
Sixteenth International Conference of Labour Statisticians

Geneva, 6 - 15 October 1998

Report II

Measurement of income from employment

International Labour Office Geneva

CONTENTS

INTRODUCTION 4

I -	REVIEW OF NATIONAL PRACTICES IN THE MEASUREMENT OF INCOME FROM EMPLOYMENT	8
	Labour force/household surveys	8
	Household budget and household income and expenditure surveys	11
	Establishment surveys	12
	Administrative records	14
	Other sources of income data	15
	Complementary information on non-wage employment-related benefits	16
II -	FRAMEWORK FOR THE MEASUREMENT OF INCOME FROM EMPLOYMENT	18
	Income from employment and the economically active population	18
	Income from employment and the existing international income-related guidelines	19
	Objectives and uses of statistics of income from employment	21
	The concept of income from employment	24
	Data requirements in relation with the measurement objectives	27
	Reference period	28
	The population groups covered by the measurement of income from paid and self-employment	30
	Conclusion	34
III -	INCOME FROM PAID EMPLOYMENT	36
	Historical background	36
	The need for statistics of income from paid employment	37
	Definition of Income from paid employment	39
	The components of Income from paid employment	39
	Complementary approach for non-measurable benefits	53
	Valuation of some components of income from paid employment	53
	Treatment of employees' occupational expenses	55
	Exclusions from income from paid employment	55
	Relationship between income from paid employment and other existing concepts of wages	56
	Conclusion	60
IV -	INCOME FROM SELF-EMPLOYMENT	64
	Introduction	64
	The population concerned	65
	The concept of self-employment income	66
	Sources and components of income from self-employment	69
	Mixed income and income of the self-employed	73
	Treatment of contributing family workers in income from self-employment	74
	Social security benefits received by the self-employed	75
	Choice of method for recording income	77
	Evaluation of production for own use	80
	Treatment of losses	80
	Exclusions from income from self-employment	81
	Conclusion	81
V -	SOURCES OF DATA	83
	Establishment surveys	83
	Administrative records	84
	Labour force/household surveys (LFSS)	86
	Household budget or household income and expenditure surveys (HIES)	88
	Other sources of income data	89
VI -	DATA COLLECTION AND COMPILATION	91
	Statistical units	91
	Data requirements	92
	Volume of employment	93

Periodicity of data collection	96
Items of data collection	96
Analytical measures	98
Classification of data	98
Measurement of the imputed contribution of unpaid family workers	100
Comparability of data on income from paid and self-employment	101
Data dissemination	102
Further action	103
 DRAFT RESOLUTION CONCERNING THE MEASUREMENT OF INCOME FROM EMPLOYMENT	 104
 APPENDIX 1	
 <u>ILO CONVENTION No. 95 (1949)</u> Convention concerning the Protection of Wages	 126
 BIBLIOGRAPHY	 127

INTRODUCTION

1. The need for statistics on income from employment, i.e. the income generated by a person's paid or self-employment job, has long been recognized in the socio-economic and statistical literature. It has increased over the past decades owing to the changes that have taken place in forms of employment and remuneration systems.

2. In both industrialised and developing countries, urban economies and labour markets, in particular, have undergone important structural changes. The prevalence and stability of regular wage employment has declined and many workers have had to resort to other types of income-earning activities, such as casual or temporary paid employment, full- or part-time self-employment, multiple-job holding, etc. in either the formal or the informal sector of the economy. These situations are inadequately covered by, or absent from, the existing wages statistics which are mostly limited to regular paid employment, and very little statistical information is available on the income generated by atypical or non-standard forms of employment.

3. Remuneration systems have broadened considerably during the past decades, mainly through two mechanisms: (i) the introduction of provisions or benefits, either acquired as a result of collective bargaining or provided by employers in order to attract and retain staff, which supplement regular earnings, and (ii) the introduction and expansion of social security benefits. In the current statistics, earnings often represent only the remuneration regularly received for time worked or work performed, but not all wages supplements or benefits. Thus they do not fully measure the full income accruing to workers by virtue of their status as employees.

4. In spite of the fact that the majority of workers in the world are self-employed, few regular statistics on income generated by self-employment are available. This is particularly true for many developing countries, where trends in labour income have often had to be inferred from changes in macroeconomic circumstances, productivity, employment and wages or even household expenditure (ILO 1988a). Data on the incomes of the self-employed are sparse, because their income is less well-defined than the income which accrues from wage and salary employment. Where statistics of self-employment

income are compiled (e.g. in OECD countries and in a few developing countries), they are very often available only at the household level and there is little information on the relationship between self-employment and income.

5. In general, statistics of income from paid and self-employment are rare; they are not yet part of the regular wage statistics programmes of developed or developing countries. When they have been compiled, they follow a variety of concepts and methodologies and very often have not been sufficiently exploited.

6. From the point of view of labour statistics standards, there are two sets of international guidelines related to the statistical measurement of income: one concerns the measurement of earnings of employees, and the other the measurement of household income for the purposes of household income and expenditure surveys. Both standards are related to the measurement of income from employment, however, neither of them provides adequate guidance on the statistical definition and measurement of the full income accruing to workers by virtue of their employment situation. On the one hand, the concept of earnings represents only the remuneration received regularly by employees, leaving aside certain wage and non-wage benefits which supplement regular earnings; on the other, the existing standards on wages statistics do not provide guidance for the compilation and production of statistics of income from self-employment. Data on household income provide statistics on the distribution of households by income source (wages and salaries, income from self-employment, property income, transfers, etc.) and income groups. However, it is generally not one of the main purposes of these statistics to provide detailed data on employment and on the relationship between employment and income, or to differentiate between jobs or income-earners.

7. Other major statistical guidelines are contained in the System of National Accounts (SNA-1993). These include two measures of income arising from productive activity, namely compensation of employees and mixed income of the self-employed. Compensation of employees corresponds to a concept of cost to the employer for employing workers, while mixed income measures the business value of unincorporated enterprises in the household sector. The SNA deals essentially with aggregates. Information on the generation and distribution of income is confined to flows between broad sectors and

no attempt is made to integrate into the system detailed information relating to the distribution of personal income.

8. All these changes and developments call for further statistics on the income generated by both paid and self-employment activities for different categories of the labour force, and the development of appropriate statistical concepts, definitions and methods to measure this income.

9. In 1993, the ILO Bureau of Statistics submitted to the 15th International Conference of Labour Statisticians (ICLS) a preliminary report (ILO, 1992a) concentrating on the desirability of measuring income from employment. The Conference recognized the need to develop new international standards encompassing all types of income earned through both paid and self-employment activities. Such standards are intended, first, to provide internationally agreed guidelines which could help national statistical offices develop definitions, classifications and data collection methods that suit their particular requirements. They should also help improve international comparability.

10. On the basis of these considerations, the Governing Body of the ILO convened at its 267th Session (November 1996) a Meeting of Experts on Labour Statistics which was held in Geneva from 14 to 23 October 1997. The Meeting was attended by government experts and experts nominated by the Employers' and by the Workers' groups of the Governing Body. Observers and representatives of intergovernmental organizations also attended the Meeting. Under Item 2 of the agenda, the Meeting discussed the issues identified and the approaches proposed for measuring income from paid and self-employment on the basis of a report prepared by the ILO Bureau of Statistics (ILO, 1997a). Five background documents on national practices had also been prepared (1997b). In the report adopted by the meeting (ILO, 1997c) a number of conclusions and recommendations were drawn, which were taken into consideration in the preparation of the present document.

11. This report is divided into six chapters. Following the introduction, Chapter I presents a review of the existing major sources of data on income from employment and shows the variety of national practices. Chapter II specifies the objectives of the collection of data on income from employment and proposes a measurement framework. Chapter III focuses on the definition, components and specific

measurement issues of income from paid employment. Chapter IV examines the concept and measurement issues related to income from self-employment. Chapter V deals with methods of collecting data on income from paid and self-employment and discusses their relative strengths and weaknesses in relation to the measurement objectives. The final chapter sets out the items of data to be collected, depending on the measurement objectives and survey instruments used.

12. Where relevant, reference to the proposals included in the draft resolution on statistics of income from employment is provided in the text. The proposed draft resolution is presented in the appendix. A number of issues are also raised on which proposals have not been made, but which would best be dealt with in a technical manual providing practical advice on the application of the resolution.

I - REVIEW OF NATIONAL PRACTICES IN THE MEASUREMENT OF INCOME FROM EMPLOYMENT

13. With a view to developing a framework for the measurement of all forms of income from paid and self-employment, the ILO Bureau of Statistics sent, in 1996, an exploratory questionnaire to ministries of Labour and national statistical agencies, with a view to gathering information on the extent to which countries collected data on income from employment. On the basis of the replies received and complementary methodological information available at the Bureau of Statistics, national practices in over 70 countries were reviewed and information was gathered on feasible sources, data collection methods, concepts and availability of data. It also showed that there is a growing awareness among data producers and users that the existing statistical systems must be complemented with statistics of income from employment. Some statistical agencies have already started to collect and compile statistics of income from employment, although the majority of countries has not yet integrated this measure into their regular programmes of statistics. The information available also shows that income from employment is measured in different ways depending on the objectives of data collection and the type of data source. These, in turn, determine the appropriateness of including a number of components in, or excluding them from, the definition of income from employment.

14. The main sources of data that are used are labour force/household sample surveys (LFSS), household budget or household income and expenditure surveys (HIES) and other field inquiries,

establishment (employer) surveys and administrative records (tax and social security records). The following sections highlight the diversity of national practices.

Labour force/household surveys

15. A large number of countries inquire about household members' incomes at least once a year, if not more frequently, through labour force and related household surveys. These surveys focus on individual household members and on the characteristics of the economic activities they carry out. A variety of approaches are adopted in the measurement of income, as shown by the review of some 50 national questionnaires available to the ILO Bureau of Statistics.

16. Some surveys inquire only about employees' income, by means of one or two questions on wages and salaries (e.g. in most European Union countries, Indonesia and Sri Lanka), while at the other extreme a set of detailed questions is asked on different types of income and the circumstances leading to the receipt of that income (as in Australia, Canada, Costa Rica and the United States). In Latin America and, to a lesser extent in Asia, a number of countries tend to cover the incomes of both employees and self-employed persons. A few countries, like Germany or Guam, however, use a single question to ask about income obtained from all sources, which does not permit the identification of that part of income which is directly related to employment.

17. Some surveys record net earnings, some gross earnings, some total income (understood as the sum of regular earnings and additional bonuses, premiums, allowances, etc.), and some income according to a number of components. In some cases, an estimate of payments in kind is required from the respondents, while in others, only the existence of incomes in kind is asked for (e.g. Argentina, Mexico). Generally, the value of income in kind is found difficult to measure in LFSS. In a number of surveys (particularly in Asian countries), the reference period for income questions is the week or more frequently the month, and in others, the period of work corresponding to the last payments received (last pay period). A few countries use the year (e.g. Canada, Japan, New Zealand and the United States). Some surveys cover income actually received during the reference period and others ask for usual/normal

income. In the majority of cases, actual amounts are recorded, but in a few cases, income data are collected by means of income ranges (e.g. in the Republic of Korea).

18. Income may relate to the main or usual job only (as in Portugal, Kenya, the Republic of Korea and Singapore), to the main and to secondary occupations separately (as in Hong Kong, the Netherlands and the Philippines), to all jobs together (as in Belize and Japan) or to the main or usual employment status (as in Tanzania).

19. As regards income from self-employment, different notions of income are used. In a large number of countries either "gross income" or "net income" is asked for, the latter being sometimes defined as the difference between business profits and expenditure. Usually, no explicit definition is given in the questionnaire of the term "net" which may mean either "net of consumption of fixed capital" or "net of income taxes and social security deductions". Income is measured in terms of "earnings" in Barbados and Macau, while both notions of "net income" and "withdrawals" are used in Latin American countries.

20. The majority of surveys in Asian countries restrict their inquiries to the incomes received by persons currently in paid and self-employment, so that income questions are not addressed to the other categories of the population (e.g. the unemployed and those not economically active). Others (e.g. in Latin America) cover all economically active persons and ask questions about the receipt of pensions, rents, state allowances, etc. for all persons surveyed (over a specified age limit), including the non-economically active household members. In a number of cases, questions are asked about the amounts of social security benefits received by the respondents, while in others, registration of respondents with the national social security system is observed. Usually, no explicit distinction is made in the questionnaires between benefits linked directly to the job or employment status of workers and other benefits. However, it appears that this distinction can be made on the basis of information available at the country level on the eligibility rules and coverage of the social security and assimilated schemes.

Household budget and household income and expenditure surveys

21. Household budget and household income and expenditure surveys (HIES) usually provide a wide range of information on the composition and distribution of household income by source (wage and self-employment income, transfers including social security benefits, property income, contributions and taxes, etc.), which is collected for a number of purposes, including income distribution studies and income and expenditure analysis¹. Detailed data are generally collected on all incomes and expenditure of each household member, for consistency reasons between resources and expenditures.

22. HIES are well suited to collecting data on income from self-employment - since information is usually collected on all outputs and inputs - and on income in kind. Generally, a disaggregation of the quantity and value of goods and services bought and received is asked for. Consequently, it is possible to estimate the quantity and value of those products received as remuneration by employees or withdrawn by the self-employed, which constitute income in kind. In principle, HIES data can also be used to estimate gross income and to compute net income more accurately than in LFSS, since the amounts of contributions and taxes paid by employees and the self-employed are identified. Finally, as far as transfer incomes are concerned, data collection allows for a detailed recording of the amounts received from various sources, such as pensions, family allowances, other social security benefits, etc. (although at present, and for publication purposes, all these receipts are usually grouped together under one subgroup and there is no indication as to whether or not these benefits are employment-related).

23. HIES normally inquire about incomes actually received during the reference period. As in LFSS, this reference period varies from a month or a quarter to a year, depending on the sampling scheme, data collection methods and sources of income.

24. In principle, HIES permit the identification, for each household member, of those receipts which are related to the employment or unemployment status. However, it is not one of the main purposes of such surveys to collect detailed data on the relationship between employment and income. As a consequence, in practice, there is a lack or scarcity of data on this relationship. Even when detailed data are collected on economic activity, occupation and income from employment for each household member,

¹ See *Sources and Methods - Labour Statistics*, Volume 6, Household income and expenditure surveys, ILO, 1994.

the unit of analysis is generally the household, not the individual. Data are rarely collected on work duration in terms of hours of work of individuals, but rather on the quantum of employment in number of days, weeks or months.

Establishment surveys

25. A large number of countries conduct establishment surveys (i.e. employer-based surveys) which provide data on those elements of income from paid employment which are paid directly by the employer, such as total cash earnings, benefits in kind and profit-related pay, together with employers' contributions to social security and assimilated schemes, as well as data on employment and hours of work. These surveys do not provide information of employment-related and other benefits received by employees from outside sources, such as social security or State insurance institutions.

26. In the present state of the art, most establishment surveys of employment and wages², and assimilated reports from employers, are limited to the private formal or "modern" sector. They exclude income-recipients in the public sector and the government, as well as the informal sector. They usually concentrate on large or medium size establishments and do not cover the self-employed, whether own-account workers or employers with a limited number of employees. They often leave out certain types of income-earners and their income in order to simplify data collection, analysis and presentation, or because inclusion of these workers may be considered as biasing trends; this is the case of salaried directors and managerial staff remunerated predominantly by a share of the profits, as well as outworkers, workers subcontracted from other establishments and interim agencies and commission agents, especially when they are paid on a commission basis without a retainer, and to a lesser extent, apprentices and trainees. Data on annual earnings reported for the past year often exclude income earners employed on jobs which finished before the end of the reference period and the remuneration they have received.

² See *Sources and Methods - Labour Statistics*, Employment, wages, hours of work and labour cost (Establishment surveys), Volume 2, second edition, ILO, 1995.

27. In surveys (including industrial surveys and censuses) where data are collected from the payroll, income data are usually obtained for all employees within the scope of the survey, sometimes disaggregated by broad employee category and/or occupational group, and employee characteristics, such as sex and type of contract. These surveys generally do not attempt to provide data for individual employees nor for specific jobs or occupations, nor do they provide data on the different factors which influence the level and trends of paid employment income (e.g. skill level, seniority).

28. A number of annual surveys tend to provide data on employees' "total earnings", i.e. earnings which include both regular and irregular payments. However, there is a great variety of approaches to the measurement of "total earnings". Where information is available on the detailed components, they are often limited to cash payments and, even then, they often exclude a number of components of total remuneration, most commonly: house rent allowance and the value of free or subsidized housing; transport allowance; family allowances paid by the employer; ad-hoc lump sums; profit-sharing bonuses; and severance and termination pay (the last item being excluded from the concept of earnings).

29. Occupational wage surveys (such as those conducted in Australia, Cyprus, Hong Kong and Singapore) and wage structure surveys (such as those conducted in the European Union countries) provide more detailed data on individual employees or occupations, on the structure and distribution of earnings and on wage payment systems and practices, such as details of annual bonuses, sickness pay, contributions to pension and social security schemes, etc., according to a number of employee characteristics such as age, sex, length of service, education or skill level and nature of employment and occupation. They are therefore more relevant to the measurement of (part of) income from paid employment. Structural surveys, where individual employees are usually identified by a code or number (e.g. social security number), enable employees to be followed throughout their career and information to be collected on income levels and trends, and sometimes on the dynamics of income from employment.

30. By their nature, establishment surveys do not provide information which can be used to identify multiple-job holders and second jobs held by employees. Consequently, they provide data on the income-earning capacity of jobs carried out within establishments, but not on the total income accruing to persons in paid employment.

Administrative records

31. In a number of countries, data on income from employment are also obtained from existing secondary sources, such as income tax and social security records. Although this type of source exists in most if not all countries, it is mainly in the industrialised countries (e.g. Canada, the Netherlands or the Scandinavian countries) that administrative records are, at present, extensively used for the purposes of labour statistics. They often provide data on both paid and self-employment income. As a general rule, the income from paid employment registered in these records comprises payments made by employers as defined in the rules or laws governing the administrative process, and includes some elements which are usually excluded from earnings (e.g. termination payments or the value of certain payments in kind) as well as social security benefits (e.g. family and unemployment allowances); the data on income from self-employment usually relate to the "net business profit" or entrepreneurial income of the self-employed. Administrative records do not usually provide information on the labour input, in terms of full-time or part-time work, nor do they record data on hours of work. However, they may provide some estimate of the duration of employment in terms of weeks, months, etc. during a one-year reference period. The data on income from employment are usually available according to economic activity and employment status, sometimes cross-classified according to personal characteristics of employed persons.

Other sources of income data

32. Other important sources of data on income from employment include special informal sector surveys and surveys of micro and household enterprises. Recent examples of such surveys (e.g. the "Survey of Household expenditure and small scale economic activities" in Malawi, the "National informal sector survey" in Tanzania, the "Pesquisa da economia informal in Brazil", the "Encuesta nacional de micronegocios" in Mexico, and the Urban Informal Sector survey in the Philippines) show that data on the income generated by economic activities, and the volume of employment put into these activities, can be and are collected in great detail.

33. The above brief review of national practices highlights the variety of sources and the diversity of definitions and methods used to compile data on income from employment. Comprehensive statistics of income from paid employment, i.e. the total remuneration received by employees, are seldom compiled, and statistics of income from self-employment are even more rarely available. Where they do exist, the differences mentioned above mean that the data cannot be compared across countries. There is therefore a need for international guidelines to help national statistical offices develop definitions, classifications and data collection methods which could both suit their particular requirements and improve international comparability.

Complementary information on non-wage employment-related benefits

34. In the last few decades, certain new forms of remuneration have emerged, particularly in industrialised countries. Non-wage employment-related benefits covering a wide range of concessions and allowances are commonly provided to employees, and include annual and sick leave entitlements, pension plans, health and life insurance plans, profit-sharing and other forms of compensation. It is often difficult to compile information on the value of such benefits to employees but, considering the importance of such forms of compensation, attempts have been made in a number of countries to compile information on the existence and trend of such benefits. In a number of countries, data are collected and compiled on the cost of benefits to the employer within the context of labour cost and similar surveys. A few non-governmental organizations (such as the Organization Resource Counselors, Inc. and Income Data Services Ltd, London, England) have attempted to conduct ad-hoc surveys to determine the value of such benefits to employees. Lastly, a small number of governmental statistical agencies gather information on the trend and incidence of non-wage benefits. Examples of such attempts include the annual supplement to the Labour Force Survey conducted by the Australian Bureau of Statistics (ABS, 1997), which collects information on non-wage employee benefits; the annual Survey of Salaries and Employee Benefits carried out by the Hong Kong Census and Statistics Department (Hong Kong, 1996), which collects data on the incidence of employee entitlement to selected fringe benefits such as housing, retirement, insurance, medical and profit-sharing benefits; and the National Compensation Survey (NCS) of the US Department of Labor, Bureau of Labor Statistics (BLS, 1994), which is being redesigned with a view to compiling wage and benefit information and statistics on benefit provisions and incidence.

35. The type of information collected in these surveys may not be entirely suitable for determining the monetary value of income from employment from the employee's viewpoint. However, it can provide an additional element for evaluating the complete compensation package received by persons in paid employment.

II - FRAMEWORK FOR THE MEASUREMENT OF INCOME FROM EMPLOYMENT

36. The statistical measurement of income from employment is inextricably linked with the other elements of work and life, such as wages, levels of living and income distribution and as such, falls within the scope of labour statistics. Although this topic is not covered by the Convention concerning Labour Statistics, 1985 (No. 160), it should be noted that the International Labour Conference, at its 70th Session (June 1984) discussed its inclusion within the proposed set of labour statistics and several members suggested that if income data were to be included, they should be restricted to income from employment. This suggestion was subsequently replaced by the inclusion of the whole measure of household income, a major components of which is income from employment.

Income from employment and the economically active population

37. The resolution concerning statistics of the economically active population, employment, unemployment and underemployment (ILO, 1988b) provides for two useful measures of the economically active population: (i) the usually active population, which may be subdivided as employed and unemployed, and (ii) the currently active population (i.e. the labour force), which includes (a) the currently employed (i.e. persons in paid employment and persons in self-employment) comprising persons who may be "at work", or "with a job but not at work" and (b) the currently unemployed, who are persons not in employment during the survey reference period, but currently available for and seeking work. The proposed resolution on the measurement of underemployment which is being submitted to this Conference (ILO, 1998) aims at supplementing these guidelines.

38. In a primary acceptance of the term, "income from employment" is generally understood as the income which accrues to the employed population, including the underemployed. Its measurement should cover all categories of employed persons and throw light on the various types of income earned from all forms of employment, including casual, short-time, intermittent or atypical paid and self-employment, in both the formal and the informal sectors.

39. An extended interpretation of the term allows for the measurement of income derived by unemployed or inactive persons by virtue of their former situation as employee or self-employed: the

unemployed, for instance, may have experienced various employment situations in a previous period, which may have generated employment-related income in the form of termination pay, unemployment benefits, etc. during the reference period.

Income from employment and the existing international income-related guidelines

40. The proposed guidelines for the compilation of statistics of income from employment should be clearly distinguished from the other existing international guidelines related to specific aspects of income, such as the guidelines for statistics of earnings, labour cost or household income contained in the relevant ILO resolutions (ILO, 1988b) on the one hand, and the standards for statistics of compensation of employees and enterprise mixed income contained in the System of National Accounts, on the other hand.

41. The wage measure "earnings" is based on the concept of income to the employee. It represents the remuneration in cash and in kind received by employees from their employers, as a rule at regular intervals, for time worked or work performed, together with payments for time not worked, such as for annual vacation, public and other paid holidays and other time off granted with pay. However, earnings fall short of measuring the full income accruing to employees from their employment. In particular, earnings do not measure a number of fringe and non-wage benefits which may be either provided by the employer or derived from other sources by virtue of the workers' prevailing employment status.

42. The measure of "compensation of employees" contained in the SNA corresponds to a concept of cost to the employer for the total remuneration payable to employees. However, not all of employers' costs represent an income to the employee and the value of compensation received by an employee does not necessarily equal the employer's expenditure. In addition, compensation of employees is an aggregate measure which does not provide details on the various types of paid employment jobs covered. The same is true of the full ILO "labour cost" concept, which includes all employer outlays associated with the utilization of labour services and comprises not only the wage and non-wage benefits received by employees, but also all cost items associated with hiring and using labour as a factor of production. The total labour cost of employers does not correspond to the income of employees and certain elements of labour cost do not have counterparts from the employee's income viewpoint. This distinction is further illustrated in Chapter III on Income from paid employment.

43. For the purposes of household income and expenditure surveys (HIES), household income was defined by the 12th ICLS as the "sum of money income and income in kind consisting of receipts which, as a rule, are of a recurring nature and accrue to the household or to individual members of the household regularly at annual or at more frequent intervals". The resolution lists the main sources of Household income, which include, among others: employees' salaries, wages and other related receipts from employers, net income from self-employment, business profits, etc., together with social security and assimilated benefits in cash and in kind. Household income is generally distributed over the following five main headings: wages and salaries (i.e. the gross remuneration received from an employer); entrepreneurial income; property income; transfer income (sometimes further classified according to public or private transfers); and income from other sources. By contrast, income from employment is limited to those components of household income which are derived from paid and self-employment only.

44. Income from self-employment is defined in the System of National Accounts (SNA) as the mixed income of unincorporated enterprises owned by members of households. It consists of the surplus accruing from production and contains an unknown element of remuneration for work done by the owner of the enterprise or other members of the same household. Mixed income is therefore an economic concept which measures the profit, or business value, of the household enterprise. The primary objective of the measurement of mixed income is not to assess the income accruing from employment to individual self-employed persons, but to contribute to the assessment of the primary income account of the household sector and to the distribution of incomes among the various institutional sectors of the national economy as a whole. No attempt is made to integrate into the system detailed information relating to the distribution of personal income.

45. By contrast, the draft resolution on statistics of income from employment aims at measuring employment income at the micro-level, i.e. at the levels of paid and self-employment jobs and of individuals.

46. Notwithstanding these differences between the proposed concept of income from employment and the various income-related concepts mentioned above, the measurement of income from employment should allow for the reconstruction of aggregate statistics where relevant, such as household income, by

regrouping the various components of the proposed definitions of income from paid and self-employment. ***(this is reflected in para. 4 of the draft resolution)***. The relationships between the proposed measures of income from paid and self-employment and the existing income-related concepts are in Chapters III and IV, respectively.

Objectives and uses of statistics of income from employment

47. In order to develop a conceptual and methodological framework for the measurement of income from employment, it is essential to identify the main objectives of the statistics.

48. In the resolution on the economically active population, the 13th ICLS had stressed the need to supplement statistics of employment, unemployment and underemployment with information that would provide insight into the income aspects of employment, for the purpose of "(a) analysing the income-generating capacity of different economic activities and (b) identifying the number and characteristics of persons who are unable to maintain their economic well-being on the basis of the employment opportunities available to them" (ILO, 1988b).

49. These two broad objectives highlight the economic and social aspects of the concept of income from employment and encompass various socio-economic uses. In particular, they emphasize two different approaches to the concept of income from employment:

(a) Income as a return to productive activity: in this approach, income is examined from the productivity aspect. It focuses on the creation of income and on the identification of economic activities (understood, thereafter, in terms of paid and self-employment jobs) according to their income-generating capacity. This is the approach adopted, for example, in economic planning where income improvement is related to increased production, and in the design, implementation and assessment of employment promotion policies which aim at creating and developing productive activities (including self-employment activities) that provide adequate incomes. Data on income from productive activities are also needed for the analysis of the potential of the informal sector for employment and income generation, to study differentials between industries, occupations, sectors, etc., in comparisons with the corresponding

statistics in the formal sector, and for national accounts and socio-economic accounts purposes, in order to throw light on the structure of the economy and on the relative importance of employment income in relation to other sources of income (such as property and transfers).

(b) Income as a measure of the economic well-being of individuals: from this viewpoint, income is examined in terms of welfare. The measurement of income from employment can be used to identify those groups of persons who are experiencing employment-related economic hardship, i.e. who are unable to achieve a certain level of well-being from their employment (commonly known as the "working poor". Data on the structure and distribution of income from employment for different socio-economic groups are also needed for planning, implementing and evaluating social and economic policies, in order to assess the relationship between income from employment and geographic or economic labour mobility (including rural-urban migrations), and the impact of specific policies such as assistance to agricultural workers, access of women workers to the labour market and abolition of child labour.

50. The 1997 Meeting of Experts supported the views of the 13th ICLS and recognized that, at the conceptual level, there was a need to distinguish between the productivity and the welfare aspects of the measurement of income from employment, since these different perspectives have a bearing on the concept. It was felt that the measurement of income from employment was useful to analyze the labour force situation, and in particular, to reflect the increased flexibility of the labour market and the structural changes resulting from this flexibility. Statistics of income from employment would be particularly useful for analysing such issues as changes in employment patterns, the growing incidence of precarious employment and the changes in remuneration practices which have taken place in industrialized, transition and developing countries. Guidelines on the measurement of income from employment should also help improve the measurement of income in agriculture and in the informal sector. In addition, it was considered that there was a need to link statistics of income from employment to productivity measures with a view to identifying, creating and developing productive employment.

51. It was noted that the assessment of economic well-being involves not just the measurement of the employment and income from employment situation of individuals on their own, but also that of other types of income, and their evaluation within the context of the household. However, data on income from

employment could be used as a *proxy* for economic welfare and as a significant input in the assessment of the consumption capacity of workers.

52. Other major uses of statistics on income from employment include the formulation of tax policies and estimates of tax revenue, the assessment of the impact of social and fiscal measures, the adjustment of income tax and social security contributions in order to redistribute income and social security benefits, etc. The statistics can also be used to complement national accounts by providing information on the distribution of income among the population concerned and throwing light on the relative importance of income from employment in relation to other sources of income (such as property and transfers), and to contribute to the development of labour accounts.

53. From the above, it follows that the dual aspects of income from employment, i.e. as a measure of the income-generating capacity of economic activities and as a measure of employment-related welfare of individual persons, should be taken into account in the conceptual and measurement issues which are examined in the following sections. ***This is reflected in paragraphs 1 and 2 of the draft resolution.***

The concept of income from employment

54. Income from employment may be broadly defined as the receipts which accrue to individuals as a result of their involvement in paid or self-employment jobs. Income from employment can take different forms and accrue in cash, kind, services, benefits or even entitlements to deferred benefits. It can originate directly from involvement in a paid or self-employment job, or accrue by virtue of the employment status itself (for instance, in the case of employment-related benefits received by employees and self-employed workers, from sources other than the job itself, such as social security or insurance schemes which recognize the occupational status as a specific condition for membership). Intrinsically, income from employment accrues to persons who are employed, i.e. at work, or temporarily absent from work with a formal job attachment (as defined in the resolution concerning statistics of the economically active population, employment, unemployment and underemployment, 13th ICLS), but it can also accrue to persons who are no longer employed and who receive certain types of income derived by virtue of their former employment status.

55. The most conventional form of income from employment consists of the *actual* compensation in cash which accrues to employed persons as a result of their involvement in a paid or self-employment job. Examples of this form of income are the wages and salaries in cash received by employees from their employers and the profits drawn by self-employed persons from their enterprises. Cash remuneration has a current value to workers, it originates directly from the job and generally constitutes the major part of the resources available to economically active persons.

56. A second form of income from employment consists of income in kind. This includes the value of goods and services which are received by employees as remuneration in kind or fringe benefits (e.g. free housing, meals or vehicles for personal use), as well as the value of goods and services produced by the self-employed for their own use or consumption and for barter (such as own-produced grain consumed by agricultural workers or own-manufactured furniture used by carpenters). This form of income does not constitute a mere substitute for current income in cash. It requires that a value be *imputed* for the goods and services transferred or created. This value increases the current resources available to the worker and enables consumption or saving to take place.

57. A third form of income arising from employment consists of the *potential* income generated by various plans and schemes which specifically concern employed persons and provide for *entitlements* to current or future benefits. Examples of such schemes are profit-related or stock-option plans offered to employees, and statutory and non-statutory social security schemes for employees and, although to a lesser extent, self-employed persons. Whether they provide for current or deferred benefits, the above-mentioned schemes and plans are generally financed through contributions or participation from the workers themselves (employees and self-employed persons), the employers (in the case of schemes for employees) and the State, in the case of social security schemes (although the extent of state participation varies from country to country). As such, these contributions and participation do not represent a current income to the workers, but they open entitlements to benefits; these benefits have a value which will be transformed into income at some future date and/or under certain conditions. Until that time, they represent only an expectation of income.

58. The above-mentioned schemes and plans can be broadly grouped into two categories, according to (a) their source and (b) the types of benefits they provide. A first distinction can be made between (i) schemes which are provided by employers in respect of their employees, such as profit-related pay schemes, or voluntary or collectively agreed social security and pension schemes provided by employers to employees; and (ii) schemes which are organized by social security or insurance institutions or the State and which provide benefits to persons in paid and self-employment by virtue of their employment status, such as sickness and occupational injury compensation, occupational pensions, etc. It should be noted that similar types of benefits may be provided under both types of sources. Schemes from the first source originate from the employer-employee relationship and provide benefits which are linked to a given job or activity, while the second is related more to the expansion of social security schemes and to the coverage and eligibility rules fixed by social security and related institutions.

59. A second distinction can be made between (i) the schemes which provide for current benefits to employed persons, i.e. benefits to employees or self-employed persons while in employment or retaining their status in employment; and (ii) those which provide for future or deferred benefits which may become income to formerly employed persons. Family allowances, sickness and maternity benefits and profit-related cash payments fall under the first category, while schemes providing for old-age, invalidity or total unemployment benefits, as well as deferred-profit sharing plans belong to the second type.

60. All of these forms of income are of interest for the assessment of income from employment, but it may be necessary to establish different combinations to meet each of the two major objectives mentioned earlier. It is therefore proposed that the comprehensive concept of income from employment relate to both currently available and potential income. These forms of income can be derived either directly from a paid or self-employment job, or by virtue of the employment status. ***A comprehensive definition of the concept of income from employment is proposed in paragraph 5 of the draft resolution.***

61. The proposed definitions and components of income from paid and self-employment are discussed in more detail in Chapters III and IV.

Data requirements in relation with the measurement objectives

62. When the objective is to measure the capacity of a given job or activity to provide adequate income, income data should be associated with a job. Both current, available income and entitlements to supplementary benefits provided by the employer in the case of paid employment jobs, or generated by a self-employment activity, are relevant. In addition, the measurement of income from employment requires that the data on employment in a given job and the data on income generated by that job be consistent. Data should therefore be collected on the characteristics of the job, the volume of labour input and the amount of income generated by that job.

63. When the objective is the assessment of the workers' welfare, it appears appropriate to take account of all forms of income, including those forms which accrue by virtue of the employment status from sources other than the employer or the job. It may also be considered that potential income (e.g. entitlements to social security or pension coverage) should be included, since this form of income has an influence on the current consumption capacity of individuals. To analyze the relationship between employment and welfare, data are needed for each person separately on each main and secondary job carried out during a given reference period, on the income derived from each of these jobs, as well as on the socio-economic characteristics of individuals. ***(These data requirements are reflected in para. 3 of the draft resolution.)***

Reference period

64. Income from employment does not always accrue on a regular basis. In paid employment, some elements of income may be generated with an irregular periodicity (e.g. annual premiums or profit-sharing bonuses). In self-employment, a number of household enterprises are seasonal in character, even in the non-agricultural sector (e.g. in construction, tourism, and in the informal sector), so the income generated fluctuates throughout the year. In agricultural activities, the bulk of income often accrues at long intervals, for example as at the end of a crop season, which makes it difficult to ascertain the portion of income that corresponds to a short reference period; there may be inputs but no outputs in some periods and vice versa.

65. Employed persons may have several jobs, either simultaneously or successively during a given reference period, so they devote less time than the full period to each job and derive different kinds and amounts of income from each of them. Intensity of work of casual, short-term or seasonal workers varies throughout the year and the use of a short reference period may result in an erroneous evaluation of their activities and of the income these generate. Periods of employment may also alternate with periods of unemployment or inactivity, during which people may receive benefits directly related to their previous employment status, or be deprived of any kind of employment-related income.

66. Thus, a long reference period, such as a full year, would be more appropriate for measuring the flows of income that take place over time. Account may be taken of all income received, even if irregularly or at certain points in time only; the relationships between part-year or intermittent employment and low income, and that of the seasonal characteristics of certain activities may be analyzed. Differences in the components and amount of income produced by casual or intermittent activities will only appear through the use of a long reference period.

67. The choice of a long reference period is also in line with the 1982 resolution concerning statistics of the economically active population, which recommends that *"in order to obtain comprehensive measures of the relationships between employment and income, the measurements of employment, income from employment and household income should refer to the work experience of the population over a long reference period, preferably a year"*. Such a long reference period should allow the inclusion of *"not only the principal occupation but also any secondary occupations and other sources of income"*.

68. With a year as the reference period, the resulting income statistics may usefully be analyzed in combination with related bodies of data on the economically active population, household income, national income and production, etc. which are generally available on a one-year basis. It also has the advantage of tying in with tax, social security and other administrative records, labour and socio-economic accounts, and national accounts.

69. The Meeting of Experts agreed that this approach was most appropriate for measuring all the proposed components of income from paid and self-employment. It also agreed that, for data collection

purposes, shorter periods such as a month or a quarter could be used, which would be aggregated to develop an annual estimate. This method is taken into account in the proposals submitted with regard to data collection purposes. **(See paragraphs 35-36 of the draft resolution).**

The population groups covered by the measurement of income from paid and self-employment

70. Intrinsically, the measurement of income from employment should cover all persons employed, as defined in the resolution on the economically active population (ibid), i.e. persons in paid employment and persons in self-employment. These two major groups are further defined in the International Classification of Status in Employment (ICSE-93) "with reference to one or more aspects of the economic risk and/or the type of authority which the explicit or implicit employment contract gives the incumbents, or to which it subjects them". **(See paragraph 7 of the draft resolution).** For the purpose of measurement of income from employment, these definitions require some additional remarks, as follows:

71. As mentioned earlier, persons in paid employment include not only the regular employees who are generally covered by earnings statistics but also workers in precarious employment, i.e. with casual, short-term, intermittent, seasonal or atypical jobs, as well as persons who may have regular employment but who are generally excluded from the statistics on earnings, i.e. managerial employees and apprentices and trainees. These forms of employment generate different entitlements to, and various amounts of, wage and non-wage supplements and benefits. The measure of income from paid employment should therefore cover all categories of persons in paid employment, so as to help reveal the differences which may exist between the various forms and levels of paid employment income. ***This is reflected in para. 10 of the draft resolution.***

72. The self-employed comprise a wide range of workers who carry out their activities in various circumstances. The resolution concerning the ICSE defines the self-employed as persons holding jobs "where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits)..." in their enterprise (ICSE-93, in ILO, 1993). They comprise four major groups of workers: employers, own-account workers, members of producers' cooperatives and contributing family workers. The resolution

also indicates that particular sub-groups of workers (e.g. owner-managers of incorporated enterprises, outworkers, contractors, franchisees) may be classified as being either in paid or self-employment, depending on the nature of the formal or informal agreement or contract under which they work, the regularity of payments they receive, the degree of risk and autonomy with which they work, etc. and the use to be made of the resulting statistics.

73. The measurement of employment-related income of these particular sub-groups requires the following differentiations based on the circumstances in which the self-employed carry out their activity and the form of organization of their enterprise:

74. The income which accrues to owners of corporate and quasi-corporate enterprises represents the actual payments made to them out of the operating surplus of the enterprise, after a decision has been taken at the enterprise level as to the proportion of receipts that should be retained within the enterprise as savings. This is the approach adopted in OECD countries, where working proprietors or managers of corporations are classified as employees, mostly because of their status in law and/or for tax and social security purposes. However, these distinctions are not necessarily observed in other countries. In the SNA, the income received by managers of corporations and quasi-corporations is treated either as "wages and salaries" or as "property income", as follows:

(a) The owner-managers (sole proprietors and partners) of incorporated enterprises are shareholders who generally receive a part of their remuneration in the form of profits (dividends) usually distributed in proportion to the value or amounts of the shares or other capital participation which they own. Dividends are a form of *property income* in the SNA. In addition, owner-managers of corporations usually receive *fees* or *salaries* which represent an individual reward for work done, time worked or responsibility assumed in the enterprise and are very similar to the remuneration accruing to other persons in paid employment.

(b) Owner-managers of quasi-corporations own and run unincorporated enterprises, including unincorporated partnerships, that function as if they were corporations: they keep a complete set of accounts in which it is possible to identify and record any flows of funds and capital which take place

between the enterprise and its owner(s). The owner-managers of a quasi-corporation do not receive dividends. However, they may choose to *withdraw* some or all of the operating surplus of the enterprise. In the SNA, the withdrawal of such income is equivalent to the distribution of corporate income through dividends. Conceptually, therefore, the income withdrawn is a form of *property income* accruing to the owner of a quasi-corporation in respect of funds invested in the enterprise.

(c) Producers' cooperatives are assimilated to corporations in the SNA, on the grounds that they are legal entities whose assets and liabilities are separate from those of their owners. Their members' income takes the form of a *share of the cooperatives' profits* which are distributed in accordance with agreed rules. In the SNA, such income is assimilated to that accruing to shareholders and managers.

(d) Individuals who carry out the same type of activity as other groups of self-employed, but who run their business in their own name and capacity (i.e. heads and partners of unincorporated enterprises) or who, as members of a professional trade, withdraw an income which is represented by the return or profit of the enterprise they operate. They may be own-account workers or employers and work with or without the help of contributing (unpaid) family members. They constitute the core of the "non-salaried workers" in most countries. These self-employed do not pay themselves a salary. Their income consists of the return or profit of the (generally small) household enterprise or partnership they are running, which may remunerate the work done by one or several persons (partners and unpaid contributing family members).

(e) A number of subcategories of workers (e.g. outworkers, contractors, franchisees) may also be classified as being in either paid or self-employment, depending on the nature of the formal or informal agreement or contract under which they work, the regularity of payments they receive, the degree of risk and autonomy with which they work, etc.

(f) By definition, contributing family workers are persons who work without pay in an economic enterprise operated by a related person (whether or not living in the same household) (ICSE, 1993). They do not receive regular wages and salaries, although they may be remunerated in the form of housing, lodgings, meals, tips or part of the enterprise production in kind. This type of "remuneration"

is not dealt with as such in the SNA, which does not record transactions between household members. As a consequence, no attempt is made in the SNA to impute wages and salaries of unpaid (contributing) family workers whose income is included in the mixed income or operating surplus of the enterprise in which they work.

75. In all the above-mentioned cases (except perhaps in the case of contributing family members), it is implicit in the definition of self-employment that it involves some financial reward, or at least the expectation of it, for the work undertaken, the position held or the risk assumed.

76. Notwithstanding the classification of these workers in paid or self-employment for the purposes of classification in the economically active population by status in employment, it is proposed that the following distinction be made between the forms of income received by self-employed workers, for the purposes of measuring income from employment:

(i) when the income received by certain sub-groups of workers - in particular, owner-managers of corporations and quasi-corporations, outworkers, contractors, etc., is similar to that accruing to persons in paid employment, in that it represents a sum of receipts, their income should be measured according to the guidelines proposed for the measurement of Income from paid employment. ***(See para. 11 of the draft resolution.)***

(ii) When the income which accrues to self-employed persons does not consist of a sum of receipts, but of the residual funds that accrue after all receipts and expenditure have been balanced, the assessment of income requires some identification of the sources and components of receipts and expenditure. This is the case of the income accruing to the owners of unincorporated household enterprises, on which Chapter IV focuses. ***(Coverage of the statistics of income from self-employment is reflected in para. 16-17 of the draft resolution.)***

Conclusion

77. In order to meet distinct objectives and various socio-economic uses, the statistics of income from employment should be as complete, reliable and detailed as possible. The measurement of income from employment should therefore follow a set of basic principles in order to be acceptable to all users, and, where necessary, adaptable to the requirements of specific objectives. In particular, account should be taken of the following prerequisites:

(i) Because of the differences in concepts and measurement methods, the concepts of income derived from paid employment and income derived from self-employment are analyzed separately and in parallel; **(See para. 6 of the draft resolution.)**

(ii) The concept of income from employment is limited to income received from, or derived by virtue of, involvement in paid and self-employment jobs, i.e. income received from other sources such as property, social assistance, transfers, etc. not related to employment is excluded;

(iii) The dual aspect of income from employment - as a measure of the income-generating capacity of economic activities and as a measure of employment-related welfare of individual persons - is taken into account in the conceptual and measurement issues.

III - INCOME FROM PAID EMPLOYMENT

Historical background

78. The need for a concept that would fully measure the income accruing to employees from their employment has a long history. In 1949, the Seventh ICLS considered a report prepared by the ILO entitled "Wages and Payroll statistics", in which *total labour income* was defined as total wages and salaries and such transfer payments as unemployment compensation, sickness benefits, etc. (ILO, 1949). In 1973, the 12th ICLS adopted a resolution concerning an integrated system of wages statistics, and also expressed interest in a proposal, put forward by the 1968 Meeting of Experts on Statistics of Wages and Employee Income (ILO, 1968) to develop a wage measure provisionally called *employee income*. This concept was defined as "all receipts or benefits in cash or kind received by the employee, by virtue of his current status as employee, from employers or social security and insurance schemes or the State" (ILO, 1973). The 12th ICLS confirmed its overall agreement with the view that "employee income" was "an extension of the notion of total employee remuneration" and that it would take into account not only wages and related payments received by the employee from the employer, but also certain non-wage receipts that accrued to him/her by virtue of his/her status as an employee, such as compensation received from unemployment funds, sickness insurance funds and other sources, together with various allowances such as those received during vocational training, retraining or refresher courses, etc. The measure of employee income was expected to provide a more realistic assessment of the level of *total remuneration* of employees and to fill the gap in wage statistics programmes between statistics of earnings and labour cost (ILO, 1973). In addition, the inclusion of benefits from social security and assimilated schemes was expected to "throw light on the level and nature of certain social security benefits received by employees of different categories and industries and their changes over time". The Conference did not adopt any recommendation on this topic, but encouraged the Office to continue its work on this subject.

79. Nine years later, the 13th ICLS indicated the need to supplement statistics of unemployment and visible underemployment with statistics that would provide insights into the income aspect of employment inadequacy and introduced certain guidelines for analysing the relationship between employment and income (ILO, 1988b). In 1993, the 15th ICLS examined a preliminary report prepared by the Office

on the concepts of income from paid and self-employment and reiterated its interest in a measure called *income from paid employment* which would, inter alia, reflect the changes that had occurred in the forms of employment and remuneration systems of paid employees (ILO, 1993). Finally, the 1997 Meeting of Experts made a number of suggestions and recommendations concerning the various issues raised by the concept and measurement of income from paid employment (hereafter called IPE).

The need for statistics of income from paid employment

80. As mentioned earlier, the existing statistical guidelines on wages provide for the measure of "earnings" which is based on the concept of income to the employee. It represents the remuneration in cash and in kind received by employees, as a rule at regular intervals, for time worked or work performed, together with payments for time not worked, such as for annual vacation, public and other paid holidays and other time off granted with pay. However, statistics of earnings fall short of measuring the full income accruing to persons in paid employment.

81. In recent years, especially in industrialized countries, the packages of pay and benefits that are available to persons in paid employment have changed considerably and a number of items that might be regarded as part of total remuneration are not necessarily picked up in the measurement of earnings. A review of the findings of salary and benefits surveys carried out by professional associations, employment agencies and specialist survey publishers in European and North-American countries (see IDS/US/Canada) shows that there is an increasing use of fixed and variable benefits, often linked to the employers' necessity to provide sufficiently attractive compensation packages to recruit and retain quality staff, while keeping payroll costs as low as possible. Examples of such goods and services are the availability of company cars for private use, maintenance of employees' own cars, provision or free use of telephone, fuel, electricity, etc., subsidised mortgages, workplace nursery, subsidised canteen, season tickets, housing assistance, etc. Training fees, club memberships, education and school fees for employees' children, loans provided by employers at zero or reduced nominal rates of interest, etc., are also frequent and benefit employees and their family members. Improved wage-related, statutory and non-statutory pension schemes, private health insurance or life assurance are often part of flexible benefits packages offered by enterprises, whereby employees are allowed to trade up or down their

entitlements, or to take a full cash alternative. Similarly, there has been an increase in profit-related pay in the form of share-based profit shares and the issuing of stock options and the like to all employee categories.

82. In transition countries, remuneration systems have traditionally included a variety of social and welfare benefits paid by the enterprise, from the wage fund or other social funds. Over the last few years, high inflation coupled with economic difficulties have led enterprises to make an increasing use of non-monetary forms of remuneration, notably by introducing and/or substituting benefits (e.g. food, subsidized housing, health care services or production output, income from shares, insurance payments, etc.) for money wages (ILO, 1995). In the private sector, pressure on employers intensifies to provide additional benefit programmes and non-cash perquisites designed to make up for inadequate State arrangements (ORC, 1994).

83. In developing countries, the above-mentioned forms of payments may not be so developed. The provision of social benefits tends to be very modest and employment security, family allowances and other benefits tend to be much less extensive than those provided in advanced economies (ILO, 1996). However, in some sectors such as in agriculture and in the informal sector, payments in kind may account for a large proportion of employee remuneration, in the form of free food and drink, clothing, housing, rations, fuel, production output, etc.

84. These items, which are usually excluded from the measurement of "earnings", represent the "variable" or "invisible" part of the total remuneration which can frequently be converted into an equivalent cash value to the employee. Individuals benefiting from the provision of such items clearly have a remuneration with a higher spending power.

Definition of Income from paid employment

85. With a view to encompassing all forms of income which accrue to persons with a paid employment job or by virtue of their employment status, income from paid employment is defined as:

All receipts and benefits in cash, kind or services, which accrue, over a given reference period, to persons in paid employment, for themselves or in respect of their family members, as a result of their involvement in paid employment jobs. Such receipts and benefits may be paid by the employer, social security and insurance schemes or the State, in so far as they are derived by virtue of the employment status. ***(This definition is reflected in para. 9 of the draft resolution.)***

86. Such a general definition is however insufficient for the purposes of measurement, and an operational statistical definition should identify the constituent elements, if necessary, by establishing an exhaustive list.

The components of Income from paid employment

87. As mentioned earlier, the objectives and uses of the measurement of income from employment are numerous and have a bearing on the components of income themselves. While agreeing upon the proposed definition, the Meeting of Experts expressed differing views with regard to the components themselves. Four major groups of components were identified: total cash remuneration for work done, time worked and time not worked; remuneration in kind and services; profit-sharing bonuses and profit-related pay; and employment-related social security benefits. In the following paragraphs, more detailed indications are given on the list of specific items constituting IPE and the components are analyzed in relation to the existing ILO concepts of "earnings" and "labour cost" and the SNA concept of "compensation of employees", the latter two measuring, in terms of costs, a large number of components of the proposed measure of IPE.

(I) Remuneration in cash

88. All the components of direct wages and salaries in cash, and all bonuses and gratuities, whether contractual or non-obligatory, regular (e.g. received monthly or quarterly) or ad hoc (at annual or infrequent intervals) form part of IPE. Exceptional payments linked to the enterprise performance or provided under individual or group incentive schemes, together with special allowances for overtime,

night or shift work, for work in difficult circumstances, etc. are also included in IPE. Cost-of-living allowance, transport allowance (to and from work), petrol and/or mileage allowance, clothing, food, housing and similar allowances, which are traditionally treated as earnings, also form part of IPE.

89. In addition, IPE includes certain types of receipts which are generally excluded from the concept of earnings or not explicitly dealt with. The main types of receipts include:

- Bonuses and premiums for innovative ideas or special services, additional duties, improvement in working methods, etc. These are excluded from earnings statistics on the basis that they do not occur on a regular basis. However, they form part of "wages and salaries" in "compensation of employees" and it is proposed to include them in IPE, as part of all cash payments made by the employer;
- Commissions paid to sales and assimilated personnel (provided they are considered in other respects as employees), in addition to, or without, a retainer;
- Tips and other gratuities received by employees, whether paid by employers or third parties, which may be assimilated to performance premiums;
- Fees and salaries received by managerial staff;
- Wages, salaries or allowances received by trainees and apprentices.

90. Cash remuneration for time not worked comprises direct cash payments to workers in respect of annual vacation and similar leave, long-service leave, public and other recognised holidays, and other time off granted with pay by the employer, such as personal leave, educational leave, etc., all of which are considered as earnings. Direct payments by employers may also be made in the event of temporary halt or slow-down of production, short-time working and similar flexible time arrangements, all of which are included in IPE.

91. Remuneration for time not worked also comprises the continued payment of wages and salaries, at full or reduced rate, during employees' relatively short periods of absence due to sickness, accidents, maternity leave, etc. Where these payments are not regarded as social security benefits but as direct payments from the employer, they may be included in this group. It should be noted that payments for sick leave are included under employer's social security expenditure in the classification of "labour cost" and "compensation of employees". However, the SNA recognizes that when it is difficult to separate

payments of wages and salaries during sick leave and assimilated leave from other payments of wages and salaries, the former can be grouped with the latter.

(II) Remuneration in kind and services

92. Traditional payments in kind include the receipt of free or subsidised food, drink, fuel, clothing and housing and similar payments. They form part of the concept of "earnings", and are included in the extended concept of IPE.

93. Almost any kind of consumption good or service may be provided as remuneration in kind (see para. 82-84). Although these benefits do not constitute an actual money income, they are derived by virtue of a given job and their imputed value increases the available income of employees. A large number of these goods and services are not explicitly dealt with in the definition of earnings, and are generally excluded from earnings statistics, but the cost of their provision is included in labour cost and compensation of employees. It appears therefore desirable to include the value of benefits in kind actually received by employees in the components of IPE.

94. It should be noted that while the value of free or subsidized goods may generally be allocated individually to employees, the same does not hold true for all services and facilities, some of which may be provided to and used collectively by employees (e.g. cultural or sport clubs or car parking). The Meeting of Experts felt that the fact that some benefits in kind were provided to employees in a collective manner was not a sufficient reason for exclusion from the concept and measurement of IPE. As a consequence, remuneration in kind includes all forms of payments concerned, even if certain items are difficult to evaluate. In general, it should be feasible to find a market equivalent to determine the value accruing to individual employees.

95. The Meeting of Experts identified a particular form of compensation in kind which raised conceptual and measurement problems. This form of compensation consists of the provision by the employer of goods or commodities produced as output of the enterprise (e.g. manufactured articles such

as textiles, food tins, samovars and other products) in lieu of cash remuneration³. This practice is usually generated by economic difficulties coupled with high inflation, which lead enterprises to delay the payment of wages and salaries, to make an increasing use of non-monetary forms of compensation and to impose on employees the receipt of such goods and products in the place of cash wages and salaries owing to them. Subsequently, it is left to the employees concerned to make their own arrangements to sell or barter these products in order to recover an actual income.

96. This practice appears to be in contradiction with the terms of ILO Protection of Wages Convention, 1949 (No. 95) (see Appendix 1). By virtue of Article 4 of this Convention, the partial payment of wages in the form of allowances in kind may be authorized by national laws or regulations, collective agreements or arbitration awards, in industries or occupations in which payment in the form of such allowances is customary or desirable because of the nature of the industry or occupation concerned. In addition, in cases in which partial payment of wages in kind is authorised, the benefits in kind should be "appropriate for the personal use and benefit of the worker and his family" and their value "fair and reasonable". In the specific situation identified, this form of compensation is decided unilaterally by employers and imposed on their employees; it may replace a significant part, if not the whole, of cash remuneration; there is no evidence that the types of goods which are supplied in lieu of cash remuneration fulfil the needs of, or can be directly used by, the workers for their benefit or that of their family; and there exists no guarantee of any cash value to be received in exchange for these goods.

97. The Meeting of Experts felt that in view of the above-mentioned Convention, this type of payment was not to be considered as IPE, or that if it were to be considered, then this imposed form of compensation should be given a zero value. At most, an income could accrue to the employees concerned at the time of the subsequent sale or barter of the products concerned, which might then be covered by the statistical concept and measurement of Income from self-employment. It is therefore considered that, for the purposes of income statistics, this form of "imposed payment in kind" should not form part of income from paid employment.

³ These "imposed payments in kind" were identified, among others, in some Transition Countries.

(III) Profit-sharing bonuses and profit-related income

98. Traditional profit-sharing bonuses, whether paid monthly, quarterly or at longer intervals, form part of "earnings" and therefore also form part of IPE.

99. In recent years, in industrialised countries, an increasing use has been made of profit-related pay (PRP), workers' participation schemes and share ownership plans which have been introduced in a variety of remuneration contexts. Essentially, the design of PRP schemes falls into two categories: those which take the form of a bonus arrangement, whereby PRP is paid in addition to basic pay and those which are salary conversion schemes where employees put some part of their salary at risk (IDS, 1996-1998). PRP may be paid with weekly, monthly or quarterly salaries; or as an annual lump sum. PRP payments are often exempt from income tax (up to a given limit), which represents an additional monetary profit for employees benefiting from such schemes.

100. Profit-sharing pay may also take the form of (i) deferred plans, whereby profits are credited to employees for distribution at retirement or some other future date, or (ii) plans that combine current cash and deferred features, generally allowing employees to choose to take a profit-sharing contribution in currently taxable cash or to place the contribution in a tax-deferred account (Coates, 1991). Both types of plan are designed to be flexible vehicles for accumulating savings.

101. Under share option schemes, shareholder employees may, in addition to their fees or salaries, receive profits in the form of dividends which are distributed in proportion to the value or the numbers of shares they own. Such profits, which are treated as a form of investment income in the SNA, also increase the recipients' income.

102. Considerable discussions took place at the Meeting of Experts on the measurement of profit-sharing bonuses and profit-related pay. While it was agreed that current profit-related bonuses should be included in the definition of income from paid employment, no decision was taken as to whether entitlements to deferred benefits should form part of the concept and measurement of IPE.

103. It should be noted that entitlements to deferred benefits do not have a current value to employees and are subject to casualties, such as changes in scheme or eligibility rules, early departure from the enterprise offering the plan, etc. This makes the assessment of their future money value hazardous. Consequently, for operational purposes, it is proposed that a distinction be made between the current receipt of profit-related pay, and entitlements to the future value of deferred benefits.

104. The actual distribution of shares by employers through schemes such as profit-sharing or savings-related share options is another form of compensation which is becoming more widespread. The Meeting of Experts generally agreed that, in the case of shares, employment-related income was represented by the value of the share at the time of distribution to employees (provided such shares could be sold on the market) and that the value of the share should be assessed at the current market rate at the time of transfer to the employee, net of the amount paid by the employee, if any. This value should be included in income from paid employment at the time the share is sold. It was further considered that neither subsequent property income or capital gains from the shares, nor losses, should be included in the concept and measurement of IPE, but these should be treated as investment income (or loss).

(IV) Employment-related social security benefits

105. In many countries, wage-related social security benefits from statutory and non-statutory schemes already account for a substantial part of the income of employees and continue to grow in importance in almost all countries.

106. The definition of IPE includes the receipts of employment-related social security benefits, i.e. those benefits for which the status of employee is a precondition for their receipt. Social security benefits granted under so-called universal schemes, whereby benefits are granted to all residents, irrespective of their occupational status, with or without means tests, and social assistance schemes not related to employment, are excluded from the concept of IPE.

107. Social security benefits for employees may be paid by the employer, social security and insurance schemes or the State. The Meeting of Experts examined the relevance of including the various types of benefits which had been grouped into the following major categories:

108. The first category comprises schemes providing *current benefits to employees while in employment* (i.e. at work, or absent from work with a formal job attachment). These benefits may either (i) supplement the income of employees, such as family, dependant or educational allowances, or (ii) compensate for loss of earnings and correspond to the continued receipt of earnings, at full or reduced rate, in certain eventualities, such as sickness or maternity leave, occupational injury or disease, short-time work or temporary lay-off. When paid directly by employers, they form part of IPE, since they are generally linked to the enterprise in which the employee works and may constitute a significant part of total compensation paid by the employer. When paid through social security schemes organised on behalf of employees, these benefits can also be included in IPE in so far as status in employment is a precondition for their receipt.

109. The second category comprises schemes which provide for *current entitlements to future benefits and deferred benefits* to former employees. They cover primarily unemployment compensation paid to persons wholly unemployed, retirement or occupational pension and life insurance schemes. It is generally considered that such entitlements constitute a significant part of the remuneration package and that their value should form part of the concept of IPE. However, entitlements to deferred benefits, represented by employers' and/or employees' contributions to pension, health or insurance funds, do not constitute current income to persons in paid employment; the benefits have a value which will be transformed into income at some future date and under certain conditions (determined by length of service, salary, family status, retirement age, change of job, etc.). In addition, the assessment of the monetary value of entitlements is based upon hypothetical considerations; it requires a complex set of inputs and the use of actuarial techniques which go beyond the statistical treatment of income from employment.

110. *Total unemployment compensation* is received by persons who are no longer in employment and do not have a formal job attachment with their previous job. In countries where unemployment benefits

are available, protection against the financial consequences of unemployment is very often limited to persons who have lost their paid employment and are looking for another paid job; the payment of the benefits is therefore directly related to the previous work experience, as is the amount of benefits received. If unemployment benefits were not included in income from employment, this would relate only to workers who are assumed never to suffer unemployment. Such an hypothesis would not take into account the influence of certain seasonal fluctuations in business activity, nor the importance of involuntary casual or intermittent activities which may or may not, depending on national circumstances, give rise to an entitlement to unemployment compensation. The inclusion of these data could help provide a better understanding of the labour market.

111. *Pension and life insurance schemes* which are of interest here consist of employer-sponsored benefit plans and government occupational benefit plans which are directly related to the employment status. In the majority of cases, the actual receipt of retirement pensions or life insurance annuities accrues to persons who are no longer part of the economically active population. However, occupational pensions may also accrue to economically active persons (i.e. currently employed or currently unemployed) from past (paid or self-) employment. The statistical observation of the receipt of such benefits would throw light on the situation of persons who either have withdrawn from the labour market (i.e. pensioners) or are still on the labour market and whose welfare level is influenced by the receipt of such pensions (e.g. the currently employed or unemployed in receipt of a pension for past employment). On the other hand, current receipts of pensions and similar payments are often the result of a life-time activity which may combine several jobs and occupations in paid and self-employment, and the assessment of the relationship between economic activity and resulting pension raises complex problems.

112. *Severance, termination and redundancy pay* usually consists of a lump-sum paid by employers to employees at the time they lose their paid employment - although in some countries, such as China, it may consist of the continued payment of reduced wages and salaries for a limited period (FEER, 1997). It is excluded from the concept of "earnings" since it is not a regular receipt. However, it may be treated either as payment for time not worked, since it is derived by virtue of terminating employment and often based on length of service and level of earnings, or as a social security benefit, since it may constitute compensation for the loss of employment similar to unemployment benefits. When severance

and termination pay is a one-off benefit, it is often equivalent to a number of weeks or months of wages and salaries and thus affects significantly not only the expectation of but also the actual level of resources available to former employees.

113. *Compensation for medical and health expenditure* clearly represents a significant benefit to employees and their family members covered by such schemes. In countries where no universal coverage exists, entitlements to improved health insurance coverage is often part of the employers' compensation packages used to attract and retain labour, and may be tied to an enterprise or industry group.

114. *Flexible benefits*: Last but not least in compensation packages is the introduction of new complex schemes which highlight the growing complexity of compensation practices and the difficulty in defining a measure of total IPE. Examples of such schemes are "flexible benefit schemes" and "reimbursement accounts". Flexible benefit schemes, which are becoming widespread in developed countries, give employees the opportunity to exercise a degree of choice over the composition of their benefits package from a menu of benefits, and/or to "trade" some benefits for others (e.g. a car traded for medical insurance and improved holiday entitlements). Under "reimbursement account schemes", deductions are made from an employee's pay based on the individual's annual assessment of future needs (e.g. medical and child care needs). These deductions are excluded from taxable income and are reimbursed to the employee by the employer after receipts for these expenditures are submitted. The employee receives a tax advantage in the form of reduced taxable income (while the employer's cost is restricted to processing the account).

115. A review of the descriptions of social security programmes throughout the world⁴ reveals the complexity of social security legislation and schemes, which accounts for the 1997 Meeting of Experts' conflicting views with regard to the relevance of including social security and similar benefits in the concept of IPE.

⁴ See "*Social Security Worldwide*", International Social Security Association (ISSA) infobases, ILO, Geneva.

116. The financing of social security benefits may take various forms: they can be financed by the employer, social security or insurance funds, or the State, with or without the employee's participation. They may be provided under public or private schemes and, in the latter case, be mandated by law, provided for in collective bargaining agreements, or organized on a purely non-statutory basis by individual employers. In view of this complexity, the Meeting felt that it was not always easy to determine which social security benefits were employment-related and which benefits were not. Nevertheless, information available on social security schemes at the country level shows that it is feasible to make the distinction between those for which status in employment is a precondition for the receipt of benefits, and universal or assistance schemes which cover all or most of the population.

117. Employers' contributions to social security schemes are generally related to the amount of direct wages and salaries paid to the insured person. It does not follow, however, that the individual employee is paid or can claim the amount his employer contributed on his behalf. The benefits received are not uniformly proportional to the contributions paid. Some employees who contribute may not receive any benefits from a certain type of social security scheme (e.g. unemployment insurance) while others may get large amounts, depending on contingencies, needs and qualifying conditions. From the standpoint of the employee, contributions by the employer and/or the State to wage-related social security schemes are not considered as current income. However, they provide a means of increasing their potential income.

118. At the Meeting of Experts, some participants, and in particular the Worker experts, considered that only benefits that are fully financed by the employers and provided by schemes other than social security and State schemes should be included in income from employment. Other benefits paid through social security schemes or the State (such as unemployment benefit, maternity leave benefit, occupational injury allowance), which are not determined within the framework of the employer-employee relationship, were not viewed as a return to productivity. They should therefore be excluded from IPE.

119. The Employer experts proposed that a distinction be made between social security benefits that are of a permanent nature (e.g. pensions) - which should be excluded from the concept of IPE, and social security benefits that are temporary and contingent upon paid employment status (e.g. compensation for

occupational injury, maternity and temporary unemployment) - which should be included. It was further suggested that information on those social security benefits that are excluded from the concept of IPE be collected as part of other income components.

120. All other participants at the Meeting of Experts were of the opinion that social security benefits, regardless of the source of payment, should be included in the concept of IPE. In particular, it was agreed that compensation for medical and health expenditure clearly represented a significant benefit to employees and their family members and should be included in IPE, together with severance, termination and redundancy pay (which could be assimilated to unemployment benefits).

121. In view of these conflicting views, the following distinction has been made between different types of social security benefits, based on a component approach which takes account of the organization of the schemes, the employment status of the population concerned and the measurement objectives. It is expected that, if a particular definition is not fully acceptable for certain uses, the components can be regrouped to arrive at the statistical measure corresponding to the user's requirements.

122. Thus, a first distinction should be made between:

- (i) social security benefits provided by the employer within the framework of the employer-employee relationship, and
- (ii) benefits provided through social security or government schemes and related to the workers' employment status.

123. Benefits in the first group are generally related to the job occupied or the enterprise to which the employee belongs, and may be viewed as part of the income-generating capacity of a given job or occupation. They may be provided as direct payments by the employer to the employee or through the payment of contractual and non-obligatory contributions to private social security and insurance schemes. Benefits in the second group are generally financed through employers' statutory social security contributions, with or without the employee's participation, and very often with the State contribution, although the extent of State participation varies from country to country. These benefits are linked more to the development and coverage of social security schemes and legislation than to the capacity of a given

job to generate an income. It is desirable to include them in IPE when the objective is to analyze the level of employment-related welfare of the population, to identify groups of workers experiencing employment-related economic hardship and to throw light on the working conditions of particular categories of workers such as casual workers, home workers or workers in the informal sector who are very often deprived of such benefits.

124. Within each of these two first groups, a second distinction is made between:

- (i) schemes which provide benefits to employees while in employment or retaining the status of employee and
- (ii) schemes providing benefits to former employees, by virtue of their former employment status.

125. Thus, family allowances (where not universal), educational allowances, compensation for loss of earnings during sickness, maternity, occupational injury, temporary unemployment or layoff, would fall under the first category, while long-term benefits, such as total unemployment compensation, pensions, invalidity, old age and survivors benefits belong to the second type. Where relevant, efforts should be made to collect data on the second category of income components, with a view to assessing the nature and level of income of former employees. ***The proposed components of income from paid employment are shown in para. 12 of the draft resolution.***

Complementary approach for non-measurable benefits

126. In view of the importance generally attached to the growth of forms of compensation schemes offering current and deferred entitlements to various benefits (e.g. pension and health plans, life insurance, flexible benefits and the like), a number of countries have already attempted to compile information of the value of such benefits to the employee. It is recommended that where relevant, countries collect, compile and publish information on the development, trend and incidence of such benefits as separate but related phenomena. ***This proposal is reflected in para. 70 of the draft resolution.***

Valuation of some components of income from paid employment

Benefits in kind

127. Notwithstanding the provisions of Convention No. 95 on the Protection of Wages, income in kind and services may not bring the same satisfaction as income in cash because employees are not free to choose how to spend it, and because the types of benefits offered may differ from what the employee would normally buy at his/her own discretion. However, for statistics of IPE, income in kind should be valued consistently in terms of the income accruing to the employee, and its valuation on the basis of retail market prices generally provides a reasonable estimate of that value. When provided free, the value of income in kind is the full value of the goods and services in question. When provided at reduced prices, the value of income in kind is given by the difference between the full value and the amount paid by the recipient. ***This approach is reflected in para. 25 of the draft resolution.***

Social security and related receipts

128. Employees generally contribute to the social security and insurance schemes from which they receive benefits. In principle, in order to measure the income accruing to employees, social security benefits received should be recorded on a net basis after deduction of the employee's contributions to the relevant schemes. The adjustment could be made either in the earnings portion or in the social security benefits part of IPE. In practice, it may be difficult to make a distinction between those contributions in respect of which benefits have been received during a given reference period (e.g. family allowances), and those in respect of which no benefits have been received (e.g. pension or unemployment entitlements). At the Meeting of Experts, the participants who were in favour of the inclusion of social security and related benefits in IPE noted that it was generally more practical to measure the value of employment-related social security benefits before employees' contributions were deducted. However, they also noted that, in some situations (e.g. where employees can only provide information about their take-home pay), it would only be possible to measure net benefits, and net income, after deduction of employees' contributions. Taking into account the theoretical and practical problems raised by this issue, and in order to align the statistical measurement of IPE on the existing guidelines on the measurement of "earnings" (ILO, 1988b), it is recommended that social security benefits, and hence IPE, be collected and recorded "gross", i.e. before deduction of employees' contributions to the relevant schemes.

129. Where relevant, a measure of "net" IPE may be derived by deducting direct taxes, employees's own contributions to pension funds and social security or insurance schemes, life insurance premiums and other employees' obligations. ***This approach is reflected in para. 13 of the draft resolution.***

Treatment of employees' occupational expenses

130. Just as the self-employed incur business expenditure in carrying out their activities and report their incomes net of such expenses, so employees may incur specific expenses associated with working, which counterbalance part of the wages and benefits received. Examples of these types of expenditure range from the cost of day care for their children, transportation, clothing, food, dry cleaning, etc. to the opportunity cost of lost leisure time. Conceptually, IPE should allow for the deduction of the costs incurred in order to work and be recorded net of such expenditure ((Weinstein & Dietz, 1996). While agreeing that the deduction of occupational expenses would maintain consistency between the measurement of income from paid employment and that of income from self-employment, the Meeting of Experts expressed concern about the lack of an objective basis for evaluating such expenses and the negligible impact these expenses generally have on employees' capacity to consume. The Meeting discussed the types of occupational expenses that could easily be quantified, such as day care which is particularly relevant to the situation in industrialized countries, but felt that there is little value added in measuring one or a few components of these expenses, and that in the majority of cases, these components are of little relevance to developing countries. It is therefore recommended that IPE be measured gross of employees' occupational expenditure. ***The relevant recommendation is reflected in para. 26 of the draft resolution.***

Exclusions from income from paid employment

131. Income from paid employment excludes all other income derived from other forms of activity and other sources, such as income from self-employment, property income in the form of interest, dividend, income attributed to private insurance policy holders, rents and other types of property income not related to employment, as well as annuities, remittances, gifts, social assistance, etc. In particular, income from paid employment excludes:

- family allowances and other social security benefits or assistance (e.g. foodstamps, government or community housing, free health care assistance, etc.), when paid by social security schemes or the State without regard to the employment status;
- indemnities or allowances in cash and in kind paid by the employer purely to cover the employees' cost of work-incurred expenditures: tools, equipment, clothing or footwear used exclusively or mainly at work, the rental value of barrack, dormitories, huts, etc. and special meals necessitated by exceptional working conditions, reimbursement of business travel and accommodation expenses (i.e. subsistence allowance), medical examinations or health checks required because of the nature of the work, etc. These are not regarded as "compensation of employees" but form part of the enterprise's intermediate consumption. However, when indemnities take the form of cash payments over and above the reimbursement of expenses incurred by employees, such payments should be considered as IPE;
- employers' contributions to social security funds, insurance or other institutional units responsible for social insurance schemes (but it includes the benefits provided directly by employers to their employees, i.e. the equivalent of employers' imputed social contributions). ***This proposal is reflected in para. 14 of the draft resolution.***

Relationship between income from paid employment and other existing concepts of wages

Total/annual earnings

132. The major component of IPE consists of total earnings in cash and in kind. However, the following major features differentiate the two concepts:

- (a) Earnings correspond to the remuneration paid by employers for work done or time worked, while income from paid employment relates to the sum of receipts from the employer, social security schemes or the State, which accrue by virtue of the *employment status*.
- (b) *Regularity* of receipt is a feature which characterizes earnings, while it is *not* taken into account in the proposed concept of income from paid employment;

Compensation of employees

133. Although the SNA concept of "compensation of employees", *prima facie*, appears to coincide with the IPE concept, there are certain essential differences which are discussed below:

(a) Compensation of employees corresponds to a concept of *cost* to the employer. However, not all of an employer's costs represent income to the employee and the value an employee derives from compensation received does not necessarily equal the employers' expenditure (e.g. goods and services received as payments in kind that an employee would not normally buy, or housing services).

(b) Consequently, the valuation method of benefits in kind differs between the two concepts. From the point of view of IPE, income in kind should be valued in terms of the value accruing to the employee, i.e. at retail market prices. Instead, in compensation of employees, wages and salaries in kind are valued in terms of cost to the employer, i.e. at purchasers' or producers' prices.

(c) A major difference between the two concepts concerns transactions pertaining to social security and private pension schemes. Only the *benefits* received by the employees (and not the employers' contributions) are accounted for in IPE.

Labour cost

134. The full labour cost concept includes all employer outlays associated with the utilization of labour services. It comprises not only the wage and non-wage benefits received by employees, but also all cost items associated with hiring and using labour as a factor of production (e.g. the cost of training and advancement practices, job amenities, recruitment and transfer). Not all of the labour cost of employers represents income to employees and certain elements of labour cost do not have counterparts in IPE. Even where there is correspondence, the accounting method differs. As for compensation of employees, the employer's cost is valued in terms of producers' or purchasers' prices. In addition, the employer's expenditures on benefits do not equal the market prices to the employee of these benefits: they are in

fact often lower because of group purchasing and because individual employees may have different preferences.

135. In labour cost statistics, account is taken of the employer's total social security expenditure, in the form of contributions, direct payments to employees, payments to reserves or funds, and cost of medical care and health services. The latter includes the cost of material depreciation on building and equipment, interest and maintenance. The remarks made with regard to compensation of employees in the previous paragraphs also apply to labour cost. In the concept of income from paid employment, only the current benefits received by employees are considered relevant. In addition, IPE includes not only the benefits received directly from the employer, but also those received from social security and insurance schemes by virtue of the employment status; this latter component has no counterpart in labour cost.

136. Labour cost includes the employer's total (net) housing costs, while it is the rental value of housing (or the corresponding housing allowance) which is taken into account in income from paid employment. Other labour costs include the cost of welfare services such as canteens, the cost of vocational training and the provision of other goods and services, such as work clothes, the cost of recruitment and transfer of employees, etc. These items do not have counterpart benefits to employees and therefore are not proposed for inclusion in the definition of income from paid employment.

Household income

137. A controversial issue contained in the ILO concept of household income is the notion of *recurrence and regularity*, which it is not taken into account in the proposed concept of IPE. This notion is meant essentially to help define the concept of income in terms of its characteristic features, especially from the viewpoint of the household, and should not be treated as a rigid constraint. The treatment of income components as household income is based on the assumption that the behaviour of households as consumers is affected by what they perceive as regular income, i.e. receipts expected to be secured regularly, with known frequency, at least once a year (UN, 1989).

138. While most components of income from employment are received on a recurrent basis (at least once a year), and therefore meet the regularity attribute of household income, certain elements - e.g. severance and termination pay - do not fulfil this criterion. However, it is felt that employment-related compensation, and in particular benefits which replace and compensate for the loss of earnings, contain an element of expectation which is strong enough to affect the social and economic behaviour of employees who lose their paid employment.

139. The SNA does not explicitly refer to regularity as a qualifying characteristics of household income, but takes into consideration all receipts which accrue to the households during the accounting period. Income from paid employment includes two forms of income (employment-related profits and employment-related social security benefits) which are treated as property income and social security transfers, respectively, in the SNA.

Conclusion

140. The following table summarizes the main components of the proposed definition of income from paid employment.

I TOTAL CASH REMUNERATION

1. Direct wages and salaries in cash, including:

- (a) All incentive, shift and premium pay (e.g. for responsibility, dirt, danger, work at night, weekend or other unsocial hours)
- (b) Cost of living, housing, transport, language and similar allowances
- (c) Hardship, mobility, non-resident, expatriation, repatriation, post-adjustment and similar allowances
- (d) Contractual and non-obligatory regular bonuses and premiums
- (e) Tips and commissions (with and without a retainer)
- (f) Payments for odd jobs and duties and casual work
- (g) Fees and salaries of managerial staff
- (h) Remuneration of trainees and apprentices

- (i) Other components of direct wages and salaries

2. Remuneration for time not worked

- (a) Annual vacation and other paid leave
- (b) Public holidays and other recognized holidays
- (c) Temporary halt or slow-down of production, short-time working, etc.
- (d) Other time off granted with pay (e.g. for personal and family reasons, civic duties, union responsibilities, training and education, etc.)
- (e) Paid sick leave (where not regarded as social security benefit)
- (f) Severance and termination pay (where not regarded as social security benefit)

3. Cash bonuses and gratuities

- (a) All bonuses and gratuities, whether contractual or non-compulsory bonuses and premiums, year-end and seasonal bonuses (13th, 14th or 15th month's salary, additional vacation pay, etc.)
- (b) Exceptional payments for innovative ideas or work methods and similar ad-hoc payments

II REMUNERATION IN KIND AND SERVICES

- (a) Traditional payments such as food, drink, fuel, clothing, footwear, etc.
- (b) Imputed rental value of free or subsidized housing
- (c) Petrol and/or mileage allowance
- (d) Imputed value of business vehicles for employees' private use,
- (e) Imputed value of telephone, electricity and similar utilities
- (f) Free or subsidized transport to and from work and free car parking
- (g) Union, association and club fees
- (h) Nurseries, creches, etc. for employees' children
- (i) Low or zero-interest loans, subsidized mortgages, etc.
- (j) Value of output from employer's process of production⁵

⁵ *In so far as the provision of this type of benefits is in line with the recommendations contained in ILO Convention concerning the Protection of Wages (No. 95), 19..*

- (k) Value of other payments in kind, including flexible benefits and other compensation packages for employees

III PROFIT-RELATED PAY

- (a) Traditional profit-sharing bonuses
- (b) Current receipts from profit-related schemes, participation, savings-related share option schemes and assimilated schemes
- (c) Initial market value of shares
- (d) Other profit-related receipts

IV SOCIAL SECURITY BENEFITS

1. Current receipts from employer:

- (a) Family, dependants and similar allowances
- (b) Educational allowances
- (c) Payments in respect of absence from work due to sickness, maternity, occupational injury or disease, etc. (which compensate, in part or in full, for loss of earnings)
- (d) Payments in respect of temporary or partial lay-off or unemployment (which compensate, in part or in full, for loss of earnings)
- (e) Severance, termination and redundancy pay (where not treated as remuneration for time not worked)
- (f) Compensation for medical expenditure, provision of free health care (homes, clinics, health services, etc.)
- (g) Other social security payments received from employer

2. Current employment-related social security benefits received from social security and insurance schemes or the State

- (a) Family, dependants', educational and similar allowances
- (b) Payments in respect of absence from work due to sickness, maternity, occupational injury or disease, etc. (which compensate, in part or in full, for loss of earnings)

- (c) Payments in respect of temporary or partial lay-off or unemployment (which compensate, in part or in full, for loss of earnings)
- (d) Severance, termination and redundancy pay
- (e) Compensation for medical expenditure, provision of free health care (homes, clinics, health services, etc.)
- (f) Other employment-related social security and similar payments received by virtue of employment status

3. Current social security benefits received by former employees by virtue of their previous employment status

- (a) Unemployment compensation
- (b) Occupational and retirement pensions

141. Groups I to III represent the "total compensation" received directly from the employer, which takes account of the emerging forms of compensation applicable to persons in paid employment. Group IV consists of social security benefits and is divided into three subgroups: (i) current receipts from employers; (ii) current employment-related benefits received by persons in paid employment from outside sources (social security and insurance schemes or the State); and (iii) current social security benefits received by former employees by virtue of their previous employment status.

IV - INCOME FROM SELF-EMPLOYMENT

Introduction

142. Self-employment is increasingly the focus of attention at a time when the capacity of governments and large enterprises to provide adequate wage employment opportunities to those seeking work is insufficient in most industrialized, transition and developing countries, and there is a growing interest in the potential of self-employment for generating productive employment. Improved and more comprehensive data on the self-employed and their conditions of work are a prerequisite for the development of more effective policies as well as special programmes for promoting self-employment. However, regular statistics of income from self-employment are scarce and fragmented because the income of the self-employed is less well-defined than the total compensation or income received by persons in paid employment. Existing international standards of wages statistics do not provide guidelines for the compilation and production of statistics of income from self-employment. This lacuna was highlighted by the 77th Session (June 1990) of the International Labour Conference in a report concerning the promotion of self-employment (ILO, 1990). This report focused attention on the need to examine and develop appropriate definitions and methodologies for measuring self-employment income (in particular, social security benefits and remuneration in kind) and on the new forms of remuneration generated by self-employment activities.

143. The preliminary report which was submitted to the 15th ICLS (ILO, 1992a) outlined the framework for the development of international standards on the measurement of income from self-employment (ISE). Both the 15th ICLS and subsequently the 1997 Meeting of Experts agreed that there was an obvious need for statistics of income from self-employment in industrialized, transition and developing countries. They also recognized that the measurement of income from self-employment was a complex task. The self-employed constitute a heterogeneous group of workers which includes owners of small-scale or micro-enterprises as well as larger enterprises, run with either little or significant capital, with or without the help of employees and contributing family workers, in both the formal and the informal sectors.

The population concerned

144. As mentioned in Chapter II, the self-employed population comprises a wide range of workers who carry out their activities in various circumstances. In the ICSE the self-employed are defined as persons holding jobs "where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits)..." in their enterprise (ICSE-93, in ILO, 1993). They comprise four major groups of workers: employers, own-account workers, members of producers' cooperatives and contributing family workers.

145. The SNA definition of the self-employed is restricted to "persons who are the sole owners, or joint owners, of the unincorporated enterprises in which they work, excluding those unincorporated enterprises that are classified as quasi-corporations". These household enterprises, or equivalently, unincorporated enterprises owned by households, form part of the household sector. They may be market enterprises (i.e. producing goods or services for sale or barter on the market), or enterprises producing goods or services for own final use (i.e. for own final consumption or own gross fixed capital formation). They may be owned and operated by individual household members or in partnership with members of the same or other households, or own-account workers, either alone or in partnership with members of the same or other households, with or without employees and contributing family members. Self-employment is therefore defined in terms of the legal aspect of the (household) enterprise, emphasizing the fact that the producer unit is not incorporated as a separate legal entity from the household itself. Thus defined, the self-employed constitute the core of the "non-salaried" workers in most countries.

146. It should be noted that although there is a large overlap between the self-employed and the owners of micro-enterprises (i.e. small-scale economic units or one to five or ten persons, depending on national definitions), the two are not equivalent. Micro-enterprises are usually not incorporated and are often owner-operated. The major difference corresponds to the few unincorporated establishments or enterprises which are not owner-operated, in which the owner invests capital and withdraws income in the form of profits from the funds invested in the enterprise. As mentioned in Chapter II, this form of income is not treated as income from employment but as property income.

147. As a result, it is proposed that, for the purpose of measuring income from employment, income from self-employment be defined as the income which accrues to persons who are the sole or joint owners of the unincorporated household enterprises (including one-person enterprises) in which they work. ***This is reflected in paragraph 16 of the draft resolution.***

148. The ICSE indicates that a number of sub-groups of workers (e.g. outworkers, contractors, franchisees) may also be classified as being either in paid or in self-employment, depending on the nature of the formal or informal agreement or contract under which they work, the regularity of payments they receive, the degree of risk and autonomy with which they work, etc. and the use to be made of the resulting statistics (ICSE-93, *ibid.*). To the extent that countries, in the light of their own needs and circumstances, classify these workers as self-employed, the income they receive should be identified and measured in the same way as that of other self-employed persons. ***This is reflected in paragraph 17 of the draft resolution.***

The concept of self-employment income

149. Income from self-employment is defined in the SNA as "mixed income", which measures the surplus accruing from the production process (i.e. value added plus subsidies receivable *minus* compensation of employees payable and taxes on production payable). It should be measured net of consumption of fixed capital. However, in practice, consumption of fixed capital may be difficult to measure, since the majority of household enterprises do not keep accounts (especially in the informal sector). Mixed income may therefore be estimated "gross". Whether gross or net, mixed income is an economic concept which measures the profit or the business value of the household enterprise. For purposes of national accounts, mixed income and its related labour input are measured at the aggregate level for the household sector.

150. There are some fundamental characteristics which distinguish the income of the self-employed from that of persons in paid employment. While the latter receive a payment for their labour, the income of the self-employed represents a return to capital as well as labour, entrepreneurial skills and risk-taking. Unlike most employees, the self-employed have considerable independence, control their working time

and use, are responsible for financial and economic decisions and bear a major share of the risks of failure. They may be operating at the margin of subsistence or receive significant gains. In the event of an economic crisis, employees may be laid off, while the self-employed are more likely to face reduced income and loss of capital. It may be difficult for them to retrieve family savings put into the activity, which provides an incentive to carry on, even as returns decline and capital is used up (ILO, 1990). The ICSE depicts self-employment income as "directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits)" in the enterprise (including one-person enterprises).

151. Both the 15th ICLS and the Meeting of Experts expressed general agreement with the initial approach regarding the basic concept of ISE which consists in defining this type of income on the basis of the mixed income of the unincorporated (household) enterprise.

152. The measurement of ISE should fulfil the objectives highlighted in Chapter II and should therefore be viewed from the standpoint of (a) the income-generating capacity of the economic activity, and (b) the welfare aspect, i.e. the level of income accruing to self-employed persons by virtue of their involvement in self-employment activities or derived from their employment status.

153. While the mixed income of household enterprises, as defined above, is a measure which fulfils the first of these two objectives, this measure falls short of assessing the full income which may accrue to self-employed workers by virtue of their employment status. In order to allow for comparisons with the situation of workers in paid employment, the measurement of ISE should include employment-related social security benefits. The evaluation of such benefits should take account of the characteristics of the situation of the self-employed with regard to such benefits.

154. The Meeting of Experts felt that the inclusion of employment-related social security benefits in the concept of income from self-employment was a minor issue. In a large number of countries, the self-employed are not covered by mandatory social security schemes and, when they are, the benefits may be low compared to those which are traditionally provided to persons in paid employment. However, the participants agreed that the treatment of employment-related social security benefits paid to the self-

employed should be in line with the treatment of those paid to employees in the context of income from paid employment.

155. Consequently, it is proposed that, in addition to the mixed income of unincorporated enterprises, income from employment include social security benefits accruing to the self-employed through schemes recognising this status in employment as a specific condition for membership. ***This is reflected in paragraph 18 of the draft resolution.***

Sources and components of income from self-employment

156. The definition of ISE involves some financial reward, or at least the expectation of it, for the work undertaken, the position held and the risk assumed. Just as employees and employers have to report wages and salaries or labour cost for statistical purposes, so sources and amounts of self-employed income should be stated and accounted for. A large number of unincorporated enterprises do not keep even simple accounts, thus limiting the possibilities of accurate measurement of ISE. In order to palliate these difficulties, the assessment of income requires some knowledge of the elements entering into its formation, i.e. gross value of outputs, inputs and related transactions (i.e. operating expenses) over an appropriate reference period.

Gross income

157. For each economic activity, the value of gross output may be defined as the value of all goods and services produced for the market as well as for own final use. Market output corresponds to the value of goods and services sold, bartered or provided free of charge or at reduced prices as payments in kind to hired labour. Production for own final use includes the value of goods and services consumed by the household or retained for use in future production.

158. Operating expenses include three types of business expenditure: (a) intermediate consumption, (b) compensation of employees payable and (c) taxes on production payable, minus subsidies received, if any.

159. Intermediate consumption covers the cost of goods and services consumed as inputs by a process of production, such as grain transformed or electricity used up. It includes the purchase of raw materials, fuel, tools and small equipment, and the cost of seeds, feeds, fertilisers and other inputs used in farming, rentals or charges paid for equipment, machinery, buildings and land used in the business, cost of transport and marketing, cost of ordinary repairs and maintenance of equipment and vehicles, interest paid in connection with the business and other running expenses.

160. Compensation of employees includes all expenditure incurred, in cash, in kind or in services, with respect to employees. Since it is viewed here in terms of the employer's cost, compensation of employees should be measured in accordance with the concept used in the SNA, and therefore include (a) wages, salaries and supplements in cash and in kind and (b) where relevant, social security expenditure in the form of actual and imputed contributions.

161. Taxes payable on production may include a variety of taxes on sales, turnover, payroll or labour force, business and professional licences, taxes on land or buildings, stamp taxes, taxes on pollution, agricultural levies, etc. Subsidies may consist of interest relief subsidy payments, recruitment allowances, etc.).

162. For a given economic activity - and for different kinds of activities in which a household enterprise may be engaged - the difference between gross output and operating expenses results in the concept of "gross profit" (or loss) of the unincorporated enterprise (i.e. gross mixed income). ***The definition of gross profit of unincorporated enterprises (or gross mixed income) is reflected in para. 19 of the draft resolution.***

Net income

163. The concept of gross profit represents a mixture of different kinds of inputs:

(a) a return to entrepreneurship and initiative - the self-employed person is responsible for the creation, management and continuity of the enterprise;

- (b) a return to the labour input of the entrepreneur - the self-employed person is in most cases a worker who contributes labour inputs, often at highly skilled professional level, of a kind which could also be provided by paid employees;
- (c) very frequently, a return to the work done by other persons, such as partners or unpaid contributing workers;
- (d) a return to the capital invested and consumed for generating this income.

164. The measurement of the income-generating capacity of self-employment jobs requires data on income from employment, in its strictest sense. It had therefore been proposed to the Meeting of Experts that income from self-employment should measure the return to labour of the self-employed. This would mean deducting the consumption of fixed capital (or depreciation) as well as the return to investment (i.e. that part of mixed income retained and reinvested in the enterprise) from the enterprise gross mixed income.

165. The Meeting of experts agreed that, while the distinction between the return to labour and the return to capital was desirable from a conceptual point of view, in practice it was extremely difficult, if not impossible, to apply this distinction. Self-employed individuals, partners or household and the enterprise form a single legal entity. The fixed assets used in the enterprise belong to their owners who are personally liable, without limit, for any debts or obligations (e.g. funds borrowing) incurred in the course of production. As a consequence, there is no clear dividing line between the assets and liabilities of the enterprise and those of its owner, between capital and current business expenditure, or between business and individual or household expenditure. Capital goods such as premises or vehicles may be used partly for business purposes and partly for own use; rents paid by shop-keepers, farm tenants, etc. may cover dwellings as well as buildings, land, equipment, etc. used for the business. In addition, the Meeting concluded that it was not appropriate to attempt to measure reinvested income, since this was part of self-employment income itself. Subtraction of reinvested income would lead to a measure of utilized income, rather than to a measure of available income.

166. In view of the complexity of measurement of income from self-employment and in order to reach a compromise between the conceptual and the practical approaches, the Meeting of Experts agreed that

the measurement of ISE should be phased into national programmes of statistics over an extended period of time and that initial efforts should be made to identify and measure the income accruing to two groups of self-employed workers:

(a) The first group consists of self-employed persons operating their enterprises with little or negligible capital input, who produce goods and services in a similar way as paid employees (such as those engaged in crafts or services, whether in the formal or in the informal sector). The income they receive is mostly a return to their labour input and the gross mixed income of the enterprise is a close estimate of the net mixed income.

(b) The second group consists of self-employed persons whose activities involve an identifiable amount of capital for the production and generation of income (such as professional workers in the formal sector or workshops in the informal sector). In this case, efforts should be made to quantify the amount of capital used for generating the income and to derive the net mixed income. ***(See the relevant proposal contained in para. 27 of the draft resolution.)***

167. For this purpose, data on the consumption of productive assets (i.e. structures, machinery or equipment, cultivated assets such as trees or animals used to produce other products such as fruit or dairy products, etc.) should, in principle, be collected. ***(This proposal is reflected in para. 20 of the draft resolution.)***

168. In business accounting or for taxation purposes, consumption of fixed capital is measured in terms of "depreciation", whereby the costs of past expenditures on fixed assets is allocated over a given number of subsequent accounting periods, depending on the expected lifetime of the asset. The SNA recommends a different approach, whereby consumption of productive assets reflects the decline in the current value of the fixed capital owned and used by the self-employed as a producer. Fixed assets purchased at different prices in the past should be revalued at the prices for the current period, and consumption of fixed capital is measured according to the perpetual inventory method.

169. Whatever approach is chosen, the self-employed engaged in household enterprises may not be able to provide reliable data on depreciation or consumption of fixed capital. As a result, net self-employment income may have to be derived by means of analytical methods.

170. For the purposes of measurement of self-employment income, it is not proposed to differentiate the return to entrepreneurship mentioned in para. 163(a) from the return to work done by the entrepreneur in (b). Entrepreneurship measures the level of initiative, risk-taking and management responsibility assumed by the enterprise head. Conceptually, this component may be compared to the responsibilities carried out by managerial employees whose salaries reflect both the complexity of duties and the level of responsibility within an enterprise. The "return to labour" component is therefore meant to cover both aspects (a) and (b) of the definition of self-employment income in para. 162.

Mixed income and income of the self-employed

171. Household enterprises may be operated by own-account workers or employers, either alone or in partnership with members of the same or other households. Self-employment income, as defined in terms of the gross or net mixed income of the enterprise, represents the profit generated by the enterprise. Where the self-employed person runs an enterprise independently from other partners and contributing family members, with or without employees, the profit corresponds to both the income generated by the enterprise and the entrepreneur's individual income from self-employment.

172. In other situations, the self-employed run their enterprise in partnership and mixed income then represents a joint income. In order to assess the economic welfare of individuals, income from self-employment should correspond to the share of income accruing to each partner. ***This approach is reflected in para. 21 of the draft resolution.***

Treatment of contributing family workers in income from self-employment

173. In household enterprises, and more generally in self-employment activities, a traditional feature is the performance of activities jointly by several members of the household without remuneration (e.g. in agricultural, trade and craft households or in intermediary professional occupations). Although this

practice is declining in industrialised countries, mostly due to legal developments and partial recognition of work in partnership, household surveys show that in the majority of agricultural and trade households, the majority of non-salaried spouses are unpaid contributing family workers. In developing countries, the "hiring" of unpaid contributing family workers (spouses, children and other household members) or unpaid apprentices is normal practice. These members contribute to the operation of the enterprise without receiving formal or individualized earnings or income. In these cases, it is assumed that the profit or mixed income derived by the self-employed head of the enterprise also rewards the participation of the household member(s). These contributing family workers participate in the economic activity with varying durations and intensity of work and at different levels of responsibility. It had been felt desirable to measure the imputed income of contributing family workers (CFW) in order to assess their contribution to the economic development and level of welfare of household enterprises.

174. This question was discussed at length at the Meeting of Experts. This category of work raises important issues relating to marginality and gender. In 1990, it was estimated that women employed as CFW constituted about half of the CFW globally. It should be noted that child labour is generally not included in the statistics on this group of workers, which means that the extent of CFWs is often underestimated, especially in low-income countries (ILO, 1990, *ibid.*). A number of participants, including the Worker experts, were of the opinion that an imputed income should be estimated for this group of self-employed persons in order to assess their contribution to the activities of the enterprises. Others expressed the view that it was extremely difficult, on practical grounds, to apportion income among household members and that ISE should be measured at the level of the enterprise defined as a single unit (due respect being given to the remark made in para. 169 above).

175. In view of these conflicting opinions, it was not felt appropriate to recommend that the imputed income of contributing family workers form part of the basic proposals relating to the measurement of income from self-employment. However, when measuring the volume of employment which has gone into the activity of the enterprise, due account should be taken of the participation of CFW. In addition, it is proposed that where it is considered relevant to assess the share of income generated by the work of CFWs, efforts should be made to assess the imputed income of contributing family workers in unincorporated enterprises on the basis of the analytical measures discussed in the last Chapter.

Social security benefits received by the self-employed

176. As mentioned earlier, it had been proposed to include in the concept of income from self-employment those employment-related social security benefits received by the self-employed, for the purpose of assessing their level of welfare.

177. The international review of present social security coverage⁶ shows that self-employed persons have comparatively much less access to statutory social security benefits than the majority of persons in paid employment, due to the characteristics of their situation. The gaps in coverage are particularly wide in respect of self-employed persons with low incomes and of those in the informal sector.

178. A number of countries have enacted so-called universal schemes whereby benefits are granted to all residents, irrespective of their occupational group. The benefits are frequently old-age, disability and survivors' pensions, family benefits and medical care through statutory national health services, either with a means test for entitlement (as in Australia and New Zealand), or without a means test (as in highly developed and industrialised countries, and in Mauritius and the Seychelles, Cuba and Nicaragua). In spite of these examples, the most frequent form of provision by which the self-employed persons acquire social security coverage is through social insurance schemes recognising the occupational status as a specific condition for membership, either through schemes originally intended for employees which have been extended to cover all self-employed workers or specific categories of them, or through separate social security schemes for the self-employed. In addition, voluntary insurance is frequently adopted in developing countries.

179. The self-employed do not receive any direct social security payments from their own enterprises. Since they have no employer to share the financing of employment-related social security and related schemes (apart from exceptional situations where an association, such as a cooperative, spreads the financing among its members), the self-employed benefit, where relevant, from schemes financed mainly or solely by their own contributions. Even when state or social security schemes entitle them to benefits

⁶ ISSA *Social Security Worldwide*

such as sickness (medical care), family allowances, old-age and bread-winner pensions, etc., many self-employed do not benefit from allowances designed to compensate for the loss of income due to temporary incapacity resulting from sickness or childbirth, occupational injury or disease, etc. Similarly, it is only in very exceptional cases (i.e. when the persons are applying to become employees) that the self-employed are protected against unemployment, since it is difficult to establish the involuntary nature of unemployment - an essential condition for benefits.

180. If self-employed persons receive social security benefits through schemes recognising the status in employment as a specific condition for membership, such benefits should be included in the concept of Income from self-employment. Notwithstanding the limitations mentioned above, the rationale for the inclusion of employment-related benefits could follow the lines of the proposals made in Chapter III with regard to income from paid employment. In principle, only those components identified under Group IV.2 apply to owners and partners of unincorporated enterprises. The components identified under Group IV.3 apply to former self-employed persons.

181. The above-mentioned approach would throw light on the situation of various categories of self-employed workers with regard to social security benefits. In the informal sector, for instance, where the self-employed may not be covered by any employment-related social security or pension schemes, the concept of self-employment income would be limited to the "profit" (or loss) of the enterprise, i.e. to the gross or net mixed income. ***This approach is reflected in paragraph 22 of the draft resolution.*** It should be noted that income from self-employment thus defined includes some social security benefits which are treated as current transfers in the SNA secondary distribution of income account.

Choice of method for recording income

182. Measuring ISE requires the introduction of some kind of accountancy, albeit at the most simple level. Several techniques may be used, which meet different objectives and measurement purposes, and produce different results, including:

(i) The *cash-flow* accounting technique measures actual cash received (including the value of production for own use) and paid out (including the value of production given out free or at reduced prices) during a business cycle or reference period. No account is taken of accrued or unpaid receipts or expenditure. The final result is a measure of the cash (and equivalent in-kind value) surplus or deficit at the end of the reference period.

(ii) *Accruals accounting* is a technique which measures not the cash (and in-kind value) flows but the profit earned during the period, by taking into account receipts and expenses relevant to that period, irrespective of whether or not they have actually been received or defrayed. The objective is to match income earned (but not necessarily received) against expenses incurred (but not necessarily paid out yet) to test the profitability of the establishment (Boden & Corden, 1994).

183. In business accounting, the cash-flow technique is widely used, on the grounds that "without cash, a business cannot survive" and that this method gives a better indication of the future prospects of the enterprise. What is true of the business might also be said to be true for people who operate them and depend upon them to meet their living expenses (*ibid.*). Cash-flow accounting may be affected by irregular or erratic payments by customers during a given reference period, and may not be indicative of the usual or future cash flows. It may give a better indication of funds actually available to meet living expenses. However, this assumption may not hold true as some of it may be committed to meeting business expenses already incurred.

184. Accruals accounting offers a better measure of actual economic activity. It is the approach favoured by the SNA which records flows of receipts and expenditure at the time an economic value is created, transformed or exchanged. It evens out reported profits between periods and provides a better indicator of performance of an economic activity, but provides only a poor measure of the actual amount of income available to the self-employed.

185. The measurement of the level and trend of self-employment income is also affected by the extent to which the value of stocks is taken into account in recording income. From the *delivery* viewpoint, income consists of the difference between gross receipts (in cash and in kind) and expenses during the

reference period. It may comprise the value of goods stocked from a previous period and sold during the reference period. Reciprocally, part of the production of the reference period may be stocked to be sold in a future period, and will not appear in the deliveries. From the *production* standpoint, stock variations are taken into consideration during the reference period and the resulting measure provides different levels of income (although the trend may be levelled out in the long-term). This aspect may be of particular importance in agriculture and in some manufacturing industries which produce goods that can be stored and stocked over a long period.

186. The Meeting of Experts suggested that the methods used to record ISE should follow, where feasible, either the procedures recommended by national tax authorities or the methods contained in the SNA. Where this is not possible, the cash-flow method could be used.

187. The choice of an accounting technique should take into account the circumstances in which the self-employed operate their businesses and the source of income data used. In industrialised countries, the self-employed may have accounts (balance sheets or profit and loss accounts) prepared by professional accountants or tax or social security declarations, which can be used as a basis for estimating income from self-employment. Each of these sources may measure income in a different way, depending on the business accounting, tax and other regulations which require specific treatment of a number of income components. This is not necessarily true in a number of developing countries and in the informal sector (both in developed and in developing countries). It is implicit that the self-employed who cannot produce business accounts are more likely to be able to compile a simple summary of cash received and paid in the assessment period (i.e. gross receipts minus expenses). This is also the method mostly used in LFSS and HIES, since it requires a lower level of "accounting skills" and data can be obtained by listing the various types of receipts and expenditure incurred.

188. Account should also be taken of the measurement objective. Where the objective is to measure the income-generating capacity of self-employment activities (and for national accounts purposes), a measure of the profitability, or economic performance, of the enterprise, may be favoured, while for the purposes of welfare assessment, it seems desirable to place the accent on the income actually available

(i.e. the cash surplus) to the self-employed which can be used to meet living expenses. ***This approach is reflected in paragraphs 28 and 29 of the draft resolution.***

Evaluation of production for own use

189. Production for own use or consumption should be valued in terms of the basic prices of similar products sold on the market or at their cost of production if no suitable basic prices are available. This is in line with the SNA recommendations. ***(Cf. para. 30 of the draft resolution.)***

Treatment of losses

190. Self-employment activities may, over a given reference period, produce a financial loss instead of income or profit as such. Clearly, if a self-employed person has made a loss, there may have been a net outflow of cash which is not available for personal expenditure needs. Such losses may be compensated by drawing from personal savings, contracting loans, selling assets, etc. In their individual capacity, the self-employed may invest the funds derived from such transactions in the business (in which case the overdraft interest is to be treated as a business expenditure) or use them to meet living expenses. Losses should be reflected in the measurement of income from self-employment and evaluated as negative income. ***(Cf. para. 31 of the draft resolution.)***

Exclusions from income from self-employment

191. Income from self-employment excludes income derived from other forms of activity and other sources, such as income from paid employment, property income in the form of interest, dividends, income attributed to private insurance policy holders, rents and other forms of property income, as well as annuities, remittances, gifts, social assistance, etc.. It also excludes family allowances and other social security benefits or assistance (e.g. foodstamps, governments or community housing, free health care assistance, etc.) paid by social security schemes or the State without regard to the employment status (e.g. under universal schemes with or without means tests). ***(See para. 24 of the draft resolution.)***

Conclusion

192. The following diagram summarizes the approach proposed for the measurement of income from self-employment in unincorporated household enterprises:

Value of goods and services sold, bartered or provided free of charge or at reduced prices as payments in kind
+

Value of production for own final use

=
GROSS OUTPUT

minus

OPERATING EXPENSES:

- (i) Intermediate consumption
- (ii) Compensation of employees
- (iii) Taxes on production minus subsidies received

=

GROSS MIXED INCOME

minus

Consumption of fixed capital / Depreciation

=

{ SHARE OF } NET MIXED INCOME

Plus

Employment-related **SOCIAL SECURITY BENEFITS**
from social security and insurance funds or State

=

GROSS INCOME FROM SELF-EMPLOYMENT

*

*

* IMPUTED INCOME OF CONTRIBUTING *
* FAMILY WORKERS *

V - SOURCES OF DATA

193. Data on income from employment can, in principle, be derived from a number of sources, which present respective advantages and weaknesses. Suggestions are made in this Chapter for the improvement of data collection methods on the basis of existing sources of statistics.

Establishment surveys

194. Establishment or enterprise surveys are the main source of statistics of earnings. Payrolls and other employers' records can also serve as a basis for the collection of certain data on income from paid employment. In order to constitute an appropriate source of data on income from employment, establishment surveys should be extended to include and identify separately all categories of persons in paid employment, and in particular owners-managers, managerial employees, part-year, part-time and, where possible, casual or intermittent workers, employees on jobs which have terminated before the end of the reference period, as well as home workers (where classified as employees), together with their related volume of employment.

195. The scope of establishment surveys is often limited to large and medium-size establishments. The self-employed, whether own-account workers or employers with a limited number of employees, are generally excluded. Similarly, traditional establishment surveys exclude the informal sector.

196. A general bias inherent in the use of establishment surveys relates to the valuation of benefits in kind. These are generally estimated at cost or producer's prices. In some countries, it is possible to obtain from the employer the tax value of taxable benefits in kind - such as housing, free meals, use of company car, telephone, etc. Whenever possible, efforts should be made to assess the difference between the different valuation methods.

197. Structural surveys of earnings, which often permit a cohort of employees to be followed throughout their career and the collection of information on income levels and trends according to detailed

employees' characteristics (sex, age, occupation, conditions of employment, etc.) are best suited for the compilation of data on income from paid employment.

198. Labour cost surveys can also throw light on that part of employees' income paid directly by the employer. However, labour cost statistics are not intended for use in the analysis of the distribution of income from employment among individual or groups of workers, and for the reasons indicated in Chapter III, employers' expenditure may only serve as a proxy to income from paid employment.

199. The information collected in establishment surveys could be supplemented by data drawn from other sources, such as social security records. Where this is the case, the money value of social security benefits should relate to the same set of employees for whom total remuneration data have been collected from the establishments. ***The use of establishment surveys as a possible source of data on income from employment is reflected in paragraphs 54 and 55 of the draft resolution.***

Administrative records⁷

200. In principle, tax and social security records are assumed to record data on income from both paid and self-employment more accurately than do field surveys. However, this is not necessarily the case and the following main limitations should be accounted for when compiling data on income from employment from such sources.

201. The classification by status in employment may largely be affected by tax and other considerations. In particular, in some countries, the tax system applicable to the self-employed may be similar to the fiscal policy applied to corporations while in others, the self-employed are taxed on personal income like employees. In addition, administrative records may fail to provide data on secondary activities, unregistered establishments and employees.

⁷ For detailed information on the use of administrative records as a source of statistical information, see ILO/EASMAT (1997).

202. Tax records often omit income that falls below a tax threshold. Social security records may omit income below some threshold or higher than a given ceiling because these incomes are not liable for social security contributions. In both cases, income components which are subject neither to tax nor to contributions (e.g. meal vouchers, profit-related payments), are omitted.

203. Another type of limitation which should be taken into account relates to the fact that income from self-employment may be biased in tax records: for instance, the self-employed can deduct some occupational expenditure from their income (such as cars, premises and spouse's services) where it is difficult to make the distinction between business and personal expenditure; production for own use (e.g. construction work in a mason's own house) may not be declared; losses in a given fiscal year might be deducted from the next year's income.

204. Tax and social security data do not generally record full-time versus part-time status, nor do they record data on hours of work. However, they may provide some estimate of the duration of work in terms of weeks, months, etc.

205. Despite these limitations, income data from administrative sources may be more adequate at the national level than survey data, which may be under-reported. For international comparisons, administrative data may be expected to be less suitable because of their heavy dependence upon the detailed regulations applying in each country, unless appropriate adjustments are made to improve their comparability.

Labour force/household surveys (LFSS)

206. Labour force surveys and other household surveys appear to be one of the sources deserving consideration with a view to measuring income from employment. LFSS usually have complete geographical and sectorial representativity, and can cover, among others, household enterprises, unregistered jobs and self-employed persons which may not be represented in other statistical sources. They aim at covering all household members about whom occupational variables are surveyed. This approach makes it possible to measure incomes accruing to both employed and unemployed persons,

and to link the data, for each activity or occupation, to the respondents' personal, educational and other characteristics. They can provide information about individual workers and the household as a whole, and permit the analysis of the relationship between qualifications and labour market activity at the individual level. They can provide in principle detailed information on income by occupation and job tenure. In principle, they can provide data on all types of income from employment, including social security benefits. LFSS are the natural source to use for international comparisons since they allow employment and income to be measured with the same kind of instrument in each country.

207. The main problem often attributed to income questions in LFSS relates to the sensitivity of the subject. It is felt that households are less likely to take part in the survey when they know they will be asked about their income; if they take part, the answers they give may not be reliable. For this reason, many countries with rotation samples administrate the income questions only to the outgoing rotation group. Other weaknesses may refer to the lack of correspondence between the reference period used to measure hours of work and status in employment and the one used to measure income. Information on industry is not as accurate as in establishment surveys. Another weakness of current LFSS/HS relates to the measurement of social security and assimilated benefits.

208. In order to improve the quality and relevance of income data in LFSS, it may be necessary to introduce certain changes in LFSS questionnaires. For instance, the wording of questions could be modified in order to obtain disaggregated data on the components of income, in order to meet various users' requirements for income data. Some variables could be introduced or modified concerning the characteristics of occupations, in order to establish the link between income and type of occupation (main and secondary, regular and casual, etc.), type of contract, duration of employment or unemployment (in terms of weeks or months), working time (in terms of hours of work), seniority in the trade or occupation, etc. Appropriate questions (accompanied with detailed instructions), addressed to all individuals, including those not employed at the survey date, may, in principle, reveal nearly all income during a given period, including social security benefits, including those employment-related benefits received by virtue of the employment status from sources other than the employer (e.g. social security or insurance schemes or the State).

209. The data required for measuring the relationship between employment status and income should include the use of a long reference period, which may raise difficulties for data collection in field inquiries. The main problem is recall errors: omission of information on short periods of employment and related incomes, or of certain irregular or unusual payments, reporting of payments received during the reference period for work done in a previous reference period, under- or over-estimation of income, etc. Unincorporated enterprises do not usually keep accounts, so that the longer the reference period, the greater the risk of non-recall and other memory-related response errors.

210. To reduce recall errors and capture the seasonal characteristics of certain activities, several solutions may be considered, such as conducting repeated surveys or surveys with a sample spread over the year and a shorter reference period such as a quarter or a season; using the month-by-month recall approach to obtain information on each of the 12 months of the year separately; fixing data collection at a time which coincides with the collection of data on income for administrative purposes, such as income tax and social security declarations, etc. For data collection purposes, different activities may require different reference periods, such as a month for regular full-time paid employment, complemented by questions about additional annual receipts, or a crop season in agricultural self-employment. For analytical purposes, the results need to be converted to a single standard unit of time, e.g. the year or the hour.

211. The measurement of income from self-employment requires detailed questions on gross output and operating expenses, fixed capital consumption and total labour input, as well as clear instructions to interviewers indicating what elements should be considered as income and expenditure. The wording of questions is also particularly important in order to make the distinction between the enterprise gross or net profit. Guidance should also be provided on the "qualifying" hours for self-employed persons. It may be considered to inquire thoroughly about self-employment incomes, for instance, once a year, at a time when more questions and particular instructions are included in the LFSS. Other alternatives may be considered, such as conducting surveys of economic units, especially designed surveys of household activities or informal sector surveys.

Household budget or household income and expenditure surveys (HIES)

212. HIES usually provide a wide range of information on the composition of household income, and probably constitute the best source of data on income in kind and income components and deductions. Their results are used to assess the needs of workers and their families, the provision and distribution of social security benefits and the living standards of various socio-economic groups. All household members are surveyed, irrespective of age, sex, etc., which allows for the collection of data on the activity and relevant income of different population groups, such as women and children.

213. Like most field inquiries, the information obtained from HIES on levels of income are subject to non-sampling errors and bias because of respondents' reluctance or incapacity to reveal such data. Lastly, one of the handicaps of HIES is the fact that they are costly and usually carried out at rather long intervals (every five to ten years), thus providing a snapshot of the employment and income situation of population groups at a given point in time, rather than providing data for an analysis of trends in income.

214. Certain improvements may be required in order to better establish the relationship between income and employment. In particular, for a proper determination of the activity status of a person, information should be collected on the number of days or half-days the person was employed, unemployed or inactive during the reference period. Wherever possible, information should also be collected, and guidance provided, on the "qualifying" hours of self-employed persons. Information on income from employment should be collected in detail in respect of each activity performed or job held during that period. For an accurate estimation of incomes derived from self-employment, a detailed investigation of inputs and outputs is essential. ***The use of labour force and other household surveys as a possible source of data on income from employment is reflected in paragraphs 50 to 53 of the draft resolution.***

Other sources of income data

215. Other possible sources of data on income from employment include informal sector surveys (in accordance with the resolution concerning statistics of employment in the informal sector adopted by the 15th ICLS in 1993), agricultural surveys of small economic units and household enterprises and population censuses.

216. All field surveys suffer from the same handicaps, related to the reluctance or inability of interviewed persons to provide income data, the difficulty in quantifying non-monetary income, the relatively heavy workload for the survey officers and the risk of inaccurate responses. This is further compounded by the complex nature of the income data themselves. When the income factor is included in a census or survey exercise, extra care must be taken in the preparatory phase, i.e. concept and definition, drafting of directives and training of officers, analysis and interpretation of the results. One of the main problems is that of proxy respondent. For the purpose of measuring income from employment, the questions should be asked from the income earner him/herself. Unavoidable total and item non-response should be partly compensated through adjustment procedures during processing.

217. Efforts should be made to identify separately those social-security benefits that accrue to employed and unemployed persons by virtue of their current or usual status in employment and to distinguish them from other social security benefits paid without regard to the employment status.

218. A combination of several sources, such as field or establishment surveys and administrative records, may be used to promote the collection of data on income from employment, to compare and evaluate the quality of data from each source, to match individual records and to conduct quality control studies. ***This approach is reflected in paragraphs 56 to 59 of the draft resolution.***

VI - DATA COLLECTION AND COMPILATION

Statistical units

219. Two basic statistical units are relevant to the measurement of income from paid and self-employment, depending on the objective pursued: the job and the individual person.

220. For the measurement of the income-generating capacity of different economic activities the *job*, as defined in the most recent version of the ICSE, is the basic entity on which information is to be collected and analyzed. Jobs can be "paid employment jobs" and "self-employment jobs". This observation unit permits the analysis of different income levels generated by jobs in different industries and with different occupations, the assessment of employment promotion policies, the effects of structural changes in industries and occupations, etc. In theory, jobs can be characterized by industry, occupation and employment category (paid or self-employment), coded at the most detailed level of existing national or international statistical classifications. In practice, such coding is feasible in the case of paid employment jobs or well-defined self-employment activities performed by a single worker. It is more difficult when an activity is jointly performed by several individuals (e.g. in the case of household enterprises where the self-employed work with the help of contributing family workers), or when it involves several occupations, as in farm household enterprises. In such cases, it is suggested that all activities involved be considered as part of one single job, classified according to its main characteristics. When compiling the corresponding employment data, it is necessary to ensure that all labour input from the different household members concerned is taken into account.

221. When the measurement objective is the assessment of the employment-related welfare of the population concerned, the desirable unit is the *individual person*. The individual is also relevant when analysing the relationship between employment-related income and educational attainment, seniority in employment, work duration, etc. An individual may be engaged in a single job, have multiple jobs in paid or self-employment, or own and operate more than one unincorporated enterprise, simultaneously or consecutively within a given reference period. From the individual's standpoint, income from employment corresponds to the sum of all incomes accruing from all jobs.

222. The choice of the individual as the income-recipient unit is particularly feasible in contexts where economic activities of individual persons or household members can be clearly identified and where the income generated by these activities may be clearly allocated to individual workers. Difficulties may arise in the case of unincorporated enterprises where owners or partners are assisted by unpaid contributing family workers. Ideally, the income received by each member contributing to the profit of the household enterprise should be separated out from the profit generated by the business they operate.

223. In practice, individuals are usually the basic statistical unit in labour force and household surveys and in population censuses. Data derived from administrative sources, such as income tax or social security records, or from a combination of sources, are often available for individuals. For each individual, the measurement objective is to assess the income generated by one or more jobs. Where relevant, the data collected on each individual and each job can be brought together at the household level for studies of the relation between the distribution of income from employment and other sources, its redistribution through taxation and other transfers, and its use in consumption and saving. ***Both statistical units are proposed in paragraph 32 to 34 of the draft resolution.***

Data requirements

224. For measuring the income-generating capacity of different jobs, there should be consistency between the data on employment in a given job and the data on income generated by that job. Data should therefore be collected on (i) the characteristics of the job (industry, occupation, employment category (paid employment and self-employment), type of enterprise (individual enterprise, partnership, corporation, etc.) and employment size, (ii) the volume of labour input (duration of employment and time worked by all contributing persons) and (iii) the amount of income generated by that job.

225. To analyze the relationship between the employment and welfare of individuals, data are needed for each person (i) separately on each main and secondary job carried out during a given reference period, (ii) the income derived from each of these jobs, (iii) the socio-economic characteristics of individuals (age, sex, education and skill level, etc.) and (iv) any spells of unemployment or inactivity that an individual may have experienced during the given reference period (ILO, 1992b). The analysis of such data would reveal the nature and extent of multiple job holding, help investigate the characteristics

and the factors influencing the incomes of employees and self-employed persons, assess the adequacy of employment in terms of income, and identify those persons who receive low income from employment. **(Cf. paragraphs 37 and 38 of the draft resolution).**

Volume of employment

226. One of the requirements of the measurement of income from employment is that the income generated by a job be related to the volume of employment which has gone into that job. Therefore, income and employment data should refer or be convertible to the same reference period.

227. For each job, the volume of employment should be assessed in terms of work duration, expressed in number of hours, days, weeks, etc. during which the activity has been carried out. Where the activity is carried out by several contributing members and income is the result of a joint labour input, efforts should be made to measure the proportion of hours, days, weeks, etc. worked by each member.

228. At the individual level, income from employment should be measured for each job carried out during the reference period, whether in paid or self-employment, together with the corresponding labour input in each activity. This requires linking the income received to the work experience of the person over the given reference period. **(Cf. paragraphs 39 to 41 of the draft resolution.)**

Measurement of hours of work

229. At the international level, the measurement of hours of work of employees is set out in the resolution concerning statistics of hours of work adopted by the 10th ICLS in 1962. This resolution includes definitions of *normal* hours and hours *actually worked*, and introduced the concept of *hours paid for*. For the purposes of statistics of income from paid employment, the measurement of hours of work should cover all categories of persons in paid employment.

230. A fourth concept, often applied in household surveys and similar field inquiries, is that of *usual* hours of work, which applies to persons in paid and self-employment, whether at work and temporarily

absent from work. This concept reveals how many hours a worker usually works per week or per day, but does not provide for a definition of the scope of hours of work. It is generally considered as the average hours actually worked over a relatively long period, such as a month.

231. At present, there are no international standards concerning statistics of hours of work of the self-employed, and this issue raises some particular difficulties. Many self-employed people, in addition to the hours during which they are directly performing the functions of their trade or profession, also have to allocate time to activities such as seeking business, waiting for new customers, record keeping, maintenance of equipment, or even merely holding themselves available for business (e.g. an emergency plumbing service). Similarly, in some professional occupations, the measurement of hours of work may provide contrasting results, depending on whether the hours of work are measured in terms of the opening hours of the shop, practice or office, or in terms of the time spent on the actual production of services (i.e. doctors or dentists' medical advice, lawyers's deeds, etc.), including hours spent in the evenings making appointments or visiting clients. It may be difficult to define hours of work for certain categories of workers, (e.g. farmers, shopkeepers, taxi drivers, hoteliers, teachers or musicians). Activities may combine elements of productive work with learning, training or domestic activities (e.g. home workers and workers in household enterprises), etc.

232. As a result, the concept of hours of work applicable to the self-employed should be broad enough to cover the time spent on all related or complementary activities at the workplace and outside the workplace. Where relevant, clear guidelines should be provided on how to measure hours of work, taking into account the particularities of self-employment activities, in the light of national circumstances.

233. Notwithstanding the definitional issue, hours of work should be identified for each job separately, and at the level of multiple jobholders, total hours of work should equal the total number of hours worked at all paid and/or self-employment jobs. **(See paragraphs 42 to 44 of the draft resolution.)**

Measurement of work duration

234. The measurement of work duration is particularly important to study the relationship between employment and economic welfare, and in particular between full-time and part-time, part-year, casual and intermittent employment and low income.

235. For each job considered, days or weeks worked should refer to the total labour input which has gone into the job during the reference period. Where this refers to the time spent by several household members on the same activity, work duration should also refer to the time worked by all persons concerned.

236. At the individual level, the assessment of employment-related well-being requires linking the employment status of individuals to their work experience over the reference period. During a one-year reference period, individuals may combine periods of employment, unemployment and economic inactivity during which some or no employment-related income accrues. Each of these periods should be identified, account being taken of all jobs performed, including casual or simultaneous employment. The main situations should be classified into broad categories relevant to the measurement of employment-related welfare (or hardship). *(See paragraphs 45 to 47 of the draft resolution.)*

Periodicity of data collection

237. With a view to improving the relevance of data on income from employment, countries should collect, compile and publish regular data on income from paid and self-employment, where feasible once a year. *(See paragraph 48 of the draft resolution.)*

Items of data collection

238. In order to measure the income-generating capacity of different jobs or economic activities, income from employment should be related to the job variables (regular/casual/part-time, etc.) and measured within the framework of employment duration (in terms of weeks, months, etc.) and working time.

239. Data on income derived from each job, distinguished by status in employment, should be collected together with the length of the reference period to which the income refers, the duration of work in hours, days, months, etc., where relevant, for each person involved in each job.

240. Data should be collected on the components, as well as on the aggregate, of income from paid and self-employment, along the following lines:

- for income from paid employment:
 - total cash remuneration
 - total imputed value of remuneration in kind
 - profit-related pay
 - employment-related social security benefits
 - received from employer
 - received from social security and insurance schemes or the State

- for income from self-employment:
 - gross output
 - operating expenses
 - gross profit
 - consumption of fixed capital/depreciation
 - net profit or share of profit
 - employment-related social security benefits

These proposals are reflected in paragraphs 60 to 62 of the draft resolution.

Analytical measures

241. Statistics of average income from paid and self-employment should be compiled per time unit. The time unit in which average income from employment is expressed, e.g. hour, day, week or month, should depend mainly on how meaningful the figures would be in the country concerned, and also on the

feasibility of collection of the required data. Whenever possible, estimates of average annual income should be compiled. **(See para. 68 of the draft resolution.)**

242. Where possible, estimates of hourly income should also be developed, based on the annual estimates of income and on the corresponding volume of employment expressed in terms of hours of work and work duration. **(See para. 69 of the draft resolution.)**

Classification of data

243. Statistics of income from employment should be classified by economic activity, status in employment and occupation or occupational group, at least according to the major groups and categories of the latest version of the relevant international classifications.

244. Disaggregations of the main categories of status in employment may be relevant, in order to distinguish specific groups such as owners-managers of corporations and other self-employed persons, employers and own-account workers, permanent employees from temporary, seasonal or casual employees, etc. **(Cf. paragraphs 63-64 of the draft resolution)**

245. In order to measure the relationship between employment and income, account should be taken of all jobs performed during the reference year, including simultaneous jobs. The employment experience of individuals during the reference period may be assessed through the identification of spells of full- and part-time employment, unemployment and inactivity. At the aggregate level, the main situations may be regrouped into broad categories relevant to the measurement of employment-related welfare, such as:

- full year/full-time employment
- part-year/part-time employment with no unemployment
 - for voluntary reasons
 - for involuntary reasons
- part-year employment with some unemployment

- mainly unemployment
 - with some employment
 - without employment
- mainly inactive with some employment

(Cf. paragraph 65 of the draft resolution)

246. Further variables may be introduced, such as length of employment, spells and duration of unemployment, etc. Such classifications would permit the identification of the main types of employment-related hardship, the severity of employment problems and the degree of labour force attachment of persons experiencing employment-related hardship (ILO, 1992).

247. Other important variables for further subclassifications of data on income from paid and self-employment are sex, age, level of education, level of skill, seniority in job or activity. ***(Cf. paragraphs 66-67 of the draft resolution)***

248. Where conceptual or measurement difficulties preclude the computation of the value of certain non-wage benefits, such as new forms of non-pecuniary compensation schemes, pension and health entitlements, etc., efforts should be made to conduct surveys of employee benefits, in such a way as to provide data on the incidence and characteristics of the benefits received by persons in paid employment (e.g. participation requirements, employers' and employees' contributions, when required, health care deductibles, pension benefit formulas, paid leave provisions, etc.). Data should be available by size of establishment, various employer and employee characteristics (major industry groups, full-time and part-time employment, union/nonunion status, etc.). ***(See para. 70 of the draft resolution.)***

249. Efforts should also be made to collect similar information on social security and other employment-related benefits which accrue to self-employed persons. ***(See para. 71 of the draft resolution.)***

250. The authority and the relevance of statistics on income from paid and self-employment will be increased if they can be fitted into broader statistical systems (such as the National Accounts) and if they

can be used in connection with the most widely used demographic and economic time series. Countries should therefore endeavour to develop consistent time series showing income dynamics and vulnerable groups of persons (van der Laan & Tuinen). ***(See para. 78 of the draft resolution.)***

Measurement of the imputed contribution of unpaid family workers

251. Unpaid contributing family workers generally have jobs whose occupational contents and level of responsibilities differ from that of the enterprise head (e.g. a spouse providing secretarial services to a practitioner or nieces and nephews giving a hand to a take-away restaurant). The measurement of their participation based solely on time allocation would not adequately reflect their contribution to the enterprise income.

252. A more appropriate approach would consist in applying a wage-based valuation method, whereby an imputed measure of "income" is assigned to unpaid work based on the market rates for equivalent occupations, taking into account the volume of employment put into the activity (in hours, days, weeks, etc.).

253. Several variants may be calculated, using for instance the minimum wage of certain suitable occupations, or the average wage, by gender and occupation or sector, of substitute workers. A choice should also be made between the allocation of "gross" or "net" wages. From the standpoint of the enterprise head, "gross" or "extra gross" wages⁸ (the latter including employers' social security contributions) seem more relevant, as it corresponds to a foregone expense, i.e. the saving made on the hiring of an employee. From the unpaid household member viewpoint, wages "net" of taxes and social security contributions appear more suitable since unpaid labour does not generate social security or income tax flows. ***This approach is reflected in paragraphs 72 to 74 of the draft resolution.***

Comparability of data on income from paid and self-employment

⁸ Term borrowed from *Measures of unrecorded economic activities in fourteen countries* (Luisella Goldschmidt-Clermont and Elisabetta Pagnossin-Aligisakis), Human Development Report Office Occasional Papers, August 1995.

254. The statistical series compiled on income from paid and self-employment may be influenced by changes over time in eligibility rules and entitlements to different wage and non-wage benefits. From one period to another, employers and governments may change their policies for the provision of services. As the coverage of social security and insurance schemes expand, new schemes may be introduced and existing ones adjusted to cover additional groups of workers, in particular casual, seasonal and part-time workers as well as the self-employed. The share of employers' participation in the provision of employment-related social security benefits to employees may vary. National tax authorities may introduce (or eliminate) income tax relief on profit-sharing pay and assimilated schemes, which has a bearing on the trend and level of benefits received. Where relevant, published statistics of income from employment should be accompanied by information reflecting significant changes.

255. To facilitate the analysis of the data, especially at the international level, the reports on the results of surveys on income from employment should provide information on the various types of schemes and plans covering persons in paid and self-employment, in particular on the national financing of statutory social security schemes and the coverage of benefits. ***This proposal is reflected in paragraph 77 of the draft resolution.***

Data dissemination

256. Statistics of average income from paid and self-employment should be compiled and published regularly, at least once a year, together with information on the quality and relevance of the statistics. Detailed descriptions of the concepts and methods used in the compilation of statistics on income from paid and self-employment should be published by the responsible statistical office. In particular, the descriptions should mention the nature and types of payments and benefits included in each of the four major groups of components of income from paid employment, the types of employment-related benefits received by self-employed persons, the source(s) of data and the methodology used in collecting and compiling the statistics on income from paid and self-employment. ***(See para. 75 of the draft resolution).***

257. In line with Article 4 of the Labour Statistics Convention, which protects the confidentiality of information relating to individuals, households, employers, etc., the statistics of income from employment

should be published and made available in such a way that the disclosure of any information relating to individual statistical units such as a person or a household enterprise is not possible. **(See para. 76 of the draft resolution).**

258. Countries which have made studies on the level and composition of income from paid and self-employment should communicate their results to the International Labour Office in order to facilitate international comparisons and interpretation of the statistics. **(See para. 79 of the draft resolution).**

259. The credibility and the relevance of statistics on income from paid and self-employment will be increased if they can be fitted into broader statistical systems (such as the national accounts or labour accounts) and if they can be used in connection with the most widely used demographic and economic time series. Countries should therefore endeavour to develop consistent time series showing income dynamics and revealing vulnerable groups of persons.

Further action

260. A number of issues have been raised in this report, on which proposals have not been made. They include, in particular, details related to evaluation methods, types of questions to be used in labour force and other household surveys, harmonization of the statistics compiled from different sources and by different bodies, etc. It is proposed that the International Labour Office should prepare a manual on statistics of income from paid and self-employment to provide more detailed technical guidelines on the contents of this resolution and related issues and to promote the application of the guidelines. A series of field tests and pilot surveys should be carried out on the basis of which the proposed manual should be prepared. **These proposals are reflected in paragraphs 80 to 82 of the draft resolution.**

DRAFT RESOLUTION CONCERNING THE MEASUREMENT OF INCOME FROM EMPLOYMENT

The Sixteenth International Conference of Labour Statisticians,

Having been convened at Geneva by the Governing Body of the International Labour Office and having met from 6 to 15 October 1998,

Recalling the resolution concerning an integrated system of wages statistics and the resolution concerning household income and expenditure surveys, adopted by the Twelfth International Conference of Labour Statisticians (1973),

Recalling paragraphs 23 and 24 of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment (resolution I), adopted by the Thirteenth Conference (1982),

Observing that the existing international standards on income statistics do not provide adequate guidelines on the statistical definition and measurement of the full income accruing to persons in paid employment,

Observing that there are no international guidelines on the measurement of income from self-employment,

Recognising further that international guidelines on the measurement of income from paid and self-employment will promote the development of these statistics along sound lines and improve their international comparability,

Adopts this day of October 1998 the following resolution:

Objectives

1. Each country should aim at supplementing its programmes of statistics on employment, unemployment, underemployment and wages with statistics that provide insight into the income derived from employment, for the purpose of (a) analysing the income-generating capacity of different economic activities and (b) identifying the number and characteristics of persons who are unable to maintain their economic well-being on the basis of the employment opportunities available to them.
2. A programme of statistics on income from employment should provide for the needs of various users. It should provide information required in economic analysis where the focus is on the identification

and creation of productive economic activities, and should contribute to the design, implementation and assessment of employment promotion policies which aim at creating and developing employment that provide adequate income. Statistics of income from employment should contribute to the development of the analysis of the informal sector for employment and income generation and the measurement of underemployment. The programme of statistics should also be useful to the analysis of the labour force situation in relation to the increased flexibility of the labour market and the structural changes resulting from this flexibility, in particular through the provision of data on the relationship between income from employment and atypical or non-standard forms of employment. It should provide data on the changes in employment patterns and remuneration practices which have taken place in industrialized, transition and developing countries. Statistics of income from employment may be used for planning, implementing and evaluating social and economic policies, for assessing the impact of specific policies such as assistance to agricultural workers and access of particular groups of workers such as women and rural-urban migrants to the labour market. Statistics on the level of income from paid and self-employment should be used as an input in the assessment of the consumption capacity of workers and their level of employment-related welfare. Data on the structure and distribution of income from employment may also be used in connection with the adjustment of income taxes and social security contributions and the redistribution of income and social security benefits. They should contribute to the compilation of labour and national accounts.

3. In order to fulfil the above objectives, comprehensive, detailed and reliable statistics should, as far as possible, be compiled on (i) the characteristics of paid and self-employment jobs, (ii) the components and amounts of income generated by these jobs, (iii) the corresponding volume of labour input and (iv) the socio-economic characteristics of persons holding paid and self-employment jobs.

4. In order to enhance their comparability and usefulness, statistics of income from employment should, as far as possible, be compatible with other related economic and social statistics and with national accounts as regards the definitions, classifications and reference periods used, where relevant, by regrouping the components of income from paid and self-employment.

Concepts and definitions

Income from employment

5. Income from employment consists of the receipts, in cash, in kind or in services, which accrue to individuals, for themselves or in respect of their family members, either as a direct result of their involvement in paid or self-employment jobs or by virtue of their employment status. Income from employment excludes income derived from other sources such as property, social assistance, transfers, etc., not related to employment.

6. For definitional and measurement purposes, the concept of income from paid employment should be distinguished from the concept of income from self-employment.

7. The statistics of income from employment should cover all persons employed, as defined in the resolution concerning the economically active population, employment, unemployment and underemployment, adopted by the Thirteenth ICLS (1982). Where feasible, they should also cover working children and youth below the specified minimum age limit adopted for measuring the economically active population. The measurement of income from employment should relate, separately, to "persons with a paid employment job" and to "persons with a self-employment job", as further defined in the most recent version of the International Classification of Status in Employment (ICSE).

8. Where relevant, statistics of income from employment may cover the unemployed and the population not economically active who derive an income by virtue of their former employment status.

Income from paid employment

9. Income from paid employment consists of all receipts and benefits in cash, kind or services, which accrue, over a given reference period, to persons in paid employment, for themselves or in respect of their family members, by virtue of their involvement in paid employment jobs. Such receipts and benefits may be paid by the employer, social security or insurance schemes or the State, in so far as they are derived by virtue of the employment status.

10. Income from paid employment should cover all categories of persons in all forms of paid employment, including persons with regular, casual, short-term, intermittent and seasonal jobs, as well as apprentices and trainees, who are classified as being "employees", as defined in the most recent International Classification of Status in Employment (ICSE).

11. Notwithstanding the classification of particular categories of workers, such as owner-managers of corporations and quasi-corporations, outworkers, contractors, etc. in paid or self-employment for the purposes of classification of the economically active population by status in employment, the income which accrues to these workers may be similar to that accruing to other categories of persons in paid employment. For the purposes of measurement of income from employment, the income accruing to these workers should be measured according to the guidelines formulated for the measurement of income from paid employment.

12. Income from paid employment should include: total cash remuneration; the value of remuneration in kind and services; profit-related pay; and employment-related social security benefits received either directly from the employer or from social security and insurance schemes or the State.

(I) Total cash remuneration covers:

(i) Direct wages and salaries in cash for time worked and work done, including all incentive, shift and premium pay (e.g. for responsibility, dirt, danger, work at night, weekend and other unsocial hours);

cost-of-living, housing, transport language and similar allowances; hardship, mobility, non-resident, expatriation, repatriation, post-adjustment and similar allowances; contractual and non-obligatory regular bonuses and premiums: tips and commissions (with and without a retainer); payments for odd jobs and duties and casual work. They also include fees and salaries of managerial staff; remuneration of trainees and apprentices; and other components of direct wages and salaries.

(ii) Remuneration for time not worked comprises: annual vacation and other paid leave; public holidays and other recognized holidays; temporary halt or slow-down of production, short-time working; other time off granted with pay (e.g. for personal and family reasons, civic duties, union responsibilities, training and education); paid sick leave (where not regarded as social security benefit); severance and termination pay (where not regarded as social security benefit).

(iii) Cash bonuses and gratuities include: all bonuses and gratuities, whether contractual or non-compulsory bonuses and premiums, year-end and seasonal bonuses (13th, 14th or 15th month's salary, additional vacation pay, etc.); exceptional payments for innovative ideas or work methods; and similar ad-hoc payments

II Remuneration in kind and services includes: traditional payments such as food, drink, fuel, clothing, footwear, etc.; the imputed rental value of free or subsidized housing; petrol and/or mileage allowance or the imputed value of free or subsidized similar benefits; the imputed value of business vehicles for employees' private use, telephone, electricity and similar utilities; free or subsidized transport to and from work and free car parking; union, association and club fees; nurseries, creches, etc. for employees' children; low or zero-interest loans, subsidized mortgages, etc.; the value of output from employer's process of production⁹; as well as the value of other payments in kind, including flexible benefits and other compensation packages for employees.

III Profit-related pay comprises: traditional profit-sharing bonuses; current receipts from profit-related schemes, participation, savings-related share option schemes and similar schemes; the initial market value of shares distributed to employees; other profit-related receipts.

IV Gross employment-related social security benefits (i.e. before deduction of employees' contributions to the relevant schemes) include:

(i) Current receipts from employer: i.e. family, dependants and similar allowances; educational allowances; payments in respect of absence from work due to sickness, maternity, occupational injury or disease, etc. (which compensate, in part or in full, for loss of earnings); payments in respect of temporary or partial lay-off or unemployment (which compensate, in part or in full, for loss of earnings);

⁹ *In so far as the provision of this type of benefits is in line with the recommendations contained in ILO Protection of Wages Convention, 1949 (No. 95).*

severance, termination and redundancy pay (where not considered as remuneration for time not worked); as well as compensation for medical expenditure, provision of free health care (homes, clinics, health services, etc.) and other social security payments received from employer.

(ii) Current employment-related social security benefits received from social security and insurance schemes or the State: i.e. family, dependants, educational and similar allowances; payments in respect of absence from work due to sickness, maternity, occupational injury or disease, etc. (which compensate, in part or in full, for loss of earnings); payments in respect of temporary or partial lay-off or unemployment (which compensate, in part or in full, for loss of earnings); severance, termination and redundancy pay (where not regarded as remuneration for time not worked); as well as compensation for medical expenditure, provision of free health care (homes, clinics, health services, etc.) and other social security and assimilated payments for which the employment status is a condition of receipt.

(iii) Current social security benefits received by former employees by virtue of their previous employment status: i.e. unemployment compensation; occupational and retirement pensions and assimilated benefits.

13. Income from paid employment should be recorded "gross", i.e. before any deductions in respect of employees' direct taxes, contributions to social security and pension schemes, life insurance premiums, union dues or other obligations. Net income from paid employment may be derived by deducting direct taxes and employees's own contributions to pension funds and social security, insurance and similar funds.

14. Income from paid employment excludes income derived from other forms of activity and other sources, such as income from self-employment, property income in the form of interest, dividends, income attributed to private insurance policy holders, rents and other forms of property income, as well as annuities, remittances, gifts, social assistance, etc. It also excludes:

- family allowances and other social security benefits or assistance (e.g. foodstamps, government or community housing, free health care assistance, etc.), when paid by the social security schemes or the State without regard to the employment status (e.g. under universal schemes with or without means tests);
- indemnities or allowances in cash and in kind paid by the employer purely to cover the employees' cost of work-incurred expenditures (e.g. tools, equipment, clothing or footwear used exclusively or mainly at work, special housing and meals necessitated by exceptional working conditions, reimbursement of business travel and accommodation expenses, medical examinations or health checks required because of the nature of the work, etc.). However, when indemnities take the form of cash payments over and above the reimbursement of expenses incurred by employees, such payments should be considered as income from paid employment;
- employers' contributions to social security funds, insurance or other institutional units responsible for social insurance schemes.

Income from self-employment

15. Income from self-employment is defined as the income which accrues, over a given reference period, to self-employed persons, for themselves or in respect of their family members, by virtue of their involvement in self-employment jobs.

16. For purposes of measurement of income from self-employment, the self-employed are defined as the sole owners, or joint owners, of the unincorporated household enterprises in which they work, excluding those unincorporated enterprises that are classified as quasi-corporations, according to the definition contained in the System of National Accounts (SNA, 1993).

17. Notwithstanding the classification of particular categories of workers, such as outworkers, contractors, franchisees, domestic workers, etc. in paid or self-employment for the purposes of classification in the economically active population by status in employment, the income which accrues to these workers may be similar to that accruing to other persons in self-employment, as defined above. For the purposes of measurement of income from employment, the income accruing to these groups of workers should be measured according to the guidelines formulated for the measurement of income from self-employment.

18. Income from self-employment consists of:

- (a) the profit (or the share of profit) which accrues to the self-employed, and
- (b) the receipt of gross employment-related social security benefits accruing to self-employed persons through schemes recognizing the status in employment as a specific condition for membership.

19. The gross profit (or the share of profit) of unincorporated household enterprises is equivalent to gross mixed income as defined in the System of National Accounts. It corresponds to the value of gross output reduced by operating expenses, where:

- the value of gross output may be defined as the value of all goods and services produced for the market as well as for own final use. Market output corresponds to the value of goods and services sold, bartered or provided free of charge or at reduced prices as payments in kind to hired labour; production for own final use includes the value of goods and services consumed by the household or retained for use in future production; and
- operating expenses comprise three types of business expenditure (a) intermediate consumption, (b) compensation of employees payable and (c) taxes on production payable, minus subsidies received, if any, as defined in the SNA.

20. In principle, profit (or mixed income) should be recorded net of consumption of fixed capital, i.e. after deduction of the value of consumption of productive assets (i.e. structures, machinery and equipment, cultivated assets used to produce other products, etc.).

21. Where the self-employed run their enterprises independently from other partners and contributing family members, with or without employees, the profit corresponds to both the income generated by the enterprise and the entrepreneur's individual income from self-employment. Where the self-employed run their enterprises in partnership, the profit represents a joint income and income from self-employment should correspond to the share of income accruing to each partner.

22. Employment-related social security benefits accruing to the self-employed comprise those benefits which are paid through schemes organized by social security, insurance institutions or the State, which recognize the status in employment as a specific condition for membership. They may include all or some of the benefits identified in para. 12.IV (ii) and (iii) above, under the concept of income from paid employment.

23. The measure of net profit (or net share of profit) and employment-related social security benefits constitutes gross income from self-employment. Net income from self-employment may be derived by deducting, where relevant, the self-employed's personal direct taxes and contributions to pension funds and social security or insurance funds.

24. Income from self-employment excludes income derived from other forms of activity and other sources, such as income from paid employment, property income in the form of interest, dividends, income attributed to private insurance policy holders, rents and other forms of property income, as well as annuities, remittances, gifts, social assistance, etc.. It also excludes family allowances and other social security benefits or assistance (e.g. foodstamps, governments or community housing, free health care assistance, etc.) paid by social security schemes or the State without regard to the employment status (e.g. under universal schemes with or without means tests).

Measurement issues related to income from paid and self-employment

Evaluation of benefits in kind received by persons in paid employment

25. For purposes of the measurement of income from paid employment, benefits in kind should be valued in terms of the income accruing to the persons in paid employment. Their evaluation on the basis of retail market prices generally provides a reasonable estimate of that value. When provided free, the value of income in kind is given by the full value of the goods and services in question. When provided at reduced prices, the value of income in kind is given by the difference between the full value and the amount paid by the recipient.

Treatment of employees' occupational expenditure

26. Despite the fact that employees may incur specific expenses associated with working, which counterbalance part of the wages and benefits received, income from paid employment should be recorded gross of employees' occupational expenditure.

Operational approach to the measurement of income from self-employment

27. In view of the heterogeneity of the self-employed population and the complexity of measurement of net income of unincorporated enterprises, the measurement of income from self-employment should be phased into national programmes of statistics over an extended period of time. In the initial phase, countries should endeavour to identify and measure the income accruing to two groups of self-employed workers:

(a) The first group consists of self-employed persons operating their enterprises with little or negligible capital input, who produce goods and services in a similar way as paid employees (such as those engaged in crafts or services, whether in the formal or in the informal sector). The income they receive is mostly a return to their labour input and gross mixed income of the enterprise is a close estimate of net mixed income.

(b) The second group consists of self-employed persons whose activities involve an identifiable amount of capital for the production and generation of income (such as professional workers in the formal sector or workshops in the informal sector). In this case, efforts should be made to quantify the amount of capital used for generating the income and to derive net mixed income. For this purpose, data on the consumption of productive assets (i.e. structures, machinery or equipment, cultivated assets such as trees or animals used to produce other products such as fruit or dairy products, etc.) should, in principle, be collected. Consumption of productive assets may be valued through an estimate of depreciation, according to the business accounting rules in force in each country, or according to the methods contained in the System of National Accounts. Due account should also be taken of the source of data and data collection methods. Where it is not possible to obtain reliable data on consumption of fixed capital from the self-employed, net income from self-employment may have to be derived by means of analytical methods.

Choice of method for recording income from self-employment

28. The choice of an accounting technique to measure income from self-employment should take into account the circumstances in which the self-employed operate their business and the measurement objective. Two major techniques can be used:

(i) Accruals accounting, which measures the profit earned during the reference period, by taking into account receipts and expenses relevant to that period, irrespective of whether or not they have actually been received or defrayed. This technique measures the profitability or economic performance of the

enterprise and as such, could be favoured when the objective is to measure the income-generating capacity of self-employment activities. It is also the approach favoured by the SNA.

(ii) The cash-flow technique, which measures actual cash received (including the value of production for own use) and paid out (including the value of production given out free or at reduced prices) during the reference period. This technique provides a better indicator of the amounts of income actually available to the self-employed to meet living expenses. Where data on income from employment are furnished by the self-employed themselves in the absence of business accounts, it is generally easier for them to provide a simple summary of cash received and paid in the assessment period (i.e. gross receipts minus expenditure).

29. These different techniques may produce different results. In determining the method used to record income from self-employment, consideration should be given to the procedures recommended by national tax authorities, the sources of data and the methods of data collection.

Evaluation of the self-employed's production for own use

30. Production for own use or consumption should be valued in terms of the basic prices of similar products sold on the market or at their cost of production if no suitable basic prices are available.

Treatment of self-employment losses

31. Self-employment activities may, over a given reference period, produce a financial loss instead of income or profit. Losses should be reflected in the measurement of income from self-employment and evaluated as negative income.

Statistical units

32. Two basic statistical units are relevant to the measurement of income from paid and self-employment, depending on the objective pursued: the job and the individual person.

33. For the measurement of the income-generating capacity of different economic activities, the *job*, as defined in the most recent version of the ICSE, is the basic entity on which information is to be collected and analyzed. Jobs can be "paid employment jobs" and "self-employment jobs", which can be characterized by industry, occupation and employment category (paid or self-employment), coded at the most detailed level of national or international classifications. In cases where a job is jointly performed by several individuals (as in the case of unincorporated household enterprises), or when it involves several occupations (as in a farm household enterprise), all activities involved should be considered as part of one single job, classified according to its main characteristics. When compiling the corresponding employment data, all labour input from the different contributing members should be taken into account.

34. When the measurement objective is the employment-related welfare of the population concerned, the desirable unit is the *individual person*. The individual is also relevant when analysing the relationship between employment-related income and educational attainment, seniority in employment, work duration, etc. An individual may be engaged in a single job, have multiple jobs in paid or self-employment, or own and operate more than one unincorporated enterprise, simultaneously or consecutively within a given reference period. From the individual's standpoint, income from employment corresponds to the sum of all incomes accruing from all jobs.

Reference period

35. In measuring income from paid and self-employment, account should be taken of the seasonal variations which affect the receipt of income, the fluctuations in work intensity of individuals, and the possible combination of multiple activities and periods of activity and inactivity of the population concerned. For this purpose, income from paid and self-employment should be measured over a long reference period, such as a full year.

36. For data collection purposes, shorter reference periods, such as a month or a quarter, may be used. Different activities and jobs may require different reference periods, such as a month for regular full-time paid employment, complemented by data on additional annual receipts, or a crop season in agricultural self-employment. For analytical purposes, data on income from employment referring to short reference periods should be aggregated to develop a single standard unit of time, such as the year.

Data requirements

37. For measuring the income-generating capacity of different jobs, there should be consistency between the data on employment in a given job and the data on income generated by that job. Data should therefore be collected on (i) the characteristics of the job (industry, occupation, employment category, type of enterprise (individual enterprise, partnership, corporation, etc.) and employment size, (ii) the volume of labour input (duration of employment and time worked by all contributing persons) and (iii) the amount of income generated by that job.

38. In order to analyze the relationship between employment and welfare of individuals, data are needed for each person (i) separately on each main and secondary job carried out during the reference period, (ii) the income derived from each of these jobs, (iii) the socio-economic characteristics of individuals (age, sex, education and skill level, etc.) and (iv) any spells of unemployment or inactivity that an individual may have experienced during the given reference period.

Measurement of volume of employment

39. One of the requirements of the measurement of income from employment is that the income generated by a job be related to the volume of employment which has gone into that job. Income and employment data should therefore refer, or be convertible, to the same reference period.

40. For each job, the volume of employment should be assessed in terms of work duration, expressed in number of hours, days, weeks, etc. during which the activity has been carried out. Where the activity is carried out by several contributing family workers and income is the result of a joint labour input (e.g. in household enterprises), efforts should be made to measure the share of hours, days, weeks, etc. worked by each member.

41. At the individual level, income from employment should be measured for each job carried out during the reference period, whether in paid or self-employment, together with the corresponding labour input in each activity. This requires linking the income received to the work experience of the person over the given reference period.

Measurement of hours of work

42. The measurement of hours of work of employees is governed by the resolution concerning statistics of hours of work adopted by the 10th ICLS in 1962 and may be expressed in terms of *normal* hours of work, hours *actually worked* and *hours paid for*. Where data on income and hours of work are derived from labour force sample surveys and other household surveys, hours of work may also be expressed in terms of *usual* hours of work.

43. In the absence of international guidelines on the measurement of hours of work of the self-employed, the measurement of their hours of work should be extensive enough to cover not only the hours during which the self-employed are directly performing the functions of their trade or profession, but also the time spent on all related or complementary activities at the workplace and outside the workplace (such as seeking business or waiting for customers, keeping records, maintaining equipment or being available for business). Where relevant, clear guidelines should be provided on how to measure hours of work, taking into account the particularities of self-employment activities, in the light of national circumstances.

44. Notwithstanding the definitional issue, hours of work should be identified for each job separately, and at the level of multiple jobholders, total hours of work should equal the total number of hours worked at all paid and/or self-employment jobs.

Measurement of work duration

45. The measurement of work duration is particularly important to study the relationship between employment and economic welfare, and in particular between full-time and part-time, part-year, casual and intermittent employment and low income.

46. For each job considered, days or weeks worked should refer to the total labour input which has gone into the job during the reference period. Where this refers to the time spent by several household members on the same activity, work duration should also refer to the time worked by all persons concerned.

47. At the individual level, the assessment of employment-related welfare requires linking the employment status of individuals to their work experience over the reference period. During a one-year reference period, individuals may combine periods of employment, unemployment and economic inactivity during which some or no employment-related income accrues. Each of these periods should be identified, account being taken of all jobs performed, including casual or simultaneous employment. The main situations may be classified into broad categories relevant to the measurement of employment-related welfare (or hardship).

Periodicity of data collection

48. With a view to improving the relevance of data on income from employment, countries should regularly collect, compile and publish statistics of income from paid and self-employment. Where feasible, data on income from paid and self-employment should be collected, compiled and published once a year.

Data sources

49. The collection of data on income from paid and self-employment should be integrated into the regular national statistical programmes.

50. The data collection programme should preferably be based on a household survey approach, with individual household members as statistical units.

51. Enhanced labour force surveys constitute an essential source of data on the income-generating capacity of jobs and on the labour market activities of individuals. Additional variables and appropriate questions accompanied by detailed instructions addressed to all individuals, including those not employed at the survey date, may, in principle, cover nearly all income during a given period, including those employment-related benefits received from sources other than the employer and derived by virtue of the employment status (e.g. received from social security or insurance schemes or the State). Income data should be linked to each person's educational and other characteristics, for each activity and

occupation, in order to establish the link between income and type of occupation, type of contract, skill level, duration of employment and unemployment, seniority in trade or occupation.

52. Household budget and household income and expenditure surveys are particularly suited to collect data on all types of income, including income components in cash, in kind and in services and income deductions. Special care should be taken in such surveys to improve the relationship between income and employment. In particular, information on income from paid and self-employment should be collected in detail in respect of each activity performed or job held by each household member, together with the corresponding volume of employment in terms of hours of work and work duration.

53. In order to improve the quality and relevance of income-related questions in labour force and other household surveys, efforts should be made to elaborate questions aiming at, in particular:

- collecting income data directly from the persons concerned and avoiding the use of proxy respondents in such questions;
- obtaining disaggregated data on the components of income from employment and linking income to work duration in each job and for each individual member covered by the survey;
- reducing recall errors and capturing the seasonal characteristics of certain jobs through various solutions, such as conducting repeated surveys or surveys with a sample spread over the year and a shorter reference period such as a quarter or a season; using the month-to-month recall approach to obtain information on each of the 12 months of the reference period; fixing data collection at a time which coincides with the collection of income data for income tax and social security purposes, etc.;

54. Establishment surveys can also serve as a basis for the collection of data on those components of income from paid employment received directly from the employer. For the purpose of measurement of income from employment, the coverage of traditional establishment surveys should be extended, or specially designed surveys should be carried out (i) to cover small establishments, own account workers and household enterprises, and (ii) to include and identify separately all categories of persons in paid employment, and in particular, managerial employees, part-year, part-time and where possible casual and intermittent workers, together with their related volume of employment. Structural surveys of earnings, which enable a cohort of employees to be followed overtime and information to be collected on income levels and trends according to detailed employees' characteristics (sex, age, occupation, conditions of employment, etc.) are the best suited of establishment surveys for the compilation of data on income from paid employment.

55. The information collected in establishment surveys could be supplemented by data drawn from other sources, such as tax and social security records. Where this is the case, the money value of social security benefits should relate to the same set of employees for whom total remuneration data have been collected from the establishments.

56. Other sources of data may be considered, including administrative records (such as income tax and social security records), informal sector surveys (according to the guidelines contained in the ILO resolution concerning statistics of employment in the informal sector), agricultural surveys, surveys of small economic units and population censuses.

57. In order to palliate the handicaps suffered by field surveys in general, related to the reluctance of interviewed persons to provide income data, the difficulty in quantifying non-monetary income, the relatively heavy workload for the statistical agencies and the risk of inaccurate responses, extra care should be taken in the preparatory phase, i.e. in the conception of appropriate definitions and guidelines, drafting of directives and training of officers. In particular, data on income from paid employment should be collected from the income earner him/herself. At a subsequent stage, special attention should be paid to the analysis and interpretation of the resulting income data and total and item non-response should be partly compensated through adjustment procedures.

58. The choice of the appropriate source of data should be based on the results of a cost-benefit analysis, taking into account factors such as the desired accuracy and details required from the results, the availability of different sources, the existence and design of labour force or other household surveys, the feasibility of adding new topics to these surveys or of launching separate surveys.

59. A combination of several sources, such as field or establishment surveys and administrative records, may be used to promote the collection of data on income from employment, to compare and evaluate the quality of data from each source, to match individual records and to conduct quality control studies.

Data compilation

60. In order to measure the income-generating capacity of different jobs or economic activities, income from employment should be related to the job variables (regular/casual, full or part-time, etc.) and measured within the framework of employment duration and working time.

61. Data on income derived from each job, distinguished by status in employment, should be collected together with the length of the reference period to which the income refers, the duration of work in hours, days, months, etc., where relevant, for each person involved in each job.

62. Data should be collected on the components, as well as on the aggregate, of income from paid and self-employment, along the following lines:

- Gross income from paid employment:
 - total cash remuneration
 - total imputed value of remuneration in kind
 - profit-related pay

- employment-related social security benefits
 - received from employer
 - received from social security and insurance schemes of the State
- Gross income from self-employment:
 - gross output
 - operating expenses
 - gross profit
 - consumption of fixed capital/depreciation
 - net profit (or share of profit)
 - employment-related social security benefits

Data classification

63. Statistics of income from employment should be classified by economic activity, status in employment and occupation or occupational group, at least according to the major groups and categories of the most recent version of the relevant international classifications.

64. Disaggregations of the main status in employment categories may be relevant, in order to distinguish specific groups such as owners-managers of corporations and other self-employed persons, employers and own-account workers, permanent employees from temporary, seasonal or casual employees, etc.

65. In order to measure the relationship between employment and income, account should be taken of all activities performed during the reference year, including simultaneous jobs. The employment experience of individuals during the reference period may be assessed through the identification of spells of full- and part-time employment, unemployment and inactivity. At the aggregate level, the main situations may be regrouped into broad categories relevant to the measurement of employment-related welfare, such as:

- full year/full-time employment
- part-year/part-time employment with no unemployment
 - for voluntary reasons
 - for involuntary reasons
- part-year employment with some unemployment
- mainly unemployment
 - with some employment
 - without employment
- mainly inactive with some employment

66. Further variables may be introduced, such as length of employment, spells and duration of unemployment, etc. Such classifications would permit to identify the main types of employment-related hardship, the severity of employment problems and the degree of labour force attachment of persons experiencing economic hardship.

67. Other important variables for further subclassifications of data on income from paid and self-employment are sex, age, level of education, level of skill, seniority in job or activity.

Analytical measures

68. Statistics of average income from paid and self-employment should be compiled per time unit. The time unit in which average income from employment is expressed, e.g. hour, day, week or month, should depend mainly on how meaningful the figures would be in the country concerned and on the feasibility of data collection. Where possible, estimates of average annual income from paid and self-employment should be compiled.

69. Where feasible, estimates of hourly income from paid and self-employment should also be developed, based on the annual estimates of income and on the corresponding volume of employment expressed in terms of hours of work and work duration.

Complementary approach to non-measurable benefits

70. In view of, on the one hand, the importance generally attached to the growth of forms of compensation schemes offering current and differed entitlements to various benefits to persons in paid employment (e.g. pensions and health plans, life insurance, flexible benefits and the like), and, on the other hand, the measurement difficulties inherent to the assessment of the value of such entitlements, efforts should be made to conduct surveys of employee benefits, in such a way as to provide data on the incidence and characteristics of the benefits received by persons in paid employment (e.g. participation requirements, employers' and employees' contributions, when required, health care deductibles, pension benefit formulas, paid leave provisions, number of beneficiaries). Data should be compiled and published by size of establishment and various employer and employee characteristics (major industry groups, full-time and part-time employment, union/nonunion status, etc.).

71. Where relevant, efforts should be made to collect, compile and publish similar information on social security and other employment-related benefits which accrue to self-employed persons.

Measurement of the imputed contribution of unpaid family workers

72. In household enterprises, and more generally in self-employment activities, activities may be jointly performed by several members of the household without formal or individualized earnings or

income. In that case, the profit or mixed income derived by the self-employed head of the enterprise also rewards the participation of contributing family workers (as defined in the most recent version of ICSE) who participate to the economic activity with varying durations and intensity of work and at different levels of responsibility. Where it is felt desirable to assess the contribution of these contributing family workers to the economic development of household enterprises, it may be relevant to measure the imputed income of this category of workers.

73. Unpaid contributing family workers generally have jobs whose occupational contents and level of responsibilities differ from that of the owner or partners of the enterprise. The measurement of their participation involves (i) the measurement of the volume of employment put into the activity (in terms of hours, days, weeks, etc.) and (ii) the imputation of an income value to unpaid work. This imputed value can be based on the market rates for equivalent occupations.

74. Several variants may be calculated, using for instance the minimum wage of certain suitable occupations, or the average wage, by gender and occupation or sector, of substitute workers. Wages may be allocated "gross" or "net". Imputed gross wages (where relevant, including the employer's imputed contributions to social security and similar schemes) can provide an indication of the expense foregone by the head of the household enterprise, while imputed wages net of taxes and social security contributions appear more suitable since unpaid labour does not generate social security or income tax flows.

Data dissemination

75. Statistics of average income from paid and self-employment should be compiled and published regularly, where possible once a year, together with information on the quality and relevance of the statistics. Detailed descriptions of the concepts and methods used in the compilation of statistics on income from paid and self-employment should be published by the responsible statistical office. In particular, the descriptions should mention the nature and types of payments and benefits included in each of the four major groups of components of income from paid employment, the types of employment-related benefits received by self-employed persons, the source(s) of data and the methodology used in collecting and compiling the statistics on income from paid and self-employment.

76. In accordance with Article 4 of the Labour Statistics Convention No. 160 (1985) which protects the confidentiality of information relating to individuals, households, employers, etc., the statistics of income from employment should be published and made available in such a way that the disclosure of any information relating to individual statistical units such as a person or a household enterprise is not possible.

77. To facilitate the analysis of the statistical series compiled on income from paid and self-employment, over time at the national level, and at the international level, the reports on the results of

surveys on income from employment should provide information on the various types of schemes and plans covering persons in paid and self-employment, in particular on the financing of statutory social security schemes and the coverage of benefits.

78. The credibility and the relevance of statistics on income from paid and self-employment will be increased if they can be fitted into broader statistical systems (such as the national accounts or labour accounts) and if they can be used in connection with the most widely used demographic and economic time series. Countries should therefore endeavour to develop consistent time series showing income dynamics and revealing vulnerable groups of persons.

79. Countries which have made studies on the level and composition of income from paid and self-employment should communicate their results to the International Labour Office in order to facilitate international comparisons and interpretation of the statistics.

Further action

80. In view of the complexity of the measurement of income from paid and self-employment, special efforts should be made to improve the use of existing sources of data and to enhance surveys in order to increase response rates and obtain the required information as accurately as possible.

81. The International Labour Office should follow the national developments in collecting and compiling statistics of income from paid and self-employment, carry out a series of field tests and pilot surveys where relevant, disseminate and evaluate information about the lessons learnt from national experiences, and prepare a manual to provide technical guidelines on the contents of this resolution.

82. The International Labour Office should cooperate, as far as possible, with countries in the development of statistics of income from paid and self-employment in providing technical assistance and training.

ILO CONVENTION No. 95 (1949)
Convention concerning the Protection of Wages¹⁰

.....

Article 1

In this Convention, the term wages means remuneration or earnings, however designated or calculated, capable of being expressed in terms of money and fixed by mutual agreement or by national laws or regulations, which are payable in virtue of a written or unwritten contract of employment by an employer to an employed person for work done or to be done or for services rendered or to be rendered.

.....

Article 3

1. Wages payable in money shall be paid only in legal tender, and payment in the form of promissory notes, vouchers or coupons, or in any other form alleged to represent legal tender, shall be prohibited.
2. The competent authority may permit or prescribe the payment of wages by bank cheque or postal cheque or money order in cases in which payment in this manner is customary or is necessary because of special circumstances, or where a collective agreement or arbitration award so provides, or, where not so provided, with the consent of the worker concerned.

Article 4

1. National laws or regulations, collective agreements or arbitration awards may authorise the partial payment of wages in the form of allowances in kind in industries or occupations in which payment in the form of such allowances is customary or desirable because of the nature of the industry or occupation concerned; the payment of wages in the form of liquor of high alcoholic content or of noxious drugs shall not be permitted in any circumstances.
2. In cases in which partial payment of wages in the form of allowances in kind is authorised, appropriate measures shall be taken to ensure that--
 - (a) such allowances are appropriate for the personal use and benefit of the worker and his family; and
 - (b) the value attributed to such allowances is fair and reasonable.

¹⁰ Date of coming into force: 24 September 1952.

BIBLIOGRAPHY

- ABS, 1997. *Labour Force, Australia* (annual), ABS catalogue No. 6203.0, Australian Bureau of Statistics, Canberra
- Beccaria, L.A. 1996. *Report on the use of household surveys in Latin America as a source of data on income from employment*, Buenos Aires, Report prepared for the ILO, Sep.
- Berkeley Hill. *Farm Incomes, Wealth and Agricultural Policy*, 1996, in "Perspectives on Europe, Contemporary Interdisciplinary Research"
- BLS, 1994. *Employee benefits in State and Local Governments, 1994*, May 1996, No. 2477, and *Employee Benefits in Medium and Large Private Establishments, 1993*, November 1994, No. 2456, Bureau of Labor Statistics, US Department of Labor
- Eardley, T.; Corden, AS. 1996. *Self-employed earnings and income distribution: Problems of measurement*, Social Policy Reports, No. 5, University of York
- Coates, 1991. "Profit sharing today: Plans and provisions" in *Monthly Labor Review*, Vol. 114, No. 4 (Washington DC, Apr.)
- Boden, R.; Corden, A. 1994. *Measuring low incomes: Self-employment and family credit*, London, HMSO.
- Concialdi, P. 1987. Les revenus des travailleurs indépendants: les problèmes de mesure, Colloque européen sur le travail non salarié.
- Cordellier, C.; Missegue, N. 1996. *Economic discrepancies between self-employed workers and wage earners with a statistical attempt to compare their respective earnings*, Institut National de la Statistique et des Etudes Economiques, Paris; paper presented to the 24th General Conference of the International Association for Research on Income and Wealth, Lillehammer, Norway, Aug.
- FEER. *The Great Job Hunt and The Burden of Age*, in *Far Eastern Economic Review*, Hong Kong, Oct. 1997, published in "Problèmes économiques", La Documentation Française, No. 2557, February 1998
- Hill, B. 1996. *Farm incomes, wealth and agricultural policy*, Avebury, Aldershot.
- Hong Kong, 1996. *Report of Salaries and Employee Benefits Statistics, Managerial and Professional Employees (Excluding Top Management)*, Census and Statistics Department, Hong Kong
- IDS/US/Canada. *Income Data Services: IDS European Report* (various issues), United Kingdom; United States Department of Labor, Bureau of Labor Statistics: *Employee Benefits in Small Private Establishments* (various issues), Washington DC; Statistics Canada: *Estimates of Labour Income* (annual issues).
- ICSE-93. *Resolution concerning the International Classification of Status in Employment*, see ILO, 1993.
- IDS. 1996. *Linking pay to profits*, Income Data Services, IDS Study 603, June. See also *Profit-sharing and share options*, IDS Study 641, January 1998
- ILO. 1949. *Wages and payroll statistics*, Report prepared for the Seventh International Conference of Labour Statisticians (Geneva, 1949).
- . 1968. *Report of the Meeting of Experts on Statistics of Wages and Employee Income*, Geneva.
- . 1973. *Statistics of wages and employee income*, Report II, 12th ICLS (Geneva, 1973).
- . 1974. *Report of the 12th ICLS*, Geneva.

- . 1979. *An integrated system of wages statistics: A manual on methods*, Geneva.
 - . 1988a. *Trends in employment and labour incomes: Case studies on developing countries*, Geneva.
 - . 1988b. *Current international recommendations on labour statistics*, Geneva.
 - . 1990. *The promotion of self-employment*, Report VII, International Labour Conference, 77th Session, Geneva.
 - . 1992a. "Income from employment", Ch. III of *General report*, 15th ICLS, Geneva.
 - . 1992b. *Surveys of economically active population, employment, unemployment and underemployment: An ILO manual on concepts and methods*, Geneva.
 - . 1993. *Report of the conference*, 15th ICLS, Geneva.
 - . 1995. *Labour Market crisis in Ukrainian industry: The 1995 ULFS*, Standing, G. and Zsoldos, L.: Labour Market Papers, No. 12, Geneva.
 - . 1996. *World Employment 1996-97: National policies in a global context*, Geneva.
 - . 1997a. *Income from employment: Concept and measurement*, Report II, Meeting of Experts on Labour Statistics, Geneva, Oct.
 - . 1997b. See Beccaria, L.A. 1996; SERC, 1996; Wingfield Digby, P.K., 1996; and Income from employment: Review of national practices (MELS/1997/D.II.4.) and Employee benefits - National practices (MELS/1997/D.II.5), Geneva, Oct.
 - . 1997c. *Report of the Meeting of Experts on Labour Statistics (Geneva, Oct.): II - Income from employment (MELS/1997/R.)*.
 - . 1997d. *1997 Labour Overview*, in ILO News, Latin America and the Caribbean, Lima
 - . 1998. Report I to the 16th ICLS, Underemployment.
- ILO/EASTMAT. 1997. *Labour statistics based on administrative records: Guidelines on compilation and presentation*, Bangkok
- Meager et al. 1994. *Self-employment and the distribution of income*, Institute of Manpower Studies, Report 270. London.
- ORC. 1994. Organization Resources Counselors, Inc.: *ORC Survey of Compensation in Eastern Europe*, Spring 1994.
- SERC. 1996. *Report on income from employment: An Indian experience*, report prepared by the Socio-Economic Research Centre for the ILO, New Delhi.
- SNA, 1993. *System of National Accounts 1993*, prepared under the auspices of the Inter-Secretariat Working Group on National Accounts, Brussels/Luxembourg, New York, Paris, Washington DC.
- United Nations. 1989. *National Household Survey Capability Programme - Household income and expenditure surveys: A technical study*, New York.
- Van der Laan, P.; van Tuinen, H.K. *Increasing the relevance of income statistics: Experiences and plans in the Netherlands*, Statistics Netherlands, Nov.
- Weinstein, H.; Dietz, E. 1996. "Towards a working definition of compensation", in *Compensation and Working Conditions*, June, Bureau of Labor Statistics, Washington DC.

Wingfield Digby, P.K. 1996. *Measuring income from paid and self-employment in household surveys in Africa: The experience of the Ghana Living Standards Survey*, report prepared for the ILO, Sep.