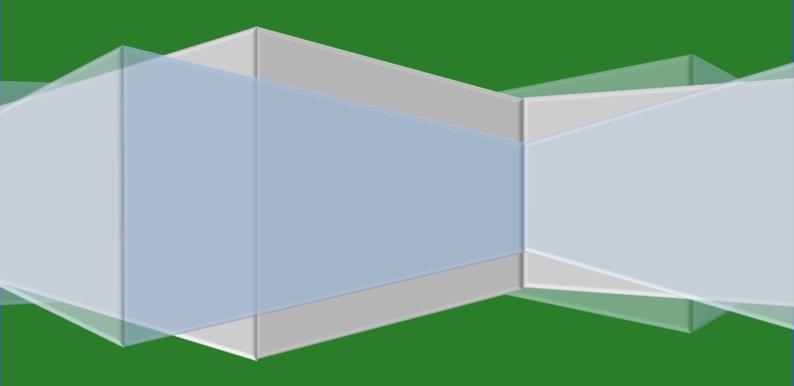
OIC Accreditation and Certification Programme for Official Statisticians

Labor Statistics



Organization of Islamic Cooperation Statistical, Economic and Social Research and Training Centre for Islamic Countries



OIC Accreditation and Certification Programme for Official Statisticians



Labor Statistics

Training Guide



Dr. Saleh Al-Kafri



Organization of Islamic Cooperation Economic and Social Research and Training Centre for Islamic Countries



Table of Contents

1. Introduction

- 1.1 Guide purpose
- 1.2 Labor statistics definition and goals
- 1.3 International efforts in the standardization of Labor Statistics
- 1.4 Guide comprehensiveness and domain

2. Economically active population

- 2.1 Concept framework
- 2.2 Concept of economic activity limits
- 2.3 Market economic activity
- 2.4 Non-market economic activity
- 2.5 Non-economic activities
- 2.6 Theoretical background of economic activities
- 2.7 Age limits of economically active population

3. Actually active population (Labor Force)

- 3.1 Definition
- 3.2 Labor force general framework
- 3.3 Priority rule in classification
- 3.4 Activity principle
- 3.5 Indicators

4. Usually active population statistics

- 4.1 Definition
- 4.2 Key status of Activity
- 4.3 Indicators
- 4.4 Measuring economically active population statistics

5. Employed statistics

- 5.1 Employed definition
- 5.2 Employment status
- 5.3 One hour standard
- 5.4 Temporary absence from work
- 5.5 Treatment of special groups at work
- 5.6 Indicators
- 5.7 Variable measure

6. Unemployed statistics

- 6.1 International standard definition of unemployment
- 6.2 Indicators
- 6.3 Variable measure

7. Limited employment statistics (Underemployment)

- 7.1 Objective
- 7.2 Underemployment statistics manifestations
- 7.3 International standard definition
- 7.4 Underemployment related to time
- 7.5 Indicators
- 7.6 Measuring underemployment statistics

8. Working conditions statistics

- 8.1 Objective
- 8.2 General concepts
- 8.3 Indicators
- 8.4 Measuring indicators

9. Strikes and lockouts statistics

- 9.1 Objective
- 9.2 Terms and Concepts
- 9.3 Measuring indicators

References

First Unit

Introduction

Labour Statistics serve many purposes as a mixture of social and economic indicators that are exposed to the biggest community portion. Those statistics affect the social aspect of the population through the measurement of the extent to which the equality of all community adult members segments in terms of their access to their right to work, as well as working conditions experienced by those that have a work during the most of their daily time they spend in their workplaces, and measure the achievement of equality between all segments of society, particularly in relation to the issue of equal pay or getting a decent work. The Labour Statistics affect also directly the economic side because of its direct relationship with the production process. The statistics on work-related indicators provide one of the most important elements of production, a unit of work, which is assimilated in the employee himself, characteristics, working hours, working state and economic activity in which he operates.

Labour statistics provide the most important factors for the economic and social analysis success, circulating widely among economists and sociologists and related expertise professionals. Such statistics provide data for the analysis of economic models circulating among economists to study the demand and supply extent of manpower, analysis of production and productivity and its account and monitor the economic situation. They provide also indicators for the formulation and implementation of policies for the development of human resources and decent work, and the development of employment strategies and poverty reduction in addition to other social programs.

The UN adopts, through ILO, the process of unifying Labour Statistics Indicators concepts among all states as indicators within the list of official statistics, which are measured and provided by the national statistical offices. Based on this, what is stated in the decisions of the ILO will be adopted to define labour statistics indicators that are related to national accounts system directly and in line with each other.

1.1 Guide purpose

The main goal of the guide is to provide training material to enhance the capacity of workers in the official statistics offices, particularly workers in the labour statistics to help improve the production of statistics in line with international standards and employ them to fit in with local content. The guide provides training material about the concepts of basic components of Labour Statistics and their production methodology from household surveys as it is the most comprehensive of the population, more flexible and covers individuals inside and outside the labour force as well as the principles of scheduling data. The guide will try to put the trainee in a context that can make them begin planning to lay the foundations and rules for the production of statistics on the economically active population and basic constituents of workers, limited employment, and unemployment and working conditions until access to the display of the results in an international comparative form.

The guide will abide by international standards that have been developed by the International Labour Organization and it will not be considered self-sufficient without returning to the details mentioned in the list of the main sources listed in the guide.

The guide axes were organized to start from the general concept of Labour Statistics, their importance and the international standards that address them, which are considered a basic reference to enable international comparisons and meet the local and international community's requirements. The content arrangement of the guide came to enable the trainee to see the labour force general framework, concepts and basic components, and then the most common methodology used in the production of these statistics in the official statistical institutions and consistent with international standards, and the calculation of statistical indicators mechanism.

The main goal of the guide is to enable the labour statistics-related training courses employees and give them the ability to contribute to the development and improvement of the production of labour statistics tools and improve their concepts and definitions specifically the economically active population statistics, labour/employment, unemployment and limited employment in addition to working conditions. In more detailed way, the training guide aims to the following:

- Definition of the goals and objectives of measuring the economically active population and its relationship with the national accounts system
- Definition of the general framework of the labour force and its basic components and definition rules that help the trainee for improvement within the surrounding frame
- Definition of the basic rules that measure the working conditions of workers within the international standards and concepts
- Definition of measurement instruments and design of household surveys tools to measure key indicators of Labour Statistics
- Definition of scheduling data principles to fit international standards

1.2 Labour statistics definition and goals

The document of "Classification of Statistical Activities" (CSA) issued by the United Nations, classify labour statistics within the demographic and social statistics field. The importance of classification consists in organizing and unifying the work in national and international statistical institutions, where the classification is used as a basis for international statistical activities database. According to the classification, labour statistics cover the labour force, labour market, employment and unemployment, and in a more detailed way, they cover the economically active population, working conditions, health and safety in the workplace (accidents at work, work-related injuries), working hours, other work conditions, as well as labour strikes and institutions lockouts.

Labour statistics are used by a wide audience and serve a number of purposes. Users of Labour Statistics are governments and their affiliated agencies, advisers, economists,

financial analysts, journalists, businessmen, trade unions and employers associations, students, teachers, industrial tribunals, academics, researchers and lobbyists.

The Labour Statistics are used in a large scale of both economic and social analyses. They are used in the analysis, evaluation and monitoring of the economy; the labour market; a wide range of government policies (especially the ones related to employment, income promotion, industrial relations and equality); and the marginalized population groups of special concern (women, juveniles, elderly, etc.).

1.3 International efforts in the standardization of Labour Statistics¹

ILO was founded in 1919, at the peace conference occasion that followed the end of the First World War. ILO Constitution was produced by the Working Committee, which was set up by the peace conference. The Committee consists of representatives from nine countries. A tri-gathering resulted from the organization bringing together representatives of governments, employers and workers in the executive bodies. ILO is unique among world organizations as all the three parties have a voice and a role in the formulation of the organization policies and programs.

The International Labour Conference meets annually and provides an international forum to discuss global issues of work, and during the annual forums, the minimum international labour standards and public policy of ILO is determined. Each member country has the right to send four delegates to the Conference: two from government and one representative for each of the workers and employers, each of whom have the chance to vote independently.

The most important tools for the work of ILO are the international conventions and recommendations for action. These agreements were adopted by the International Labour Conference, which in turn put international labour standards. Through ratification by Member States, based on that, provisions implement-obliged agreements came out. The agreements provide recommendations and guidance on policies, legislation and related practices, including recommendations in the field of labour statistics.

The convention of 1985 establishes principles, commitments and recommendations for the collection and dissemination of labour statistics and related areas of employment, unemployment, earnings, working hours, the structure of wages and operating costs, consumer prices, income and expenditure of households and occupational injuries, diseases and industrial disputes.

The detailed technical guidelines on Labour Statistics are expressed on the form of resolutions to be officially approved by a technical committee of the International Organization of Labour - International Conference of Labour Statisticians (ICLS). The first conference was held in 1923. The conference covers related concepts, definitions and

4

¹ Source: Australian Bureau of Statistics (ABS): Labor Statistics: Concepts, Sources and Methods, Aug 2006: http://www.abs.gov.au

methodologies necessary for data measurement and collection, compilation, analysis and dissemination.

From the most important decisions of the International Conference of Labour Statisticians currently applicable are the collective agreements (1926); Social Security statistics (1957); working hours (1962); labour costs (1966); underemployment and underutilisation of the labour force (1966); household income and expenditure (1973); an integrated system of wage statistics (1973); occupational injuries (1982); the economically active population, employment, unemployment and underemployment (1982); indices of consumer prices (1987); the international standard classification of occupations (1987); strikes and sit-ins, the classification of the situation in labour and employment in the informal sector (1993); and incomes resulting from employment, occupational injuries, underemployment and inadequate employment situations (1998). The conference decisions can be accessed through the website of the International Labour Organisation at the following address: http://www.ilo.org/public/english/bureau/stat/res/index.htm.

It is worth noting that some minor adjustments were made to some of the concepts for both labour, employment and the non-optimal use of employment in 2013 during the Nineteenth International Conference of the Labour Statisticians organized by the International Labour Organization².

1.4 Guide comprehensiveness and scope

To be able to provide comprehensive material that meets the basic purpose of the guide and to enable its users of getting knowledge of the fundamentals, principles and concepts of Labour Statistics and their integrity and most commonly used styles for their production, the guide is initiated with a general introduction about the importance of Labour Statistics and their goals and primary source to determine their concepts and international standards sources on which it is based. Then the basic concepts of the economically active people, employed people, underemployment and unemployed people statistics is explained from the second unit to the seventh, which are based on household surveys or censuses to provide indicators. The eighth unit focuses on indicators of working conditions and the mechanism of measurement, which relies on surveys of facilities or administrative records. In the ninth and final module, the focus is on statistics of strikes and lockouts that are as important as the rest of the statistics. And thus, most of the Labour-related statistics that were developed initially have been covered to provide the trainee with the principles of Labour Statistics to be able to dig deeper by reviewing more detailed evidence in every area and field. The guide is considered as a start for beginners in the official statistics, especially in labour statistics. It has been based, as mentioned earlier, mainly on the evidence and international standards to be able to proceed the same international standard which is set up to achieve international comparability among all the statistics.

² http://www.ilo.org/global/statistics-and-databases/meetings-and-events/international-conference-of-labour-statisticians/19/lang--en/index.htm

Second Unit

Economically Active Population

2.1 Concept Framework:

Based on the international standards, which rely on the national accounts system 2008, the economically active ones are defined by the following:

The economically active population reflects female and male individuals who are willing to provide manpower to carry out the activities listed within the production limits set out in the National Accounts System³.

Thus, the classification of a person as economically active is linked to the extent of their contribution or willingness to contribute to the production of goods and services according to what was specified in the National Accounts System. This excludes those who work and do activities outside the scope of production limits, and are not classified among the economically active population.

The emphasis on ensuring the linkage of the economic activity definition to the production limits comes up to match Labour Statistics with production statistics and thus being able to derive a number of economic indicators such as productivity, which reflects the average output size produced per worker. The economic theories rely mainly on the linkage between production and its components, represented mainly in the work unit and the capital under the framework of the so-called production function. Also, labour economics in most theories are mainly dependent on the intersection between the demand and the offer of the workforce, as the employer request for labour Looks for maximizing profits through access to higher production levels, which generate higher profits, in contrast, individuals seek maximizing their benefit through maximizing the well-being by choosing between work offers with best wages that meet their needs and which is to select the appropriate hours to undertake an economic activity. And therefore, it is necessary to guarantee the consistency of the concepts issued by ILO with the national accounts.

2.2 The Economic Activity Limits Concept⁴

A clear understanding of the limits and concept of economic activity is the basic requirement to be able to classify individuals according to their relation to labour force in terms of being whether economically active or working or unemployed in the labour force surveys. Knowing that it is not easy to be going into all the details related to the economic

³ European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, 2009. *System of National Accounts*, 2008. Paras. 19.5.

⁴ European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, 2009. *System of National Accounts, 2008.* Paras. 6.27 and 6.28.

activity of individuals to determine if it falls within the concept of economic activity or not, but there is a minimum limit and previous experiences that can be followed and take advantage of them to be able to achieve more accurate classification.

Based on what is stipulated in the national accounts system 2008, production limits include the following:

1.	The production of all goods or services that are provided to other productive units, or to be supplied to it, including the production of goods or services used in the production process of these goods or services;	Market Economic activity (market (production
2.	Production for own account of all goods that are retained by their producers for their own final consumption or formation of the gross capital	
3.	Production for own account of knowledge capture goods that are retained by their producers for their own final consumption or formation of the gross capital except (by agreement) these products that are produced by households for their own use	Non-market economic activity (non- market
4.	Production for own account for housing services by the owner who occupies the house;	(production
5.	Production of household and personal services by employing workers from the family with wage.	

The first activity mentioned above indicates the **market economic activities for a clearly market production**. The remaining activities (2-4) are indicative of **non-market economic activities for non-market production** i.e. for self-consumption. All of the above activities altogether make up the <u>field of economic activity</u> to measure, classify and identify the economically active population. Other than that of non-listed activities are called **non-economic activities** and do not fall within the economically active population classification those who carry them out. From these activities that are excluded come mostly of services produced for own use by households and some examples include:

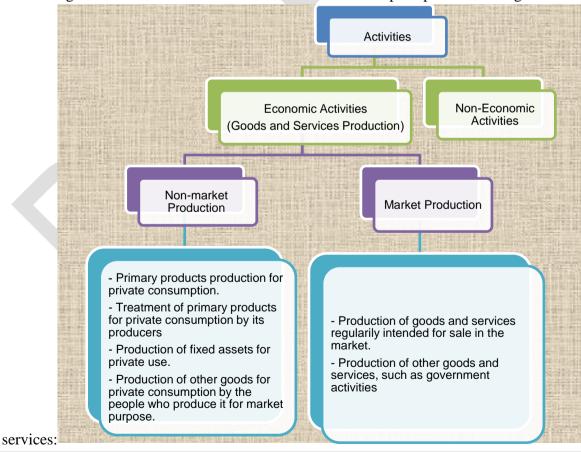
Examples of **non-economic activities**:

- 1. Cleaning, and decorating and maintenance of the house by the family that occupies it, including small repairs of a kind which is usually done by tenants and mates;
- 2. Cleaning, maintenance and repair of household goods or other items, including cars used for household purposes.
- 3. Prepare and serve meals for the household.
- 4. Care, training and education of the household children;
- 5. Sick and infirm care in household
- 6. Transport the household members or their goods for the benefit of the household.

The following is a diagram illustrating the scope of the economic activity limits upon which rely the International Labour Organisation's standards in classifying people in terms of whether they are economically active or not, which in turn determines who are inside or outside the workforce:

Scope of Economic Activity

According to the National Accounts standards for the concept of production of goods and



2.3 Market Economic Activity:

Market production includes all activities carried out by people working in the economic units that contribute to the production of goods and services with a view to selling them in the market, including units that provide public services, such as government, where government employees, for example, classed as producing for the market. The economic units are, such as companies and factories, farms, workshops, offices for services and other several examples.

The common image of the contributors to the market production is receiving wages in cash or in kind, or targeting them for profit as compensation for their working hours. Thus if the purpose was to carry out economic activities by individuals is a material objective, this expresses then the market production property.

The following illustrate the forms of employees' compensation:

Payment for a work including:

- Payment in cash, such as cash wages or salaries, or a proportion, or tips and others.
- Payment in kind and it is compensation for a work done by people such as food, fuel or for communications or mobile device / GSM or for a rent or food or product of the institution/farm products where the work or the training is performed. The definition includes as well the common phenomenon in many countries such as the share received by a person in exchange for complete management of the farm where sometimes the owner of a farm agrees with a person or a family to do the cultivation of his land, manage it and fully deal with it during a season for half of the crop or a third and thus that return enters within the compensation in kind during the season, which is considered in that agricultural year possessor of the farm.

Profit refers to:

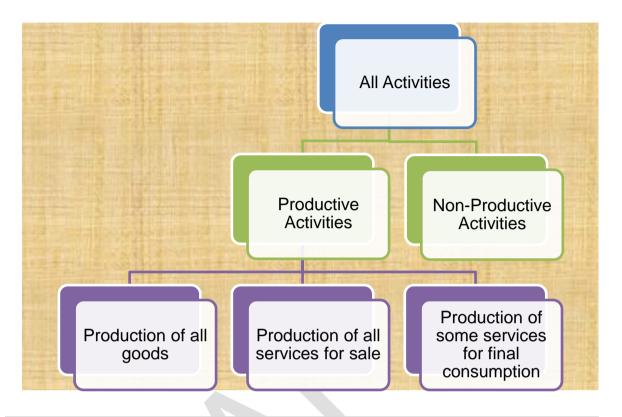
- Compensation for activities completed by people who manage and occupy their own businesses such as farms or companies, regardless of their hiring of employees with wage or not.
- Activities carried out by a family member to run the family businesses, i.e. projects a family owns, at no charge, but gets indirect gains by household spending.

The profit depends on an accrual basis, meaning that the individual who runs his own or family interests, which is one of its members for profit, not necessarily to get a profit at the moment, but the important thing is that he/she is doing activities of profit regardless the fact that he/she got it during the reference period or not.

Market activities also include mutual activities between the families for production, and activities aimed at the production of goods and services to the trade-off between the families, even though it is not dealing with cash payments. Such activities are spread in many countries where there are many families who produce dairy products and exchange it with other families' commodity products such as vegetables or services such as the education of some of the family members.

Production Limits

It measures the national production and employment



2.4 Non-Market Economic Activity:

Non-market production is determined based on the final use of the product and not on the nature of the production in terms of paid or unpaid production. For example, the cultivation of vegetables for the purpose of self-consumption is considered as a non-market production, not because it is an unpaid activity but because the intent of the production is not to sell it in the market. The term "non-market" does not mean it does not include any dealings with the market, but it is possible that the non-market production goes through stages requiring dealing with the market, such as the purchase of seeds and medicines, or rent a land.

Workers in non-market activities are considered economically active if they contribute with a large proportion of the total consumed by the family. Those who cultivate only home garden for entertainment and what they produce does not contribute significantly in meeting the basic needs of the family, it is a production that does not contribute to the economy, and therefore the gardens products that do not contribute mainly to the family need are neglected.

Four types of non-market production can be stated as follows:

Primary production for self-consumption, and that includes domestic production of goods for their own consumption and this is more concentrated in the agricultural and livestock production, which contributes significantly to the food basket of the family, which constitute the bulk of the consumer basket in developing countries.

<u>Processing and manufacturing commodities for self-consumption</u>, this includes a range of activities such as the production of seeds for agriculture, grain milling, preparation and preservation of meat products, spinning, tanning and furniture industry.

Production of fixed assets for the purpose of self-consumption, this covers activities that establish the infrastructure, such as building private roads and wells, housing and facilities for own account, as well as the production of instruments and tools that have a long lifespan. Knowing that it does not include the process of repairing buildings but it includes the expansion of the housing, which shows the linkage of the classification to the extent of the product's contribution to the national economy.

<u>Production of other products, not primary, for the purpose of self-consumption</u>, this includes manufacturing, transportation, communication businesses and some other services. For example, manufacturing shoes for the family is considered a non-market activity. This type of production affects the production, the value-added and the income. The non-market part of production could affect the measurement of working hours it took to produce some of those goods.

It should be noted, that the production of services for self-use, such as water transport is one of the non-market production as it is under water supply. There are many countries where many families are transporting water and wood such as the Bedouin population.

The summary of clarifying the non-market production, which faces many obstacles in its measurement because of the ambiguity and the difficulty of estimating its significance to the economy, lies in that any production for self-consumption by families to meet the basic of their needs, especially of food\ beverage, housing and transport, which constitute the bulk of the consumer basket, is considered an economic activity and those who engage in such activity fall within the economically active population.

2.5 Non-Economic Activities:

The concept of economic activity, through which the economically active population is measured, excludes a range of activities that sometimes appears as homework and sometimes is still under the ongoing debate about the need to be included within the economic activity and which makes whoever undertakes it as an economically active person. But because of its size and its real contribution to the value-added and production of the economy and the difficulty of measuring its output, such activities have been excluded. Some of these activities include:

- Production for final self-use by the family and which does not constitute a relative importance in household spending basket
- House repair and maintenance and construction by the families themselves
- Volunteer services provided to the community or civil organizations
- Individual services offered by a family member, such as teaching family members or nursing for a family member, cooking and baking, washing and so on.

Non-productive Activities:

Those activities reflect the daily activities carried out by individuals, such as eating and sleeping, and others. And that class of tasks and activities expresses in the economic theory the Leisure time.

2.6 Theoretical Background of Economic Activities:

Through the previous presentation, it clearly appears that the activities can be divided into three main sections: a working time for profit and wage, a working time for self-consumption and time to rest, which result in the division of the individuals' time during the day, the week, or the year. The division of a person of their day and the choice of the hours they will spend in each of the three types is interpreted by the economic theory related to the interpretation of the nature of the individuals who are willing to work productively, which falls under the name of labour supply theory, which helps that theory to explain the levels of participation in the labour market or its absence and the future predictions by connecting the income or wages, which can be obtained from productive working hours and the individual personality and nature. The older individual tends more to choose resting hours instead of working hours, especially if the work income is not encouraging.

Therefore, it is important that the concepts of statistical outputs remain compatible with the concepts used by the theories. And here, it is important to separate the three types of activities to be able to link them closely with what economic theories say. It also requires the separation of the income that comes from productive work or income obtained from other sources, such as real estate, heirs or others.

2.7 Age limits of the economically active population:

Performing an economic activity by individuals is linked to their ability to actively take part in a productive activity within the law of an individual country. This is due to the relevant regulations of minimum years of study, which must be received by individuals, and the labour law, which sets the minimum age allowed to carrying out an economic activity.

Thus the minimum and maximum age of the population who fall within the definition of economically active population is linked to local regulations and international conventions that define the minimum age at which individuals can be involved in economic activities. The labour law in Palestine, for example, sets the minimum age at which an individual can engage in any Economic activity at 15-years and with terms. The age group of 15-17 years old can work at most six hours a day in acceptable activities and to avoid all forms of bad and difficult works. Thus the minimum in Palestine of labour force surveys deal according to the law and considered the age group of 15 years old and over as a target category in the surveys of the economically active population. And workers under that age are considered within the concept of child labour.

In other countries, they put an upper limit for the age groups that can exercise an economic activity and for statistical and planning objectives. The age of 65 years old is set as the

maximum of economically active population in many countries and that to study the actual participation in the economic activities where it cannot be expected from the elderly to look for a job if they did not work under a social security law or social protection or national insurance or pension law that guarantees for the elderly a decent living. Thus we note that the minimum age of the economically active population will be compulsory, while the upper limit of the age is not obligatory to be set in many countries.

Identifying the age group associated with the economically active has an importance in the definition of "Manpower" or another term "Adult Working Population", which are frequently used in books used in universities. That class of society is also considered as the productive human energy in any country and the extent of the optimum use of manpower for that category is measured on the basis of who are economically active or not within the age group which is determined in any country.

Manpower or "Adult working population," or else "Population in working age" are the people in a particular age range of not less than the legal age for those who are allowed to work and not more than a specified age agreed upon within each country. However, for international comparisons, it is advised to deal with the most common age group of individuals who are 15 years old and above.

Third Unit

Currently Active Population

(Labour Force)

In the previous unit, the definition of economically active population and the statement of lower and higher age limits were made. However, in order to distinguish exactly the study of the current status or the general situation in a country and be able to link it to economic statistics and the system of national accounts, the measurement of the economically active population indicators is linked to the attribution of a specific time either a long or short term. From this point, ILO characterizes in the measure of economically active population in terms of the following:

Currently Active Population (or Labor Force). This is determined by linking the attribution of a short time, such as last week or the last seven days or last day, and is measured at the periodic labor force surveys, which monitor changes in the labor market.

Usually Active Population. It is associated with the attribution of a long time like last year or the last twelve months and this usually is measured through the population censuses

In this unit, focus will be on the definition and measurement mechanism of the **currently economically active population** (**labor force**), through which will check other indicators associated directly with this definition, such as worker and unemployed and those outside the labor force.

3.1 Definition:

"Currently economically active" definition depends mainly on the definition of both the worker and the unemployed, as the definition is linked to the subsequent units that defines both of them. The definition is as follows:

The economically active population or "Labor force" are the individuals in a specific age group i.e. the manpower who have completed the requirements to classify them as employed or unemployed during an attributed time period or a specific and short time period, such as one day or one week.

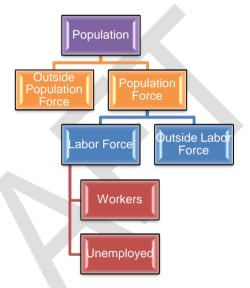
The concept of currently active population is the most common in terms of use to measure the economically active population. The concept is based on a short attributed time period. This type of concepts is used to measure short-term indicators in labor makets, which works on measuring and monitoring the performance of labor markets in the countries, especially if the data are collected frequently and in tight times. What is meant here by monitoring is

that short-term indicators can be measured over time by observing the changes as well as at the sectorial or geographic levels. From the most important indicators that are measured based on the concept of currently active, unemployment, employment and characteristics of each. Their measurement depends on the basis of labor force framework.

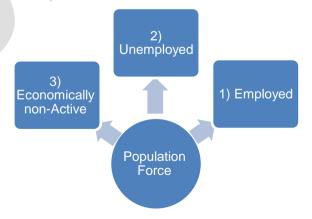
3.2 General framework of Labour Force:

Through the definition of economically active population (labor force), the relationship appears essential between the concept of labor force, workers and unemployed which is embodied in what is called the labor force framework and which shows the relationship map between the population, the labor force and the unemployed in a specific and short time.

General Framework of Labor Force



Through the general framework of the labor force, it is clear that the manpower can be divided by their current activity within a specified short period of time (a week or a day) to three comprehensive categories as follows:

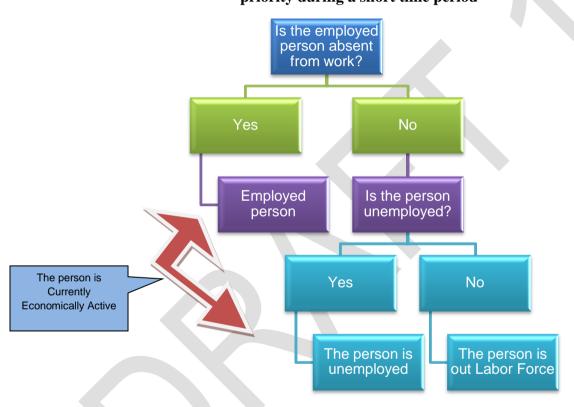


The first and second categories form the current labour force. Those provide us with the number of manpower supplied at a specific time **Labour Supply**.

3.3 Priority rule in classification:

The hierarchy and priority rule in the classification of individuals according to the three categories listed above (workers, unemployed, outside the labor force/economically inactive) is one of the most important issues for the classification of individuals. This means that when we begin to classify individuals into those categories, we start to check if the person was a worker or not, then if not we check if he was unemployed or not, and if not we check if he was currently active or not, and if not he get classified as an individual outside the labor force.

Illustrative figure showing the hierarchical classification of individuals following priority during a short time period



The above figure shows that the priority has been given to check the status of individuals within the manpower during a short and specific period (such as one day or one week) if they were **employed** or not, first, including if they were absent from work as well. Then check whether they were **unemployed** (Provided that they are searching actively for work and available and ready to work) or not in the case they were not employed or absent from work. Finally, if they were not employed or unemployed, they are classified as persons **outside the labour force** i.e. persons **economically inactive** then are subjected for checking the reasons of being economically inactive, such as a full-time homeworker or education or old age or others.

Example: a full-time regular university student, the student worked over the week under study 15 hours in a restaurant. This student is classified as **employed** where the status of

work was prioritised on the prevailing situation which is education.

3.4 Activity principle:

The classification of individuals depends on the relationship with the workforce described in the general framework of the labor force on the prevailing activity over a short and specific period of time, and this is to show what the real activity of the individual is during that period.

The **activity principle** aims at making the labor force measurement process objective as much as possible, and this is to verify and ensure the comprehensiveness of individuals in the labor force who are actually carrying out an economic activity of joining a job or an activity related to market production or some of the activities related to non-market production as described in a previous unit, or those who search effectively for work and are ready and available to work during the specified period.

There is a slight exception to the activity principle which is related to the employed individuals absent from work or temporarily unemployed who are waiting to be called in order to start a specific job.

In some cases where the pattern of work is fixed over the year, with minor and relatively low seasonal movements and changes on the structure of the general framework of the labor force in terms of inside or outside the labor force and the employed structural, a survey for a specific period during the year to take a snapshot of the labor force structure image is enough to represent the structure for the whole year.

However, the existence of different seasonal patterns over the year for the labor force activities and movements does not enable the surveys of one short reference period to represent the rest of periods. In such cases, these indicators should be measured over a longer period of time, either by repeating the surveys during the year or using a longer period of time reference.

3.5 Indicators:

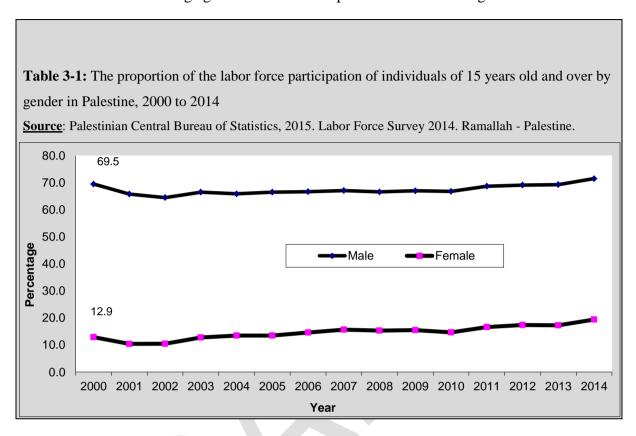
The most important indicators that can be derived by measuring and classifying the economically active population are as follows:

The proportion of current activity, a percentage of the economically active population to the total population.

The rate of participation in the labor force, a percentage of the economically active population to the working-age population (manpower), which is one of the most common indicators.

The most common sub variables that are linked with the indicators above are gender, age, education and geographic areas.

Example: Table 3-1 shows the percentage of female participation in the labor force compared with the male for some age groups in Palestine, which displays a big gap between them in the participation rate and shows that the proportion of economically active women to total women of working age reached 19% compared with 72% among males in 2014.



Fourth Unit

Usually Active Population Statistics

4.1 Definition:

Based on the international definition:

Usually economically active population includes all people of working age (manpower), whose main activity is determined whether they were employed or unemployed on the basis of a long period of time (time reference period) up to a year or to the past twelve months.

The difference between the currently and usually economically active can be summed up as follows:

Currently Economically Active	Usually Economically Active	
Its measurement depends on the state of activity of the person who is evaluated based on the "priority standard" used in the labor force general framework		
According to the general framework of the labor force, people are categorized first as employed or unemployed then classified as labor force.	First, people are categorized as usually economically active or inactive then the active ones are classified as employed or unemployed based on the longer period they spend in each.	

It is noted from two modes that they offer different indicators; the current situation indicator provides an indicator that depicts the situation as instantaneous snapshot through the implementation of the survey, while the usually active indicator shows the relationship of the population with the labor force throughout the whole year. Under the fact that the latter concept depends on the memory to measure the activity over a long period of time (a long time reference), that causes the raise of mistakes rates. Thus, in this guide will be brief and will not be focused on, but will be referenced superficially to be comparable. In the case it becomes of interest, return to the definition source and the relevant evidence.

This indicator has been introduced for the first time in 1982 during the 13th Labor Statisticians Conference in order to measure the population activity during the year and give a picture of the prevailing pattern of its relationship with the labor force in the

countries. Usually, such indicators are used in population censuses because of their spaced periodicity which reaches up to ten years.

4.2 Activity Main Status

Based on the above definition of those usually economically active, the person who is identified as an economically active depends on the longest period they spent as active. i.e. if the weeks he spent in a state of inactivity (as an economically inactive one) are more, he is then classified as economically inactive. Therefore, it is supposed that the person has been engaged in an economic activity or searched for a work (as for the definition of the employed and the unemployed) during the year or did pass by both status over outspread times that scattered a total of weeks more than the weeks he spent as a economically inactive. Likewise, the usually economically active is classified as employed or unemployed with the same mechanism.

The definition of usually active population includes two main components:

- Basic status of the activity of any person must be identified in terms of the amount
 of time they spent in case of employment or unemployment during the period of
 time reference "majority standard"
- When determining the status of the person whether he was an employed or an unemployed, **the number of weeks or days** spent by the person in the basic status where he was classified should be determined.

Example:

If a person spent 16 weeks searching for work and is ready for it (unemployed), and worked for 11 weeks and the rest of the year he is not working nor looking for work and not ready to work (economically inactive): his classification will be according to the international definition - "usually economically active" then he would be classified as unemployed. (Note: the year's weeks are 52 weeks).

4.3 Indicators

- Proportion of the usually economically active population of the total population
- Proportion of the usually economically active population of the total individuals of working age.

These indicators are linked with demographic (gender, age ...), and social, economic and geographical indicators. I should be taken into consideration that these indicators are usually different from the indicators of the currently economically active, especially in the case of plenty seasonal nature.

4.4 Measuring the economically active statistics

Considering the problem of remembering all the activities that took place during the year and account its duration, there was an attempt to avoid the dilemma by identifying the activity on a monthly basis over the year, so that the activities are registered every month.

The most common source of data is the population censuses or surveys on demand. Under the provision of quarterly periodical surveys mostly for labor force surveys, it has become unnecessary to implement surveys to calculate the habitual activity of individuals. However, as it has been referred to earlier, the economically active indicator calculates the status based on the period that has been spent in each of them, and therefore the basic rely in classification depends on the usual concepts for each of the employed and the unemployed then remains the issue of final evaluation.

Fifth Unit

Employed Statistics

5.1 Definition of the employed:

Population practices different kinds of work, some of which is working with government and private institutions,non-profit organizations and others in exchange for a wage or a salary, and some of them are self-employed or work as employers and have hire paid employees, and some of them are unpaid employees for the household. Some of them work full-time or part-time and some work in intermittent works like seasonal businesses. There are also individuals who engage in non-economic activities and from time to time they take part in economic activities. There are many forms of activities that determine if an individual falls within the employment concept or not.

According to the concept of the employed, as stated by the international definition of ILO in 1982, the "employed persons" are all people over the age specified for measuring the economically active population who were within a specified short period of time (one day or one week) in the following categories:

Paid work or paid workers (1) at work: They are people who were performing a work during the reference period for a wage or a salary, whether in cash or in kind, (2) at work but are not there: They are people who have already done their current work, but they were not at work on a temporary basis during the reference period, and they have a formal attachment to their job.

The work for self-account (1) at work: They are people who were performing a work during the reference period for profit or for family gain, whether in cash or in kind, (2) has a project, but not present at work: include people who have a project, it may be a business or a farm, or service project, but for some reason were not present at work during the reference period⁵.

The international standards clarify in addition to this, for practical reasons, back to the origin of SNA to calculate the output of production and non-production, the market and non-market activities, that the phrase "a work" could be interpreted as work for a period of at least one hour during the short reference period. This means that working for a short duration as one hour only is enough to classify the person to be in working condition. As it is consistent with the above-mentioned priority rule, which gives priority to classify a person as a worker.

22

⁵ International Labor Office and ESCWA 1996: surveys of the economically active population, employment, unemployment and underemployment. Amman, Jordan.

5.2 Employment Status:

Workers are classified into four main status based on whether they work for others, or they operate self-projects for self-benefit or work on projects for the benefit of the household. The following is a description of such status:

Employer:

He/she is a person who works at an enterprise he/she owns or owns part of it (partner) and works under his/her supervision or for him/her at least one worker with pay. This includes employers who manage projects or companies out of the enterprises, provided that one worker at least works under their supervision or for them with wage. The shareholders in joint-stock companies are not considered employers even if they are working in them.

Self-Employed (Own account worker).

He/she is a person who works at a facility he/she owns or owns part of it (partner) and there is no paid worker in the enterprise and includes people who are self-employed outside the enterprises.

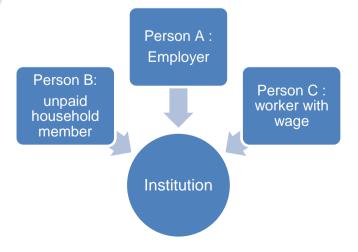
Wage/Paid Employees:

He/she is a person who works on behalf of another person or for the account of an enterprise or a specific authority and under its supervision and gets in exchange for this work a specified fee, whether it was in the form of a monthly salary, weekly wage, payment per segment or any other form of payment. Under that fall those working in ministries, government bodies and companies in addition to those who are paid employed in service of the family or for others.

Unpaid Family Member:

He/she is a person who works on behalf of the family, in a project or a service or a farm of the family and does not receive any pay for it and has no share in the profits.

The following is an example of the interdependence of these statuses: the status is: person A runs the institution of the family and is responsible for their accounts and employs two other persons, one of them from the same family, person B, and the other from outside the family, person C who receives a wage.



5.3 One hour standard:

The main goal of the one hour standard is coverage of all types of employment, including the casual work, the reserve work, and the work for short-term and other types of non-regular employment. The standard is also linked closely to the system of national accounts to calculate the total production. Therefore, in the event of commitment to the one hour standard, a space will be left to connect the output to the total hours of work undertaken following the activity. The total working hours exerted can be measured by measuring the number of workers and their working hours. Thus, any increase in the minimum exerted working hours standard (one hour standard) could lead to a distortion of the linkage between total production with the total exerted working hours.

On the other hand, the adoption of the one hour standard leads to nonexistent unemployment measure, i.e. the real unemployment, which did not work even one hour during the reference period and was not absent from work. This will lead to unemployment measure as a state of complete lack of work. Thus, non-compliance with the standard will lead to a distortion in the unemployment indicator.

Also, the one hour standard is linked with short reference period (one week or one day) and therefore, the working hour is within one week or one day.

5.4 Temporary absence from work:

The international standards emerging from ILO developed estimations for the nonexistence of the worker at work during the reference period, and thus kept that category within the employed category. But, with the presence of this type of exception, there remains an important condition which is the need to make sure that the absentee from work will return to work certainly.

The temporary absentees from work include all personnel who did not practice their work during the time reference period (reference period) due to illness or absenteeism due to injuries at work, special leave, maternity leave, public holidays, , strike, curfew, lockout, temporarily stalled from work for a lack of raw materials or fuels (inputs of production) reasons, reduced demand for production for a limited period for seasonal reasons, or because of adverse weather conditions, stoppage of factories for reasons of mechanical failure, a power outage or other reasons.

The basic idea of the inclusion of the concept of absence from work is the non-loss of statistics related to the employed persons and the details of their work and their characteristics when they are out from work during a specific and temporary period during the time reference period, but under the following condition:

Individuals who are supposed to be classified as temporarily absentees from their work, and therefore are classified as employed persons if they primarily worked in the current activity and expected to return to work after the end of the absence period.

However, there is an exception from the exigency that a person must have already begun work, so that individuals who were summoned to do a work and to start it during the reference period of the surveys, but they did not begin their actual work because of the above reasons, including illness, for example, they are categorized as individuals absent from work thus workers.

According to international standards, absence of wage and self-employed workers is being differentiated. Here below explanation of each:

Temporary absence from work for paid workers (wage employees).

The distinction for the classification standard of the absentee workers from work was made following their working status whether they were paid employees or self-employed. The absence of paid employees from work is emphasized as follows:

The standard is based on the idea of "Attending an official function" to emphasize the absence in the light of local conditions of the country based on one or more of the following criteria:

- 1. Continue to get pay or salary
- 2. Confirming and trusting the return to work after the completion of or the demise of the absence reason or make sure of the return date
- 3. Expiration of the absence period from work, where it is possible to be a period during which workers can get compensation without obligation to accept other jobs. Normally, the absence period is short in order to be considered as temporary absence. Knowing that the exact period of absence from work for all types of absences has not been specified in the conferences of Labor Statistics experts which the last was the sixteenth (1998).

The evidence that handled employed and unemployed statistics classifications on the basis of absence from work in the conference of 1998 recommended the classification of the employees state following the specific cases below, depending on making sure of the return to work and only during short periods of absence:

- 1. Paid employees in maternity leave (in addition to: the condition to get all or part of the wages or salaries from the employer or from an equivalent authority from other sources during the 1-6 months of compulsory maternity leave).
- 2. Members on parental leave (in addition to the requirement for the leave to be short, 1-3 months, preceded by a working period or maternity leave).
- 3. Workers self-benefiting from leave without pay (in addition to the emphasis on working with the same employer/operator, within a period not exceeding 3 months)

- 4. Workers on paid vacation initiated for employers or management (in addition to the emphasis on working with the same employer with access to a significant part or full salary or wage)
- 5. Members in unpaid leave initiated by the employer or the management (in addition to the agreement on the date of return to work within a period not exceeding 3 months).
- 6. Members in training or education leave (in addition to the requirement of obtaining a significant part or full salary or wage, or if unpaid, emphasis on the leave to be within 1-3 months max.).
- 7. Seasonal workers who are not in their work during the period out of work season (in addition to the requirement of making sure to work with the same employer, and get a significant part or full salary or wage during the period of unemployment due to seasonal situation).

Controversial cases:

It is possible for controversial cases on absence from work related to the following to take place:

- 1. Personnel demobilized from work temporarily (such as members of work contracts or activities which have been suspended by the employer without specifying the date of return). They must be considered as temporarily absentees from work and thus classified as employed only if they maintained their official function.
- 2. Individuals demobilized from informal work must be classified as unemployed or economically inactive, depending on their action in the search for work and their actual willingness to work.
- 3. Non-regular workers, such as casual workers who work with per day payment or on a weekly basis with an employer without an official post, and when they do not work during the reference period, it is supposed not to classify them as employed.
- 4. Others non-regular workers, such as seasonal workers, they should be classified as employed when they are not in their work, if the function was official during the time reference.

Temporary absence from work of self-employed workers:

Standards of absence from work of the self-employed workers differ from wage employed because of the large difference in the work pattern of self-employed workers where there is no clear pattern for the official work. Determining whether the self-employed workers are absent from work or not (and thus employed or not) depends on the **continuity of the existence of the institution/project** during the period of absence from the production process. Also, it depends on the length of the inactivity/absence according to the international standards.

Casual self-employed workers:

This category is not supposed to be considered "with an institution but not at work," when they are away from work/employment. For example, the children/individuals who work as shoe cleaner in the street when they stop working, they cannot be considered as employed during the short-time reference period.

Unpaid workers with the family:

That category contributes to the family institution activities. They're not supposed to run or have projects for themselves. For that category, it cannot be considered "with an institution or a project, but not at work". Therefore, the category cannot be classified as employed when they are not at work. They must be classified as unemployed or economically inactive, depending on their action in the search for work and their current willingness to work.

Seasonal workers:

For employers, self-employed workers and workers in seasonal activities. Assuming that during the densely season period (active) the institution or the project itself will be continuing in production when the employer is absent, in this case, he is classified as an employed when he is temporarily absent from work. During the period out of season, where it is not possible for seasonal projects to keep working over the year, such as olive presses and thus when the employer is not at work because the season did not come yet, the employer, in this case, is not an employed.

5.5 Treatment of special groups at work:

The ILO guidelines explicitly suggest for some particular categories of workers to be classified as employed: contributing to the family projects, individuals who work in the production of goods and some services for self and house consumption, paid trainees, students, working housewives and members of the armed forces.

Unpaid workers for the family or workers in the family projects are individuals working without pay in an economic activity that is run by a family member. That category is classified as employed, but in some countries, the minimum working hours that must be worked over a week is determined (during the period of time reference) to consider a person from that category as employed.

Individuals working in the non-market production are members of another category of workers categories without pay and are classified as employed. As they are contributing to the production of goods and services for self or family consumption taking into account that such activities have a significant and important contribution to the total consumption of the family, and this depends mostly on each country according to its circumstances.

The apprentice (who is training at work), they are those working in an institution operated by a relative (from family members), as when they received a salary in cash or in kind they consider it as a pay for a work and they are considered workers with pay at work or not at work, as already explained.

For those who work in an institution that is not operated by a family member, their classification as employed depends on their contribution to the production of goods and services. In some cases, they are classified "at work" or are not at their work" if they were on an official business.

The case of unpaid trainees was addressed properly in the Fourteenth International Labor Conference (1987): unpaid intern, at work in an institution operated by a relative (from the same family) is an employed.

Trainees: statistics address the classification of trainees on by-case basis. Trainees can be classified as employed if they will be assigning to an official job afterward, such as government employees who begin specific training period to be able to start working later productively.

Students, **housewives** and the non-involved in an economic activity during the period of time reference, which were at the same time working with wage or self-employed, should be classified as employed, and thus as for the priorities, the work is prioritized over other activities, such as access to education or domestic work as for the working women who are at the same time carrying out entirely the housework.

The Armed Forces personnel must include both regular and temporary (reserve) members as defined in the 1988 revision of the international standard classification of occupations ISCO1988. Those who do civil services as an alternative to compulsory military service are also classified as employed.

Individuals in voluntary work: the person in the volunteer work is the person who engaged in any activity willingly free of charge or material reward in order to achieve common interests or help to develop the standard of living of others from their neighbors or human societies in general, where the transportation, meals or gifts allowances that are offered to the volunteer are not considered as wages. The unpaid work required as part of the education or training programs are excluded from volunteering work.

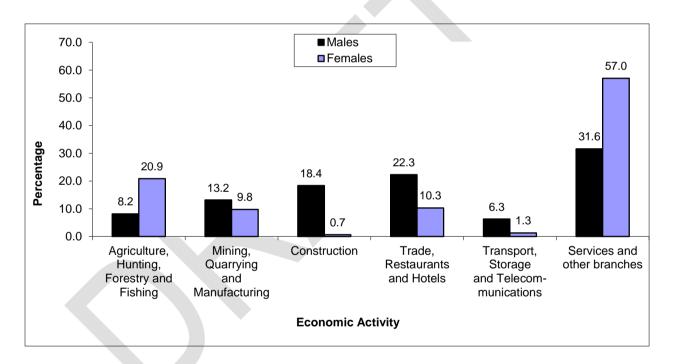
5.6 Indicators:

The most relevant indicators are:

- **Proportion of workers**: the ratio of workers to the currently active population and it is complementary to the unemployment rate. For example, if the employment rate is 80%, this means that the unemployment rate is 20%.
- **Proportion of workers to the population**: the contribution of workers to the working-age population
- The relative distribution of the employed

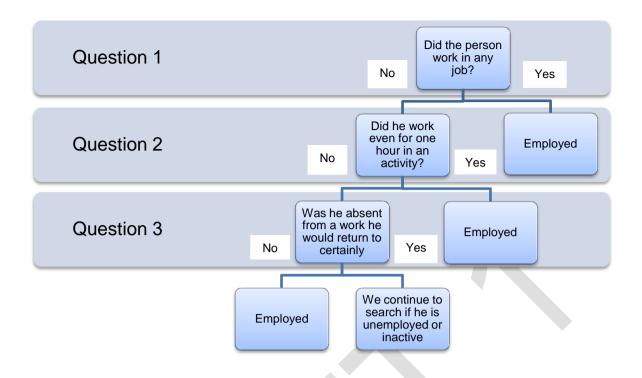
These indicators can be distributed according to several sub-indices such as gender, age groups, education, economic activities, institutional sectors, professions, geographical distribution, working status and other sub-indices.

Example: Relative distribution of employed individuals of 15 years old and over by gender and economic activity



5.7 Variable measurement (through the form):

The following figure shows the questions series that are addressed to individuals to be classified as employed or not (questions indicate a specific and short period of time reference - like last week, which is the most common). These questions are within a family form directed to individuals of working age.



Sixth UnitUnemployed Statistics

1.6 International standard definition of unemployment:

International standard definition of unemployment depends on three criteria that should meet at the same time to allow the classification of individuals without work as unemployed, and those criteria are:

The unemployed are all persons of working age who were during the short period of time reference:

- Without work, i.e. they were not during the period of reference in any paid employment, self-employment or even absent from a work to which certainly will return to as for the employed definition
- Currently available for work, i.e. available for paid employment or self-employment
 or they were offered during the time reference to search for work, i.e. they carried
 out specific and serious steps over a short and specific period to look for paid
 employment or self-employment.

This definition is not associated to formal or institutional benefits such as compensation and benefits of the unemployed, but it is linked only to the person activity itself during the period of time reference.

Without work:

The term "without work" distinguishes between the worker and the non-worker (regardless of whether unemployed or economically inactive) and it is interactive with the term employed. Individuals who were not classified as employed according to the international definition, they are therefore "non-workers" i.e. individuals without work.

Individuals "without work" are those who did not work with wage or are not self-employed even for one hour during the reference period, and also they were not absent from their jobs temporarily following the definition of workers.

This standard does not specify if the person is unemployed or economically inactive only if it was linked to the criteria of being available to work and looking for a job together.

Current availability for work:

Current availability for work (during the period of time reference) is a prerequisite for classifying a person without work as an unemployed. This standard means specifically that if given the opportunity to work, the person without work during the reference period must be able and willing to work.

This standard has been determined to avoid the example of people who are without work and looking for work, but not at the present time, such as students. And thus examines whether a person is ready to start working.

Searching for a job:

The search for work criterion stresses on the seriousness of the search by the adoption of a person without work the steps to find a job so that it takes formal status such a regularly and periodically review of the newspapers and websites for jobs and apply to institutions, corporations and registration in employment offices and others. The most important can be enumerated as follows:

- Registering in employment offices or private or public personnel exchange offices
- Applying for jobs to employers and potential employers to work for them
- Exploring work related websites, factories, markets and others
- Advertising in newspapers or search through the newspapers for jobs
- Looking for land, machines, shops, offices, stores or equipment to establish an institution/company
- Arranging the funding source
- Applying for licenses or permits and other
- As **informal methods**, asking friends, mates and relatives for job opportunities

For the time reference of the search for work standard, it is different from the basic time reference of the survey, where it is determined on a longer period that goes up to a month or four weeks so as to increase the likelihood of making sure that the person has looked for work, in addition to the time gap between the search for work and getting a work.

Start to work later (starting in the future):

The International Standard provides an exception to the three criteria for determining a person without work as unemployed or economically inactive, which is an exception to the general rule of the three criteria, as there are some cases where it is clear that the persons who are without work are not looking for work because they wait to be called to work in the near future. In this case,, the international standards determines that category an unemployed and not absentees from work for reasons due to the concept of "non-optimal exploitation" or underutilization of human resources.

Expand the standard of searching for work - the definition of normative unemployment:

As a result of uneven relevance and impact of the standard of searching for work in the measure of unemployment indicator accuracy and realism, in many countries, the requirement of seeking a job as a condition of classification of individuals who do not have work as unemployed is removed. For example, making the definition of the unemployed flexible by removing the requirement of seeking employment raises the unemployment rate, and thus when a gap is between the standard definition and expanded definition of unemployment, the labor market is less regulated and unpaid works among the family are spread.

The 1982 guide points to some specific cases to expand the definition of unemployment through the elimination of the requirement of seeking employment so that this provision is limited to the following cases:

- Traditional means to find a work have limited significance,
- Labor market is not regulated to a great extent or limited in scope,
- Labor absorption in sometime is not enough, or
- Self-employment spreads in the labor market

It is notable that those conditions and the environment make it difficult for the unemployed to search for work even if they actually need to work, and in case of the requirement to provide the standard of searching for job, that will mislead the decision makers and give them an excessive positive image.

It can be also referred to an example about demobilized workers from informal institutions because of political or economic crises. That group of demobilized workers can be classified as a separate sub-category within the unemployed category.

6.2 Indicators:

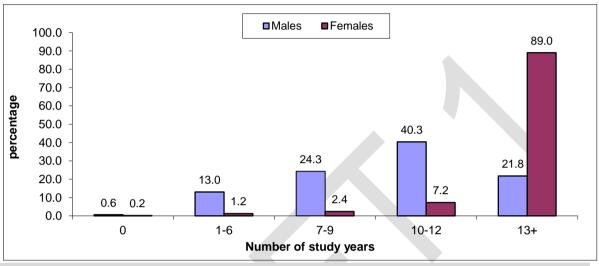
The most important relevant indicators are:

- **Unemployment rate**: the ratio of unemployed persons to the currently active population (labor force). It is complementary to the proportion of employed persons. For example, if the unemployment rate is 20%, this means that the percentage of the employed persons is 80%.
- **Proportion of unemployed persons to the population**: the unemployed persons to working-age population

• Relative Distribution of unemployed persons

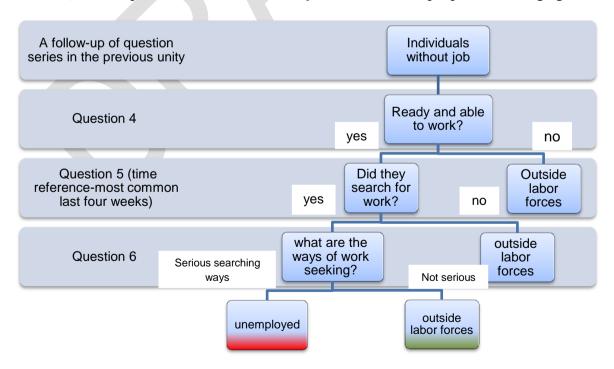
As mentioned in the previous unit, these indicators can be linked to sub-indicators such as age, education and geographic distribution.

Example: Relative Distribution of unemployed individuals of 15 years old and above by the number of years of study and gender



6.3 Variable measure (through the form):

The following figure shows the questions series which are addressed to individuals without work to be classified as unemployed or outside the labor force, i.e. economically inactive (Questions refer to the specific and short time reference - last week, which is the most common). These questions are within a family form directed to people of working age.





Seventh Unit

Limited employment statistics (underemployment)

7.1 Objective

The limited employment (underemployment) statistics aim to measure the extent of real benefit from the manpower in the light that the unemployment index in many countries, especially the developing countries, does not reflect the reality of the labor market performance. These countries sometimes record low unemployment rates, but in fact the nature of the work of the employed category is not enough to cover the minimum level of a decent life. There are many imperfect aspects of the work that individuals are forced to work in instead of continuing as unemployed, particularly in light of the lack of unemployed compensation system. The absence of such a system in developing countries leads to force unemployed persons to accept any work, rather than doing nothing. This is related to the supply concept of labor and wages or supplied working hours. Consequently unemployment is part of the low performance problem of some labor markets, but more importantly, what are the conditions of employed persons and the level of their ability to provide a decent life. The underemployment reflects a lower level of the capabilities and desire of the employed persons in terms of labor time (the number of hours and timing) and productivity. Underemployment also reflects the inability of a person to get a work level up to the level of complete employment.

7.2 underemployment statistics manifestations:

Underemployment statistics are considered as complementary to the statistics of employment and unemployment. The three statistics groups constitute the workforce.

Through the employed definition, which has been associated to the one hour standard, it is noted that we considered each person who worked even for one hour in a week time reference as employed, and therefore if the person actually works for a few hours and lower than they wants, it demonstrates the non-optimal use of the potential and skills of the country. This in itself is an indication equivalent to the unemployment index in significance.

Underemployment statistics are part of the workforce general framework and are determined by several related standards and they are part of the employed statistics where the workers are classified to complete employment and limited employment. When the individual is classified as employed, it is followed by criteria for determining whether that person works in complete or limited employment conditions. This comes as a verification of the proportion of optimal use of human potentials and skills in the country.

7.3 International standard definition:

This group includes all individuals who fit the concept of employment and are working unusually, whether they are working fewer hours than usual for some reason and who are

interested in the same time in increasing the number of their working hours to the normal limit (35 hours or more per week, the most common), or are trying to increase this number by one of the methods, such as searching for additional work or trying to create a private work or service, and this type is called **visible underemployment**. Within the underemployment fall also those who want to change their jobs for economic reasons such as inadequate salary or because of poor working conditions and this type are called **invisible underemployment**.

It is noted from the above definition that it includes two types of underemployment:

- Underemployment related to time
- Certain types of inadequate employment conditions

The first concept describes cases where the working hours for employed people are not sufficient. The second concept is related to the inadequacy of work in terms of profession skills, income, excessive working hours and hazardous jobs. Both concepts express the non-optimal use of human resources whether it was from a quantum perspective (working hours) or type perspective (decent and suitable work). Both concepts are defined and specified by comparing them with alternative jobs which the worker wants to get or is ready for.

The employed person's desire and willingness to change their current job is a key element to determine whether they are part of the inappropriate and inadequate underemployment state.

However, not everyone who wants to change their work is actually ready for the change. There is a discrepancy between the people who want to change the work in terms of frequency and the real reasons for willing to change. There is a supply and a demand in the labor market which controls the labor markets conditions resulting from the political and economic conditions in any country. Thus, the challenge remains in the real measurement of underemployment, which can sometimes be linked to working conditions themselves, the worker's skills and the compatibility between them.

7.4 Underemployment related to time (visible underemployment)

Time related underemployment is associated to persons willing to work extra hours after the hours spent in all the activities they carried out during the period of time reference as a result to the total worked hours being less than the standard working hours or those specified in the law.

This means that a person who works two jobs as an extra work and wants to change them by one job with the same working hours is not classified as time related underemployment. People who are working less than the normal working hours in the main job are also not supposed to be considered as time related underemployment if they work in an extra job

(secondary) whose hours raise the total usual hours (according to the law or limit that is specified in the country - such as 35 hours weekly as common limit).

There are three elements in the time related underemployment definition, namely:

- Desire to work extra hours
- Willingness to work extra working hours
- Working less than the agreed upon limit of hours

Desire

The worker's desire to work extra working hours, regardless of the total working hours which they do actually in all works during the period of time reference, is the first and main requirement in determining workers as underemployment, be it in the current or usual status.

It is possible that the workers want to increase the working hours by:

- Getting another job (jobs) in addition to their current job (jobs)
- Replacing any of their current jobs with another job with the increase in the working hours
- Increasing the working hours in one of the other jobs
- Combining with the possibilities above.

To categorize them among underemployment, the international evidence recommend requiring for a serious search for additional working hours according to the definition of the unemployed people in their seriousness in the search for work.

Readiness

Readiness is one of the conditions that facilitate the process of classifying people whether they were willing to work extra hours or not. This condition has three components:

- Workers ready to work extra working hours
- Workers ready to increase extra working hours later, to do some arrangements such as childcare or arrangements in the current function and others. This is usually linked to persons wishing to change their jobs
- Workers in need to get a chance to work extra working hours

Workers working fewer hours than the normal working hours

This condition is important to exclude those who desire and are ready to work extra working hours, but they have complete works considering the period of work they perform is beyond the normal working hours. Thus, for the classification of employed people as

underemployed, it is supposed to begin by determining whether the person is actually working less hours of normal working hours.

This condition requires the calculation of the total working hours performed by the person during the time reference period in **all functions**, including the main and secondary during the reference period, and the comparison of those hours with normal working hours. The normal working hours are connected to the national level of hours of work in a country that was according to the labor law or decision in any country whether it was following the labor law, an internal decision or agreement in the country, or in the case of absence of those arrangements, the overall average or median of weekly/daily working hours are considered depending on the time reference.

As a result of the fact that normal working hours are determined according to the above, that is determined from international comparisons between countries when normal working hours are different. To avoid this in comparison reports between countries, the two conditions, desire and readiness are considered apart from the total working hours carried out by the worker during the period of reference. Therefore, this requires the states to ask about the desire and readiness, through the implementation of household surveys, regardless of linking working hours whether they were lower or higher than the normal working hours. For the national analysis and data scheduling, the condition of the working hours are included if they are less than normal working hours to give the opportunity for international comparisons.

Integrated summary with the labor force general framework:

The following is a summary that distinguishes labor force components as extra disaggregation of the labor force general framework that we mentioned at the third unit.

Individuals of working age	Do want and are ready for work (alternative)	Do not want or are not ready for work (alternative)
Those having a job	Underemployment	Complete employment
Do not work or do not have a job	Unemployed	Economically inactive

Inadequate employment situation (invisible employment)

Invisible underemployment includes people employed during the time reference period, but they want to change the current state of their job, or change the activities and/or the work environment for any reason or a set of reasons being determined based on the circumstances of the country. The change could be through:

- Change any of the work situations they carry out like from working for self-account to paid work
- Withstand changes in any of their working situations (paid or unpaid) through the
 re-organization of the work or improvement of the tools, machines and equipment,
 or diversifying their products of services and goods, or the development of
 marketing tools, and others.
- or both

This could be due to several reasons such as:

- Incompetent use or lack of correlation with the professional skills of the individual
- Inadequate salary or income from the current Position
- Excessive working hours
- Dangerous work
- Work in poor working conditions
- Inadequate tools or equipment
- Inadequate social services
- Difficulty of traveling to work
- Variable and inappropriate work schedules
- Frequent cessation of work because of delayed or irregular flow of production inputs
- Irregular payment of salaries
- Unstable or delayed customers entitlements

And other non-exclusive reasons where the employed person can see the work insufficient from the financial perspective (income) or skills. Thus, it is useful to separate the cases when scheduling.

International evidence point to two additional conditions which can be used by the countries to be able to identify the invisible underemployment accurately, namely:

- Workers are supposed to be **ready to change their work** as the readiness has been defined in time related underemployment (visible underemployment)
- Workers are **seriously looking for** an alternative job to their current one

Based on the mentioned above, the invisible underemployment can be determined by the following chart:

Some forms of invisible underemployment can be presented as follows:

Invisible underemployment related to skills: which includes people working in jobs that do not use their skills in the best way. Example: a civil engineer who works as a construction worker and wants to change his function with a job that fits his qualifications and skills, although his wage as construction worker could be similar to an engineer salary.

Invisible underemployment related to income: which includes people working in jobs with low wages and want to change their jobs with a job that exploit their capabilities and potential underlying in better pay. Example: an employed working in the field of cleaning, although they can work in a better job and with better salary based on their experience or diploma.

Invisible underemployment related to excessive working hours: includes people working in the factory for long hours much beyond the normal working hours and want to change their jobs, although it can reduce their wage or income.

7.5 Indicators

When presenting data about visible underemployment associated to time and invisible employment, it is useful to calculate the following:

- Visible and invisible underemployment rate as a percentage of total employment
- Proportion of underemployment size associated with the time as a percentage of its contribution to the normal potential work size and this shows the size of the missing hours which can be invested as labor supply.

The second indicator is based on the total available hours and are not exploited and can be added to the total working hours, which can also be performed by the unemployed persons, and thus, provide the decision maker with an index on the size of the working hours that need to be worked and they are near to the quantitative visualization of production inputs available in the economy to be invested in any future plans. Therefore, it is useful to link them with the skills available for work.

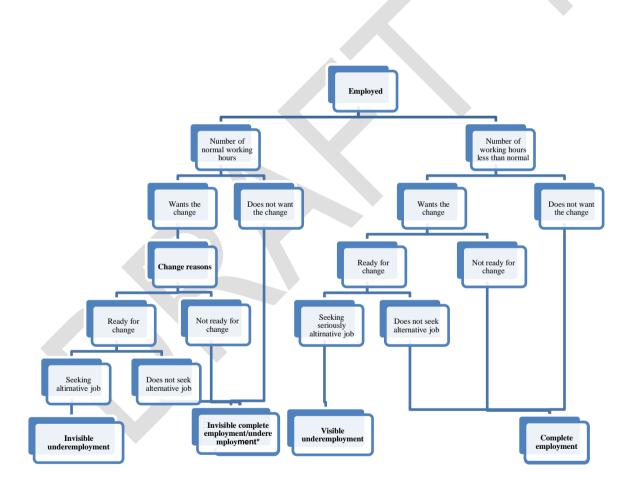
Such indicators can be linked to sub-indicators as in the other indicators such as demographic, social, geographic and economic indicators.

7.6 Measuring underemployment statistics:

By including some questions within the household form designed for individuals of working age, the visible and invisible underemployment statistics can be measured, and of course, it follows the questions that are being asked to identify whether the individuals were

employed or unemployed. Here we would like to state that the terms visible and invisible come out from the fact that visible underemployment, which is associated with time, is determined by the number of working hours performed by the individual in all works during the period of time reference and thus it is concerned with the quantitative sense of the work nature. on the other hand, the term invisible underemployment is based on the principle of jobs quality that are occupied by workers and which cannot be measured directly, but in the contrast it is measured from the perspective of the workers seeing themselves in terms of their desire, their readiness and search for alternative employment, which are considered inference indicators that it is invisible underemployment and a statement of the change reasons.

Below IS the illustrative framework of the measurement mechanism within the sequence of questions in the household form:



^{*:} Determining the status of underemployment or complete employment depends on the concerned country

Eighth Unit

Working Conditions Statistics

8.1 Objective

Working conditions statistics aim to provide indicators on the extent of employers' commitment in labor law or in the minimum limit of occupational safety conditions or risks avoiding conditions. In many countries, especially the developed and industrialized countries, a set of occupational safety conditions are developed to be met in the professions and economic activities in order to protect the workers that the employers are prevented to overpass. This causes high operating costs and therefore high production costs, causing in the attempt to overpass them by the employers, particularly in the informal sector. From this point comes the role of national statistical offices to provide monitoring indicators of the working conditions in the labor market and examine the extent of employers' commitment to the laws, if available, or moral commitment in the absence of laws. The analysis of working conditions indicators is connected to a range of basic sub-indices, namely profession of workers (job nature) and economic activity of the concerned institution.

8.2 General Concepts

Occupation:

The meaning of occupation is the profession or the work carried on by the individual if employed, or used to perform if they were unemployed, regardless of working nature of the facility where they work and regardless of the study or training field received by the individual.

ILO provides a classification guide of all professions so as to enable international comparisons; that is, the International Standard Classification of Occupations (ISCO)

The first version of the classification was issued in 1957 and the last revised version was issued in December 2007 and put with the name of ISCO08.

The following link is related to the classification:

http://www.ilo.org/public/english/bureau/stat/isco/index.htm

The economic activity:

it is the work type practiced by an entity that employs individuals (regardless of their occupation), if they work in a facility, but if they do not work in a facility, they show the main activity or work type that they are engaged in or the goods type they produce or sell (or both).

The UN provides also through the Department of Statistics an international guide for the classification of economic activities, which is the International Standard Classification of All Economic Activities (ISIC), which classifies the economic activities to 21 major activities.

The fourth edition of the guide fits the guide of SNA, 2008 version. The following link shows the activity details:

http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=27

Work environment:

Work environment reflects the material and moral environment in which the worker works, where the physical and tangible environment of the work describes the place where the people work taking into account the professional standards of safety that maintain human security from injury by accident or disease. Moral environment represents the procedures and transactions between workers and discrimination at work among many groups. A lot of countries and international organizations, especially the International Labor Organization, have developed professional safety conditions for many professions, such as workers in the maritime transport. Those conventions and laws try to reduce work-related injuries that sometimes take the workers lives away. The work-related injuries can be temporary due to a direct accident or on long-term as environmental pollution incidence for which the negative consequences appear after several months or years.

Among the negative physical aspects of the working environment: noise, vibrations, inappropriate lighting, bad weather conditions (excessive heat or too low coolness), exposure to sunlight for hours above the allowable limit, infection risk (such as dealing with the animals or work in hospitals), radiation exposure (such as X-Labs), exposure to pollution from drugs which lead to excessive sensitivity, exposure to dust, excessive inhalation of gas, exposure to secondhand smoke and pollution, exposure to slipping from the floors nature, working in high places (such as workers in construction), exposure to traffic accidents, such as workers in transport, exposure to volatile objects during work, exposure to electricity shocks, work in seas and oceans, working in an excessively moist environment, working for long hours or work in non-compatible offices where the minimum occupational safety is not available and others.

Among the negative moral aspects of the working environment: exposure to discrimination because of gender, color or religion, harmony with coworkers, fitting of the occupation with the educational qualification or professional qualification, exposure to psychological and social pressure, overcrowding in the workplace and others. The working

environment of intangible working conditions related to continuous and repetitive movements can be added such as sewing and packaging workers, sitting in front of computer screens continuously for hours more than 4 hours, sitting on a bench continuously for a period of more than four hours, standing continuously for more than four hours, carrying heavy weights, working in uncomfortable conditions, dealing with rotating machinery, dealing with sharp instruments and working with dangerous chemicals.

These manifestations can be linked with the concept of visible and invisible incomplete Labor Statistics in the case of attaching the two conditions of readiness and willingness to change such as those jobs in addition to the condition of job search. But under the developing economies or economies in which the safety and protection of professional laws are not available or are lacking jobs (i.e. have a scarcity of jobs), or areas basically specialized in activities with diverse risks, the workers may not see the usefulness of searching for an alternative as a result of those circumstances that the country experiences and therefore the statistical offices are supposed to cancel the condition of active search for alternative job.

Preventing profession risks:

Based on what is mentioned in the types and forms of exposure to risk during the work, the states and international organizations develop occupational safety requirements, which are supposed to be abided by the employers to provide minimum protection for workers during the work. Usually, there are general and specific terms for each profession or activity. This depends on the law and the circumstances of each country. It is useful to be noted that these conditions usually raise the cost of production for the employers, and this in turn requires a balance between the importance of the workers safety and their wages and the possibility of the employers' continuity in production. However, this training guide provides statistical indicators adequate to the states and it also takes into account the international comparisons, it is important when designing a questionnaire to return to those local laws and international laws to determine the questions that are supposed to be checked for every labor market. Among the prevention forms there are the availability of awareness and guidance plates, emergency exits, relaxation places, first aid personnel, first aid box, fire extinguishers and others.

Insurances:

Insurance is one of the protection tools for after injury despite the existence of protection as it provides the tool for worker's compensation in the event of injury during a work accident or disease, and therefore do not protect the worker from injury but provide a mechanism for compensation in case of injury. The laws usually require employers to provide insurance against work-related injuries to workers. In addition there are additional advantages to attract more the workers toward the institution by providing health insurance for employees as a feature, usually being one of the criteria for distinguishing the formal sector from the informal sector. Below are the definitions of each of the two types:

- **Health insurance**: compensation for material loss linked to cover costs related to a health problem or its treatment.
- Occupational hazard insurance: compensation for material loss linked to cover costs related to a problem caused by a specific injury during the performance of work or its treatment.

Job security:

There is a set of instructions, regulations and laws that do not allow the employer to fire the worker whenever he/she wants or upon any occurring problem only through applicable laws and regulations.

Material incentives:

A package of incentives offered to the worker in the form of financial rewards, allowance for extra work, awards or any encouragement with material return as a result of outstanding performance from the worker.

Moral incentives:

A package of incentives offered to the worker in the form of thanking letter, upgrade or any encouragement of moral output as a result of outstanding performance from the worker.

8.3 Indicators

Working conditions statistics provide many indicators related to measuring the extent to which employers are committed to laws and ethics of occupational protection and safety. With the goal of measuring the extent to which an employer is committed to the occupational safety standards in an activity or in an institutional sector, the working conditions indicators must be linked to the sub-indices of the labor sector, such as the government or private sector or other operational institutions such as NGOs. As well as the index of economic activity and profession as every activity or profession has its own requirements. Governments, in particular, sometimes focus on a profession more than others because of the different levels of risk for each of them.

The main index, which is derived, is the proportion of workers who are exposed to any form of negative environment with high likelihood of exposure of employees to work injuries or pathological injuries in short term or long term. Below are the indicators:

- Proportion of workers who have occupational safety and prevention of total workers
- Proportion of employees/paid workers who are exposed to a negative material work environment by type/environment of total workers
- Proportion of employees/paid workers who suffer from different negative moral work environment forms of total workers

8.4 Measuring Indicators

The provision of Labor Conditions Statistics relies on household surveys, facilities at the work site surveys or administrative records. The most common are household surveys to be able to get more precise answers since the employers are more oriented to give misleading information as it is connected to them and the field researcher cannot check the field within the work sites and takes the role of the Ministries of Labor staff (inspection departments). Thus the national statistical offices go over the household surveys or administrative records (from Labor Ministry). The measurement of labor conditions indicators depends on direct measurement either by asking the workers about their working conditions directly, or collecting annual official records on accidents and work-related injuries and reports of labor inspectors.

Ninth Unit

Strikes and Lockouts Statistics

9.1 Objective

Strikes and lockouts statistics aim to provide indicators related to labor disputes. Its importance comes through the provision of actions statistics resulting from such disputes for the purposes of industrial relations and to contribute to the evaluation of a part of the effects of conflict on economic and social aspects. As a result of the issue's importance, a decision was issued by the International Labor Organization stating the need to provide such statistics and the first time was in 1987 in the fourteenth Labor Statisticians Conference. After that, the recommendations were revised in 1993.

This unit is based on the International Labor Organization report on the current international recommendations on labor statistics (Version 2000). It is often a translation for what is stated in the recommendations with some facilitating and illustrating amendments that do not affect the content (pages 79-83). This is the result of the fact that international experiences are often uneven, and therefore full compliance with international standards facilitates the placement of a sound basis for international comparison.

9.2 Terms and concepts

The following terminology is related to strikes and lockouts statistics resulting from labor disputes:

- Labor dispute occurs due to lack of agreement on a specific topic or range of topics as a result of conflicts between workers and employers, or about a complaint provided by employers or employees, or about the support of workers or employers to other employees or employers about their request or complaints.
- **Strike** is a temporary stop from working carried out by one group or more of workers for the application, to oppose a requirement, deliver a complaint, support a demand or complaint of other employers.
- Lockout is a temporary partial or complete closure of an operating place or more, obstruction of the normal work activities of workers through an employer or more in order to applicate or oppose a demand, deliver a complaint, support a demand or complaint of other employers.
- Further action because of labor disputes, including actions carried out by one
 group or more of workers or by the employer or more, with a view to applicate or
 oppose a demand, deliver a complaint, support a demand or complaint of other
 workers or employers where there is no stopping from work.
- Workers participating in the strike: workers participating directly in the strike are those taking part directly by stopping work. Indirectly participating workers in the strike are those workers in the participating facilities, self-employed personnel

- within a group participating in the strike, who do not contribute directly to stop work, but they are prevented from working because of the strike.
- Workers involved in the lockout: workers participating directly in the lockout are those workers in the participating facilities in the lockout concerned directly by the labor disputes and prevented from working through the lockout. Indirectly participating workers in the lockout are those workers in participating facilities and not directly concerned by the labor disputes but were prevented from working through the lockout.
- Workers participating in other actions: workers involved directly in other actions
 are those who take part directly in the actions. Indirectly participating workers in the
 actions are those workers in the participating facilities or the self-employed workers
 in participating groups who do not contribute directly to the action, but they cannot
 perform their usual work or are prevented from working as a result of these actions.
- Usual working days are those days during which usually work is carried out by relevant worker groups with wage or self-employed workers who are expected to work in normally. Thus it is supposed to exclude the weekly rest days, as well as public holidays, etc., where it is not planned to work by participating worker groups with wage or did not expect to work in by participating self-employed workers in the actions. If the work is organized through the process of displacement (compensation of working days), one displacement must be considered as one working day.
- **Normal working hours** for the concerned workers groups must be defined based on the latest standards of the International Labor Organization.
- Participating facility is the facility where one group or more of workers are
 directly participating in the action due to labor disputes, or an action that is
 implemented by the employer. Defining the facility is supposed to be based on the
 latest UN evidence.
- Secondary effects of actions resulting from labor disputes are the effects on other facilities where workers were prevented from work or their work was interrupted, or the effects on other groups of self-employed workers who were prevented from work or who have stopped working.

Here below are the basic data which is supposed to be collected and published on a regular basis:

- The number of strikes or lockouts
- The number of workers involved in strikes or lockouts
- The duration of strikes or lockouts
- The amount of time not worked in by the participants in strikes or lockouts
- Other important properties related to labor disputes.

In addition to:

- The number of participating facilities
- The number of other forms of action as a result of labor disputes.

It is supposed that statistics of strikes should be separated from the lockouts to facilitate the analysis. As well as collecting data about the sub-indices such as economic activity and institutional sectors.

Coverage:

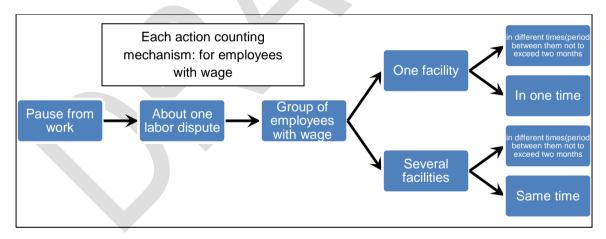
Based on international recommendations, it all the state is supposed to be covered, as well as covering all the strikes and lockouts. Also, the coverage is supposed to include employees with wage directly involved and, if possible include the indirectly involved and it is advisable to cover self-employed workers and those involved directly. Secondary effects of actions resulting from labor disputes should not be covered, but it could be a subject of a separate program.

9.3 Measuring Indicators

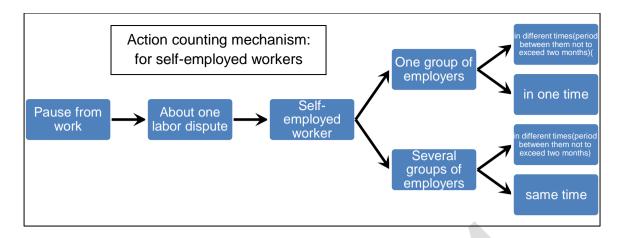
Number of strikes or lockouts:

The criterion used to define one separate strike (single) or one separate lockout (single) depends on the intended/target labor dispute. Thus the one strike or one lockout can be counted as follows:

The following figure shows the four cases that each of it can be considered one strike or lockout for a category of employees with wage where they are associated to facilities. Every direction leads to a set of conditions to count strike as one; the figure below gives the four possibilities for considerations to determine the one strike.



The self-employed workers belong to groups of employers, professions or trades such as farmers or owners of hair salons or owners of pharmacies and other examples. It is possible that they belong to unions or labor or professional unions.



It is likely that the strike turns to a lockout as an extension of the same workers conflict, and in this case the strike time/period is calculated until the announcement of the lockout, after which it is considered a lockout. This type of lockouts is supposed to be referred to as a lockout preceded by a strike when classifying actions. The same thing applies when it is inverted, and thus presumably referring to the strike as a strike preceded by a lockout. the same goes for cases where any other actions preceded strikes or lockouts and vice versa. This is of course if it has already happened in the country as a sequence actions (i.e. consecutive actions) should be described in detail and are placed as cases in addition to the main cases.

Number of workers involved in strikes or lockouts:

According to international recommendations, the following are some of the details, determinants and considerations taken into account when calculating workers within the number of participant workers in strikes and lockouts:

- Each worker involved directly or indirectly in any time during the action should be accounted within the number of involved workers, whether their participation is for the entire period or only part of it.
- Part-time workers must be treated as full-time workers.
- Workers absent from their jobs for any reason, as stated in the fifth unit (personnel statistics), during the action, must be excluded from the number of participant workers in the action for the period of absence.

The index is calculated as follows:

$$IR = \frac{WI}{W} \times 1000$$

- IR: Number of involved workers per 1.000 workers
- WI: Number of involved workers
- W: Number of workers

Example:

A country with a million workers, of whom 10,000 workers participate in the protest actions, how many workers involved in actions for each 1,000 workers:

= 1,000 * 10,000 / 1,000,000 = 10 workers per 1000 workers

Duration of strikes and lockouts:

The action period as result of a labor dispute can be seen both in terms of incidence and extension of the action.

- The action incidence period must be calculated in terms of the normal working days
 for a group of involved workers, from the day the action began by the first group of
 participant workers to the last day which ended by the last group of workers.
 Normal working days that come between incidences should not be calculated /
 included.
- The action extension period should be calculated in terms of the daily agenda, from the date on which the action begins by the first group of participant workers till the date of completion by the last group of participant workers.

In line with international experience for the minimum to cover the action as a result of labor disputes, if the action lasted for less than a full working day, it must be measured in terms of the hours that typically may be decided to work in for a group of involved workers. For self-employed workers, the calculation depends on the expected work.

The amount of time not worked by workers involved in strikes and lockouts:

The amount of time not worked by the participant workers must be estimated in terms of normal working hours, taking into account the regular work agenda of each category of the participant workers. The hours not worked (lost) can be transformed to days based on the number of normal working hours for each day or each displacement of each category of the concerned workers.

It is possible to estimate the amount of time not worked or lost for each lockout or strike day for all involved workers and the total is calculated for the full period of the strike or lockout.

The index is calculated as follows:

$$A = \frac{T}{W} \times 1000$$

A: The amount of time that was not worked in as per 1000 workers

T: Time that was not worked in by the participant workers

W: Number of workers

Example:

The total number of workers, million; the number of participants in the actions, 10,000 workers and the total time of absence estimated by 20 working days during the year, the amount of working days that has been recorded in absence per thousand workers is: 20*100,000/10,000*1,000 = 200 working days per 1,000 workers

Other important characteristics related to labor disputes:

According to international recommendations, it is useful to provide these indicators by economic activity to the latest revision as defined previously. It is also useful to state if the labor disputes have been originated by collective bargaining for several reasons that have been mentioned in the International Labor Organization decision on strikes and lockouts statistics.

It is also useful to provide the indicators as follows:

- Participating facilities size in terms of number of employees
- · Geographical locations where the action occurred
- Sector such as the public and private sector
- Organizer of the action whether they were employees or / and employers
- If employers had carried out the replacement of workers during their actions
- Economic cost of the actions for participating facilities and for the staff involved
- If the actions were formal or non-formal
- Relevant collective agreements
- Method of dispute settlement (such as direct negotiations between the two parties, or the introduction of a third party mediator, end the conflict without successful negotiations)
- Did the dispute arise on the right or interest basis?

The reference period (time reference period):

The period is not supposed to exceed a one year. In the case of events and actions intersection, it is referred to the ongoing actions to a year/other period or to the actions which began in a past period, in total, all active periods are calculated during the one-year period or time reference period.

References

Main References:

International Labour Office and the Economic and Social Commission for Western Asia (ESCWA), 1996. Economically active population, employment, unemployment and underemployment surveys. A guide provided by the International Labour Organization for surveys concepts and methods.

International Labour Organization (2000). Current International Recommendations on Labour Statistics. 2000 Edition.

International Labour Organization (2003). Statistics of Employment, Unemployment, Underemployment: Economically Active Population. International Training Compendium on Labour Statistics.

International Labour Organization (1990). *Strikes and Lockouts*. Statistical Sources and Methods: Volume 7. 2nd Edition.

Additional References:

International Labour Organization (1990). *Economically Active Population, Employment, Unemployment and Hours of Works (Household Surveys)*. Statistical Sources and Methods: Volume 3. 2nd Edition.

International Labour Organization (1988). Current International Recommendations on Labour Statistics. 1988 Edition.

International Labour Organization (2013). Report of Discussion: 19th International Conference of Labour Statisticians 2-11 October 2013. Geneva.

International Labour Organization (2008). General Report: 18th International Conference of Labour Statisticians 24 Nov. -5 December 2008. Geneva.

Chernyshev, I. (2003). Decent work statistical indicators: strikes and lockouts statistics in the international context. International Labour Organization.

Anker R., Chernyshev I., Egger Ph., Mehran F. and Ritter J. (2002). *Measuring Decent Work with Statistical Indicators*. International Labour Organization.

Palestinian Central Bureau of Statistics, 2004. Working conditions Survey: basic results (May-June 2004). Ramallah - Palestine.