

## 1. Introduction

1. Current international standards on the measurement of employment and unemployment, adopted by the Thirteenth International Conference of Labour Statisticians (ICLS) in 1982, are recognized worldwide. Most national measures of employment and unemployment tend to converge towards these standards, allowing reasonable international comparisons of national estimates. However, estimates of employment and unemployment do not fully describe the labour market performance in the various countries and need to be complemented with other measures, reflecting different aspects of the labour market situation. Such measures are most urgently needed in developing countries, where the lack of unemployment relief programmes constrains workers who find themselves without work to engage in marginal economic activities. They are also needed in industrialized countries where persons in employment also experience inadequate employment opportunities. This report focuses on one such complementary measure, namely, underemployment.

2. The problem of how to define and measure underemployment has been discussed by the International Conference of Labour Statisticians (ICLS) on six occasions. It was in 1925 that the Second ICLS first considered the topic together with unemployment statistics. In 1947, the Sixth ICLS explicitly mentioned the need to measure underemployment and in 1954 the Eighth ICLS had before it a first proposal to define it. However, it was not until 1957 that the Ninth ICLS adopted the first international statistical definition of underemployment and established the foundations for current international guidelines. These are contained in two resolutions: the resolution concerning measurement and analysis of underemployment and underutilization of manpower, which was adopted by the Eleventh ICLS in 1966, and the *resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, which revised parts of the previous resolution and was adopted by the Thirteenth ICLS in 1982 (cf. Annex II).

3. Current international statistical guidelines on underemployment, however, have not managed to enlarge their scope beyond *visible underemployment*, "reflecting an insufficiency in the volume of employment" (cf. paragraph 15(1) of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, Thirteenth ICLS, in Annex II). But *visible underemployment* is thought to affect a smaller number of workers than *other forms of underemployment*, currently referred to as *invisible underemployment*, "reflecting a misallocation of labour resources or a fundamental imbalance as between labour and other factors of production" (cf. paragraph 15(2) of the resolution). Additionally, the current international definition of *visible underemployment* is vague, discouraging the production of regular and comparable statistics on *visible underemployment*. The *ILO Year Book of Labour Statistics*, which compiles national labour statistics for a variety of topics, has never published national data on *visible* or *invisible underemployment*.

4. In order to encourage a greater number of countries to measure underemployment in their regular statistical programmes so that international comparisons are possible, it is now being proposed to revise current guidelines on the subject. Two objectives are being pursued: (i) to agree on a definition of *visible underemployment* based on clearer and more precise criteria; and (ii) to agree on a definition of *other forms of underemployment*, replacing the definition of *invisible underemployment*, based on criteria that can be applied for measurement in household-based surveys.

5. As part of the process of revision, a Meeting of Experts was convened in October 1997 (hereafter referred to as "the Meeting of Experts") which discussed an initial set of proposals and made a number of recommendations (ILO, 1997c). The draft resolution put forward in the present report (see Annex I) draws heavily on these

recommendations. The purpose of the Committee on Underemployment of the Sixteenth International Conference of Labour Statisticians is to discuss the definitions proposed in the draft resolution and to agree on a set of recommendations that will constitute revised international statistical guidelines on the measurement of underemployment.

6. The main feature of the draft resolution is that underemployment is conceived as part of the framework for measuring the labour force and is defined on the basis of criteria which are comparable to those used by the international definitions of employment and unemployment. Most importantly, the criteria are already being applied in a number of national household-based surveys in industrialized and developing countries alike.

7. This report has been organized as follows: Chapter 2 presents the measurement objectives and scope of underemployment. Chapter 3 describes the proposed framework. Chapter 4 discusses the proposed definition of persons in *visible underemployment* and Chapter 5 the proposed definition of persons in *other forms of underemployment*. Chapter 6 examines complementary measures and other matters.

## 2. Objectives and scope

8. This chapter addresses the need for statistics on underemployment, particularly in the context of the Employment Policy Convention, 1964 (No. 122). In the light of this Convention, the existing statistical framework for measuring the labour force, and the different ways in which underemployment has been viewed, sets the scope of the concept. In particular, it introduces the need to study underemployment in relation with other dimensions of inadequate employment.

### The Employment Policy Convention

9. Full employment is an important policy goal strongly endorsed by the ILO. It is the subject of one of its main Conventions, the Employment Policy Convention (No. 122), adopted by the International Labour Conference in 1964 with a view to "stimulating economic growth and development, raising levels of living, meeting manpower requirements and overcoming unemployment and underemployment" (ILO, 1985). It calls on Members to promote "full, productive and freely chosen employment" by ensuring that there is: (i) work for all who are available for and seeking work; (ii) work which is as productive as possible; and (iii) work freely chosen by workers, who should have the fullest possibility to qualify and use their skills and endowments in a job for which they are well suited (ILO, 1985). Situations which fail to meet (i) relate to unemployment, and those which do not meet (ii) or (iii) relate mainly to underemployment. The Employment Policy Recommendation, 1964 (No. 122), further mentions the need to base national employment policies on statistical data on employment, unemployment and underemployment. In total, 85 countries have ratified Convention No. 122 and are required to report to the ILO every two years on its application. In the standard questionnaire sent to them for this purpose, they are requested to provide statistics of employment, unemployment and underemployment for their countries. Yet not all countries actually measure underemployment and report on it. Of 83 countries which reported to the ILO that they carried out a national household or labour force survey, all measured employment and unemployment but only 54 and 14 respectively reported measuring *visible* and *invisible underemployment* (ILO, 1990b and Chernyshev, 1997).

10. Indeed, full employment policies in a country have mainly targeted the reduction of unemployment. It is through the level of unemployment that the performance of the labour market has conventionally been assessed. Consequently, national statistical offices have focused on measuring unemployment, generally giving less priority to the measurement of underemployment.

11. It has long been recognized, however, that measured unemployment is insufficient to understand the shortcomings of the labour market in developing countries. In these countries, unemployment figures tend to be low. This does not mean, however, that the labour market is very effective — as would be the interpretation in an industrialized economy — but rather that unemployment is only part of the problem. Most developing countries lack unemployment relief programmes, and many workers who find themselves without work cannot afford to stay in this situation, but have to engage in any activity to survive, even if it does not employ them full time, use their skills adequately or generate sufficient income for a decent living (Arndt et al., 1980). These countries also have a high proportion of persons in self-employment jobs who, when facing periods of slack work, tend to engage in alternative self-employment activities which generate a lower income, rather than face unemployment (Kritz et al., 1976). Low unemployment figures in these countries are also the consequence of traditional work arrangements, common in many rural communities, whereby the available tasks are absorbed by the community as a whole at the cost of lowering the

hours of work and income of all or most members of its population (Haritchelhar, 1980). As a result, an important number of workers in developing countries tend to work fewer hours, earn lower incomes, use their skills less and in general work less productively than they could and would like to.

12. More recently, the limitations of the unemployment figure to describe the labour market functioning have become more evident in developed countries as well (Eurostat, 1994). Through reductions and reorganizations in the demand for labour, many workers in these countries are experiencing not only a total lack of employment opportunities but also a lack of "adequate" employment opportunities, with persons who have jobs often being compelled to use their skills less fully or to earn lower hourly wages or work less hours than they are willing and able to. The unemployment figure, being very strictly defined and measured, does not account for these workers, even though their situation is affected by similar causes and they behave very much like the unemployed in many aspects.

13. In the countries of Central and Eastern Europe and the former Soviet Union, fundamental changes in the labour market situation have taken place during the transition towards market economies. During this process, a large number of paid workers have become unemployed, while many others work short hours or earn low hourly wages. A specific feature in many of these countries is the high number of paid workers who are being forced by their employers to take unpaid leave. Consequently, the number of persons engaged in the informal sector has increased, many of them working in activities well below their skill level.

14. It is clear from the above that in order to supplement statistics on employment and unemployment, improve the description of employment problems as well as assess the extent to which the available human resources are being utilized in the production process to promote full employment and to provide insights for the design and evaluation of employment, income and social programmes, statistics are needed on persons who work fewer hours, earn less income or do not use their skills as fully as they are willing and able to.

15. These are employed persons whose employment level, in relation to the duration or productivity of work, is below their capacities and preferences. Such workers have not attained their "full employment" level in relation to the duration or productivity of their work, i.e. in the sense as used in the Employment Policy Convention mentioned above. They are persons experiencing what has come to be known as underemployment. ***Paragraph 1 of the draft resolution in Annex I reflects this point.***

## **The labour force framework**

16. The labour force framework, adopted by the Thirteenth ICLS in 1982 as a set of international guidelines, sets the measurement rules for classifying persons according to their activities during a short reference period. It defines three mutually exclusive and exhaustive population categories, namely, the employed, the unemployed and the economically inactive population (box 1). This framework has succeeded in encouraging the production of regular statistics on employment and unemployment which are reasonably comparable between a large number of countries.

17. Given the wide international recognition of the labour force framework and the fact that underemployed persons are affected by similar causes and tend to behave like unemployed persons, the proposed resolution conceives the measurement of underemployment as part of the labour force framework. This means that the proposed definition of underemployment uses criteria which are analogous to those used to define

employment and unemployment. It also means that underemployment is defined as a separate category within the framework and, more specifically, as a subcategory of employment. It is hoped that these two features will encourage national statistical bodies to produce data on underemployment on the same basis as for the unemployed population. **Paragraph 2 of the draft resolution in Annex I reflects this point.**

Box 1

**The employed, unemployed and economically inactive populations:  
A summary of international statistical definitions**

The *employed population* covers all persons engaged in the production of goods and services, even if for only one hour, during a specified short reference period, and all persons who have a job from which they are absent but in which they normally work. It is an extensive concept which encompasses all types of employment situations, including casual labour, short-time work and all forms of irregular employment.

The *unemployed population* indicates the extent to which an economy fails to provide jobs for its workforce and covers all persons who are not in employment, but who are available and seek work. Under certain circumstances, the unemployed population may include workers who do not seek work, i.e. a "relaxed" definition of unemployment.

The *economically inactive population* is a residual category, comprising persons who are neither employed nor unemployed. It encompasses all persons who, because of physical handicaps are not able to work, and all persons who, for personal reasons, such as studies, family responsibilities or old age, are not willing to work. In order to reduce the cost of collecting the information, it also includes persons below a certain age, defined at the national level, regardless of whether they work or are looking for work. The age below which persons are considered inactive is generally chosen to cover those age groups which generally do not participate in economic activity, for example, persons below the compulsory schooling age or the minimum working age established in legislation.

Source: ILO, 1988.

18. When embedded in the labour force framework, underemployment is defined in relation to a short reference period of one day or one week. To represent all important cycles during the year, the measurement of underemployment needs to be replicated throughout the year at sufficiently frequent intervals. Only a few countries are able to do so, however: of 84 countries which reported to the ILO that they had carried out a household-based survey to measure employment and unemployment, only 12 carry out monthly surveys, and only an additional 24 countries carry out quarterly or three-times-a-year surveys (ILO, 1990b and Chernyshev, 1997). In countries where frequent measurement is not undertaken, it is important to describe the underemployment situation also for a long reference period.

19. Defining underemployment for a long reference period was strongly recommended by the Meeting of Experts, concerned that workers who are inactive during part of the year, but who work very long hours when they do work, are not identified when a short reference period is used, even if measurement is repeated throughout the year, such as in the case of seasonal workers in rural areas and full-time casual workers, who are willing and able to work additional hours over a year. The issue of measuring underemployment for longer reference periods is discussed in greater detail in Chapter 6.

## The scope of underemployment

20. It was noted in paragraph 15 above that underemployment exists when persons in employment have not attained their "full employment" level in relation to the duration or productivity of work. In other words, persons are underemployed when the duration or productivity of their work is below their full employment level. The full employment level of a person, however, can be defined in different ways, depending to a large extent on whether underemployment is associated with labour market issues or

with economic development issues.

21. When associated with labour market issues, underemployment aims to identify persons who, because of reduced or modified demand for labour or insufficient employment creation for specific trades, are compelled, as an alternative to being without work, to work shorter hours, or to work in lower skilled jobs or in less productive economic units, thus reducing their income below the level they might normally be able to earn (Borgen et al., 1988; Hecker, 1992). Part-time workers may find themselves in this situation if they are willing and able to work more hours than at present. Workers in the informal sector are in the same situation when they are willing and able to work more productively than they currently do. This (labour market) type of underemployment measure was first called "disguised unemployment" (Robinson, 1937).

22. The labour market type of measures require that workers themselves compare their current work situation with an alternative work situation in which they are willing and able to place themselves, i.e. an estimate of their full employment level. Full employment is understood as the "readily available supply of labour", i.e. the amount of work that persons are able and willing to provide (ILO, 1957b). In principle, workers themselves determine their full employment level. They will be classified as underemployed if they are willing and able to change their work situation in order, for example, to work additional hours, use their skills better, increase their income per hour, or work in an establishment with higher productivity, etc., regardless of the duration or productivity of their current employment situation. In practice, however, a maximum threshold may be used, so as to exclude persons whose duration or productivity of work can be considered as "sufficient" or "adequate". The current international definition of visible underemployment is a labour market type of measure. *Visibly underemployed* persons have been defined as "all persons in paid or self-employment, whether at work or not at work, involuntarily working less than the normal duration of work determined for the activity, who were seeking or available for additional work during the reference period" (cf. paragraph 18 of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, Thirteenth ICLS, in Annex II).

23. Labour market measures of underemployment are primarily based on workers' willingness and availability to increase the duration or productivity of work and accordingly lend themselves to statistical measurement in household-based surveys (ILO, 1957b). They are in line with the measurement of employment and unemployment, in which workers' current willingness and abilities to work are crucial factors. When underemployment is associated with labour market issues, it becomes incorporated into the labour force framework. Given the type of statistics needed to satisfy the data objectives examined above (cf. paragraph 14) and the need to incorporate the measurement of underemployment in the labour force framework, statistics on underemployment need to be associated with labour market issues. ***This point is reflected in paragraph 3 of the draft resolution in Annex I.***

24. Labour market measures assume that workers are able to assess their current work situation in relation to other work situations in the relevant labour market. This assumption may not be valid for all workers. There are workers who have passive attitudes and low awareness regarding their work and life in general, and who may find it difficult to compare their work situation with alternatives. This may be the case of workers in rural areas and self-employed workers in urban areas for whom alternative work situations are difficult to identify because they lack information on improved methods of production, or access to them; of paid workers who may face scarce alternative work opportunities, discrimination or obstacles to mobility, and who may have problems describing their relation to the labour market; and of unpaid family workers, child workers and other workers with low earnings, who may have limited possibilities to compare their work situation with alternative situations and take action to

change them. In order to capture adequately all underemployed persons, in particular those mentioned above, the defining criteria and measurement instruments need to be sensitive to the different ways in which workers affected by underemployment perceive their particular work situation (ILO, 1957a). This feature is taken into account in the proposals.

25. Underemployment can also be associated with economic development issues, in which case it aims to identify "wasted" resources which are not being utilized because current levels of technology and organization are deficient. These are typically workers in traditional settings or in the informal sector, where an important number of persons work few hours or unproductively because their establishments operate with low levels of capital and technology or with an inadequate organization. Many workers in these situations do not earn enough income to provide for an adequate livelihood. This measure of underemployment has commonly been related to the "surplus labour" theory which states that labour can be withdrawn from their work without affecting output by improving organization and production methods (Hsieh, 1952 and ILO, 1957a). A development-type underemployment measure assumes that a change of circumstances, through government or private intervention, is necessary to improve workers' situation, in the form of better organization of production, additional training, increased capital, improved technology, campaigns to change current attitudes towards work. It also assumes that workers always want to work standard hours or increase their income, and that they are always capable of adapting to new technology or working methods.

26. A development-type measure requires the comparison of current levels of labour utilization — for example, the workers' hours of work or income from employment, preferably during a long reference period such as one year — with workers' potential levels of utilization, i.e. the amount of work that the population is potentially capable of providing under improved circumstances (ILO, 1957b). The workers' potential level of utilization is an estimate of their full employment level, which is exogenously determined on the basis of hypotheses regarding workers' potential capacities and desires, their mobility across occupations, industries and regions, etc. In principle, it should be specific to each worker. In practice, however, it is generally a single value or norm, inspired by national legislation or arising from analytical or policy needs. Persons are considered as underemployed when their current levels of utilization are below the corresponding norm.

27. Development-type measures have been related to characteristics of workers, such as: (i) the working poor, e.g. persons whose income is below the poverty line or the minimum wage (Hauser, 1974; Moir, 1980; Morris, 1986; Oster et al., 1978); (ii) persons with "unsatisfied basic needs" who are not able to earn enough to buy a certain amount of goods and services (Hopkins, 1985); or (iii) workers in certain "status in employment" and "education level" categories (PREALC, 1984). They have also been related to the characteristics of the establishments in which persons work, such as (iv) workers in establishments belonging to the informal sector (Hirshman, 1979), (v) workers in farms below a certain size (Ayub, 1989), or (vi) workers in establishments with productivity levels below a certain norm (Acharya, 1983). The current international definition of invisible underemployment is a development-type measure. It has been characterized by situations of "low income, underutilization of skill, low productivity" (cf. paragraph 15(2) of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, Thirteenth ICLS, in Annex II).

28. Labour market and development-type measures overlap but are not equivalent. A labour market underemployment measure excludes those persons who work few hours or unproductively but who are not willing or not able to work longer hours or to adapt to better production methods or work organization. These workers are included in a development-type underemployment measure; and labour market

measures include workers who do not necessarily work few hours or unproductively but who are willing and able to work more hours or more productively. These workers are excluded from a development-type underemployment measure. While these differences exist and are important, international guidelines on underemployment have defined *invisible underemployment* to address economic development issues, but *visible underemployment* to address labour market issues. The international definitions of *visible* and *invisible underemployment* have never been compatible.

29. Furthermore, development-type measures have limitations which render their measurement very complex. The limitations may explain why no internationally acceptable definition of *invisible underemployment* has ever been agreed upon. The first limitation relates to selecting a valid norm below which persons are classified in underemployment, while the second relates to measuring qualitative variables, such as the hours of work of persons, their income from employment, the size of their land, their establishment's productivity, etc. (see box 2 below). In contrast with development-type measures, labour market measures of underemployment do not depend upon the selection of a set of norms or the estimation of the numerical values of the hours of work, income from employment or occupational skills. Consequently they overcome the two limitations involved in development-type measures discussed in box 2.

Box 2

**Limitations of development-type underemployment measures**

**The choice of valid norms**. The norms chosen to identify underemployed persons should reflect the full employment level of the population. However, these norms have generally been chosen to be low (e.g. low hours, low levels of income, small size of land, reduced purchasing power, etc.), resulting in underemployment measures which relate to workers on short hours, poorly paid, low skilled, etc. This means that some underemployed persons are not included, e.g. those whose hours worked, skills or income are relatively high but who are capable and want to work in a more adequate employment. Some persons who are not underemployed are also included, e.g. those who are not able to work longer hours or earn a higher income, even under improved circumstances, and those who are not willing to do so (Myrdal, 1968).

Norms are generally selected on the basis of national legislation or as values of central tendency. Legal norms, such as the normal hours of work of full-time workers, minimum wage, etc., are very useful for policy design, implementation and evaluation, which are always linked to national standards. They may be unique to each worker, e.g. the normal hours of work for each worker, thus approaching the original intent of representing the worker's full employment level. However, they hinder the analysis of underemployment in time, because a change in legislation or in the application of the legislation may generate a change in the number of underemployed persons which does not necessarily reflect real changes in the level of underemployment. Furthermore, legal norms are not relevant in all countries nor are they relevant for all workers, such as those in the informal economy.

Values of central tendency, on the other hand, such as the modal value, the median or the average, will be relevant for all workers, but will be a uniform value, common to all workers, which will probably not reflect the full employment levels of all persons in employment. They may also bias the results if the economy as a whole is in a situation of under or overemployment.

**Measuring quantitative variables** is problematic both in establishment and household surveys. The greatest weakness of establishment surveys is that they exclude small units, where underemployment is expected to be high. The greatest weakness of household surveys concerns their respondents, who may not understand the question posed, forget certain events when giving information, deliberately provide incorrect information, give approximate values or ignore the answer, in particular when it relates to characteristics of the establishment where the person works. Household surveys are not well suited for measuring quantitative variables in general. The main labour force variables, such as employment and unemployment, are measured very precisely in household surveys on the basis of questions which only require from the respondent a "yes" or "no" answer, or simple categorical answers.

Regardless of the measurement instrument used, measuring the hours worked by self-employed persons (and paid workers who behave like them) may lack relevance because their remuneration is linked not only to the time they work but also to capital and skill inputs. Their income from employment may be impossible to distinguish from production costs and from other sources of income and expenditure. Measuring working time is also difficult for workers who work "in" or "next to" their private home (e.g. homeworkers, agriculture workers), whose work periods are often intermittent with other periods.

## Measurement instruments

30. For measuring and analysing the varied aspects of underemployment, current international guidelines on underemployment recommend using "besides labour force sample surveys, family budget surveys, population censuses, agricultural and industrial censuses, periodic establishment reports, records of placement services, and national accounts. Sources of technical data include special surveys and records primarily of a non-statistical nature, such as farm management and time utilization surveys and records of agricultural extension programmes" (cf. paragraph 16 of the resolution concerning measurement and analysis of underemployment and underutilization of manpower, Eleventh ICLS, in Annex II). It is generally recognized, however, that household-based surveys and, in particular, specialized labour force surveys, are better suited to measuring underemployment. The criteria on which the definition of underemployment is based can best be implemented with this type of survey. Household-based surveys also have the advantage of being able to cover

related topics, thus allowing the combined analysis of underemployment with employment and unemployment, hours of work and income, job satisfaction and working conditions. They also cover all workers, including those in casual, seasonal and self-employment, among whom underemployment is expected to be high. **Paragraph 4 of the draft resolution in Annex I reflects this point.**

31. Information stemming from employment offices records or compulsory unemployment insurance records may also be used to measure underemployment. Records ensuing from the work of employment offices will be relevant in countries where an important share of employed persons tend to register when they seek another employment situation. Similarly, records about the beneficiaries of unemployment insurance will provide valid information in cases where employed persons have the right to claim some benefits when working less than their contractual hours. This may be the case of full-time employees affected by partial unemployment, that is by "collective and temporary reduction in the normal hours of work for economic, technical or structural reasons" (ILO, 1994). Even in the best of cases, however, administrative sources will provide only partial information on underemployment because they are able to identify only those persons who have the right to claim benefits or who register for another employment situation.

### **Underemployment and inadequate employment**

32. In current international guidelines, underemployment is understood as a situation of inadequate employment in relation to the duration or productivity of work: "Underemployment exists when a person's employment is inadequate in relation to specified norms or alternative employment, account being taken of his or her occupational skill (training and working experience)" (cf. paragraph 14 of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, Thirteenth ICLS, in Annex II). The Meeting of Experts emphasized that other dimensions of inadequate employment, although outside the scope of underemployment, are very important for assessing the welfare of the population, and are therefore critical issues. Furthermore, they can affect the levels of underemployment in ways which need to be acknowledged. These dimensions relate to workers' occupational safety and health issues as well as issues concerning the conditions of employment in general. It was recommended that statistics should also be collected on these *other forms of inadequate employment* and that their measurement could be incorporated into the measurement of underemployment. **Paragraph 5 of the draft resolution in Annex I reflects this recommendation.** The definition and measurement of *other forms of inadequate employment* are addressed in Chapter 6.

### 3. The proposed framework

#### The concept

33. In current guidelines, underemployment is understood as a situation of inadequate employment with respect to the duration and productivity of work. In order to address labour market issues the concept needs to be incorporated into the labour force framework, and thus be based on classification criteria which are comparable to those used to assign persons in employment, unemployment or economic inactivity. Three criteria are inherent in this framework: (i) working or not working but having a job; (ii) being willing to work; and (iii) being able or capable to work (cf. figure 1 below). Unemployment, for example, includes persons who did not work nor had a job during the short reference period but were willing (i.e. sought work) and able (i.e. available) to work. By analogy, underemployment includes persons who worked or had a job during the short reference period but were willing and able to change their current work situation in order to increase their duration or productivity of work. This is in essence the definition of underemployment being proposed. Rewording the above, underemployment can be said to reflect inadequate employment with respect to the duration and productivity of work, determined by comparing the person's current employment situation with a possible alternative work situation, that is an employment situation in which workers are willing and able to engage (cf. paragraph 6 of the draft resolution in Annex I).

**Figure 1. The use of the classification criteria of the labour force framework**

Criteria	Category				Inactivity
	Employment	Unemployment	Underemployment		
Works or has a job	Yes	No	Yes		No
Is willing to work	—	Yes	Yes		No
Is able to work	—	Yes	Yes		No

34. This definition relates to the employed population and to a short reference period, and is based on three criteria: (i) the worker's willingness to change his or her current work situation; (ii) for reasons which are linked to an increase in the duration or productivity of their work; and (iii) their ability to change their work situation. In particular, workers' desire to change their work situation is essential to determine underemployment (Fergany, 1992) in the same way as persons' desire to work is essential to determine unemployment. But this is not enough. Not all persons who desire to change their current work situation are actually capable of doing so, since many would need additional training or a change of circumstances. In the same way, not all persons who have the personal capacities to change their current employment situation are actually willing to do so, and many are reluctant to do so (Myrdal, 1968). Both workers' willingness and abilities to change their current work situation are essential to determine underemployment.

35. This formulation represents a change from current international guidelines, where underemployment can also be determined by comparing a person's current employment situation with a set of chosen norms. The Meeting of Experts saw many problems with defining underemployment in relation to a set of norms. The choice of a norm is specific to each country and therefore tends to hinder international comparability. Even within a country, it is difficult to choose a norm which is valid for the population as a whole (cf. box 2 above). In particular, in many countries, especially developing countries, employed persons work well beyond the hours considered to be

"normal" by legal instruments, in order to earn an adequate income (cf. table 1 below). In these countries, persons who work the legal number of hours may consider that their own full employment level is not attained, and thus may be willing and available to work additional hours. It may be argued that such workers are also facing underemployment with respect to the duration of work, but if the norm chosen to determine underemployment is linked to legal instruments they would be excluded from underemployment. The Meeting therefore recommended that underemployment be determined mainly by comparing the current employment with a possible alternative employment situation.

**Table 1. Distribution of persons in employment by hours usually worked per week, 1994 (%)**

	Less than 35 hours	35 to 44 hours	45 hours and more
Bolivia	20.40	17.30	62.30
Colombia	9.80	21.60	68.60
Costa Rica	14.70	16.80	68.40
Honduras	11.00	30.90	58.10
Panama	13.90	38.20	47.90
Paraguay	16.70	20.40	62.90
Uruguay	21.80	24.90	53.20
Venezuela	11.10	54.80	34.10

Source: CEPAL (1996).

36. On the other hand, the Meeting of Experts also acknowledged that, for national policy decisions, norms needed to be used to exclude persons who already work at what could be considered adequate levels, regardless of whether they would prefer or be capable of working more hours, earning a higher income, etc. The Meeting of Experts therefore recommended that, to address policy concerns, norms were useful at the national level to exclude certain persons from underemployment. These norms should be chosen according to national realities and needs. For international reporting, however, such norms need to be disregarded. Therefore, exclusions should, as far as possible, be made "post facto", i.e. after the data have been collected, so that information is available on the number of persons otherwise excluded.

### Different forms of underemployment

37. Underemployment is determined in relation to two dimensions of work, namely its duration and its productivity. They are the two components that describe labour utilization (Myrdal, 1968). Duration is directly observed and quantified by the hours worked by the employed population. Labour productivity, in contrast, is determined by a number of factors, most of which cannot be measured easily. Some relate to characteristics of workers, such as their skill level, their attitudes towards work and life and their physical and mental capacities; others are fixed in the short or medium term, such as the occupational distribution of the labour force, the existing natural resources, the level of technology and the volume of capital (ibid.).

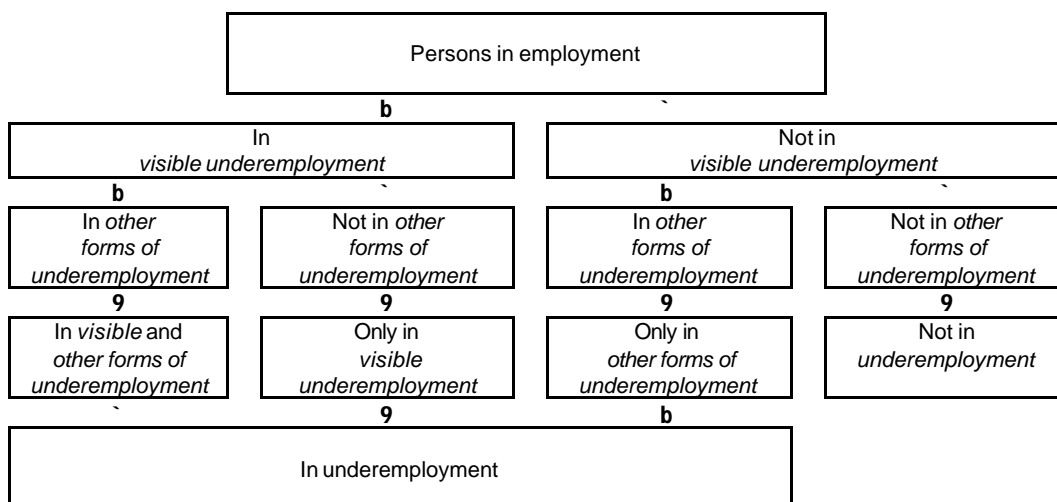
38. These two dimensions correspond to the two forms of underemployment identified by current guidelines: *visible underemployment*, reflecting inadequate duration of work, and *invisible underemployment*, reflecting inadequate productivity of work. The Meeting of Experts considered that these two forms of underemployment should continue to be distinguished (cf. paragraph 7 of the draft resolution in Annex I). In particular, it identified two variables to reflect *invisible underemployment*, namely, hourly income and use of skills, and suggested that it should be renamed "other forms of underemployment", to better reflect the fact that it is characterized by more than one variable, i.e. hourly income and skills, and that these forms were far from being

"invisible". Although it would be useful to separate the income and skill dimensions, the main interest is to reflect the underlying phenomenon they both describe, namely the productivity of work. They are not exhaustive to determine the productivity of work, and the proposed definition allows countries to use additional variables.

39. *Visible underemployment* and *other forms of underemployment* are not mutually exclusive. A person may be underemployed with respect to both time and skills or with respect to time and hourly income. In order to analyse the relationship between *visible* and *other forms of underemployment*, such workers may be classified in both forms of underemployment and tabulated accordingly (cf. paragraph 8 of the draft resolution in Annex I) The total number of persons in underemployment therefore comprises: (i) persons who are in *visible underemployment* only; (ii) persons who are in *other forms of underemployment* only; and (iii) persons who are in *visible underemployment* and in *other forms of underemployment* simultaneously.

40. The draft resolution defines underemployment in terms of its components, *visible underemployment* and *other forms of underemployment*. Given the historical importance of the *visibly underemployed*, the Meeting of Experts considered it essential to identify them very precisely. This is best done through direct measurement of *visibly underemployed* persons, based on a set of questions specifically aimed at identifying them, rather than through measurement based on general questions aimed at identifying the underemployed as a whole, where *visible underemployment* is one category. Workers may be reluctant to report all their reasons for wanting to change their current work situation, may be incapable of doing so or may interpret the importance of each reason in different ways, depending on their particular employment situation. For example, persons who want to earn a higher income may be interested in changing their jobs for another one with a higher salary or, failing that, work additional hours in order to earn more income. With a general question, such persons may declare hourly income, and not hours, as the critical aspect of their inadequate employment situation. It is recommended, therefore, that the measurement of *visible underemployment* should take precedence over the measurement of *other forms of underemployment* (cf. paragraph 9 of the draft resolution in Annex I). The classification of a person in underemployment is illustrated in figure 2 below. *Visibly underemployed* workers are identified first, followed by persons in *other forms of underemployment*. The *visibly underemployed* may also be included in *other forms of underemployment*.

**Figure 2. Identification of persons in underemployment**



#### 4. The visibly underemployed

41. This chapter presents the proposed definition of persons in *visible underemployment*. It discusses each of the criteria proposed and how to apply them in household-based surveys. It also reviews the current international definition of *visible underemployment* and how it has varied since the concept was first discussed in an ICLS.

### Current guidelines

42. Current international guidelines on *visible underemployment* are found in the *resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth ICLS in 1982 (cf. Annex II). They provide a working definition on the number of *visibly underemployed* persons and on the *volume of visible underemployment*. *Visibly underemployed* persons comprise "... all persons in paid or self-employment, whether at work or not at work, involuntarily working less than the normal duration of work determined for the activity, who were seeking or available for additional work during the reference period" (cf. paragraph 18(1)). The definition requires the fulfilment of three criteria during a short reference period. The first is that workers should work less than the normal duration of work for their activity, which is defined in terms of the legal hours, the usual practices or a uniform norm: "... normal duration of work for an activity should be determined in the light of national circumstances as reflected in national legislation to the extent it is applicable, and usual practices in other cases, or in terms of a uniform conventional norm" (cf. paragraph 18(2)). The second criterion is that this situation should be involuntary and the third is that workers should either seek or be available for additional work.

43. This definition has changed little over time. Since 1954, when the first definition of *visible underemployment* was proposed to the Eighth ICLS, it has been related to a short reference period and has been based on short hours of work and on the workers' willingness to work more time (ILO, 1954). The Ninth ICLS in 1957, which adopted the first international definition of *visible underemployment*, added the criterion of availability to work more hours. A Meeting of Experts which met in 1963 introduced the notion of the involuntary nature of the short-time work which, although disregarded by the resolution of the Eleventh ICLS, is present in the current definition. The only significant deviation from previous definitions is that the first international definition also recommended measurement for a long period of one year, in order to capture variations in the extent of *visible underemployment* throughout the year (ILO, 1957c). This recommendation was not retained by subsequent ICLS.

44. Although the current international definition of *visible underemployment* has varied little since it was first formulated, the criteria on which it is based are not well specified. First, it is not clear whether actual or usual hours should be used to identify persons working less than the normal duration. Second, the normal duration of work below which persons are eligible for classification in *visible underemployment* can be determined in different ways and no guidelines are provided on how to apply this norm in practice and, in particular, how to choose a valid uniform norm. Third, it does not provide guidelines for determining the involuntary nature of workers' hours of work or for ascertaining the workers' seeking activities or their availability for additional work. Thus few countries apply these criteria consistently (see Annex III), resulting in a panoply of national definitions making it difficult to compare the levels of *visible underemployment* between countries (cf. box 3).

## The proposed definition

45. The definition of persons in *visible underemployment* proposed in the draft resolution, (subparagraph 10(1) in Annex I) attempts to overcome most of the limitations of the current international definition. It uses similar criteria to those applied by the international definitions of employment and unemployment and defines each criteria. It is proposed that persons are visibly underemployed if, during a short reference period, they were willing to work additional hours, were available to do so, and worked less than the normal duration of work for their activity.

### Box 3

#### National practices regarding visible underemployment

Most definitions include persons whose "hours actually worked" during the reference period were below a uniform conventional norm. Some definitions include persons whose "hours usually worked" are below a uniform conventional norm. Yet others include both groups of workers. A number of definitions do not set a condition on the hours of work.

The *normal duration of work for the activity* is defined in a few countries in terms of the legal hours or the usual hours worked by full time workers. Other countries inquire directly into whether workers work part-time, allowing workers to assess the usual hours in their main job with the normal duration of work for their activity as they understand it. Most other countries use a uniform conventional norm, the specific values of which vary significantly, from 25 hours in Barbados and Malaysia to 40 hours in Ecuador and 47 hours in Costa Rica. A few countries define the normal duration of work as the worker's usual hours of work, which does not reflect the normal duration of work as defined in international standards.

Not all definitions require workers to report *involuntary reasons* for either not working more hours or for working the current number of hours. When they do, the specific reasons considered as involuntary vary between countries. More definitions require workers to report *wanting* to work additional hours, a criterion which is not present in current guidelines. Some of these definitions require all persons in employment to reply to the question on workers' wanting to work additional hours. In most countries, however, only persons who work less than normal are targeted.

While most definitions requiring workers to report involuntary reasons target all persons who worked less than the normal duration of work, a certain number, mostly from developed countries, obtain this information in two stages. They first identify workers who usually work less than normal for involuntary reasons, and then identify workers whose actual hours are below their usual hours, for economic or technical reasons. However, the reasons considered as "involuntary" are not equivalent for the two groups of workers identified. They are not additive.

Few definitions require workers to *seek* to work additional hours; fewer still require workers to be *available, ready or able* to work additional work. When they do, it is generally in connection with the other criteria.

Source: ILO, 1990.

46. The proposed definition of *visible underemployment* relates to persons who are willing and able to work beyond the hours worked in all the jobs they hold during the reference period and who work, during this period, fewer hours in all their jobs than the normal duration of work. This means that persons who have two part-time jobs and want to replace these jobs with one full-time job involving the same number of total hours should not be classified as *visibly underemployed*. Neither should persons who work less than the normal duration of work for their activity in their main job, but who, when their secondary activities are considered, work beyond that norm, even if they declare that they want to work additional hours.

47. However, there are many multiple jobholders<sup>1</sup> who carry out secondary

<sup>1</sup> Multiple jobholders have been defined as persons in employment who during the reference period had paid employment jobs with two or more employers, or had self-employment jobs in two or more enterprises, whether owned by workers themselves or by members of their household, or had both paid employment jobs and

activities to earn an adequate income. It may be useful to supplement the measurement of *visible underemployment* with a question on the reasons for having a secondary job, in order to identify those multiple jobholders who would have been classified as *visibly underemployed* if they had had only one job, i.e. those workers who report having a secondary job because the hours worked in their main job were insufficient (cf. paragraph 17 of the draft resolution in Annex I).

### **Willingness to work additional hours**

48. The first and main criterion in the proposed definition of *visible underemployment* identifies those persons in employment who, regardless of the number of hours actually worked during the reference period, express a desire or preference to work beyond the hours already worked in all their jobs during the reference period, whether usually or only currently: *visibly underemployed* persons may want to increase the hours they work on a usual basis or only during the short reference period. These are workers whose actual hours of work are below the number of hours they consider to represent their full employment level. This includes persons in employment who during the reference period wanted or preferred to: (i) change their current paid employment or self-employment jobs for another job with more hours; (ii) obtain another job or jobs in addition to their current jobs; (iii) work more hours in their current jobs; or any combination of (i)-(iii).

49. This criterion replaces the requirement that workers be "involuntarily" working less than the normal duration of work present in the current international definition. It can reasonably be expected that persons who involuntarily work fewer than normal hours also want to work more hours, and it can be agreed that the involuntariness criterion in the current international definition of *visible underemployment* is strongly related to the workers' willingness to take additional work. France, for example, when submitting its labour force survey data to the Statistical Office of the European Communities (Eurostat), equates part-time workers who want more work with part-time workers who are unable to find more work. And Australia, when presenting underemployment data, considers that full-time workers who during the reference period worked less than usual for economic reasons are persons who prefer extra hours of work (ABS, 1997). Because the difference between the "willingness" and "involuntariness" criteria is expected to be small, they may be used interchangeably.

50. However, the "willingness" criterion is preferred over the involuntariness criterion for three reasons. First, because the willingness criterion complies more closely with the activity principle of the labour force framework, whereby persons need to do or have the intention of doing something to be included in one of its population categories, irrespective of whether they are in a specific situation or have certain attributes. Second, because it is generally acknowledged that it is difficult to classify reasons as voluntary or involuntary. Countries tend to disagree on the specific reasons that they consider as involuntary (cf. Annex III). The Thirteenth ICLS, which adopted the current definition of *visible underemployment*, could not agree on the reasons to be considered as involuntary, even though the following had been proposed: "slack work or slack season, material shortages, repairs to plant or equipment, failure to obtain full-time work, [...] etc." (ILO, 1982). Third, because voluntary reasons may be involuntary reasons in disguise and vice versa. Persons who report that they worked less than normal because of family responsibilities may have opted for these activities because they were unable to find more work in the first place. There may also be persons who although originally working short hours for personal reasons now desire more working hours but continue to declare the original (voluntary) reason for working

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self-employment jobs (ILO, 1982). Paid and self-employment jobs are defined in the resolution concerning the international classification of status in employment, adopted by the Fifteenth ICLS (ILO, 1993).

short hours. Conversely, persons may report economic reasons for working short hours even if at present they are not willing to work additional hours.

51. To identify workers who satisfy the "willingness" criterion, the question to be used in a household-based survey should seek to establish whether, during the reference period, workers want to work additional hours. For analytical purposes, this question may also serve to identify whether persons want an additional job or jobs, another job with more hours to replace the current one(s), more hours of work in the current job(s), or a combination of the above. The question should convey the idea that the person may want additional paid work or self-employment and should be asked with respect to all jobs held by the worker. It should be addressed to all persons in employment, regardless of the hours they actually worked during the reference period. Therefore, the question may also request information about the workers' preference for less hours of work than those currently worked, as in Japan:

Do you wish to change jobs or to have another job in addition to the present one?

- wish to change jobs
- wish to have another job in addition to the present one
- wish to increase work time in the present job
- wish to decrease work time in the present job
- do not wish to change jobs

52. It may be argued that, for classifying workers as *visibly underemployed*, "seeking" to work additional hours is a more straightforward criterion than simply "wanting" to work additional hours. This criterion is particularly useful to align the definition of *visible underemployment* with that of unemployment. There is evidence, however, that a measure based on workers' seeking activities is in general less sensitive to economic changes than a measure based on workers' preference to work additional hours (ILO, 1997c). This is particularly so in times of reduced demand for labour, where many employed persons do not seek to work additional hours even though they want and are available to work more hours. Many self-employed persons may lack information on improved methods of production, or may not have access to them. Paid workers may not be aware of additional work opportunities, or opportunities may be scarce, for example if these workers are subject to discrimination. Workers who are economically dependent on a primary earner, such as spouses and children, may not be able to move to other regions or economic activities, where additional work opportunities exist. Lastly, and most importantly, workers who happened to be on short-time work only during the short reference period may not have had the opportunity to actively seek to work additional hours but will most likely only be able to express a preference to work additional hours. Data for a number of countries show that a very low proportion of workers in *visible underemployment* actually seek to work additional hours, especially when they have been in this situation only for a short period of time (OECD, 1996a). For all of these workers, the use of the "seeking" to work additional hours criterion will be too restrictive. In general, as job search requires contacts, information about methods of seeking work and access to such methods, educated workers in the urban areas have a higher chance of being included in *visible underemployment* than other workers. On the other hand, however, a measure based on workers' seeking activities is likely to be less sensitive to question formulation than a measure based on workers' preference to work additional hours (ILO, 1997c). The Meeting of Experts recommended therefore that both measures should be obtained (cf. subparagraph 20(b) of the draft resolution in Annex I).

53. The criterion of "seeking" to work additional hours should be interpreted, as in the standard definition of unemployment, as undertaking at least one specific work

search activity during a specified recent period. It should include steps similar to those of the international definition of unemployment (ILO, 1988), with some modifications to consider the case of workers who seek to increase the hours of work in their current paid or self-employment activity. The following steps are proposed (in *italics* those which have been added to the seeking work steps used in the unemployment definition): registration at a public or private employment exchange; application to *current or other* employers; checking at *current or other* worksites, farms, factory gates, markets or other assembly places; placing or answering newspaper advertisements; seeking assistance of friends or relatives; looking for land, building, machinery or equipment to establish or *improve* their own enterprise; arranging for *initial or additional* financial resources; applying for permits and licences, etc.

54. The specified recent period during which persons should have taken steps to seek to work additional hours should be sufficiently long to take account of persons who sought work earlier and are waiting for replies from potential employers, but not too long in order to exclude those who are not currently willing to work more hours. If appropriate, countries may want to use the same specified recent period as the one used for the measurement of unemployment, in the light of their own national circumstances.

55. The "seeking to work additional hours" criterion should also take into consideration those persons who did not seek to work additional hours during the specified recent period because they had already found additional hours of work to start at a later date. Such persons should qualify for classification in *visible underemployment*, in the same way as persons not in employment who do not seek work but who will start a job in the future are considered as unemployed (cf. subparagraph 10(3) of the draft resolution in Annex I).

### **Availability to work additional hours**

56. The second criterion for classification in *visible underemployment* aims to distinguish persons who are ready to work additional hours within a subsequent period, given the opportunity to work additional hours, from those who are not. This criterion has three components. First, workers need to be ready, i.e. have the time to work additional hours. Second, they need to be ready within a subsequent period, i.e. either immediately or after making some arrangements to replace their current jobs, for child care, to arrange for housing if moving to another location, and similar matters. There is evidence that the subsequent period to determine availability to work additional hours needs to be extended beyond the short reference period of one day or one week, and therefore beyond the period conventionally used to determine availability for work in the definition of unemployment, given that many workers can leave their present employment only at a later date (OSZ, 1997) (cf. subparagraph 10(4) of the draft resolution in Annex I). Third, workers need to have the opportunity to work additional hours in the type of arrangement wanted or sought, e.g. if they wanted to work additional hours in the same job, they should have the possibility to do so.

57. The question to determine the workers' availability to work additional hours in a household-based survey should inquire whether workers are ready to work additional hours during a subsequent specified reference period. In order to provide flexibility for data analysis, it may be useful not to specify the subsequent period but to inquire about it with response alternatives, as Norway does:

How soon could you start working with increased working hours?

- at once
- within a month
- later (than a month)
- do not know

## Working less than the normal duration of work

58. The third criterion aims to exclude workers who are willing and available to work additional hours but who, because of the hours they worked during the reference period, can be considered for policy purposes to have attained their full employment level on the dimension of the duration of work. This criterion results from the need of policy-makers to link the *visibly underemployed* population with policy decisions, by identifying persons who worked less hours than what they consider to be "full time". Given the limitations of using norms, particularly for international purposes (cf. paragraphs 35 and 36 above) the Meeting of Experts recommended that this criterion should be used mainly for national policy needs. For international purposes, it recommended reporting on the *visibly underemployed* population identified only with the first two criteria, i.e. the workers' willingness and availability to work additional hours. This implies that at the data collection stage of a household-based survey all workers should be requested information about their willingness and availability to work additional hours and that the exclusion of workers who work above the normal duration of work should be carried out during the tabulation of the data. ***This discussion is reflected in subparagraphs 10(2) and 20(a) of the draft resolution in Annex I.***

59. In order to reflect national practices, it is proposed to determine this criterion by comparing the workers' hours actually worked in all jobs during the reference period with either (i) a uniform conventional norm or (ii) the normal hours of work of comparable full-time workers. This criterion requires the measurement of hours actually worked in all jobs during a short reference period. It does not make reference to workers' usual hours of work because *visible underemployment* is one category of the labour force framework, which relates to a short reference period. In the same way that unemployment identifies persons who did not work during the short reference period and not those who usually do not work, *visible underemployment* identifies persons who worked less than the normal duration during the reference period, not those who usually work less than the normal duration. Persons in employment who usually work less than the normal duration of work but who during the reference period worked more, either because they worked overtime or had a secondary employment, are therefore excluded. Persons in employment who usually work more than the normal duration of work but who during the reference period worked less are included, if they are willing and available to work additional hours. It may be useful for analytical purposes, however, to identify *visibly underemployed* persons who usually work less than the normal duration of work. This subgroup, termed *involuntary part-time workers*, is further described in Chapter 6 below.

60. The hours actually worked has been defined by the Tenth ICLS in 1962 (see box 4). Although the definition is restricted to paid workers, mainly in manufacturing establishments, most countries measure hours actually worked in their household-based surveys for all workers, although not always for all jobs. It would be an advantage if international standards on "hours actually worked" were revised to cover all workers. The Sixteenth ICLS may want to recommend that the ILO Bureau of Statistics give priority to the revision of international guidelines on working time in the near future.

61. The normal duration of work may be determined on the basis of a uniform conventional norm. Most countries which measure *visible underemployment* determine

the normal duration of work this way. Currently, however, there is great variation between countries in the value chosen for the norm. In order to reflect a "full employment" level in relation to the duration of work, it is proposed to determine the uniform norm as the "hours usually worked" by most persons in employment, i.e. it should be the modal value of the hours usually worked, if a unique modal value can be identified, or the median value in other cases. It is proposed to use the "hours usually worked" (and not the "normal hours of work") because they relate to all persons in employment, not only to paid workers, and many countries already measure them in their household-based surveys. However, there is no international statistical definition of the "hours usually worked". The ILO has done some work on the subject (cf. box 5). It would be a great advantage if international guidelines were developed on this topic and the Sixteenth ICLS may want to recommend that the ILO Bureau of Statistics give priority to the revision of international guidelines on working time.

62. The normal duration of work may also be determined as the "normal hours of work" of "comparable full-time workers". The normal hours of work was defined by the Tenth ICLS, and a comparable full-time worker was defined by the International Labour Conference in 1994, in the ILO Part-Time Work Convention (No. 175) (see box 4). The definition of a comparable full-time worker is not a statistical definition, and as such does not lend itself for measurement. It requires that the normal hours of work be obtained for practically every occupation within each establishment. This is too burdensome to be applied for measurement in a household-based survey. However, it is possible to identify the number of persons whose normal hours of work are below the normal hours of work of comparable full-time workers indirectly by requesting respondents in a household-based survey to assess whether their working schedules are full time or part time. This would in principle reflect the legal nature of their work contracts or administrative provisions in the establishment regarding their jobs. This type of question is applied in labour force surveys of the European Union as in Spain:

The referred job is:

- full-time
- part-time, because:
  - the interviewee is in school or professional training
  - is sick or incapacitated
  - has not been able to find a full-time job
  - did not want a full-time job
  - other reasons
  - does not know the reason

Box 4

**Some international definitions**

**International definition of hours actually worked**

- (1) Statistics of hours actually worked should include —
  - (a) hours actually worked during normal periods of work;
  - (b) time worked in addition to hours worked during normal periods of work, and generally paid at higher rates than normal rates (overtime);
  - (c) time spent at the place of work on work such as the preparation of the workplace, repairs and maintenance, preparation and cleaning of tools and the preparation of receipts, time sheets and reports;
  - (d) time spent at the place of work waiting or standing-by for such reasons as lack of supply of work, breakdown of machinery or accidents, or time spent at the place of work during which no work is done but for which payment is made under a guaranteed employment contract;
  - (e) time corresponding to short rest periods at the workplace, including tea and coffee breaks.
- (2) Statistics of hours actually worked should exclude —
  - (a) hours paid for but not worked, such as paid annual leave, paid public holidays, paid sick leave;
  - (b) meal breaks;
  - (c) time spent on travel from home to work and vice versa.

(Resolution concerning statistics of hours of work, Tenth ICLS,  
1962)

**International definition of normal hours of work**

- (1) Normal hours of work are the hours of work fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards.
- (2) Where not fixed by or in pursuance of laws or regulations, collective agreements or arbitral awards, normal hours of work should be taken as meaning the number of hours per day or week in excess of which any time worked is remunerated at overtime rates or forms an exception to the rules or custom of the establishment relating to the classes of workers concerned.

(Resolution concerning statistics of hours of work, Tenth ICLS,  
1962)

**International definition of a comparable full-time worker**

The term "comparable full-time worker" refers to a full-time worker who:

- (i) has the same type of employment relationship;
- (ii) is engaged in the same or a similar type of work or occupation; and
- (iii) is employed in the same establishment or, when there is no comparable full-time worker in that establishment, in the same enterprise or, when there is no comparable full-time worker in that enterprise, in the same branch of activity, as the part-time worker concerned.

(Part-Time Work Convention, 1994  
(No. 175))

**Box 5****A tentative definition of usual hours**

The concept of hours usually worked by a person in employment aims at identifying the most common working schedule of the person over a long period. The hours usually worked may relate to daily or weekly schedules and be defined as "the hours worked during a typical week or day in [an] activity" (ILO, 1992), or more technically, as the **modal value of the worker's "hours actually worked" per day or week over a long period**. For workers in sales and agricultural jobs, whose working schedules are different during the high and low commercial or agricultural seasons and who will have more than one modal value during the year, the "long period" may be the current (commercial or agricultural) season. In contrast, it may be the year for most workers in clerical jobs, who tend to have similar working schedules throughout the year. The "long period" may also be set as a function of the frequency with which data are collected, e.g. monthly household surveys can use the previous month as the long period.

When a modal value cannot be found, e.g. for workers on annualized working schemes, who do not have regular schedules, the "hours usually worked" can be obtained with another measure of central tendency, such as the average "hours actually worked" per day or per week over the long period. In order to avoid biased estimates, the average should exclude all days or weeks when workers have been either absent from work or not in employment.

In principle, the "hours usually worked" may be measured for workers who do not possess a work contract, e.g. workers engaged in small-scale or family enterprises, self-employed workers, etc., if they work regular working schedules. For workers who possess a work contract, it is useful to contrast their usual working schedules with their normal hours of work. When compared with the "normal hours of work", the "hours usually worked" include overtime which occurs systematically every day or week and excludes time not worked on a usual basis. The "hours usually worked" are not affected by unexpected or unusual overtime or by unusual absence or rest.

Source: Mata-Greenwood, 1992.

63. This procedure, however, identifies persons who work part time in the main job only, i.e. persons whose normal hours of work in the main job are below the normal hours of work of comparable full-time workers, which is not equivalent to persons who during the reference period worked less than the normal hours of work of comparable full-time workers. Three types of adjustments are needed. First, part-time workers need to be corrected for eventual overtime worked during the reference period. Those part-time workers who during the reference period worked more than their normal hours of work, because of overtime for example, need to be excluded, if as a consequence they worked in total more than the normal hours of work of comparable full-time workers. Second, full-time workers need to be corrected for absences. Those full-time workers who during the reference period worked less hours than the normal hours of comparable full-time workers need to be included. Third, part-time workers need to be corrected for multiple jobholding. Because part-time status can be determined only for one job in particular, there is a risk that persons who hold two part-time jobs will be eligible for classification in *visible underemployment* even if the total hours worked in both jobs are higher than what is considered as full time in either of the jobs held, thus overestimating the measures. Thus, part-time workers in the main job who held more than one job during the reference period should be excluded, if as a consequence they worked in total more than the normal hours of work of comparable full-time workers in the first job. These adjustments can be made correctly only if the normal hours of work of comparable full-time workers are directly obtained in a household-based survey. However, this is rarely the case.

64. Apart from limitations in carrying out the above adjustments, identifying part-time workers on the basis of self-assessment may be inaccurate, because the perception of respondents about whether their schedules are full time or part time seems to be biased when they are in occupations whose normal hours of work have decreased over the years. Persons in full-time jobs tend to report their schedules as part time when their jobs have seen reductions in the normal hours of work well below

what is generally considered to be full time in the country (OECD, 1996b). Furthermore part-time work status is difficult to obtain for workers who have no work contracts (e.g. self-employed workers, workers in the informal sector, etc.) or who are in unstable employment (e.g. casual and seasonal workers), many of whom tend to be underemployed.

65. In addition, workers excluded from *visible underemployment* on the basis of the normal hours of work of comparable full-time workers will not be the same as those excluded on the basis of a uniform conventional norm. Table 2 shows, for a selected number of countries, that the number of part-time workers identified on the basis of self-assessment differs from those identified on the basis of a threshold (OECD, 1996b). **The Committee on Underemployment may want to discuss the relevance and feasibility of determining this criterion on the basis of comparison with the normal hours of work of comparable full-time workers.**

**Table 2. Part-time employment: National definitions based on self-assessment by workers as compared to methods based on cut-offs of usual weekly hours worked, 1995**

Country	Percentage of all persons in employment who are part-time workers, when defined		
	On the basis of self-assessment	As persons who usually work less than 30 hours per week	As persons who usually work less than 35 hours per week
Switzerland (1996)	28.5	22.7	26.7
United Kingdom	21.9	19.9	24.0
Denmark	19.7	14.5	21.4
France	15.7	14.1	19.0
Germany	15.5	13.4	16.6
Belgium	15.5	16.5	20.4
Ireland	12.2	15.3	19.5
Poland	8.5	13.3	17.0
Luxembourg	7.5	11.2	13.4
Spain	6.5	6.2	9.3
Italy	5.9	11.1	13.9
Czech Republic	4.0	4.8	34.8
Portugal	3.9	6.8	9.1
Greece	3.2	8.0	11.5

Source: OECD, 1996b.

## Some data

66. Data on *visible underemployment* stemming from national household-based surveys were found for 34 countries in national publications or provided by Eurostat (cf. Annex IV for the list of publications consulted and the definitions used). No data were requested directly from member countries. Although the data found in national publications are official, they do not always refer to *visible underemployment*. Indeed, the interpretation given to the data by the ILO and the way they have been presented are unofficial and should be considered as such.

67. Different definitions are used. A first group of countries identifies persons in employment whose hours of work, whether currently or usually, are below a certain cut-off point and who *wanted* to work additional hours. A second group of countries identifies persons in employment whose hours of work, whether usually or currently, are below a certain cut-off point and who *sought* additional employment. These definitions are in line with the proposed definition of *visible underemployment*. A third type identifies persons in employment whose hours of work, whether currently or usually, are below a certain cut-off point and who report *involuntary* reasons for doing so. The reasons

considered as involuntary invariably diverge between countries. A fourth group of countries identifies two component groups: *involuntary part-time workers*, made up of employed persons who declare to work part time or who usually work below a certain cut-off point, who want to work additional hours or who are unable to find full-time work, and *temporary short-time workers*, made up of other employed persons who during the reference week worked less hours than a certain cut-off point or less than usual for economic reasons. These two types of definitions could also be considered to conform to the proposed definition if it is assumed that workers who report *involuntary or economic* reasons for working below a certain number of hours are equivalent to workers who report being willing to work additional hours. Only one country identifies *visibly underemployed* persons as persons in employment whose hours currently worked are below a certain cut-off point and who are available for additional work. Only three definitions require all *visibly underemployed* workers to be available for additional work, while an additional three require *some visibly underemployed* workers to be available for additional work (see Annex IV).

**Table 3. National measures of visible underemployment by type of definition**

	Visibly underemployed population ('000)	Labour force ('000)	Visible underemploy- ment rate (%)	Unemploy- ment rate (%)
<b>Employed persons who want or prefer to work additional hours</b>				
Argentina (April-May 1996) (urban areas)	...	...	12.6	17.1
Costa Rica (July 1996)	146.8	1 220.9	12.0	6.2
Ecuador (November 1996) (urban areas)	58.2	3 223.5	1.8	10.4
Japan (February 1995)	1 720	65 020	2.6	3.1
Paraguay (1990) (Metropolitan area)	13.9	520.2	2.7	6.6
Peru (1993) (Lima)	...	...	14.6	9.9
Philippines (i 1995)*	2 614	28 380	9.2	9.5
Uruguay (1992) (urban areas)	...	...	3.5	9.0
<b>Employed persons who seek additional work</b>				
Ireland (April 1996)	23.3	1 494.4	1.6	11.9
Mexico (second quarter 1996) (41 urban areas)	...	...	1.4	5.8
Norway (1995)	87	2 186	4.0	4.9
<b>Employed persons reporting involuntary reasons</b>				
Czech Republic (autumn 1996)	54.2	5 312	1.0	3.5
Hong Kong (second quarter 1996)**	49	3 173.7	1.5	2.9
Israel (1995)	51.7	2 100.3	2.5	6.3
Mexico (second quarter 1996) (41 urban areas)	...	...	1.6	5.8
Slovakia (fourth quarter 1996)	15.4	2 509.6	0.6	10.8
Turkey (April 1994)	371.9	21 586	1.7	8.3
Venezuela (first half 1993)	20.4	7 519.1	0.3	6.9

**Involuntary part-time workers and temporary short-time workers**

Australia (September 1995)	567.8	9 103.9	6.2	8.4
EU countries (1994)				
Belgium	154.1	4 148	3.7	9.6
Denmark	124.4	2 759	4.5	8.0
Germany	653.7	39 267	1.7	8.7
Greece	176.5	4 154	4.2	8.9
Spain	197.2	15 488	1.3	24.3
France	1 384.6	24 869	5.6	12.7
Ireland	54.2	1 413	3.8	14.6
Italy	504.7	22 584	2.2	11.3
Luxembourg	1.6	170	0.9	3.5
Netherlands	148.7	7 224	2.1	7.2
Portugal	95.5	4 759	2.0	6.7
United Kingdom	986.2	28 398	3.5	9.7
French Guiana (1993)	3.3	46.3	7.1	24.2
Guadeloupe (1993)	18.1	175.5	10.3	26.1
Poland (February 1997)	834	16 954	4.9	12.8
United States (i 1996)	4 315	133 943	3.2	5.4

**Employed persons who are available for additional employment**

Thailand (February 1995)	923.3	29 778.7	3.1	2.4
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\* i = Annual average.

\*\* Prior to 1 July 1997, when Hong Kong became a special Administrative Region of the People's Republic of China.

Sources and definitions: Data presented in this table have been derived from national publications and are not always referred to as *visible underemployment* by countries (see Annex IV).

## 5. Other forms of underemployment

68. This chapter presents the proposed definition of *other forms of underemployment* and discusses the criteria involved. This definition is intended to substitute current international guidelines on *invisible underemployment* and modifies them substantially. In order to throw light on the reasons for this change of direction, the current definition of *invisible underemployment* and previous discussions on the subject are also presented in this chapter.

### Current guidelines

69. Current international guidelines related to the measurement of *invisible underemployment* are found in two resolutions, the *resolution concerning measurement and analysis of underemployment and underutilization of manpower*, adopted by the Eleventh ICLS in 1966, and the *resolution concerning statistics of the economically active population, employment, unemployment and underemployment*, adopted by the Thirteenth ICLS in 1982 (cf. Annex II). In contrast with *visible underemployment*, current international guidelines consider that *invisible underemployment* does not lend itself for measurement and should be studied with analytical indicators: "Invisible underemployment is primarily an analytical concept reflecting a misallocation of labour resources or a fundamental imbalance as between labour and other factors of production. Characteristic symptoms might be low income, underutilization of skill, low productivity. Analytical studies of invisible underemployment should be directed to the examination and analysis of a wide variety of data, including income and skill levels (disguised underemployment) and productivity measures (potential underemployment)" (cf. paragraph 15(2) of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, Thirteenth ICLS).

70. Indeed current international guidelines do not provide a definition of *invisible underemployment* which can be applied directly in statistical surveys. The existing definition identifies only three variables that can be used as indicators of the productivity of work, i.e. income, use of skills and productivity of the establishments, but does not define them. It also specifies that the values of these variables should be low, but does not provide further guidelines regarding the specific low values to select. Only a few countries measure *invisible underemployment*, mainly in Latin America. Table 4 presents data on *invisible underemployment* stemming from national household-based surveys found in publications available at the ILO (see Annex IV for publications consulted and definitions used). They generally include all persons not in *visible underemployment* who earn less than the minimum wage, or a multiple of it, regardless of whether they looked for or wanted another job or were able to take up another job.

**Table 4. National measures of invisible underemployment**

	Invisibly underemployed population ('000)	Labour force (000)	Invisible underemploy- ment rate (%)	Unemploy- ment rate (%)
Costa Rica (July 1996)	128.8	1 220.9	10.6	11.2
Ecuador (November 1996) (urban areas)	71.3	3 223.5	2.2	2.5
Mexico (second quarter 1996) (41 urban areas)	...	...	10.3	5.8
Paraguay (1990) (Metropolitan area)	66.1	520.2	12.7	13.6
Peru (1993) (Lima)	...	...	62.8	9.9
Phillippines (i 1995)	2 523	28 380	8.9	9.8

Sources and definitions: Data presented in this table have been derived from national publications and are not always referred to as *invisible underemployment* (see Annex IV).

71. No resolution adopted by the ICLS has ever provided a definition of *invisible underemployment* which can be used for measurement purposes. In fact, the first three ICLS which discussed the subject — the Second, Sixth and Eighth ICLS in 1925, 1947 and 1954, respectively — viewed underemployment only as a problem of reduced working hours (ILO, 1947 and 1954). It was not until 1957 that the Ninth ICLS enlarged the scope of underemployment to include problems of inadequate technology, misuse of skills and low productivity (ILO, 1957b) and distinguished between two forms of underemployment to reflect the intensity or productivity with which work was performed (ILO, 1957b): *disguised* underemployment, on the income and skills dimensions, and *potential* underemployment, on the productivity dimension. The Ninth ICLS also identified the three variables, still present in current standards, that characterize *disguised* and *potential underemployment*, i.e. income, skills and the establishment's productivity. The proposal to the Ninth ICLS recommended a set of norms against which to compare the current levels of income, skills and productivity, namely the minimum wage rate or usual practices regarding wages, the skills required by the job, and the average productivity of efficient establishments. Additionally, at the time, persons were required to seek or be ready to accept a post with normal work conditions to qualify for classification in these forms of underemployment. The proposal to the Ninth ICLS, however, was not retained, and the definition adopted viewed *invisible underemployment* as the current definition does, that is, as a situation of low income, underutilization of skills and low productivity.

72. A Meeting of Experts which met in 1963 first used the term *invisible underemployment* to relate to disguised and potential underemployment (ILO, 1963). It also recommended that *invisible underemployment* be described through analytical procedures. This suggestion was retained by the Eleventh ICLS, which further identified some elements for its measurement, and in particular recommended the use of indirect indicators to describe *potential* underemployment. These measurement elements constitute current international guidelines and are reproduced in Annex II to this report.

73. It is clear from the description of current international guidelines and the review of previous guidelines that although *invisible underemployment* was originally linked to the labour market functioning (cf. Chapter 2) it is now associated with economic development policies. The interest shifted from identifying persons who were "seeking and ready to accept a post with normal working conditions" to identifying persons whose "characteristics are below certain norms", determined in the light of national development policies. The invisibly underemployed have in fact been likened to the working poor, the unskilled, the population in small farms, in the informal sector, etc. While it is no doubt very important to identify such workers for economic development policies, they should not be equated with the *invisible underemployed*. Not all of them are underemployed, and there are underemployed persons who are in none of these situations. The view of present proposals is to link *invisible underemployment* with labour market issues.

## The proposed definition

74. The definition of *other forms of underemployment* proposed in the draft resolution (cf. subparagraph 11(1) in Annex I) revises current guidelines on *invisible underemployment* and attempts to deal with the limitations. The definition focuses on labour market issues and as such overcomes the measurement limitations of measures associated with economic development issues (cf. box 2). It is integrated into the labour force framework, thus aligning itself with employment, unemployment and *visible underemployment* measures: *visible* and *other forms of underemployment* become "additive". It is proposed that persons are in other forms of underemployment if,

during a short reference period, they were willing to change their current work situation in order to earn a higher income, use their skills more fully, etc., and were available to do so.

75. According to this proposal, workers are identified in *other forms of underemployment* in three stages: first, on the basis of their willingness to change their current work situation, then, on the basis of the reasons for wanting or preferring this change, and finally, on the basis of their availability for change. In contrast with the definition of *visible underemployment*, where workers are directly identified on the basis of their desire or preference to work additional hours, workers in *other forms of underemployment* are not directly identified on the basis of their desire or preference to earn a higher income or to use their skills more fully, as all reasonable persons would qualify for inclusion, rendering the measure meaningless.

76. Several countries and areas, among them Colombia, France, Japan, Kenya, Martinique, Nigeria, Spain, Turkey, Uruguay and Venezuela, already measure, or are able to measure, persons in *other forms of underemployment* in a way which is similar to the proposals (cf. Annex II). Data on employed persons in *other forms of underemployment* stemming from household-based surveys, derived from national publications available at the ILO or from data provided by Eurostat for 18 countries (ILO, 1997b) (cf. table 5 and Annex IV) are based on definitions which are similar — although not identical — to the definition being proposed.

**Table 5. National measures of other forms of underemployment**

	Employed persons in other forms of under-employment (000)	Labour force (000)	Other forms of underemploy- ment rate (%)	Unemploy- ment rate (%)
Algeria (December 1989)	181.8	5 234	3.5	18.1
Colombia (June 1996) (7 main cities)	...	...	11.7	11.4
Czech Republic (autumn 1996)	110.2	5 312	2.1	3.5
EU countries (1994)				
Belgium	44.6	4 148	1.1	9.6
Denmark	131.2	2 759	4.8	8.0
Germany	354.9	39 267	0.9	8.7
Greece	63.6	4 154	1.5	8.9
Spain	106.5	15 488	0.7	24.3
France	363.4	24 869	1.5	12.7
Ireland	38.9	1 413	2.8	14.6
Italy	565.1	22 584	2.5	11.3
Luxembourg	1.6	170	0.9	3.5
United Kingdom	826.7	28 398	2.9	9.7
Japan (February 1995)	3 540	65 020	5.4	3.1
Poland (February 1997)	562	16 954	3.3	12.8
Slovakia (fourth quarter 1996)	43.3	2 509.6	1.7	10.8
Turkey (April 1994)	1 221.3	21 586	5.7	8.3
Venezuela (first half 1993)	13	7 519.1	0.2	6.9

Sources and definitions: Data presented in this table have been derived from national publications and are not referred to as *other forms of underemployment* by countries (see Annex IV).

77. Most of these definitions identify employed persons who seek another employment situation in order to earn a higher income or to make more use of skills. Two countries opted for a softer definition, and identify the number of employed persons who *want* another employment situation for similar reasons. But no country explicitly requires workers to be *available* to perform the job sought or wanted (see Annex IV for definitions). All these surveys include a reason linked to increased income. It is not

always clear, however, whether this reason is interpreted by respondents as an increase of the hourly income or whether workers are willing also to work longer hours, i.e. whether the reason reflects *visible underemployment* or *other forms of underemployment*. In contrast, some surveys do not include reasons linked to an increase in the skills used, leading to an underestimation of *other forms of underemployment*. In other cases, the reasons accepted as valid for inclusion go beyond the reasons related to *other forms of underemployment*, thus leading to overestimation relative to the definition proposed in this report.

78. Implicit in the proposed definition is that employed persons in *other forms of underemployment* need to be willing and available to change or modify at least one of their paid or self-employment jobs in order to earn a higher hourly income or to make better use of their skills. Countries should take care to determine whether workers are willing and available to change their secondary jobs, not only their main one, in order to include workers who only want to change their secondary job and not their main job. The following sections describe the criteria involved in this definition.

### **Willingness to change the current work situation**

79. The first criterion aims to distinguish persons whose full employment level on the dimension of productivity of work, as estimated by the workers themselves, is above their current level, and therefore want a change in their current work situation. It identifies persons who during the reference period wanted to (i) replace any of their current paid or self-employment jobs for another one; (ii) carry out changes in any of their current jobs, i.e. by reorganizing the work, upgrading tools, machinery or equipment, diversifying the type of goods and services produced, innovating marketing strategies, etc., in any of the paid or self-employment jobs; or (i) and (ii) simultaneously. This criterion is similar to the willingness criterion used to define *visible underemployment* (cf. paragraphs 41 to 67 above).

80. In order to identify workers who want to change their current work situation, the question in a household-based survey should inquire about the workers' wish or preference to change their current work situation. The question should convey the idea that persons may want to change or modify any of their paid or self-employment jobs. It should also serve to identify the desired change, i.e. whether they want to replace any of the current jobs, to modify them, or the two simultaneously. A question of this type has been formulated by Kenya:

Want another job, looking for work?

- yes
- no

81. As with the measurement of *visible underemployment*, it may be useful to also identify, among persons who reported that they wanted to change their current work situation, those who were "seeking" to change the current work situation (cf. subparagraph 20(d) of the draft resolution in Annex I). "Seeking" to change the current work situation is a more straightforward criterion than "wanting" to change the current work situation. In addition, countries may want to use this criterion because it aligns the definition of *other forms of underemployment* more closely with that of unemployment. "Seeking" to change the current work situation should be understood on similar lines as seeking to work additional hours, i.e. as undertaking at least one specific search activity during a specified recent period. It would include steps similar to those of the international definition of unemployment, with some modifications to consider the case of workers who seek to modify any of their current paid or self-employment jobs (cf.

subparagraph 11(3) of the draft resolution in Annex I).

### Reasons for wanting to change the current work situation

82. The second criterion aims to identify, on the basis of workers' assessment of their own work situation, those reasons for wanting to change the current work situation which reflect the potential for increase in the productivity of work. It is proposed that at least two answer categories be envisaged. One relates to an increase in the hourly income from employment, which translates into wanting an increase in the total income from employment without increasing the hours of work. Another relevant answer category relates to the better use of the workers' current skills, as set forth in the latest International Standard Classification of Occupations, ISCO-88, namely as wanting a new work situation with tasks and duties with higher complexity and range (ILO, 1990a). Reasons related to increased job satisfaction and conditions of work do not qualify workers for classification in *other forms of underemployment* because they are not directly linked to an increase in productivity of work.

83. The Meeting of Experts expressed some concern about the use of the hourly income as an indicator of the productivity of work. Hourly income is a major factor when choosing a job or planning to change jobs: most employed persons who want or seek to change their work situation do so to increase their total income. They can do so by working more hours altogether or by working the same number of hours in a job with a higher hourly income. In the first case, income is linked to the person's duration of work and thus to *visible underemployment*. In the second case it is an indicator of a person's productivity, i.e. it is a summary variable reflecting the degree to which labour is utilized, given its direct link to the worker's skills and personal efficiency, and to the establishment's productivity, itself a function of production methods and organization. But hourly income is also linked, and perhaps to a larger extent, to institutional, geographical and demographic factors which are independent of labour utilization issues. Income may vary between men and women, industries, urban and rural areas, export-oriented and the domestic-oriented establishments, etc., at identical levels of productivity.

84. To identify the reasons which qualify a person for classification in *other forms of underemployment*, the question to be used in a household-based survey should distinguish the reasons linked to an increase in the hourly income, to a better use of current skills, etc., from other reasons. France, for example, uses the following categories:

Why is X seeking another job?

- fear or certainty of losing present job
- wants to find a job which corresponds better to qualifications or training
- wants to find a better paying job
- wants to find a job nearer to home
- wants to find a job which is better adapted because of health reasons
- wants to find better working conditions (schedules, arduousness)
- wants to find a job in another region
- seeks to work more (in a second activity or in a job with longer hours)
- other (specify)

The reasons "wants to find a job which corresponds better to qualifications or training" and "wants to find a better paying job" are related to *other forms of underemployment*.

### Availability to change current work situation

85. The third criterion aims to distinguish workers who are capable of starting the new work situation in a subsequent period from those who are not. These are workers who only need limited on-the-job training to get acquainted with the specific tools, equipment and working methods of the new workplace, as compared to those who need to acquire major new skills. In order to identify them, it is assumed that persons who do not need to overhaul their skills in a major way are persons who are available in the short term. Therefore, the requirement for inclusion in *other forms of underemployment* is that workers should be available to change their current work situation. This criterion has three elements. First, workers need to be ready to take the new work situation, i.e. should have the time to do so. Second, they need to be ready within a subsequent period, i.e. either immediately or after making some arrangements to replace their current jobs, for child care, for housing, or for similar matters. The subsequent period may be the same period as the one used in the definition of *visible underemployment* (cf. subparagraph 11(4) of the draft resolution in Annex I). Third, workers need to have the opportunity to work in the type of job wanted or sought, i.e. they should have the possibility to change their job for another one, or to modify their job, as indicated in the willingness criterion.

86. The question to determine workers' availability to take the new work situation in a household-based survey may be the same as the question used to determine the workers' availability to work additional hours to measure *visible underemployment* (cf. paragraph 57).

## Exclusions

87. Countries may want to exclude some persons from *other forms of underemployment* who are willing and available to change their current work situation but who are in jobs which can be considered, in the light of national policy needs, as adequate in relation to the productivity of their work. Countries may want to exclude workers on the basis of their occupations. Workers who are willing to change or modify one of their jobs in order to use their skills more fully may be excluded if that job already requires the highest level of skill or is at the top of an organization's hierarchy, i.e. if the job belongs to a professional or managerial occupation. Given the link between the workers' occupation and their income (Elias and McKnight, 1996), a similar threshold can be used to exclude persons who are willing and able to change or modify one of their jobs in order to earn a higher hourly income. The specific professional and managerial occupations to be used to exclude persons from the scope of *other forms of underemployment* may need to be determined in the light of national circumstances (cf. subparagraph 11(2) of the draft resolution in Annex I). Another possible threshold to exclude workers from *other forms of underemployment* relates to the average hourly income for each occupational group. Workers who have a higher hourly income than the average for the occupational group concerned would be excluded from *other forms of underemployment*. Both types of thresholds are sensitive to the number of occupational groups distinguished. The second type of threshold, furthermore, entails measurement limitations which cannot be ignored (cf. box 2).

88. As with the definition of *visible underemployment*, the Meeting of Experts considered the problems of international comparability caused by the exclusion of certain workers and recommended that this criterion should be used only for national purposes, in line with policy needs. Therefore, for international purposes, it recommended reporting on the population in *other forms of underemployment* without exclusions (cf. subparagraph 20(c) of the draft resolution in Annex I).

## 6. Other issues

89. This chapter deals with miscellaneous issues related to the measurement of underemployment. As regards *visible underemployment*, it examines two analytical groups which may be distinguished separately, as well as the measurement of the *volume of visible underemployment*. It presents a set of indicators which may be useful, and discusses the measurement of particular topics, such as the *duration of underemployment*, *overemployment* and *other forms of inadequate employment*. It identifies the type of classifications that can be useful for analysis and policy decisions, and presents how data should be reported to enhance international comparability. Finally, it discusses some issues for further action.

### Analytical groups

90. In countries where part-time work is a widespread working time arrangement, two groups of *visibly underemployed* persons may be identified, which are important for analytical purposes. The first is made up of involuntary part-time workers, comprising part-time workers who during the reference period worked less than the normal duration of work and were willing and available to work additional hours. The second is made up of temporary short-time workers, comprising other employed persons, who during the reference period worked less than the normal duration of work and were willing and available to work additional hours (cf. subparagraph 12(1) of the draft resolution in Annex I). In particular, the latter group includes part-time workers who, during the reference period, worked less than their partial schedules and were willing and available to work additional hours in relation to this situation.

91. Involuntary part-time workers can be seen as reflecting a structural type of underemployment, while temporary short-time workers can be seen as reflecting aggregate demand problems, or a more "cyclical" type of underemployment. In practice, the distinction between the two groups of workers is equivalent to that between usual and current *visible underemployment*. In this sense, the distinction between the two groups of workers is relevant also in countries where part-time work is not a widespread working time arrangement. In all cases, it may be useful to study the relationship between them and the unemployed population at different points in time (cf. subparagraph 12(3) of the draft resolution in Annex I).

92. In order to reflect national practices, it is proposed that part-time workers be defined, in line with the Part-Time Work Convention, 1994 (No. 175), as workers whose normal hours of work in the main job are below the normal hours of work of comparable full-time workers, i.e. measured on the basis of self-assessment, or as workers whose usual hours of work in all jobs are below the uniform conventional norm used to establish the normal duration of work (cf. subparagraph 12(2) of the draft resolution in Annex I). The resulting measures will not be comparable between countries, as the number of persons identified as working part time varies with the definitions used (cf. table 2). In fact, measures may not be comparable even between countries using the same definition of part time, in particular with respect to workers on partial unemployment, i.e. "full-time workers affected by collective and temporary reductions in their normal hours of work for economic, technical or structural reasons" (ILO, 1994) as explained below. When the measurement of part-time workers relies on the respondents' own assessment of their working schedules, involuntary part-time workers will not include workers on partial unemployment, because their schedules are full time. It may be, however, that they declare working part time, especially if their working hours have been reduced for a long time, say six months, in view of the tendency of respondents to report that they work part time when their working schedules are reduced (cf. paragraph 64 above). When part-time workers are defined

as persons whose hours usually worked are below a uniform conventional norm, then involuntary part-time workers will include all workers whose hours have been reduced for a sufficiently long time and want and are available for additional employment (cf. box 5 above). Involuntary part-time workers will therefore include partially unemployed persons who have been in this situation for a long time. It is not clear, however, whether countries actually exclude such reduced time situations when they measure the hours usually worked and whether respondents actually report on it. In both cases, different persons may be identified as involuntary part-time workers in different countries, even in countries where a similar definition of part-time work is applied.

93. When measured as proposed, the group definitions are mutually exclusive and exhaustive of the *visibly underemployed* population. However, not all countries which identify these two groups define them as proposed. In particular, many define temporary short-time workers as persons who during the reference period worked less than the hours usually worked and were willing and able to work additional hours. Thus, the group definitions may not be exhaustive in countries which identify part-time workers on the basis of self-assessment — they may exclude full-time workers whose working schedules have been reduced for economic or technical reasons for long periods of time in both groups. These workers are excluded from involuntary part-time workers, as explained above, and, because their usual hours of work are low, if during the reference period they worked the same low hours as usual, they are not identified as temporary short-time workers either. This problem does not appear when part-time work is defined on the basis of the comparison with a uniform norm, as these workers would be identified as involuntary part-time workers. A second problem arises with non-response. When workers are not able to report their part-time status, or are not able to report their usual hours of work, then they are not classified in any group, even if they are *visibly underemployed*. A study of countries of the European Union shows that around 3 per cent of the *visibly underemployed* are neither involuntary part-time workers nor temporary short-time workers (Eurostat, 1995).

## The volume of visible underemployment

94. There is an interest among certain member countries in measuring not only the number of persons in *visible underemployment*, but also the severity of their underemployment situation. The amount or volume of *visible underemployment* is itself not defined in current international guidelines, which mention, however, two approaches for its measurement. These depend on whether countries want to apply the criterion of "availability" for additional work or the criterion of "seeking" additional work. When the first criterion is used, the volume of *visible underemployment* can be "... measured by aggregating the time available for additional employment during the reference period in respect of each person *visibly underemployed*", which may be expressed in "... working days, half-days or hours". When the second criterion is used, the volume of *visible underemployment* is the aggregate of "... the duration of work sought" (cf. paragraph 19 of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, Thirteenth ICLS, in Annex II).

95. The measurement of the volume of *visible underemployment* was first mentioned by the resolution of the Ninth ICLS which defined it as "the amount of working time lost" or as "the value of supplementary labour which might be contributed by the persons concerned" (ILO, 1957c). However, it did not provide practical measurement guidelines on the subject. It was the Eleventh ICLS which introduced the notion that the volume of *visible underemployment*, expressed in work-years, work-days or work-hours, etc., could be estimated with the "duration of work" or the "extra time available for work", depending on the assumptions made and the analytical methods

followed (ILO, 1967).

96. In order to be consistent with the definition of *visible underemployment* proposed in the draft resolution, it is proposed to define the volume of *visible underemployment* in terms of the definition criteria, i.e. the workers' willingness and availability to work additional hours. Consequently, the volume of visible underemployment is equivalent to the additional days, half-days or hours that visibly underemployed persons are willing and available to work (cf. subparagraph 13(1) of the draft resolution in Annex I). This information can be obtained directly, by asking persons in *visible underemployment* for the number of additional days, half-days or hours that they want and would be available to work, or indirectly, as the difference between the total days, half-days or hours that persons want or prefer to work and the hours actually worked during the reference period. For national purposes, countries may want to use the normal duration of work as the maximum possible preferred hours of work of the *visibly underemployed* population. Various countries measure the volume of *visible underemployment* in their household-based surveys (cf. Annex II). Some inquire directly on the additional hours that workers would prefer, wish or be available to work, e.g. Botswana. Others inquire on the total number of hours (or days) that workers would prefer to work, e.g. Ethiopia and South Africa.

97. Current international guidelines also recommend the compilation of a composite estimate of the volume of current unemployment and visible underemployment (ILO, 1988b) on the basis of the labour time disposition of unemployed and *visibly underemployed* persons, i.e. by obtaining the number of days, half-days or hours that each person in the labour force is either at work, available for work or not available for work during the short reference period. The labour time disposition of persons considers the time that they work or are available for work in the context of the total time potentially available for work, and thus allows a control of the reported time available for work. The direct inquiry of the duration of additional work sought or available for does not include this control and thus may overestimate the *volume of visible underemployment*. In line with the proposed definition of the *volume of visible underemployment*, it is proposed to define the composite volume of unemployment and *visible underemployment* as the additional days, half-days or hours that the unemployed and *visibly underemployed* were willing and able to work during the reference period (cf. subparagraph 13(2) of the draft resolution in Annex I).

## Analytical indicators

98. When presenting data on underemployment, it may be useful to calculate an underemployment rate as the percentage in the total labour force which is in underemployment. The relation between the underemployed population and the employed population may also be useful. These same rates should be calculated separately for persons in *visible underemployment* and in *other forms of underemployment* (cf. subparagraph 14(a) of the draft resolution in Annex I).

99. Another indicator which is already being compiled in some countries is the combined unemployment and underemployment rate, which can be calculated as the ratio between the sum of the unemployed and underemployed populations and the labour force. A combined unemployment and *visible underemployment* rate may also be calculated, as well as a combined unemployment and *other forms of underemployment rate* (cf. subparagraph 14(b) of the draft resolution in Annex I).

100. When the *volume of visible underemployment* is obtained, it is useful to calculate a rate of the *volume of visible underemployment*, by calculating the share of the *volume of visible underemployment* within the "potential time for work" of the employed population. The potential time for work of the employed population is the total hours of work that persons in employment would have worked if they had all been fully

employed. It can be calculated as the sum of the total hours actually worked by all employed persons and the *volume of visible underemployment* (cf. paragraph 14(c) of the draft resolution in Annex I).

101. Similarly, when the composite volume of unemployment and *visible underemployment* is obtained a rate of the composite volume of unemployment and *visible underemployment* may be calculated as the ratio between the composite volume of unemployment and *visible underemployment* and the "potential time for work" of all persons in the labour force. The potential time for work of the labour force relates to the total hours that persons would have worked if they had all been fully employed. It can be calculated as the sum of the total hours actually worked by all employed persons and the composite volume of unemployment and *visible underemployment* (cf. subparagraph 14(d) of the draft resolution in Annex I).

### **Underemployment for longer reference periods**

102. In order to account for all important cycles during the year, underemployment can be measured for longer reference periods. Two types of measures are useful. One relates to *underemployment over the year*, determined in terms of the number of weeks or days that a person has been underemployed and unemployed during a long reference period, such as one year, the other to the *duration of underemployment*.

103. *Underemployed persons over the year* can be defined, in line with the international definition of the usually active population adopted by the Thirteenth ICLS in 1982 (ILO, 1988b), as a usually employed person who, during the reference year, experienced a certain number of weeks or days of underemployment. On the basis of this definition, the broadest measure of *underemployed persons over the year* includes all persons experiencing underemployment at least during one week or day during the year. While this measure extends over a long reference period, the basic period to determine each underemployment episode remains the short reference period, i.e. the day or week. This measure is not able to identify persons who experience underemployment when the year is considered as a whole, but who, in any day or week within the year, are fully employed, unemployed or inactive (never underemployed). Many seasonal workers find themselves in this type of underemployment situation. In order to capture these situations, a question is required in a household-based survey to inquire whether workers are willing and able to work additional hours throughout the long reference period as a whole. A simpler procedure consists of deriving a measure on the basis of conventional information on usual activity, and classifying persons in *underemployment over the year* on the basis of the number of days or weeks of underemployment and unemployment. Indeed, usually employed workers who experience at least one day or week of unemployment during the year can be said to experience underemployment when the long reference period is considered as a whole.

104. For the measurement of *underemployment over the year*, data need to be collected on each work and non-work episode during a long reference period, including information on starting and ending dates, industry, occupation, hours of work, willingness to change their work situation, reasons and availability to do so, etc. However, since information on the activity status for each day or week during the long reference period depends on respondent assessment, it may not be reliable, particularly in situations of irregular or casual employment, which are most affected by underemployment.

105. The *duration of underemployment* could be measured instead, which is an important variable in examining the characteristics of the underemployed population. It is proposed to define it as the elapsed duration, i.e. the number of days, weeks, months or years that underemployed persons have continuously been in the current situation of wanting to change their current work situation for similar reasons, and available to do so

(cf. paragraph 15 of the draft resolution in Annex I). Botswana, for example, measures the duration of *visible underemployment* by requesting: "For how long have you been wanting to work more hours?" Similar definitions have been used for the duration of employment, which has been defined as the length of time that a person has continuously been at the current job or with the current employer. No international guidelines exist on the duration of employment or on the duration of unemployment, however, and the Sixteenth ICLS may want to recommend to the ILO that this subject be developed in the future, perhaps in connection with guidelines on working time.

106. The measurement of the duration of underemployment in household-based surveys will depend on the respondents' recall capacity and is therefore approximative. Experience shows that responses tend to cluster around "round" numbers and it is difficult in practice to clearly take into account short breaks in the continuity of the underemployment situation. It may be unreasonable to expect respondents to report systematically not only short episodes of full employment or non-employment but variations in the reasons for wanting to change the current work situation, or episodes in which workers ceased, for a limited period, to wish or prefer to change or to be available for change.

### Overemployment

107. Related to the concept of underemployment is that of overemployment. This refers to persons who are willing to work less time (with a corresponding reduction of pay), work in a job with less pay or perform lower skilled work than they are currently doing. Full-time workers who would like to work part time and persons who are compelled to work overtime against their wishes, are examples of *overemployed* persons on the dimension of hours of work. *Overemployed* persons should not be confused with workers who work excessive hours and would like to work less hours only if they can maintain the same income. These persons are not *overemployed*. Overemployment can be seen as the counterpart of underemployment and can be defined with similar criteria. It is proposed to define persons in overemployment only on the dimension of the hours of work, as persons in employment who during the reference period were willing to work less hours than currently, with a corresponding reduction in income (cf. paragraph 16 of the draft resolution in Annex I).

### Other forms of inadequate employment

108. The Meeting of Experts strongly recommended the measurement of inadequate forms of employment, other than underemployment. Indeed, determining the inadequacy of the duration or productivity of work is not enough to assess the welfare of the population, and the measurement of other dimensions of inadequate employment has become urgent. A definition is therefore being proposed in the draft resolution (cf. paragraph 18 of the draft resolution in Annex I). It is based on the same criteria as the proposed definition of underemployment, i.e. primarily on workers' willingness and abilities to change their current work situation for specific reasons. The reasons that qualify a person for inclusion in *other forms of inadequate employment* are linked to occupational safety and health and general working conditions. They include reasons such as work stability, welfare services, working time arrangements, safety and health at work, commuting time, stress, etc.

109. The question to be used in a household-based survey to identify these workers would be the same as that used to identify workers in *other forms of underemployment* (cf. Chapter 5). In the question by France used as an example in paragraph 84, the reasons "fear or certainty of losing present job", "wants to find a job nearer to home", "wants to find a job which is better adapted because of health

reasons", "wants to find better working conditions (schedules, arduousness)", "wants to find a job in another region" would qualify a person for classification in *other forms of inadequate employment*.

## Classifications and international reporting

110. As with statistics of employment and unemployment, the analysis of the underemployed population requires its classification by significant demographic, social and economic characteristics. These characteristics should allow users to understand and analyse the particular position and constraints of women workers as compared to men workers so as to provide a solid basis for promoting equality between women and men. As far as possible, they should also comply with existing international guidelines. Significant demographic characteristics are the sex and age of persons. Social characteristics relate to persons' educational attainment, the presence of young children and other persons requiring care, marital status, and, where polygamy is practised, rank within the marriage. Economic characteristics relate to the branch of economic activity, the occupation, the institutional sector (a category of which should be the informal sector, wherever relevant) and the status in employment of each job held by the worker.

111. When presenting data on underemployment classified by economic characteristics, it is important to classify the job with respect to which the person is in underemployment. Persons in *visible underemployment* should be classified on the basis of their main or only job. Persons in *other forms of underemployment* should be assigned to the industry, occupation, institutional sector and status in employment of the job which generates underemployment. When more than one job causes underemployment, then it is proposed to choose the main one. The latter is understood as set forth in the resolution concerning the International Classification by Status in Employment (ICSE), i.e. 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)" (ILO, 1993) (cf. paragraph 19 of the draft resolution in Annex I).

112. One of the concerns of the Meeting of Experts was that users were often not provided with sufficient information for the analysis of the data. Single figures constructed on the basis of a number of components were often published, leaving users with little flexibility to examine the data and understand changes which occur in the populations analysed. In order to reduce this problem, it is proposed to present the data disaggregated by component groups, in the form of "building blocks". In order to throw light on the *visibly underemployed*, for example, it is proposed to classify the employed population according to whether they were willing to work additional hours or not, and to further disaggregate these population groups by whether they were seeking to work additional hours or not, etc. (cf. paragraph 19 of the draft resolution in Annex I). Australia, for example, already presents data in the form of "building blocks" (see figure 3 below).

## Further action

113. The Meeting of Experts strongly endorsed the need to launch a programme to test the application of the definition of underemployment and other forms of inadequate employment in household-based surveys. In particular, it recommended that this programme should be sponsored by the ILO and be launched in developing, industrialized and transition countries. Such testing could include the study of the relationship between the hourly income and skill dimensions of underemployment, how to combine the measurement of *visible underemployment* and *other forms of*

*underemployment*, how to combine the measurement of underemployment and other forms of inadequate employment, question formulations and the best order in which the questions should be posed in household surveys, as well as the effect of proxy response on the quality of the information obtained. As with other international guidelines, it is proposed that the ILO should cooperate with countries in applying the definition of underemployment as recommended in this resolution in their household-based surveys and should disseminate the information about the experiences gained in this field (cf. paragraph 21 of the draft resolution in Annex I).



**Figure 3. Presentation of the visibly underemployed population in the form of building blocks, Australia, 1997**

Source: ABS, *Underemployed workers*, Sep. 1997.