not looking for work is valid (see definition of unemployed) in which case the person is considered unemployed.

If the answer to this question is schooling, housekeeping, too young/old or retired/permanent disability or other reasons not considered valid, then the person is excluded from the labor force.

2.6 Work

Work means something a person does during the past week, for pay in cash or in kind, in any establishment, office, farm, private home or for profit or without pay on a family farm or enterprise. It also includes what a farm operator or member of the operator's family does on the farm operated by another household on exchange labor arrangement.

In addition to the above, any activity that a person does during the past week in relation to minor activities in home gardening, raising of crops, fruits, hogs, poultry etc., fishing for home consumption and manufacturing for own use are also considered work. However, there must be some harvest in the case of home gardening, raising of crops, fruits and nuts and gathering of wild fruits and vegetables; animals disposed of (sold, consumed, bartered or given away) or some catch in fishing in order that these activities will be considered work.

2.7 Occupation and Industry

The data on occupation and industry relates to the job held by employed persons during the past week. Occupation refers to the specific kind of work a person does while industry refers to the nature or character of the business or enterprise or the place wherein a person works. Persons employed at two or more jobs are reported in the job at which they worked the greatest number of hours during the past week.

The occupational and industrial categories used in the survey are the 1977 Philippine Standard Classifications recommended by the Statistical Advisory Board in its Resolution No. 3 - 76. The 1977 Philippine Standard Occupational Classification and the Philippine Standard Industrial Classification are the results of the coordinative and cooperative efforts of the Statistical Programs and Standards Staff of the National Economic and Development Board (NEDA) and Inter-Agency Committee on Philippine Standard Classification, NEDA.

2.8 Class of Worker

Employed persons are classified according to the following categories, namely:

Wage and Salary Workers include the following:

1. Worked for private household. These are employed persons working in a private household for pay, in cash or in kind. Examples are domestic helper, household cook, gardener, family driver.

2. Worked for private establishment. These are persons working in a private establishment for pay, in cash or in kind. This category includes not only persons working for a private industry but also those working for a religious group, missionary, unions, and non-profit organizations. Examples of persons working for a private establishment are public transport drivers who do not own the vehicle but drive them on boundary basis, persons working in public works projects on private contractors, dock hands or stevedores, cargo handlers in railroad stations or piers, etc.

3. Worked for government/government corporation. These are persons working for the government or a government corporation or any of its instrumentalities. This category of worker includes the following workers: chaplains in the Armed Forces of the Philippines, Filipinos working in embassies, legation, chancelleries or consulates of foreign government in the Philippines and those working in international organizations of Sovereign States of Governments like the United Nations (UN), World Health Organization (WHO), etc.

4. Worked with pay on own family-operated farm or business. These are members of the family who receives cash or fixed share of the produce as payment for his services in a farm or business operated by another member living in the same household.

Own-Account Workers include the following:

1. Self-employed. These are persons who operate their own businesses or trades and do not employ paid workers in the conduct of their economic activities. This category includes workers who worked purely on commission basis and who may not have regular working hours.

2. Employers. These are persons who employ one or more paid employees in the operation of their businesses or trades. Thus, domestic helpers, family drivers and other household helpers who assist in the family-operated business, regardless of time spent in this activity, are not hired employees in the enterprise/business. A farm or business proprietor who is assisted purely by such domestic help is not also considered an employer.

Unpaid Family Workers or Those Who Worked without pay on own family-operated farm or business. These are members of the family who assist another member in the operation of the family farm or business enterprise and who do not receive any wage or salary for their work. The room and board and any cash allowance given as incentives are not counted as compensation for these family workers.

2.9 Number of Hours Worked

Number of hours worked refers to the total number of hours a person actually worked in all the jobs/businesses that he held. It includes the duration or the period the person was occupied in his work, including overtime, but excluding hours paid but not worked. The normal working hours per day is the usual or prescribed working hours of a person in his primary job/business which is considered a full day's work.

2.12 Comparability with Related Data

The information presented herein are obtained from sample households. Differences observed among

corresponding figures obtained from a complete count or another independent survey using the same schedules and instructions are due to sampling variations and other biases not attributable to sampling. Due to the difference in primary sampling units, the employment data obtained from household surveys may differ from employment data based on reports from establishment surveys.

SURVEY DESIGN

3.1 Sampling Design

The sampling design of the Labor Force Survey adopts that of the Integrated Survey of Households (ISH) which uses the new master sample design starting July 1996. The multi-stage sampling design of the master sample consists of 3,421 PSU's in the expanded sample for provincial level estimates with a sub-sample of 2,219 PSU's designated as the core master sample for regional level estimates. The July 1996 Labor Force Survey was based on the expanded master sample.

3.1.1 Domains

The domain for the new master sample is similar to that of the previous ISH design with an addition of 23 newly created domains. The urban and rural areas of cities and municipalities with a population of 150,000 or more are considered as separate domains. The other urban and rural areas in each of the 77 provinces are likewise treated as separate domains. In view of the creation of ARMM and the separation of Marawi City and Cotabato City from Lanao del Sur and Maguindanao, respectively, the urban and rural areas of the two cities also form separate domains.

3.1.2 Sampling Frame

The frame for the first and second stages of sample selection were based mainly on the results of the 1995 POPCEN. The 1995 POPCEN list of barangays with the household and population counts is used in the first stage of sample selection. The stratification of barangays included in the frame, however, are based on the 1990 CPH and other administrative reports from the field offices of NSO.

The enumeration areas which constitute the secondary stage sampling units are those that were formed during the 1995 POPCEN.

Isolated barangays and/or barangays that are difficult and expensive to reach are excluded from the sampling frame. However, critical areas or barangays with peace and order problem which is generally temporary in nature are included in the frame.

The frame for the third stage of sample selection is the list of households from the 1995 POPCEN.

3.1.3 Stratification Scheme

Barangays in each domain were explicitly stratified by urbanity. Within the urban/rural barangay stratum in each of the provincial domains, the barangays were implicitly stratified by municipal district, serpentine ordering of the municipalities, and grouping of the barangay, based on accessibility and more or less similarity in socio-economic characteristics and religious background of the population. The implicit stratification ensured geographic coverage.

3.1.4 Sample Selection

The multi-stage sampling design of the master sample involves the selection of the sample barangays for the first stage, selection of sample enumeration areas or EAs for the second stage, and the selection of sample households for the third stage in each stratum for every domain.

The sample barangays were selected systematically with probability proportional to size from the list of barangays that were implicitly stratified. The preliminary count of households based on the results of the 1995 POPCEN was used.

The selection of sample EAs for the second stage was also done systematically with probability proportional to size. The EAs are those that were formed during the 1995 POPCEN. An EA is a physical delineated portion of the barangay. For barangays that were not divided into EAs, the barangay was treated as an EA.

The selection of sample households for the third stage was done systematically from the 1995 POPCEN List of Households.

3.1.5 Sample Size

The new master sample consists of an expanded sample of 3, 421 sample barangays (2,045 urban and 1,376 rural) to improve the precision of provincial-level estimates from the household surveys. A subsample of 2,219 sample barangays (1,330 urban and 926 rural) which has about 27,000 households is defined as the core master sample which will provide reliable survey estimates at the regional level as well as for the larger provinces.

3.1.6 Estimation Procedure

A. Calculation of Final Weights

The basic weight for the sample households in the July 1996 LFS can be expressed as in inverse of the probability of selection, as follows:

$$W_{hij} = \frac{N_h}{b_h \times N_{hi}} \times \frac{N_{hi}}{N_{hij}} \times \frac{N_{hij}}{n_{hij}} \times \frac{N_h}{b_h \times n_{hij}} = \frac{N_h^2}{b_h^2 \times N_{hi} \times N_{hij} \times n_{hij}}$$

where:

b_h = number of sample EA's selected in stratum h (domain city, other urban or rural, within province) for the expanded master sample

N_{hi} = number of households from the 1995 POPCEN frame in the i-th sample barangay in stratum h

N_h = total number of households from the 1995 POPCEN frame (cumulated measure size) from stratum h

N_{hij} = number of households from the 1995 POPCEN frame for the j-th sample EA in the i-th sample barangay in stratum h

n_{hij} = number of sample households selected in the j-th sample EA in the i-th sample barangay in stratum h for the July 1996 LFS (fixed at 12)

Since the sample households for the July 1996 LFS were selected directly from the 1995 POPCEN frame, the basic weight is the same for all households within the stratum (that is, the sample is self-weighting within stratum). However, after the basic weight is adjusted for nonresponse, the weights may vary slightly by sample EA within stratum.

The basic weights need to be adjusted to take into account the sample EA's which were not enumerated, as well as the household non-interviews, followed by an adjustment based on the population projections for the domain. Therefore the weight adjustment will be carried out in three stages for the LFS data.

(1) Weight Adjustment Factor for Sample EA'S Which Were Not Enumerated

The first stage weight adjustment will be carried out at the stratum level (domain city, other urban or rural, within province). This adjustment factor (A_{ih}) will be based on the number of sample EA's selected in the stratum (b_h) divided by the number of sample EA's actually enumerated:

$$A_{ih} = \frac{b_h}{b_h'}$$

Using this adjustment factor is equivalent to substituting b_h with b_h' in the formula for the weight specified earlier, as if b_h' sample EA's had been selected in stratum h instead of b_h .

(2) Weight Adjustment Factor for Noninterview Households

In adjusting the weights for noninterview households, it is necessary to distinguish valid non-interviews (refusals, not at home) from selected units which are out-of-scope (vacant or demolished housing units), and whether or not they were replaced. In the case of households which could not be located, it will be assumed that they are valid households for estimation purposes; however, in future surveys the interviewers should make a strong effort to determine the status of such households. For the July 1996 LFS, the interviewers were instructed to replace any sample household which could not be located with a household from the list of selected replacement households which they were given. However, they were not always able to replace such households. Also, in a few cases the enumerators replaced households which refused to be interviewed, were not at home, or the housing unit was vacant.

The second stage weight adjustment factor for non-interview households will be carried out at the level of the sample EA. This adjustment factor can be defined as follows:

$$A_{2hij} = \frac{n_{hij}'}{n_{hij}''}$$

n'_{hij} = number of valid households selected for the survey in the j -th sample EA in the i th sample barangay in stratum h (excluding demolished or vacant housing units); for the July 1996 LFS, this would be equal to 12 minus the number of sample households which were not interviewed.

n''_{hij} = number of households with completed survey interviews in the j -th sample EA of the i -th sample barangay in stratum h (that is, n_{hij} minus the number of valid noninterview households which were not

replaced); for the July 1996 LFS, this would be equal to 12 minus the number of sample households which were not interviewed.

(3) Weight Adjustment Factor Based on Population Projection

In order to adjust the survey estimates of total population for each domain to reflect changes in the population over time, a final adjustment factor can be applied at the domain level, based on the best population projections for the corresponding reference period. It should be noted that this adjustment should only be carried out for higher-level domains for which good population projections are available. The population projections at the national and regional levels should be fairly reliable. However, the reliability of demographic projections tends to decrease for lower levels of disaggregation, since updated information on the differential fertility, mortality and migration rates may not be available for lower-level geographic areas. For this reason the weights for the 1995 FPS were only adjusted at the regional level. Although the LFS used population projections at the provincial and city levels in the past, the NSO should verify the reliability of these projections before deciding to continue using this estimation methodology. Otherwise, it is recommended to adjust the weights at the regional level.

Before the final adjustment of the weights based on population projections, it is necessary to carry out a preliminary adjustment of the weights to take into account the non-enumerated EA's and noninterview households. In the case of the LFS, the weights would be adjusted as follows:

$$W_{hij}' = W_{hij} \times A_{1h} \times A_{2hij}$$

As described in the 'Weights and Estimation Procedures' specifications, these preliminary weights will be used to calculate from the survey data the weighted number of persons in each domain (15 years or older, and less than 15 years). For each domain and age group, the final weight adjustment factor would be calculated as follows:

$$A_{dg} = \frac{X_{dg}^p}{X_{dg}'}$$

where:

A_{dg} = last stage weight adjustment factor for the sample survey records for persons in age group g for geographic domain d

X_{dg}^p = projected number of persons in age group g for geographic domain d

X_{dg}' = preliminary weighted estimate of the total number of persons in age group g for geographic domain d, from the LFS data

3.1.7 Geographic Area Coverage

For most part, statistics have been limited to the socio-economic data at the national level. It is very evident though that there is the need for information at the local level. In this regard, the LFS sample design has been drawn in such a way that accurate lower level classification would be possible.

3.2 Questionnaire Design

The items of information presented in this report were derived from a structured questionnaire covering demographic and economic characteristics of individuals. Refer to Appendix C for detailed information on the items included.

3.3 Method of Collection

Personal interview is deemed most applicable for the LFS owing to the complexity of the questionnaire, the details required, and the level of education of respondent in sample households.

NSO Statistical Coordination Officers/Assistants (SCOs/ASCs) and Statistical Researchers served as interviewers during the operations. Supervision and monitoring of survey operations were done by the Regional Administrators/Provincial Statistics Officers of NSO, most of whom have experience and have undergone training on various types of surveys and censuses.

3.4 Data Processing

Data processing involves two stages: manual processing and machine processing. Manual processing refers to the manual editing and coding of questionnaires. This is done prior to machine processing which entails code validation, consistency checks as well as tabulation.

Enumeration is a very complex operation and oftentimes it happens that accomplished questionnaires have some omissions and implausible or inconsistent entries. Editing is meant to correct these errors. For purposes of operational convenience, field editing is usually done. The interviewers are required to review the entries at the end of each interview. Blank items which are applicable to the respondents are verified and filled out. Before being transmitted to the central office, all questionnaires are edited in the field offices.

Coding, the transformation of information from the questionnaire to machine readable form, is likewise done in the field offices.

Machine processing involves all operations that are done with the use of a computer and/or its accessories, that is, from data encoding to tabulation. Coded data are usually in such media as tapes and diskettes.

Machine editing is preferred to ensure correctness of encoded information. Except for sample completeness check and verification of geographic identification which are the responsibility of the subject matter division, some imputations and corrections of entries are done mechanically.

Further machine processing for this round, is done at the central office of the National Statistics Office.

ITEMS/VARIABLES GATHERED

For All Persons

- Relationship to the Household Head
- Age as of Last Birthday
- Marital Status

- Highest Grade Completed

For Employed Persons

- Main Activity/Usual Occupation During the Past Twelve Months
- Primary Occupation
- Kind of Industry/Business
- Class of Worker
- Nature of Employment
- Normal Working Hours Per Day During the Past Week
- Total Hours Worked During the Past Week
- Whether Wanting More Hours of Work

For Persons Who Had No Job/Business

- Job Search Method
- Number of Weeks Looking for Work

Tags:

[Technical Notes](#)

Like { 1

[About Us](#)

[Contact Us](#)

[Site Map](#)

[Privacy Policy](#)

[Terms of Use](#)

[International Links](#)

