

I. ABOUT THE DATA

A. OBJECTIVE/S OF THE SURVEY

The 2017/2018 Integrated Survey on Labor and Employment (ISLE) aims to generate integrated data sets on: (1) unionism and collective bargaining, (2) employment of specific groups of workers, (3) occupational shortages and surpluses, (4) training of workers, (5) productivity improvement and gainsharing practices, (6) employees' compensation program, (7) occupational safety and health practices, and (8) occupational injuries and diseases.

B. MAIN TOPICS COVERED BY THE SURVEY

Main topics covered by the survey are total employment by category of workers and specific groups of workers; outsourcing/contracting out activities within and outside the premises of establishments; occupational shortages and surpluses; training of workers; productivity improvement and gainsharing practices; employees' compensation program; occupational safety and health practices; and extent of occupational injuries and diseases..

C. USES OF THE DATA

Generated data will be used as inputs to studies on industry trends and practices and serve as bases for the formulation of policies on employment, conditions of work and industrial relations. To some extent, the survey results will also be used to assess the progress of decent work in the country.

D. REFERENCE PERIOD

The reference periods for the 2017/2018 ISLE are as follows:

- Part I: General Information – As of June 30, 2018
- Part II: Unionism and Collective Bargaining – June 30, 2018
- Part III: Employment – June 30, 2018
- Part IV: Occupational Shortages and Surpluses – July 1, 2017 to June 30, 2018
- Part V: Training of Workers – Calendar Year 2017
- Part VI: Productivity Improvement Program and Gainsharing Practices – Calendar Year 2017
- Part VII: Employees' Compensation Program – Calendar Year 2017
- Part VIII: Occupational Safety and Health Practices – Calendar Year 2017
- Part IX: Occupational Injuries and Diseases – Calendar Year 2017

E. PERIODICITY (FREQUENCY)

Every 2 years

F. COVERAGE OF THE SURVEY

Geographical: The whole country.

Industrial: Agricultural and non-agricultural industries except: central banking; public administration and defense and compulsory social security; public education services; public medical, dental and other health services; and activities of membership organizations, households as employers of domestic personnel, and extra territorial organizations and bodies.

Establishments: Agricultural and non-agricultural establishments employing 20 persons or more.

Persons: All employed persons.

G. CONCEPTS AND DEFINITIONS

UNIONISM AND COLLECTIVE BARGAINING

Establishment refers to an economic unit engaged in one or predominantly one kind of economic activity under a single ownership or control at a single fixed location, e.g., mine, factory, store, bank, etc. *(Based on ASPBI Concepts and Definitions)*

Union is defined as any registered group or association of employees that exists in whole or in part for the purpose of collective bargaining or dealing with employers concerning terms and conditions of employment. It also refers to a union whose registration is still in process as of reference date.

Collective Bargaining Agreement (CBA) refers to the negotiated contract between a legitimate labor organization and the employer concerning wages, hours of work, and all other terms and conditions of employment in a bargaining unit, including mandatory provisions for grievance and arbitration machinery.

Bargaining Unit is defined as a group of employees sharing mutual interest within a given employer, composed of all or less than all of the entire body of employees in the employer unit or any specific occupational or geographical grouping with such employer unit.

Labor Management Cooperation/Committee/Council (LMC) is defined as a state of relations where labor and management worked hand-in-hand to accomplish certain goals using mutually acceptable means.

EMPLOYMENT

Employment - persons who worked or received pay from the establishment.

Include:

- *working owners with or without regular pay*
- *salaried directors, managers and executives*
- *regular and non-regular workers, e.g., probationary, casual, contractual/project-based, seasonal and paid apprentices/learners*

- *workers on paid vacation, sick, maternity, paternity, service incentive leave and other paid leaves*
- *persons working away from the establishment, but paid by and under its control, e.g., bus drivers*
- *workers on strike/lockout*
- *unpaid workers without regular pay who work for at least 1/3 of the working time normal to the establishment*

Exclude:

- *silent or inactive partners*
- *members of the board of directors paid solely for attendance at meetings*
- *consultants, persons on retainer basis, contract out/agency hired workers, homeworkers*
- *workers on indefinite leave, laid off workers for six (6) months or more*
- *workers paid purely on commission without employer control*
- *students under on-the-job training (OJT)*

Working Owners - working owners who are already engaged in the management of the establishment but do not receive regular pay.

Unpaid Workers - persons without regular pay who work for at least one-third of the working time normal to the establishment.

Paid Employees - categorized into:

- *Managers and Executives* - workers whose main responsibilities are to determine and formulate policies and plan, direct, control and coordinate the activities of enterprises and organizations, or their internal departments or sections. Working owners receiving regular pay are included;
- *Supervisors/Foremen* - workers whose main responsibilities are to plan, direct, organize and supervise the daily activities of workers in the section or unit concerned with the production of goods or the provision of services, subject to the general directive of managers; and
- *Rank and File Workers* - workers who do not fall within the managerial or supervisory classification of employees. These consist of:

i. Regular Workers - workers hired to perform activities which are usually necessary or desirable in the usual business or trade of the employer and usually worked on permanent status; and

ii. Non-Regular Workers - consist of:

- *Probationary Workers* - workers on a trial period during which the employer determines their fitness to qualify for regular employment, based on reasonable standards made known to them at the time of engagement;
- *Casual Workers* - workers whose work is not usually necessary and desirable to the usual business or trade of the employer;

- Contractual/Project-based Workers - workers whose employment have been fixed for a specific project or undertaking, the completion or termination of which has been determined at the time of engagement. Workers hired through agencies/contractors are excluded;
- Seasonal Workers - workers whose employment, specifically its timing and duration, is significantly influenced by seasonal factors, e.g., Christmas; and
- Apprentices/Learners - workers covered by TESDA apprenticeship/learnership programs who are paid at least 75% of the minimum wage.

Age group - refers to classification of workers according to age bracket as follows: 15-24, 25-34, 35-44, 45-54, 55-64 and 65 years and over.

Persons with disabilities (PWDs) – refer to workers who have physical, mental or sensory impairments which may hinder their full and effective participation in the workplace on an equal basis with others.

Workers Paid the Exact Minimum Wage - workers who are paid the applicable minimum wage rates fixed by the Regional Tripartite Wages and Productivity Boards.

Time-rated Workers – refer to workers paid on the basis of a time unit of work such as an hour, a day or a month.

- Full-time workers – refer to workers who work at jobs with hours of work equal to or more than those considered as normal or regular to the establishment;

Part-time Workers - workers who work at jobs which provide less than the working time normal to the establishment.

Commission Workers - categorized into:

- With basic pay and commission - persons working for the establishment who receive a basic pay plus a certain percentage of money received for a transaction. They are on the regular payroll of the establishment and are included in its total employment (e.g., sales representatives);
- Purely on commission with employer control and supervision - persons working for the establishment who are paid purely on the basis of a certain percentage of money received for a transaction. They are under employer control and supervision and are on the regular payroll of the establishment, and are included in its total employment; and
- Purely on commission without employer control - persons working for the establishment who are paid purely on the basis of a certain percentage of money received for a transaction. They are outside employer control and are not on the regular payroll of the establishment, and are excluded in its total employment (e.g., insurance underwriters).

Output-rated Workers - persons whose pay is in relation to their output, i.e., piece-rate, quota, “pakyao” or task.

- *Piece-rated Workers* - workers who are paid on the basis of the number of units produced rather than the time spent in production. Production standard (quota), “pakyao” or “takay”, task, commission workers and homeworkers are excluded.
- *Production Standard (quota) Workers* - workers whose performance is measured based on an imposed minimum amount or quantity of production for a given period, usually eight (8) hours. Piece rate, “pakyao” or “takay”, task, commission workers and homeworkers are excluded.
- *“Pakyao” or “Takay” Workers* - workers whose job or work to be performed is in bulk or volumes which are difficult to quantify (commonly practiced in the agricultural industry). Piece rate, production standard (quota), task, commission workers and homeworkers are excluded.
- *Task Workers* - workers who are paid for performing specific work irrespective of the time consumed. Piece-rate, production standard (quota), “pakyao” or “takay”, commission workers and homeworkers are excluded.

Workers who Work on Evening/Graveyard Shifts - workers who work on shifts that wholly or partly cover the 10:00 P.M. to 6:00 A.M. window.

Outsourcing or Contracting out - refers to an arrangement whereby a principal agrees to put out or farm out with a contractor in the performance or completion of a specific job, work or service within a definite or predetermined period, regardless of whether such job, work or service is to be performed or completed within or outside the premises of the principal.

Workers Hired through Agencies/Contractors - workers employed by the contractors to perform or complete a job, work or service pursuant to a service agreement within the premises of the establishment. They are excluded from the total employment of the establishment.

OCCUPATIONAL SHORTAGES AND SURPLUSES

Job Vacancies - refer to unfilled job openings, which are immediately available for placement and for which active recruitment steps are being undertaken anytime during the reference period.

EXCLUDE vacancies with the following conditions: a) *positions not paid through the establishment’s payroll*; b) *ONLY available to be filled by internal applicants*; c) *work to be carried out by contractors*; and d) *to be filled by staff from contract labor agencies*.

Entry-level Jobs - refer to starting positions that require little or no experience. Otherwise, the jobs classified as junior, senior or executive level position.

Hard-to-fill Vacancies - refer to those job vacancies for which an establishment has encountered difficulties in recruiting for some reasons such as no/few applicants applied for the job, applicants lack years of experience, applicants lack needed competency/skill, applicants lack professional license/TESDA Skills Certification, applicants expect high salary, location or work schedule problem or competition with overseas jobs.

Hard Skills - refer to capabilities that are job or occupation specific (e.g. computer programming, welding skills, carpentry skills, etc.).

Soft Skills - refer to a broad set of skills, competencies, behaviours, attitudes, and personal qualities that enable people to effectively navigate their environment, work well with others, perform well, and achieve their goals (e.g. flexibility/adaptability, effective communication skills, problem solving, etc.).

Public Employment Service Office (PESO) - refer to a non-fee charging multi-employment service facility or entity established or accredited pursuant to Republic Act No. 8759 otherwise known as the PESO Act of 1999. The PESO responds to a full range of employment services. This includes provision of career guidance and employment coaching, labour market information and analysis and employment facilitation services. Its main objective is to ensure the prompt, timely and efficient delivery of employment service and provision of information on the other DOLE programs.

Job Portal - also known as a career portal, is a modern name for an online job board that helps applicants find jobs and aids employers in their quest to locate ideal candidates. A web site where employers can post job offers, and people looking for employment can post their skills.

- *Phil-JobNet* – an internet-based job and applicant matching system which aims to advance jobseekers search for jobs and employers search for manpower.
- *JobStreet* – features a job matching engine and a job posting platforms and provides other online recruitment products and services such as online recruitment, outsourced human capital service, software as a service, e-commerce and e-business and jobseekers services.
- *Kalibrr* – a recruiting platform that uses assessments to drive faster hiring decisions. A technology company that transforms the way candidates find jobs and companies hire talent.
- *JobsDB* – provide a cost-effective recruitment platform for employees and fastest jobseekers in order to pair the most suitable talents with job vacancies.

TRAINING OF WORKERS

Job-related Trainings - include trainings conducted by the establishment and those which were offered by other institutions but are financed by the establishment.

Training cost - cost incurred by the establishments in providing employees job-related trainings either in-house or by other training providers (e.g., professional fees, supplies and materials, etc.).

PRODUCTIVITY IMPROVEMENT PROGRAM AND GAINSHARING PRACTICES

5S of Good Housekeeping refers to a training program on waste elimination through workplace organization. 5S means sort, set in order, clean, standardize, and sustain. (Asian Productivity Organization)

Continuous Process Improvement refers to the act of implementing improvements to a product, service or process.

Client Satisfaction Measurement (CSM) refers to the assessment of performance from the customer's point of view.

Total Quality Management (TQM) refers to the management philosophy that seeks to integrate all organizational objectives.

Suggestion/Feedback Scheme refers to the formal mechanism which encourages employees to contribute constructive ideas for improving their organization.

Lean Management refers to a productivity program on doing more with less, i.e., less time, inventory, space, labor and money.

Just-in-Time refers to a production technology system which promotes economic efficiency, with a central principle of “produce appropriately what is necessary, just as much as needed, when needed”.

Six Sigma refers to a program aimed at the near elimination of defects from every product, process and transaction.

EMPLOYEES’ COMPENSATION PROGRAM

Employees’ Compensation Program refers to a government program designed to provide compensation package to public and private employees or their dependents in the event of work-related sickness/disease, injury, or death.

Work-related contingencies refer to an event, such as sickness, injury, disability, or death that may occur within or outside the workplace while performing ones’ official function.

Sickness is defined as any illness definitely accepted as an occupational disease listed by the Employees’ Compensation Commission, or any illness caused by employment, subject to proof that the risk of contracting the same is increased by working conditions. For this purpose, the Commission is empowered to determine and approve occupational diseases and work-related illnesses that may be considered compensable based on peculiar hazards of employment (As amended by Sec. 1, P.D. 1368).

Injury means any harmful change in the human organism from any accident arising out of and in the course of employment.

Death refers to loss of life resulting from work-related injury or sickness/disease.

Disability means loss or impairment of a physical or mental function resulting from injury or sickness.

EC Logbook is a logbook to record chronologically the sickness/disease, injury, or death of employees containing also the names of the employees; dates, places, and nature of contingency; and absences.

Compensation refers to all payments made under the Employees' Compensation Program for income benefits and medical or related benefits.

Medical benefits refer to all payments made to the providers of medical care, rehabilitation services and hospital care that are extended to employees for work-related injury, sickness/disease or disability.

Disability benefits refer to all payments made for loss or impairment of a physical or mental function resulting from work-connected injury or sickness/disease.

Death benefits refer to payments made upon the death of a covered employee due to a work-related sickness/disease or injury to qualified beneficiaries.

Funeral benefits refer to payments made upon the death of a covered employee due to a work-related sickness/disease or injury to dependents or person who spent for the funeral services.

Cash income benefits refer to all cash payments made to compensate for loss of income due to worker's incapacity to work.

KAGABAY Program refers to an economic assistance program for persons with work-related disabilities (PWRDs) who lost employment due to work contingencies by providing 1) rehabilitation (physical restoration) services, 2) skills training, and/or 3) entrepreneurial training.

Skills training refers to a special assistance project for PWRDs to integrate them into economic mainstream of society through training/reskilling for specific career or trade and focuses on practical applications of skills learned for re-employment.

Medical rehabilitation refers to services designed to help an injured or disabled employee entitled to such services in order to attain the restoration of his/her physical capacity to the maximum level as early as possible so that he/she can remain to be productive and useful member of the society.

Entrepreneurial training refers to a special assistance project for persons with work-related disabilities (PWRDs) through livelihood training aimed to develop PWRDs as entrepreneurs by setting-up a micro-enterprise or home-based business.

OCCUPATIONAL SAFETY AND HEALTH PRACTICES

Occupational Safety and Health (OSH) is the discipline aimed in maintaining a safe work environment, promoting and maintaining the physical well-being of workers, as well as in protecting and preventing workers from risks to their safety and health.

Basic Occupational Safety and Health Training (BOSH) is one of the mandatory 40- hour training courses required for safety officers under Rule 1030 of the Occupational Safety and Health Standards (OSHS). It aims to equip participants with the basic knowledge and skills on identifying safety, health, and environmental hazards; determining appropriate control measures; and developing and implementing OSH policies and programs.

Construction Safety and Health Training (COSH) is one of the mandatory 40-hour training courses required for safety officers working in the construction industry under Rule 1030 of the Occupational Safety and Health Standards (OSHS) and the DOLE Department Order No. 13, s. 1998: Guidelines Governing Safety and Health in the Construction Industry. This training aims to equip participants with the basic knowledge and skills in performing safety audits, assessments and analysis of hazards and risks in the construction industry; determining appropriate control measures; and developing and implementing OSH policies and programs.

Chemical Safety Training is a training designed to provide participants with knowledge on the various aspects of managing and promoting chemical safety and to develop their capability in implementing solution-oriented approaches on the safe use of chemicals. Discussions focus on: The Globally Harmonized System of Classification and Labeling of Chemicals; storage and handling, health effects of chemicals; fire and explosion; waste management; operational control; emergency procedures; and management of chemical control program.

Ergonomics Training is a course that aims to enable participants to assess ergonomic risk factors in the workplace and to apply basic ergonomic principles to manage identified risks and prevent occupational injuries.

OCCUPATIONAL INJURIES AND DISEASES

Occupational accident is an unexpected and unplanned occurrence, including acts of violence arising out of or in connection with work which results in one or more workers incurring a personal injury, disease or death. It can occur outside the usual workplace/premises of the establishment while the worker is on business on behalf of his/her employer i.e., in another establishment or while on travel, transport or in road traffic.

Occupational injury is an injury which results from a work-related event or a single instantaneous exposure in the work environment (occupational accident). Where more than one person is injured in a single accident, each case of occupational injury should be counted separately. If one person is injured in more than one occupational accident during the reference period, each case of injury to that person should be counted separately. Recurrent absences due to an injury resulting from a single occupational

accident should be treated as the continuation of the same case of occupational injury not as a new case.

Case of occupational injury refers to case of one worker incurring an occupational injury as a result of one occupational accident; also refers to a person injured (or persons injured) brought by an accident related to work.

Fatal case is defined as a case/s where a person is fatally injured as a result of occupational accident whether death occurs immediately after the accident or within the same reference year as the accident.

Non-fatal cases with workdays lost refers to cases of either permanent incapacity cases or temporary incapacity cases

Permanent incapacity case is defined as an injured person who was unable to work from the day after the day of the accident AND 1) was never able to perform normal duties of the job at the time of the accident; and 2) will be able to perform normal duties but total absence from work is expected to exceed a year starting the day of the accident.

Temporary incapacity case refers to an injured person who was unable to work from the day after the day of the accident BUT (1) was able to perform again the normal duties of the job at the time of the accident; (2) will be able to perform normal duties but total absence from work is expected NOT to exceed a year starting the day of the accident; and (3) did not return to the same job but the reason for changing the job is NOT RELATED to his/her inability to perform the job at the time of the occupational accident.

Non-fatal cases without workdays lost requires first-aid or medical treatment only on the day of the accident and was able to perform again duties of the job one day after the accident.

Occupational disease is defined as an abnormal condition or disorder aside from one resulting from an occupational injury caused by exposure over a period of time to risk factors associated with work activity such as contact with certain chemicals, inhaling coal dust, carrying out repetitive movements. This refers to a new case recognized, diagnosed and recorded during the year.

Hours actually worked includes (a) normal or regular hours of work; (b) overtime; (c) time spent at the place of work such as the preparation of workplace, repairs, maintenance, preparation and cleaning of tools and preparation of receipts, time sheets and reports; (4) time spent at the place of work waiting or standing by for reasons such as lack of supply of work, breakdown of machinery or accident, or time during which no work is done but for which payment is made; and (5) time corresponding to lunch/meal breaks of less than one (1) hour and to short rest periods at the workplace including tea and coffee breaks/meriendas.

Hours actually worked excludes (a) hours paid for but not worked due to vacation, sick, maternity, paternity, service incentive leave and other paid leaves, rest days, special days and regular holidays; and (b) lunch/meal breaks of one hour or more and time spent on travel from home to workplace and vice versa

Measures of Safety Performance:

Frequency rates is computed as cases of occupational injuries with workdays lost including fatalities per 1,000,000 employee-hours of exposure or expressed by *(Occupational Injuries with workdays lost / Total hours actually worked) * 1,000,000 hours of exposure*.

Incidence rates is computed as cases of occupational injuries with workdays lost per 1,000 workers or expressed by *(Occupational Injuries with workdays lost / Total employment) * 1,000 workers*.

Severity rates is computed as workdays lost of cases of occupational injuries resulting to temporary incapacity per 1,000,000 employee-hours of exposure or expressed by *(Workdays lost due to temporary incapacity / Total hours actually worked) * 1,000,000 hours of exposure*.

Average workdays lost refer to workdays lost of temporary incapacity cases per occupational injury or expressed by *(Workdays lost due to temporary incapacity / Occupational injuries resulting to temporary incapacity)*.

H. UNIT OF MEASUREMENT

- Levels and percentages for employment, occupational shortages and surpluses, training of workers, productivity improvement and gainsharing practices, employees' compensation program, occupational safety and health practices.
- Levels and rates for occupational injuries; levels for occupational diseases and commuting accidents

I. CLASSIFICATIONS

Geographic: The geographic classification is based on the Philippine Standard Geographic Classification (PSGC) as of 31 December 2017.

Industrial: The industry classification is based on the 2009 Philippine Standard Industrial Classification (PSIC). It was patterned after the International Standard Industrial Classification (ISIC), Rev. 3 of the United Nations, up to the 4-digit level, but with modifications to suit national situations and circumstances.

Occupational: The occupational classification is based on the Philippine Standard Occupational Classification (PSOC) 2012. It was patterned after the 1988 International Standard Classification of Occupations (ISCO) of the International Labour Office with modifications to suit the national context.

Employment Size: The classification of establishments according to employment size is based on their total employment, i.e., 20-99; 100-199; 200 and over.

Others:

- Employment according to categories of workers and employees according to specific groups
- Job vacancies as to status, category, number of vacancies and applicants, length of recruitment period and specialization/skills

- Training of workers according to categories of employees
- Productivity improvement program according to type of gainsharing scheme, category of employees
- Employees' compensation program according to medium of awareness, type of information dissemination
- Occupational safety and health practices according to prevention and control measures/activities, trainings/seminars and training agencies/organizations
- Cases of occupational injuries according to incapacity for work (fatal, permanent, temporary)

J. SURVEY DESIGN

Unit of Enumeration

The unit of enumeration for the 2017/2018 ISLE is the establishment. An establishment is defined as an economic unit, which engages, under a single ownership or control, i.e. under a single legal entity, in one or predominantly one kind of economic activity at a single fixed physical location. Thus, stores, shops, factories, mining companies, electric power plants, transport companies, radio stations, hotels, restaurants, banks, insurance companies, real estate development companies and the like are considered establishments.

Scope and Coverage

The 2017/2018 ISLE is a nationwide survey that covers establishments in both agricultural and non-agricultural industries with total employment of 20 or more. Adopting the 2009 Philippine Standard Industrial Classification (PSIC), the ISLE covers 18 major industries.

Frame

The frame for the 2017/2018 ISLE was extracted from the 2017 updated List of Establishments (LE) as of 28 March 2018. This frame was used to draw the sample establishments for the survey.

The updated 2017 LE is a result of the 2016 Updating of the List of Establishments (ULE) and 2017 ULE undertakings which were conducted to provide an updated sampling frame for the ISLE 2017/2018 and other establishment/enterprise based surveys.

The 2016 ULE covered about 12,000 main office establishments, that is, establishments with economic organization (EO) classified as EO=3 (Establishment and Main Office both located in the same address and with branches elsewhere) or EO=4 (Main Office only) and entails updating of around 100,000 establishments. Moreover, around 9,000 barangays without listed establishments since 2012 were also covered to list existing establishments within the scope and coverage of the ULE.

Meanwhile, the 2017 ULE operation was conducted in selected barangays in Quezon City and in Iloilo City. These two industry hubs were selected because of the emergence of growth area barangays in terms of the number of establishments during the past years.

Other sources of updates are the survey feedbacks from the 2017 Quarterly Survey of Philippine Business and Industry (QSPBI), 2016 Annual Survey of Philippine Business and Industry, 2016 Occupational Wages Survey and 2015/2016 Integrated Survey on Labor and Employment.

Sampling Design

The 2018 OWS and 2017/2018 ISLE uses stratified systematic sampling design with 2-digit, 3-digit, 4-digit and 5-digit PSIC serving as industry strata and total employment as the second stratification variable.

Stratified systematic sampling is a process of dividing the population into homogeneous groups, called strata, and then selecting independent samples in each stratum systematically. Systematic sampling controls the distribution of the sample by spreading the selections throughout the sampling frame (or stratum) at equal intervals and thus provides implicit stratification. This method ensures that all important subgroups of the population are represented in the sample and increases the precision of “overall” survey estimates.

The design includes determination of sampling units; sampling domains; determination of sample size; sample allocation and sample selection.

Sample Size Determination

The primary consideration in the determination of sample size for the survey was its manageability at the optimum level of estimated budget without compromising the reliability and accuracy of survey results.

In order to increase the precision of the estimates at very detailed levels, the target sample size based on the estimated budget has increased to 17,500 as compared with the previous survey round with only 12,926 sample establishments.

Consequently, certainty stratum was considered in this survey round.

A certainty stratum is defined as the stratum whose sampling ratio is 100 percent. In this stratum, all establishments are taken as certainty samples, i.e. the selection probability is 1 and the sampling weight is 1.

A non-certainty stratum is the stratum where only sample establishments are taken.

Accordingly, a total of 8,602 sample establishments were considered as certainty units.

On the other hand, the sample sizes of the remaining 58 industry groups in the noncertainty stratum (20-99 employment size) was computed by taking into account the computed highest Coefficient of Variation (CV) between the average wage rates of two benchmark occupations, i.e. Accounting and

Bookkeeping Clerks and Unskilled Worker from the previous survey round of OWS and a target coefficient of variation (CV') of 4%.

The formula used is as follows:

$$n_{20-99} = \sum_{i=1}^{58} \frac{CV_i \times r_i}{CV'}$$

where

N_{20-99}	initial sample size for employment size group 20-99
CV_i	highest coefficient of variation from previous estimates
r	number of responding units from previous survey
CV'_i	target coefficient of variation
i	industry in the non-certainty stratum

An additional 10% for each industry domain were applied to accommodate the expected non-response. Further adjustments were made in the sample size for some industry domains based on the available population from the frame. As a result, these industries have been considered in the certainty stratum as mentioned above.

Thus, the total number of samples for the 2017/2018 ISLE is **16,506**.

Sample Selection

For each of the sampling strata of TE of 20-99 sample establishments are selected using systematic sampling. The IBM SPSS statistical software was utilized in choosing the samples and in the computation of initial sampling weight. Weights are assigned to respondent records in a survey data in order to make the weighted records represent the population of inference as closely as possible.

Systematic sampling was chosen so that the TE values of the sample establishments are spread out, resulting from good representation of samples within the employment stratum, thus avoiding all sample establishments with low TE values or high TE values.

Substitution of Sampling Units: There is no substitution of sampling units.

Sample Size: For 2017/2018 ISLE, the number of establishments covered was 16,506, of which 11,312 (for employment and unionism) and 14,315 (for training of workers; productivity-based incentive schemes; occupational safety and health practices; and occupational injuries and diseases) were eligible units.

K. FIELD WORK

Data Collection: The survey was conducted in coordination with the Regional Offices and Provincial Offices of the Philippine Statistics Authority. On a project basis, employees were hired to personally deliver and retrieve the questionnaires from the establishments. In some instances, questionnaires were

mailed to establishments in less accessible or conflict prone areas, in which case a self-addressed envelope was provided. Some establishments also submitted the accomplished questionnaires through fax. Delivery of questionnaires started in September 2018 and retrieval commenced after all questionnaires have been delivered or within 15 working days from delivery to an establishment or on a date agreed upon by the contact person and the enumerator.

The basic data originate from the payroll, accident and other related records of establishments.

Survey Questionnaire: The questionnaire is made up of several parts, i.e.,

Cover Page - This contains the address box, contact particulars for assistance, spaces for changes in the name and the location of sample establishment, spaces for head office information in case the questionnaire is endorsed to it, and status codes of the establishment to be accomplished by PSA and its field personnel.

Survey Information - This contains the survey objectives and uses of the data, confidentiality clause, collection authority, coverage, reference periods, reference to concepts and definition of terms, due date for accomplishment, and expected date of availability of the 2015/2016 ISLE results.

Part I: General Information - This portion inquires on main economic activity, major products/goods or services, establishment characteristics as to ownership and type of market, unionism and membership, and existence and coverage of collective bargaining agreement/s.

Part II: Unionism - This portion inquires on unionism and membership, officers, union members by sex, existence and coverage of collective bargaining agreement/s and existence of Labor Management Cooperation.

Part III: Employment - This section requires data on total employment and its breakdown into working owners, unpaid workers and employees (managers/executives, supervisors/foremen, and rank and file: regular and non-regular workers). It also looks into the employment of specific groups of workers, number of workers hired through agencies/contractors and the types of process outsourced/contracted-out.

Part IV: Occupational Shortages and Surpluses - This portion inquires on hard- and easy-to-fill vacancies, status of employment, number of job vacancies, number of applicants, length of recruitment period to fill up vacancies, reason why occupations are hard to fill and specialization/specific skills requirement.

Part V: Training of Workers - This module inquires on whether or not the establishment provided job-related trainings to their employees, number of employees provided job-related trainings, annual training costs and training providers (e.g., local private training institution, government training institution, foreign training institution, in-house trainings or trainings provided by other establishments, etc.).

Part VI: Productivity Improvement and Gainsharing Practices - This part inquires on productivity programs implemented in establishments. In particular, it inquires on productivity schemes/techniques/tools used in the program; who initiated the productivity program; objective and coverage of the program; agencies who assisted in the development of the program; types of assistance provided in development of the program and availment of tax incentive under RA 6971. It also inquires

how many managers, supervisors and rank and file employees received productivity-based incentive by type of incentive; and what forms of non-cash productivity-based incentives were provided in 2015.

Part VII: Employees' Compensation Program - This portion inquires on the awareness on existence of Employees' Compensation Commission (ECC) and the Employees' Compensation Program (ECP), type of information dissemination on ECP benefits and services, and mode and type of availment of ECP benefits and services in the past 3 years.

Part VIII: Occupational Safety and Health Practices - This part inquires on the occupational safety and health activities/programs implemented in establishments. It covers activities conducted as part of preventive and control measures against work safety and health hazards; availment of safety and health-related trainings/seminars and its conducting agency/ies; and designated health and safety personnel in establishments.

Part IX: Occupational Injuries and Diseases - This part inquires on the incidence of occupational accidents, cases of occupational injuries and lost workdays by incapacity for work (fatal, permanent, temporary), cases without lost workdays, cases of occupational diseases, incidence of commuting accidents, workers injured and hours actually worked by all employed persons. It also inquires on the classifications (type of injury, part of body injured, cause of injury, agent of injury and major occupation group) of the occupational injury cases.

Part X: Certification - This portion is provided for the respondent's name and signature, position, and telephone/fax numbers and e-mail address; time spent in answering the questionnaire; comments or suggestions (on the data it provided for the survey, results of previous survey round and improvements on the design/contents of the questionnaire); and

Part XI: Survey Personnel - This portion is allocated for the names of personnel involved in collection, editing and review of each questionnaire and dates when the activities were completed.

Survey Results - Selected statistics from 2015/2016 ISLE on unionism, employment, occupational shortages and surpluses, training of workers, productivity-based incentive scheme, occupational safety and health practices, occupational injuries and diseases are provided for information of the respondents.

L. DATA PROCESSING AND EDITING

Data are manually and electronically processed in the PSA Provincial Offices. Upon collection of accomplished questionnaires, statistical researchers (SRs) perform field editing before leaving the establishments to ensure completeness, consistency and reasonableness of entries in accordance with the field operations manual. The forms are again checked for data consistency and completeness by their field supervisors. When passed in the manual editing, the questionnaires are then turned over to machine processors for encoding and further validation.

The PSA-Central Office personnel undertake the final review, and validation and scrutiny of aggregated results for coherence. Questionnaires with incomplete or inconsistent entries are returned to the establishments for verification, personally or through mail.

The OWS and ISLE Data Processing and Management System (OIDPMS) is used for data encoding and generation of validation prooflists. After checking accuracy of encoding based on the prooflists, a conversion program using SPSS is executed to generate output tables.

M. TYPES OF ESTIMATES

- Categories of employment and employees
- Occupational shortages and surpluses
- Training of workers
- Establishment with union and with CBA, union membership and CBA coverage
- Establishment practices on productivity and gainsharing practices
- Establishments awareness, type of information dissemination and availment of ECP benefits and services
- Establishment practices on occupational safety and health
- Cases of occupational injuries (by type, part of body injured, cause, agent, major occupation group), frequency and incidence rates of cases of occupational injuries with lost workdays, severity rates and average days lost of cases of occupational injuries resulting to temporary incapacity
- Cases of occupational diseases by type of disease
- Commuting accidents and workers injured

N. ESTIMATION/COMPILATION METHODOLOGY

According to Kalton and Flores-Cervantes, weighting adjustments are commonly applied in surveys to compensate for non-response and non-coverage, and to make weighted sample estimates conform to external values (*Weighting Methods, Journal of Official Statistics, Vol. 19, No. 2, 2003, pp. 81-97*).

Not all of the distributed questionnaires are retrieved or have a status of “good” questionnaire. During data collection, there are reports of permanent closures, non-location, duplicate listing and shifts in industry and employment outside the survey coverage. Establishments that fall in these categories are not eligible elements of the frame and their count is not considered in the estimation.

Non-responding eligible units are made up of refusals, strikes or temporary closures, under new management, consolidated report with other sample establishment and those establishments whose questionnaires contain inconsistent responses and have not replied to the verification queries by the time output table generation commences.

Respondents are post-stratified as to industry and employment size classifications. Non-respondents are retained in their classifications.

Estimates are obtained by simple expansion, i.e., by multiplying the sample values at the cell level (industry and employment size) by the corresponding blowing-up factor or the adjusted weights which is the ratio of the estimated population of establishments to the number of responding establishments.

The formula used is as follows:

$$W'_{hi} = \frac{N_{hi}}{n_{hi}} \times \frac{n''_{hi}}{n'_{hi}}$$

where

W'_{hi}	Adjusted weight in the in the hth industry and ith employment stratum
N_{hi}	Total number of establishments in the frame in the hth industry and ith employment stratum
n_{hi}	Number of sample establishments in the hth industry and ith employment stratum
n'_{hi}	Number of responding establishments in the hth industry and ith employment stratum
n''_{hi}	Number of eligible units (e.i. retrieved/good, refused, on-strike, temporary closed, under new management, consolidated report, for verification) in the hth industry and ith employment stratum

or simply, the basic weight (N/n) multiplied by the adjustment factor (n''/n').

These estimates are then aggregated to the desired totals.

A 95% level of reliability of national survey estimates is desired. It is to be assessed through the coefficients of variations (CVs) of the population totals (for employment, unionism and collective bargaining, and occupational injuries) and population ratios (for frequency/incidence/severity rates and average workdays lost due to occupational injuries).

O. ADJUSTMENTS

Non-response: Non-response is taken into account in the weighing procedure.

Other Bias: No adjustments are made.

Use of Benchmark Data: No benchmark data are used.

Use of Other Surveys: No other survey data are used.

Seasonal Variations: Not applicable.

P. INDICATORS OF THE RELIABILITY OF THE ESTIMATES

Coverage of the Sampling Frame: Partially updated.

Sampling Error/Sampling Variance: Computed for key variables.

Non-response Rate: For 2017/2018 ISLE, the non-response rates in terms of eligible units are 9.66% (for employment and unionism), 15.62% (for training of workers; productivity and gainsharing practices; employees' compensation program; occupational safety and health practices; and occupational injuries and diseases).

Non-sampling Errors: These may occur due to inaccuracies in reporting by establishments and enumerators, mistakes in coding, editing and data entry. However, efforts are made to reduce non-sampling errors by careful design of the questionnaire, intensive training of survey personnel, linkages with key informants (employers' and workers' groups, government agencies and the academe) and through adoption and documentation of efficient operating procedures.

Conformity with Other Sources: The survey results are checked for consistency with the results of previous ISLE data or related administrative data.

Estimates for Non-survey Years: Not relevant.

Q. HISTORY OF THE SURVEY

With the approval of Republic Act 10625, otherwise known as the Philippine Statistical Act of 2013, the Bureau of Labor and Employment Statistics (BLES) was merged with the other major statistical agencies to constitute the Philippine Statistics Authority. In line with the merging, the BLES Integrated Survey (BITS) which was conducted every two (2) years by the former BLES was renamed Integrated Survey on Labor and Employment (ISLE).

Initiated in 2003, the BITS (now known as ISLE) is a modular survey that integrates the data requirements on employment, industrial relations, occupational injuries and labor cost that used to be collected by the former BLES through independent surveys such as Survey on Specific Groups of Workers (SSGW), Employment, Hours and Earnings Survey (EHES), Industrial Relations at the Workplace Survey (IRWS), Occupational Injuries Survey (OIS) and Labor Cost Survey (LCS). Until the 2010 survey round, the BITS covered non-agricultural establishments only. Starting the 2012 round, the survey covers establishments in both agricultural and non-agricultural industries with total employment of at least 20 persons.

Each round of the ISLE covers different aspects of employment and establishment practices. The inquiry on occupational injuries and diseases is a regular feature while that on labor cost is undertaken on a less frequent basis.

The integration aims to reduce respondent burden from filling out various survey questionnaires, to optimize the use of resources and to improve the timeliness of information.

R. AVAILABLE SERIES:

The data series starts with the 2002/2003 BITS. Nevertheless, past data are available from SSGW, EHES, IRWS, OIS and LCS.

II. DOCUMENTATION

C. PERIODICITY OF DISSEMINATION

The results are released 15 months after the June reference period of the survey inquiry on employment.

B. ADVANCE RELEASE CALENDAR

An advance release calendar that gives one-quarter-ahead notice of the approximate release date is posted in the PSA Homepage.

C. DISSEMINATION FORMATS

Hard Copy

- Survey Final Report
- Compilation of Industry Statistics on Labor and Employment
- Gender Statistics on Labor and Employment

Electronic

PSA Homepage: <http://www.labstat.psa.gov.ph>

BLES Electronic Archived Microdata System (BEAMS): <http://www.labstat.psa.gov.ph/beams>

III. CONFIDENTIALITY

The conduct of the ISLE is mandated by **Republic Act 10625**, approved on September 12, 2013, creating and mandating the Philippine Statistics Authority (PSA) to prepare and conduct statistical sample surveys on all aspects of socioeconomic life including agriculture, industry, trade, finance, prices and marketing information, income and expenditure, education, health, culture and social situations as well as the government and the political sector for the use of the government and the public.

Section 26 of RA 10625 and Article 55 of the Implementing Rules and Regulations of RA 10625 state that:

“Individual data furnished by a respondent to statistical inquiries, surveys and censuses of the PSA shall be considered privileged communication and as such shall be inadmissible as evidence in any proceeding. The PSA may release aggregated information from statistical inquiries, surveys and censuses in the form of summaries or statistical tables in which no reference to an individual, corporation, association, partnership, institution or business enterprise shall appear...”

Section 27 of RA 10625 states that:

“...Any person, including parties within the PSA Board and the PSA, who breach the confidentiality of information, whether by carelessness, improper behavior, behavior with malicious intent, and use of confidential information for profit, are considered guilty of an offense and shall be liable to fines as prescribed by the PSA

Board which shall not be less than Five thousand pesos (P5,000.00) nor more than Ten thousand pesos (P10,000.00) and/or imprisonment of three (3) months but not to exceed one (1) year, subject to the degree of breach of information...”

Republic Act 6713 (Code of Conduct and Ethical Standards for Public Officials and Employees) dated February 20, 1989, Section 7 states that:

“...(c) Disclosure and/or misuse of confidential information. Public officials and employees shall not use or divulge confidential or classified information officially known to them by reason of their office and not made available to the public, either: (1) to further their private interest, or give undue advantage of anyone, or (2) to prejudice the public interest...”

Individual data furnished by a respondent to statistical inquiries, surveys and censuses of the PSA shall be considered privileged communication and as such shall be inadmissible as evidence in any proceeding.

The PSA may release aggregated information from statistical inquiries, surveys and censuses in the form of summaries or statistical tables in which no reference to an individual, corporation, association, partnership, institution or business enterprise shall appear.