Resolution concerning the measurement of underemployment and inadequate employment situations, adopted by the Sixteenth International Conference of Labour Statisticians
(October 1998)

The Sixteenth International Conference of Labour Statisticians,

Having reviewed the relevant texts of resolution III adopted by the Eleventh International Conference of Labour Statisticians concerning measurement and analysis of underemployment and underutilization of manpower (1966), and of resolution I adopted by the Thirteenth International Conference of Labour Statisticians concerning statistics of the economically active population, employment, unemployment and underemployment (1982),

Having acknowledged that resolution I adopted by the Thirteenth International Conference of Labour Statisticians provides the framework within which the present resolution is formulated,

Recognizing the need to revise the existing standards on the measurement of underemployment and to broaden the scope to cover also inadequate employment situations, in order to enhance the standards’ usefulness as technical guidelines to countries and improving the international comparability of the statistics,

Acknowledging that the relevance of underemployment and inadequate employment situations in a given country depends on the nature of its labour markets and that the decision to measure one or both of these is therefore determined by national circumstances;

Adopts this fifteenth day of October 1998 the following resolution in substitution for resolution III of the Eleventh International Conference of Labour Statisticians and paragraphs 14 to 20 and 21(5) of resolution I of the Thirteenth International Conference of Labour Statisticians:

Objectives

1. The primary objective of measuring underemployment and inadequate employment situations is to improve the analysis of employment problems and contribute towards formulating and evaluating short-term and long-term policies and measures designed to promote full, productive and freely chosen employment as specified in the Employment Policy Convention (No. 122) and Recommendations (Nos. 122 and 169) adopted by the International Labour Conference in 1964 and 1984. In this context, statistics on underemployment and indicators of inadequate employment situations should be used to complement statistics on employment, unemployment and inactivity and the circumstances of the economically active population in a country.

2. The measurement of underemployment is an integral part of the framework for measuring the labour force established in current international guidelines regarding statistics of the economically active population; and the indicators of inadequate employment situations should as far as possible be consistent with this framework.

Scope and concepts

3. In line with the framework for measuring the labour force, the measurement of underemployment and indicators of inadequate employment should be based primarily on the current capacities and work situations as described by those employed. Outside the scope of this resolution is the concept of underemployment based upon theoretical models about the potential capacities and desires for work of the working age population.

4. Underemployment reflects underutilization of the productive capacity of the employed population, including those which arise from a deficient national or local economic system. It relates to an alternative employment situation in which persons are willing and available to engage. In this resolution, recommendations concerning the measurement of underemployment are limited to time-related underemployment, as defined in subparagraph 8(1) below.

5. Indicators of inadequate employment situations that affect the capacities and well-being of workers and which may differ according to national conditions, relate to aspects of the work situation such as use of occupational skills, degree and type of economic risks, schedule of and travel to work, occupational safety and
health and general working conditions. To a large extent, the statistical concepts to describe such situations have not been sufficiently developed.

6. Employed persons may be simultaneously in underemployment and inadequate employment situations.

Measures of time-related underemployment

7. Time-related underemployment exists when the hours of work of an employed person are insufficient in relation to an alternative employment situation in which the person is willing and available to engage.

8. (1) Persons in time-related underemployment comprise all persons in employment, as defined in current international guidelines regarding employment statistics, who satisfy the following three criteria during the reference period used to define employment:

   (a) “willing to work additional hours”, i.e. wanted another job (or jobs) in addition to their current job (or jobs) to increase their total hours of work; to replace any of their current jobs with another job (or jobs) with increased hours of work; to increase the hours of work in any of their current jobs; or a combination of the above. In order to show how “willingness to work additional hours” is expressed in terms of action which is meaningful under national circumstances, those who have actively sought to work additional hours should be distinguished from those who have not. Actively seeking to work additional hours is to be defined according to the criteria used in the definition of job search used for the measurement of the economically active population, also taking into account activities needed to increase the hours of work in the current job;

   (b) “available to work additional hours”, i.e. are ready, within a specified subsequent period, to work additional hours, given opportunities for additional work. The subsequent period to be specified when determining workers’ availability to work additional hours should be chosen in light of national circumstances and comprise the period generally required for workers to leave one job in order to start another;

   (c) “worked less than a threshold relating to working time”, i.e. persons whose “hours actually worked” in all jobs during the reference period, as defined in current international guidelines regarding working time statistics, were below a threshold, to be chosen according to national circumstances. This threshold may be determined by e.g. the boundary between full-time and part-time employment, median values, averages, or norms for hours of work as specified in relevant legislation, collective agreements, agreements on working time arrangements or labour practices in countries.

   (2) To provide analytical flexibility for policy formulation and evaluation, as well as for international comparability, countries should endeavour to identify all workers who during the reference period were willing and available to work additional hours, regardless of the hours they actually worked during the reference period.

Analytical groups within time-related underemployment

9. (1) Among time-related underemployed persons, countries may want to identify separately the following two groups:

   (a) persons who usually work part-time schedules and want to work additional hours;

   (b) persons who during the reference period worked less than their normal hours of work.

   (2) Countries may want to study the relationship between the size and composition of these groups of workers and the economically active population at different points in time.

Volume of time-related underemployment

10. The volume of time-related underemployment relates to the additional time that persons in time-related underemployment were willing and available to work during the reference period up to the chosen threshold, as described in paragraph 8(1)(c) above. It may be computed in units of working days, half-days or hours as may be convenient in national circumstances. In addition, countries may want to estimate the volume of time-related underemployment by aggregating the number of days, half-days or hours that each person in time-related underemployment is willing and available to work in addition to the hours actually worked during the reference period without reference to a threshold.

Analytical indicators on time-related underemployment

11. Based on the concepts and definitions given in paragraphs 7 to 10 above, a variety of analytical
measures can be derived. For instance:

(a) a rate of time-related underemployment may be calculated as the ratio between the population in time-related underemployment and in employment. Wherever considered useful, the ratio between the population in time-related underemployment and the economically active population may also be calculated;

(b) a rate of the volume of time-related underemployment may be obtained as the ratio between the volume of time-related underemployment and the potential time for work of persons in employment, calculated as the sum of the “hours actually worked” by the employed population and the volume of time-related underemployment.

Topics related to time-related underemployment

12. Statistics may be collected on the “duration of time-related underemployment”, understood as the number of days, weeks, months or years that time-related underemployed persons have been continuously in this situation, i.e. willing and available to work additional hours and working less than the chosen threshold. Information about the number of days or weeks of employment, unemployment and time-related underemployment experienced by a worker throughout the year may also be instructive.

13. In countries where multiple jobholding is common, it may be useful to produce statistics on the reasons for having more than one job, covering all multiple jobholders.

Classifications for time-related underemployment

14. (a) The time-related underemployed population should be classified by significant demographic, social and economic characteristics. Appropriate cross-classifications should be used with due regard to the need for confidentiality and statistical significance.

(b) The number of persons in time-related underemployment, and the rates suggested in paragraph 11 above, should be classified by sex in respect of specified age groups and levels of education, and for each branch of economic activity, occupational group, institutional sector (including a category on the informal sector, where relevant) and status in employment categories. The classification by presence of young children and of adults requiring care would also be useful.

(c) For the purpose of classification by branch of economic activity, occupation, institutional sector and status in employment, reference should be made to the main job. The main job should be understood as the job at which the worker has worked the longest hours or which has provided the highest income from employment during the period, or which can be expected to provide the highest income from work carried out in that period, if payment can only be expected in the future.

(d) In order to provide flexibility for analysis, it is important to classify persons, where possible, by the component groups covered in the definition of time-related underemployment, i.e. by whether they wanted to work additional hours, by whether they had actively sought to work additional hours, were available to work additional hours, and by the hours they actually worked during the reference period.

Inadequate employment situations

15. Indicators of inadequate employment situations describe situations in the workplace which reduce the capacities and well-being of workers as compared to an alternative employment situation. To a large extent, the statistical definitions and methods necessary to describe such situations still have to be developed further.

16. Countries may want to consider as persons in inadequate employment situations, all those in employment who during the reference period, wanted to change their current work situation, or (particularly for the self-employed) to make changes to their work activities and/or environment, for any of a set of reasons, chosen according to national circumstances. Such reasons might include, for example: inadequate use and mismatch of occupational skills; inadequate income in current job(s); excessive hours of work; precarious job(s); inadequate tools, equipment or training for the assigned tasks; inadequate social services; travel to work difficulties; variable, arbitrary or inconvenient work schedules; recurring work stoppages because of delivery failures of raw material or energy; prolonged non-payment of wages; long overdue payments from customers. It should be noted that these reasons will not be mutually exclusive nor exhaustive of inadequate employment situations. Workers’ availability to change their current work situation, as well as their active job search, as
understood in the definition of time-related underemployment, may also be applied.

**Particular types of inadequate employment situations**

17. Countries may in particular wish to consider, among the various types of inadequate employment situations, whether it is important to produce separate indicators for:

(a) skill-related inadequate employment, characterized by inadequate utilization and mismatch of occupational skills, thus signifying poor utilization of human capital. Persons in this form of inadequate employment may be understood to include all persons in employment who during the reference period wanted or sought to change their current work situation in order to use their current occupational skills more fully, and were available to do so;

(b) income-related inadequate employment, resulting from low levels of organization of work or productivity, insufficient tools and equipment and training or deficient infrastructure. Persons in this form of inadequate employment may be understood to include all persons in employment who during the reference period wanted or sought to change their current work situation in order to increase income limited by factors such as those mentioned above, and were available to do so. Countries may wish to apply a threshold, chosen according to national circumstances, above which persons do not qualify for inclusion;

(c) inadequate employment related to excessive hours, may be understood to refer to a situation where persons in employment wanted or sought to work less hours than they did during the reference period, either in the same job or in another job, with a corresponding reduction of income. Countries may wish to apply a threshold of hours below which persons do not qualify for inclusion.

**Analytical indicators associated with inadequate employment situations**

18. For persons in the various inadequate employment situations separately identified according to national circumstances, countries may want to derive analytical indicators such as the following:

(a) persons in each chosen type of inadequate employment situation, expressed as a percentage of the employed;

(b) persons simultaneously in two or more inadequate employment situations, expressed as a percentage of the employed.

**Classifications for inadequate employment situations**

19. The analysis of the various inadequate employment situations may include their classification by significant demographic, social and economic characteristics, as well as appropriate cross-classifications with due regard to the need for confidentiality and statistical significance.

**Data collection and international reporting**

20. The use of household surveys, and in particular specialized labour force sample surveys, has advantages when producing statistics on time-related underemployment and indicators of inadequate employment situations. Other sources, such as those based on administrative records, may also provide an adequate basis for such statistics. When a household-based survey exists in a country, its results may be used to calibrate the results from other sources.

21. In order to enhance international comparability, it is recommended that countries, as far as possible, design their data collection and processing procedures so that they will be able to report:

(a) estimates on the time-related underemployed population, as defined in subparagraph 8(1) above, who wanted to work additional hours, regardless of whether or not they sought to do so;

(b) estimates on the sub-group of the time-related underemployed population, as defined in subparagraph 8(1) above, who sought to work additional hours;

(c) information on the manner in which the threshold, mentioned in subparagraph 8(1)(c) above, has been determined;

(d) where feasible, information on workers who during the reference period satisfy the criteria mentioned in subparagraphs 8(1)(a) and (b), without reference to a threshold, i.e. criterion 8(1)(c).
Further action

22. Subject to the availability of funds, a programme of work should be sponsored by the ILO to refine the measurement of time-related underemployment and to further develop concepts and definitions for the indicators of inadequate employment situations. The ILO should also sponsor work relating to the measurement and presentation of these statistics in a number of developing, transition and industrialized countries and evaluate and document the results.

23. As far as possible, the ILO should cooperate with countries in the implementation of the definition of time-related underemployment and in the development and application of methods to describe indicators of inadequate employment situations as recommended in this resolution, and disseminate the information about the experiences gained.