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Economic Commission for Africa

International Research and Training Institute for the Advancement of Women

United Nations Statistical Office

Regional Workshop on Methods of Collecting and Analysing Statistics on Women in the Informal Sector and their Contribution to National Product Lusaka, 23-27 July 1990

Handbook on Compilation of Statistics on
Women in the Informal Sector in
Industry, Trade and Services in Africa

(working draft)

Santo Domingo and New York



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PREFACE

This draft Handbook is one of the main outputs of the statistics component of the project "Improving African Women's Role in the Informal Sector - Production and Management". This project has been developed and funded by the United Nations Development Programme (UNDP) in the framework of the Women-in-Development (WID) package of UNDP's fourth-regional programming cycle for sub-Saharan Africa. The project is a co-operative effort of various United Nations agencies comprising ECA, which is the executing agency, the Organisation of African Unity (OAU), the International Labour Office (ILO), the International Research and Training Institute for the Advancement of Women (INSTRAW), the Statistical Office of the United Nations Secretariat and the United Nations Development Fund for Women (UNIFEM), and four countries, Burkina Faso, Congo, the Gambia and Zambia. The project aims to make more effective the participation of African women in development by improving the productivity of their informal sector activities. It has immediate objectives for intervention in four areas, policy, statistics, training and credits in the four project countries.

The statistics component of the project is being implemented jointly by INSTRAW and the Statistical Office, and is designed to achieve the immediate objective of establishing techniques for the compilation and analysis of statistics on women's contribution to, and conditions of production in, the informal sector in Africa to assist policy makers.

The present draft Handbook has been prepared on the basis of case studies of available statistics in the four project countries, undertaken in 1988/89. The results of these studies are being distributed in a separate working paper and are used as illustrative material in the draft Handbook. The draft Handbook is now being circulated for review and comment to national statistical services, women's machineries, other concerned policy bodies at the national level and international organizations interested in the development of statistics on women and the informal sector. It will be reviewed in depth at two regional seminars in Africa in mid-1990, in Lusaka and Ouagadougou. In the course of this review process the Handbook will be further developed to reflect experience and possibilities in all of the African countries in this field.

The draft Handbook was prepared by Ms Lourdes Urdaneta de Ferrán as consultant to INSTRAW and the Statistical Office. Comments and further information on work in the African countries in this field are welcome. They should be sent to the Director, INSTRAW Liason Office, Room S-3094, United Nations, New York 10017, and the Director of the Statistical Office, United Nations, New York 10017.

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- 2. Quantitative information on women's participation and contribution to the national product, especially through their activities in the informal sector, is insufficiently covered in the statistical compilation and analysis regularly undertaken by national statistical systems. The problem of underenumeration of women's economic activity can be attributed to several factors, among which are the inadequate coverage in statistics of the informal sector in general and the emphasis hitherto placed on macrolevel rather than sectoral planning, which tends to restrict the availability of sex-disaggregated data.
- 3. The need to address the lack of information on the value of women's work is clearly expressed in the Nairobi Forward-looking Strategies for the Advancement of Women, which calls for the remunerated and unremunerated contributions of women to development to be recognized, and appropriate efforts made "to measure and reflect these contributions in national accounts and economic statistics and in (gross national product) GNP" (para. 120). The present draft Handbook is in part a response to this mandate and in part a response to the now well-recognized importance of the informal sector in many African countries.
- 4. The draft Handbook focusses on the quantification of women's remunerated and unremunerated work in the informal sector, covering activities in industry, trade and services. Following the International Standard Industrial Classification of All Economic Activities, the following activities are included:
 - Industry:

Mining and quarrying
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- 6. The use of these conventional sources of data for the compilation and analysis of statistics on women in the informal sector presents some limitations and also some advantages. On the one hand, the estimates obtained are greatly influenced by biases in the existing concepts and methods for enumerating the economic activities of women. On the other hand, this exercise leads to identification of gaps and shortcomings in the available data. The draft Handbook should therefore serve the dual purposes of acquainting users with the basic methods for assigning economic value to women's work in the informal sector, and of evaluating inadequacies in the data for measuring the full contribution of women to the economy.
- 7. The layout of the draft Handbook is as follows. Part One provides a general overview of the problem. Chapter I discusses the objectives and uses of statistics on the informal sector; chapter II presents basic statistical concepts concerning the informal sector and chapter III introduces an overview of the methods and sources for compiling the data and estimating the contribution of women to informal sector production.
- 8. Part Two presents in more detail technical methods for calculating women's contribution in the informal sector. Chapter IV discusses the potential statistical sources and how to use them. It reviews demographic and labour statistics, industrial, trade and services statistics and statistics on households. In view of the scarcity of statistics in the relevant areas, special consideration is given to the problem of incomplete information and how to overcome it.
- 9. Chapter V is concerned with how to calculate estimates of women's contribution based on the principles of national accounting and shows how such estimates can be prepared, what they imply and what sources can be used. As many of the sources are reviewed in chapter IV, the main focus here is with methods of calculation to be applied.
- 10. Following the review of sources and methods given in the two preceding chapters, chapter VI takes up the formal presentation of the results and estimates, that is, it presents examples of accounts and tables covering the participation of women in the labour force and their participation in income

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- 9. Chapter V is concerned with how to calculate estimates of women's contribution based on the principles of national accounting and shows how such estimates can be prepared, what they imply and what sources can be used. As many of the sources are reviewed in chapter IV, the main focus here is with methods of calculation to be applied.
- 10. Following the review of sources and methods given in the two preceding chapters, chapter VI takes up the formal presentation of the results and estimates, that is, it presents examples of accounts and tables covering the participation of women in the labour force and their participation in income

and output. This is done consistent with international statistical recommendations where applicable. In addition to these estimates, which are within the present recommendations of the International Labour Organization and the United Nations System of National Accounts, the draft Handbook proposes measurements of women's activity related to the function of homemaking. In connection with this it presents the concept of expanded national product.

- 11. The distinction between what is readily available from statistical authorities and what has to be estimated by the user of such data following the proposals in chapter VI is not as clear-cut as might appear. In some cases only simple tabulations will be available while in others, many of the tables shown in chapter VI already exist. Frequently, basic data will have been collected and all that will be needed are special cross-tabulations, but requests to statistical authorities for such special tabulations must be expressed clearly and in statistical terms. The tables presented in this chapter can serve as references for this purpose.
- 12. Chapter VII works out with concrete numerical examples the transformation of the basic data from the different sources described in chapters IV and V into the accounts and tables shown in chapter VI. Because the availability of sources and data in different places will vary, the numerical examples are assembled in several groups representing different scenarios of availability. These scenarios range from a situation with a reasonably satisfactory amount of useable information to situations where the scarcity of data is such that only very cursory estimates can be attempted.
- 13. The final part, References, lists books and papers that have been used in writing this draft Handbook and other sources that can be consulted for a deeper understanding of the subject. These cover a wide variety of methods and findings, which are not necessarily widely accepted.

Part One The Importance of the Informal Sector and How to Measure It

- I. OBJECTIVES AND USES OF STATISTICS ON THE INFORMAL SECTOR AND OF THE HANDBOOK
- 14. This draft Handbook has been prepared as a practical guide on how to produce statistics on women's contribution to development in the non-agricultural informal sector. It is part of the effort of "making women's labour statistically visible".
- 15. It is meant for the use of researchers interested in analyzing the relative position of women working in the informal sector, including analysts and statisticians working in research institutions, universities, women's organization and statistical offices.
- 16. As the subject is of a technical nature, that is, estimation of women's contribution to gross domestic product, using the draft Handbook requires familiarity with statistical data, though it does not call for any advanced, specialized knowledge in statistics. For some readers the draft Handbook might seem too elementary, with its step-by-step explanations of different classifications and sources; some others not used to handling data from censuses and labour force surveys may need to study the technical material at greater length. For users it offers a close look at what kind of data and indicators they can ask for.
- 17. The uses of the measurements taken up in the draft Handbook are many and serve the interests of women as well as those of the whole community. This is true of the data on women's participation in the labour force as well as of their contribution to the national product. The importance of the former has been recognized for some time and figures on it are more abundant. Interest in expressing women's economic activities in terms of national accounting is more recent, but it is no less important.
- 18. In fact, most government decisions concerning economic and social policy are linked in one way or another to employment, income and production. When a decision is needed, the existing situation usually is evaluated in the light of labour statistics and national accounting figures and the expected results are expressed in the same terms. Equally, private enterprises or whole industries, when they plead for or against certain government decisions, will usually argue in terms of employment and those enterprises' or industries' contribution to the national product. The situation is no different when it comes to defending the position of women, hence, the importance of employment data and of national accounts for women.
- 19. But again, as stated above, the usefulness of such data is not limited to women and women's organizations. Labour unions and management will find the data useful in wage negotiations and the labour market analyst will appreciate the insights it provides into job search and job quitting behaviour, the size and nature of the elasticities between labour supply and

demand, fluctuations in the labour market and the phenomenon of segmented labour markets. In this connection, it is widely assumed that the informal sector reacts to changes in labour legislation and other provisions affecting the cost of labour to the enterprise in ways quite different from enterprises in the formal sector.

- 20. Data on the pattern of changes in the absolute and relative participation of women in the labour force and the informal sector and on their role as a shock absorber in the ups and downs of business cycles will contribute to a deeper understanding of what happens during the different phases of the cycle.
- 21. For the market researcher, changes in the status of women are an early indicator of impending changes in consumption and spending patterns of the population.
- 22. The Handbook should also be useful for those organizations who intend to create statistics aimed at highlighting the economic contribution of women. This information is now very scarce but it can be produced without tremendous efforts just by using the available statistics in many cases. From the results and problems faced in the process of compiling these statistics, producers and even users of these statistics will be able to ask for improvements in the present methods of data collection, as well as more detailed classifications more adapted to women's situation and conditions of work. In this way future studies on the subject of women's economic participation will be more realistic.
- 23. The task envisaged is essentially to find adequate basic statistics and through appropriate techniques derive from them those aggregates that quantify the facts to be shown.
- 24. Most statistical offices are well aware of the importance of statistics on women and the strong demand for them. However, it may not always be apparent that such statistics serve not only the interests of women but are essential for the improvement of overall reliability of statistics and national accounts, as they focus on what has been a blind spot in economic statistics.
- 25. Women's share in product (or value added, also sometimes referred to as net output), is that part of output that has been produced by women. For example, if all agricultural products were produced by women and the net value of these products were, let us say, 60, while the total national product was 100, women's share in national product (assuming that women did not produce anything else outside agricultural products) would be 60 per cent. At the same time, one has to take into account the different circumstances existing in the formal and the informal sectors with respect to men's and women's participation.
- 26. The draft Handbook covers the non-agricultural informal sector. In order to be able to propose specific procedures for estimating the contribution of women within this sector, it is necessary to establish a

workable definition. Where different boundaries are adopted, the procedures must be adjusted accordingly. The definition used in the draft Handbook is based on experience in a number of countries using presently available data. It is defined as the sum of all productive units which employ none or very few regular salaried workers and women's contribution is measured as their participation in the labour force, income and output of the informal sector. It is restricted to the branches of economic activity listed in para. 4 above. Professionals, even if they do not employ salaried employees, are in principle considered as outside of the informal sector.

- 27. The term informal is not inherent to any person, not even to any economic activity in particular; the concept of informality is related to the way the productive unit is organized and the way it is linked to the society. Consequently, a member of a household working without pay in the enterprise of another member of the same household -- where the enterprise employs regular salaried workers -- should be recorded in the formal sector of the economy because the productive unit in which they work belongs to the formal sector.²
- 28. The concept of informal sector has been discussed for many years and the most diverse definitions have been devised for it, many of which have even been used in research and analysis. As these are frequently referred to, it is necessary to take note of them here and show how far they can or cannot be used to estimate national aggregates for the informal sector from generally available statistics.
- 29. Most of the definitions offered are based on the idea of the dualistic nature of the urban economy in developing countries and have been labelled in terms such as organized vs. unorganized sectors and traditional vs. modern sectors. These definitions reflect different approaches in the social sciences and their weakness for measuring women's participation is that they cannot be adequately quantified. Moreover, the difficulty in applying them in measurement is not from scarcity of data, which exists independently of the kind of classification, but due to their highly subjective nature.
- 30. In other words, any figures attached to these definitions contain flaws not due to the weakness of statistical sources, but to the looseness of the definition. For this reason much checking and comparisons are recommended in

¹ For agriculture it would be convenient to establish a classification system more closely related to its specific characteristics, which would present subsistence agriculture as a special category in same way as the informal sector in other economic activities.

² In case they were working in both formal and informal enterprises, he or she would be assigned to the category considered main occupation.

³ See 24 and 30 in the References.

relation to figures labelled "unorganized" or "traditional" or other loosely defined categories.

31. A still more complex situation may arise when figures are labelled "informal sector" but the data are based on a concrete definition but one which incorporates heterogeneous elements. They may, for example, include all small-size establishments, where "size" is defined by the amount of capital invested, or by the type of machinery used, or by the fact that they are not registered in certain official records (which varies according to countries' laws) or by the number of persons employed where the numbers vary between one and ten and may or may not include the owner of the enterprise and unpaid family workers. Much work is involved in clarifying such situations but this is unavoidable in order to reduce them to a clear-cut statistical aggregate.

II. MEASUREMENT AND DEFINITION OF THE INFORMAL SECTOR -- BASIC STATISTICAL CONCEPTS

- 32. Statistical systems are based on sets of concepts, classifications and rules which, even though they evolve slowly through time in response to new requirements, must be followed by those who wish to take advantage of them to analyse a given situation in statistical terms. The purpose of this Handbook is to describe the different ways of compiling statistical aggregates that best show the participation of women in the informal sector and the sources and methods that can be used to do so. It is not the intention to address conceptual issues; these are taken up only as far as necessary for the handling of sources and a better understanding of methods of compilation.
- 33. The subject of the Handbook is the measurement of the contribution of women to development. Sometimes this topic is conceived as "participation in development". Sometimes it is discussed in terms of "contribution to the national product" or then again as "participation in national income". The word contribution suggests giving something, while participation can be understood either as giving or receiving: participating in the input or participating in the output or the use of the output, which, when seen from the viewpoint of the user, can also be called expenditure. In national accounting the distinction between the one and the other is somewhat blurred—at the macroeconomic level, input equals output. But at lower levels of aggregation this relationship is more complex.
- 34. To illustrate this relationship in national accounting terms requires use of the terminology and some basic concepts of national accounts. National accounting is based on principles similar to those used in business accounting with some basic differences, especially its scope and its sources of data. While business accounting aims at measuring production, profits and net worth of the business enterprise, national accounts are intended to measure, among other phenomena, production, income and wealth for the nation as a whole or for a sector within it. For concepts and definitions in national accounting, the present Handbook refers to the United Nations System of National Accounts (SNA). The United Nations System of National Accounts recommends the rules to be followed in measuring economic aggregates such as production, income, consumption, savings, capital formation and wealth. The basic publications of the system present a general outline of the accounting system and discuss the concepts and definitions (10,13). They do not go into problems of how those concepts should be calculated in practice; this is left to handbooks on specific questions, such as accounting for production, government accounts (1) and the present one. The basic SNA publication does, however, contain a special chapter on national accounting in developing countries in view of the fact that the economic and political questions to be solved in these countries as well as their economic structure and their statistical possibilities differ from those of the developed countries.
- 35. Participation can be measured either as participation in the labour force (which is an input of labour) or participation in the outcome of

work, that is, in the product and income (of the nation, region or sector).

- 36. The two types of quantification are different in nature. The first consists of measuring the presence of women in the production process. This is a one-dimensional quantification: it represents a head count or the count of time spent on work. The units of measurement are persons or hours worked. The other type of quantification is more complex. It aims at measuring value added in production, which must be expressed in monetary units. For the informal sector, where there are no wages or salaries, the objective is to show the net income of own-account workers, either by collecting information directly on their income or gathering information on their outputs and deducting the inputs. Again, if no direct information on the value of outputs and inputs can be brought to light, the value must be calculated from figures of quantities and their corresponding market prices.
- 37. Participation in the labour force is essentially the number of women engaged in economic activities, or still better, the number of hours of work furnished by women in such activities. Moreover, the task is not to produce one global figure showing participation in a general way, but to provide details referring to where and how, which are necessary for analytical as well as for policy purposes. This is true for the national economy in its entirety, as well as the informal sector.
- 38. Participation in the labour force can be expressed either by the number of women in the labour force or by the percentage which they represent in the total number of economically active persons, both women and men. These data can be refined, if corresponding information is available, by showing them in terms of time worked.
- 39. Women's participation in income and product (and possibly expenditures) must be expressed in value terms. As mentioned above, in national accounting the total value of each of these three aggregates for the nation as a whole is equal by definition. They represent three different views of global economic activity, as illustrated in the following diagram:

I II III

National income	National product	National expenditure
Salaries Operating surplus redistributed as	Product of agriculture Product of mining Product of manufacture	Expenditures for current consumption
rents, profits and interest	Product of trade and services	Investment

40. The first column of the diagram shows the primary distribution of national income in salaries and operating surplus, which is redistributed among profits, rents and interest. In the informal sector there are no salaries and the totality of income is in the form of operating surplus. Notwithstanding the fact that it is due mainly to her (or his) physical and mental efforts, her (or his) income is considered operating surplus, because

the own-account worker is the entrepreneur of her (or his) enterprise. Due to this characteristic, in the chapters that follow no distinction is made between the "own-account worker" and "own-account productive unit". This is done exclusively for ease of exposition.

- 41. The expression "mixed income" is sometimes applied to those cases where the income represents in part a remuneration for work (work done by the owner of the enterprise in the process of production in addition to his role as an entrepreneur) and in part corresponds to operating surplus. This is a characteristic situation in the informal sector.
- 42. Women's share in income is the amount of income received by women, expressed as a fraction of total income received by both sexes. No problem arises as long as these measurements and comparisons are confined to the informal sector. But if the objective is to visualize the income received by women in the informal sector as part of total income received by women in the informal as well as the formal sector or even try to compare it with total national income for both sexes, there is a serious obstacle. It is impossible, at the present stage of statistical information, to determine what part of the operating surplus in the formal sector and in general what part of the income from property in that sector goes to women. Therefore, comparisons of that type will be incomplete.

- III. AN OVERVIEW OF METHODS FOR COMPILING INFORMAL SECTOR STATISTICS
- 43. Women's contribution to development can be conceived as their participation in the labour force or their contribution to the national product. The latter is from the statistical point of view a more involved task, but it reveals facts that otherwise would remain hidden. Both approaches are illustrated in the Handbook.
- 44. Measurement of participation in the labour force is usually based on demographic and labour statistics, industrial, trade and services statistics and statistics on households. The producers of these statistics are mostly national statistical services, but other institutions such as ministries, planning offices and universities are also potential producers which should not be disregarded.
- 45. In addition to the three types of statistics mentioned above, time-use studies provide information on an aspect of paramount importance not covered at all, or covered insufficiently by other types of statistics —the time spent in an activity. This is an important element: the same number of workers can contribute more or less to an activity depending on the number of hours they put in. This question has been raised in studies on the contribution of women. The significance of time-use studies is not only that they improve the accuracy of measurements, but in fact they add a new dimension to such measurements. Time-use surveys are also the pivotal element in estimates of homemaking activities.
- 46. It is hard to say which of the two, participation in the labour force or participation in income and product, is more important for an unbiased demonstration of the role of women in economic activity in the informal sector. The former measures the input of efforts, the latter the outcome. They are not necessarily proportional and both are needed for a true-to-life presentation.
- 47. These aggregates do not measure the same thing however. In fact, women's share in income and product falls short of their participation in the work force, because "equal pay for equal work" is still far from being a reality.
- 48. As to data, they will be more readily available on population and labour than on income and product. Demographic and labour data represent persons while data on income and product refer to flows expressed in monetary units (even though they may consist of flows of goods and services). For this reason, the former can be more easily subdivided by gender than the latter. Even in those cases where data on labour are given

⁴ To measure the contribution of women to the national product in terms of national accounting is not the same as to create a set of accounts on women's activities parallel to those which are used for the whole economy. This Handbook considers only the first task.

in hours worked (which is highly desirable) they are more easily amenable to gender-specific presentation than data from national accounts.

- 49. In discussing the sources and techniques of measurement of women's contribution to the labour force as well as their participation in the income and product of the informal sector, some of the sources serve both purposes.
- 50. There is no need to argue the importance of statements based on national accounts. Most government decisions concerning economic and social policy are linked in one way or another to employment, income and production.
- 51. It is also possible to consider establishing women's participation in expenditures, and in fact, although this is not done here, this approach is sometimes used as a complement in order to estimate output in the informal sector when no direct procedures are feasible.
- 52. In order to measure women's contribution to different activities, information must be collected not only for women but also for men in the corresponding activities and sectors.
- 53. As the development of these measurements is in its initial stage, the pool of experience on which to draw is not extensive. Many of the estimates that are being made in different countries are first steps in this direction. As always, first attempts in the statistical field are bound to be rough approximations, especially in such a little-known area as the informal sector. But this should not discourage those who are entering this special field of statistics. Through several revisions and by using the possibility of estimating similar aggregates from different sources and by different procedures, these estimates are bound to improve and become more refined.
- 54. It must be kept in mind that the degree of accuracy of estimates in the informal sector of the economy depends mostly on the sources used for estimating. These can be the accounting records actually kept by an enterprise working for the market, or a rough reckoning in the case of an enterprise working for the market without keeping proper accounting records, or finally simply assumptions and imputations for units which are not market oriented.
- 55. Therefore it is preferable to use the word "estimate" in order to dispel the impression that figures in these accounts are necessary as accurate as their counterparts in business accounting. They can be in some infrequent cases, but because of the sources they generally use, the "accounts" are statistical figures and represent approximations, hopefully the best approximations obtainable in given circumstances. As in other types of measurement, what can be considered an "acceptable" approximation can not be answered outside of its context: what is acceptably accurate for one purpose may be inadmissible for another. By the same token, the precision

needed in the case of a decision on some detail of a financial nature is not the same as when broad policy orientations are under consideration.

- 56. When estimates are undertaken for the first time, they will, by force of circumstances, have wide margins of uncertainty. This should not be a deterrent to undertaking estimates where they still do not exist, provided care is taken to explain the procedures used in their compilation.
- 57. Some systems on which the measurements are based are undergoing revisions which, when completed, might introduce changes in the statistical norms and rules which are applicable presently. Several of the possible changes are mentioned in the draft Handbook. Moreover, where present rules inhibit the possibility of doing justice to the participation of women, additional kinds of statistical measurement are suggested. Such additional measurements not only give a more realistic picture of the position of women in the economic process but in doing so, they also provide new insights into the working and potentialities of the whole economy.
- 58. The draft Handbook indicates the sources that can serve the compilation of estimates of accounts and how to transform data from them into aggregates reflecting women's standing in the work force, production and income. Experience shows that no one single source is sufficient for the measurements suggested here. Several sources must be used and the main task of this endeavour is to combine data from different sources, judge their reliability and compatibility and mould sometimes inconsistent sets of primary data into the aggregates looked for.
- 59. The review of sources and data is presented from the viewpoint of the user: what data should she (or he) be looking for, what is usually available, what exactly the data mean and how they can or cannot be used, what data can be combined with what other data and how missing information can be substituted by different kinds of information which is available. In order to do that efficiently some knowledge of the underlying principles is essential and these are briefly outlined in the initial chapters. As there exist an abundant literature on these subjects, the explanations given here have been kept to the minimum.
- 60. In presenting definitions and classifications based on existing systems, the explanations given in the source publications are used where appropriate.
- 61. The measurements presented here are based on the recommendations of the International Labour Organization for the economically active population (29) and on the System of National Accounts (SNA) of the United Nations (10) as far as national income and production are concerned. On questions of a demographic and social nature the draft Handbook follows the recommendations of the United Nations system in the various relevant fields. The classifications used are those of the International Standard Industrial Classification of All Economic Activities (ISIC), shown into annex below, and the International Standard Classification of Occupations (ISCO), also shown in the annex, as well as the International Classification of Status in Employment (ICSE) (contained in 14), and the International Standard

Classification of Education (ISCED) of the United Nations Educational, Scientific and Cultural Organization (UNESCO) (see also 14).

- 62. In addition to the presently accepted standard concepts, some measurements which bring out women's activities more faithfully are presented in the draft Handbook. They refer to expanded national product. At the present time GDP (gross domestic product), or GNP (gross national product), are the most frequently used economic aggregates that appear in reports of governments, international bodies and the press. As explained above, these do not include the activities of the homemaker and other members of the household for the satisfaction of the necessities of household members. A parallel aggregate called "expanded national product" does precisely that: it adds the estimated value of housework to the traditional national or domestic product.
- 63. Where this estimate has been done, the value of the new aggregate is between 20 and 25 percent higher than that of the traditional measure of product. Moreover, the participation of women in this product is substantially more significant. This by itself is important: it brings the estimate nearer to the real life situation. But in addition to showing the real participation of women in the satisfaction of national wants, it creates new possibilities for projections and planning, shows the growth rates of the economy in a more realistic fashion and (by way of harmonization of production and employment statistics) throws light on labour force potential. It is not, however, the purpose of this Handbook to show how household activities of this type can be estimated in terms parallel to those used in the estimation of these same activities when market oriented. There are several publications on this subject listed in the References.
- 64. The difficulties that beset measurements of the economic activity of women in the informal sector arise in almost all stages of the statistical process, including planning, sampling, design of questionnaires, field work, collection of data, coding, tabulation and publication. However, the present Handbook treats mainly already existing primary statistics. That implies that it does not discuss the problems that arise in connection with rendering faithfully the position of women which are present at the early stages of production of statistical data. Only passing reference is made to biases and other problems which arise in these stages. The purpose of such observations is that whenever there are possibilities of improvement at these stages, it should be brought to the attention of those who can implement them.
- 65. The Handbook shows how the results obtained can be organized and presented, that is, what accounts and tables should be prepared. Some of the tables may already exist, possibly not exactly in the format needed, other tables can be prepared by the statistical authorities upon demand and the tables suggested by the Handbook should be very useful to show what exactly is required. In this connection what has been said about adherence to established standards should be remembered. IT is certainly of interest to present the results in a form familiar to all users of statistics, i.e. to use established norms and standards as far as they go; but where they do not go far enough, where they are insufficient to show the phenomena it is desired to illustrate, new types of presentation should be employed.

66. Because the objective is to examine the situation of women in the light of the over-all situation, that is that of both sexes and that prevailing in the informal sector compared with those in other sectors, it will be convenient, in addition to the results prepared according to the Handbook, to select those statistics and aggregates that can be of use in these comparisons.

Part Two Methods of Compilation

IV. STATISTICAL SOURCES

- 67. Once the questions that must be settled concerning the informal sector have been determined, the next step is to find out how and where to find the necessary information. In other words it is necessary to determine what statistics on that particular subject do exist. To find a ready-made catalogue of existing statistics would of course facilitate the task, but such a catalogue, such as the "List of principal statistical series available" of the United Kingdom, will be found only in the statistically more advanced countries. So the task will be to contact statistical offices and through personal visits find out what is available. There is no reason to be discouraged if the first reaction is that "on that subject there is nothing available". In fact some information is surely available and sometimes even more than expected, once the question is posed adequately. It is true, however, that there exist great differences in what is available in different places on different types of statistics and more often than not the volume of data on women is a good indicator of the degree of development of a statistical institution.
- 68. Occasionally one may discover that there exists a database related to the subject. The expression database is being used to refer to a collection of data on a particular subject which are stored in a way that allows easy access and retrieval of information. The figures contained in a database usually are numbers referring to specific details, like the number of women with given levels of educational attainment, or working in government, or in specific industries, the number of female-headed households, etc., with indications of coverage (nationwide or for a given region) and the date for which they were obtained. From such particular data global estimates on the informal sector can be constructed. Where such a database on women's problems already exists, much of the work has already been done, provided, and this is a decisive provision, the database is organized in a way that shows and explains each of its series in sufficient detail to permit a decision as to the compatibility of different series and figures among different fields of statistics. Where no such specialized compilation of data exists, they will have to be assembled.
- 69. This chapter discusses the sources and methods of measurement of women's contribution to the labour force and chapter V centres on their participation in the income and product of the informal sector. Some of the sources serve both purposes. They are reviewed in detail in this chapter and referred to briefly in the next.
- 70. As was said in Part One, it is hard to say which of the two, participation in the labour force or participation in income and product, is more important for an unbiased demonstration of the role of women in

⁵ Data bases have been spreading in recent years, especially using microcomputers. See for example the United Nations Women's Indicators and Statistics Data Base for microcomputers (Wistat).

economic activity in the informal sector. The former measures the input of efforts, the latter the outcome.

- 71. Women's participation in the labour force can be measured mainly by three types of statistics:
 - Demographic and labour statistics,
 - Industrial, trade and service statistics, and
 - Statistics on households.

The main providers for these statistics are statistical offices but other institutions such as ministries, planning offices and universities are potential producers which should not be disregarded.

- 72. In addition to the three types of statistics mentioned above, time-use studies provide information on an aspect of paramount importance, not covered at all or covered insufficiently by other types of statistics. The time spent in an activity is an important element: the same number of workers can contribute more or less to an activity depending on the number of hours they put in. This question has been raised in studies on the contribution of women. The significance of time-use studies is not only that they improve the accuracy of measurements, but in fact they add a new dimension to such measurements. Time-use surveys are the pivotal element in estimates of housekeeping activities.
- 73. Before reviewing the sources it is convenient to say something about relative advantages and disadvantages of each one. The explanations for each of the sources will show their respective advantages and disadvantages as building blocks for aggregates depicting the participation of women in development. Censuses have the advantage of global coverage: they are needed to blow up detailed information originating in samples. Whether the details obtained from samples can or cannot be blown up to national dimensions will depend on how representative they are, that is, how well the sample has been designed.
- 74. When it comes to household and establishment surveys, each has its own advantages and disadvantages, which the United Nations Handbook on Household Surveys presents as follows (7):

"In comparing data from household surveys with data from establishment surveys a number of considerations should be taken into account. While household surveys basically measure the activity status of individuals, establishment surveys count the number of occupied jobs as listed in the payrolls. Hence, in establishment surveys persons with a job but temporarily absent without pay are excluded, while multiple-job holders are counted more than once. Household surveys cover in principle the entire population of interest, including the economically inactive, with establishment surveys generally restricted to employees, who form only a segment of the economically active population. The missing segments include the unemployed, family workers in household enterprises and farms, the self-employed and, in general, all non-wage and salary earners. Moreover, establishment surveys are usually limited to establishments larger than a certain minimum size. The fact that the economically inactive can be reached through household surveys gives those surveys a unique advantage for the measurement of the potential labour

force..... In establishment surveys... the items of information are, in general limited to those available in the records and payroll lists. On the other hand, establishment surveys can provide more accurate employment data in the organized sector of the economy than household surveys..... Moreover, because in establishment surveys the results are based on records and payroll lists, they are subject to lower degrees of measurement errors than the results of household surveys based on interviews and subject to various kinds of response error."

- 75. If all establishment surveys were limited to medium and big enterprises only, their usefulness for the present purpose would be almost nil, though they still could be useful to find average levels of remuneration in different activities which, if nothing else is available, could serve as indicators of the income of own-account workers. In addition, it must be said that more recently some of these surveys do include small-size and even own-account units in specific industries.
- 76. While some sources may have certain advantages over others, these differences must be taken into account when combining them. For example: It is generally accepted that surveys, because they can examine given situations in more depth, produce more accurate figures in certain areas than censuses. This is true, but the very fact that they are more precise must be taken into consideration when the two sources are being combined. Experience has shown that supplementary questions on employment in the same survey questionnaire often result in classifying a person in a different way than would be the case if these additional questions would not have been addressed to the person. Many persons, especially women, who by the first question would be classified as not economically active, turn out to be active on the grounds of their answers to the supplementary questions. There is, consequently, a difference between the numbers of economically active persons given in statistics with only one question on this subject (as in most censuses) and those given in surveys which had the opportunity of examining the same subject in more detail using additional questions. If such two sources are being used concurrently, this difference must be taken into consideration by estimating, to take the example given above, in how many cases supplementary questions made the status of a person change from the category of "not economically active" to "economically active". An examination of the survey files (filled-in formats of the survey) can be used for this purpose. Some statistical offices might arrange for a systematic examination of this question, which will demonstrate the effectiveness of supplementary questions used in the questionnaire.

A. Demographic and labour statistics

1. Main sources

- 77. As to sources, it is usual to distinguish between censuses, surveys, reports and administrative records. Even though they might focus on the same general subject, the angle at which they view it is different and for the purpose of the Handbook, can, as far as corresponding data can be obtained, be used in combination. The most important for this purpose are:
 - population and housing censuses,
 - demographic and social surveys,
 - employment and unemployment reports,
 - labour force surveys and
 - records of social security and other administrative files.

(a) Population and housing censuses

- 78. Population censuses are usually taken together with housing censuses and among their essential features are individual enumeration (which permits cross-classifications of different characteristics) and universality within a territory. Because of the huge volume of work which they represent, censuses cannot enter into many details and are carried out at infrequent intervals. In order to fill the void between consecutive censuses, and remedy to some extent the paucity of detail, intercensal sample inquiries are used, not only to update the census', but also to produce data on details which the census did not supply. With regard to the first, one can readily use the data prepared by the statistical authorities; in the second case, certain checks are in place. The census provides bench-mark data to evaluate the reasonableness of the over-all survey results, however, combining the two sets of data is justified only in those cases where the same or at least compatible definitions and concepts were used in both. This is also true of information from reports on a specific question or locality and data from administrative sources that might be used in connection with censuses. It is therefore essential to examine the compatibility before blowing them up to the national scale. Admittedly, this is not easy when there do not exist additional materials for comparisons which would facilitate a decision; and very rough approximations will be -- at least at the start - the only possibility.
- 79. Censuses are usually published, but frequently with a considerable time lag. Main results and summaries for the nation as a whole are usually published first, followed by publications with more details. But even before publication, data can be obtained in some preliminary form, as far as they have been tabulated. Again, not all the data collected are being tabulated and it is worthwhile to inquire about this with the statistical authorities.

⁶ Individual enumeration does not preclude the use of sampling techniques for obtaining data on specific characteristics, provided that the sample design is consistent with the size of the area for which the data are to be tabulated and the degree of detail in the cross-tabulations to be made (see 14).

Where comprehensive and complete civil registration systems exist, these can be used, in connection with migration statistics, for population estimates.

- 80. The publication of census results is a costly business and costs increase the greater the number of tables. Budgets of statistical authorities are always short and topics which are considered of less interest are omitted from publications, even when data have been collected that could throw light on them. In most cases the question is not whether to omit a certain classification altogether, but what kinds of crossclassifications should be presented. This is a matter of crucial importance not only in the case of censuses but also surveys and all other kinds of statistical products. Its importance lies in the fact that most of the information needed for present purposes is revealed through crossclassifications; in this case, detailed cross-classifications by sex, status in employment and other economic and social characteristics.
- 81. Censuses are the most comprehensive of all statistical products and are the frame for most statistical data collection. Sample surveys are usually calculated on the basis of census results and blown up using census weights and figures. Special caution must be exercised in the use of data from sample surveys on aspects which the original design of the sample was not intended to cover in detail. In case of doubt it is advisable to consult the producer.
- 82. Population censuses show many different characteristics of the population, but it is especially the socio-economic characteristics of the population and the way they are presented in these censuses as well as in the other sources that is of primary concern here. The most important are:
 - activity status,
 - kind of economic activity,
 - status in employment,
 - occupation,
 - education and school enrolment,
 - time worked, and
 - wages and salaries.

These topics will be taken up in section 2 below followed by discussion of the their cross-classification.

(b) Demographic and social surveys

83. In order to bring census results up to date and fill in the details missed by censuses, demographic and social surveys are carried out based on samples in order to overcome the long delays that usually affect census results. Most of these surveys are based on households and we will take them up in the part corresponding to statistics on households.

(c) Labour force surveys

84. Because of their importance for the type of measurement we are dealing with, Labour Force Surveys must be mentioned separately. (See section C below.) Labour force surveys are probably the most frequent type of household sample surveys. They are used to bring up to date the census results, which usually are outdated, and to provide details on topics which the population census does not contain. They are one of the most important

sources on current problems of employment, unemployment and underemployment, and, in combination with censuses, the basic source for estimating women's participation in the labour force. Censuses are, however, not the only other source with which data from these surveys should be combined and compared, another source are the data from establishment surveys.

(d) Employment and unemployment reports

85. In addition to household surveys on the labour force many countries produce reports and surveys on employment and unemployment. These may be periodic reports or reports prepared and issued in response to special circumstances in the labour market. They summarize the employment/unemployment situation at a certain moment, either for the country as a whole or for a specific region or industry. Most frequently they use the same definitions and reference frames as censuses; in such cases their data can be incorporated without further elaboration into the worksheets proposed in the present Handbook on the general structure of employment. Where this is not the case it will be necessary to examine the existing difference and, as far as possible, convert the data to the system used in the main body of statistics. Usually such reports present data separately by sex. However, these reports are centred mostly on salaried employees and omit frequently those in the informal sector. Reports like these may originate in ministries of labour, manpower research units, employment bureaus or labour exchanges. It is also worthwhile to investigate whether labour unions keep any information on the subject that could be of use.

(e) Social Security records and other sources

- 86. Statistics or administrative records of social security may represent a valuable source provided they cover activities in the informal sector, though usually they do not. Or else they cover only part of these, either because own-account workers are excluded from social security by law, or because even though authorized by law, the interested persons prefer not to subscribe to Social Security. On the other hand, in developing countries social security usually covers only the capital city or some industrial cities. Almost always disaggregation by sex is available. This must be investigated in each case.
- 87. Welfare institutions keep records of their activity, which they sometimes sum up in statistical abstracts. Even if these are not published it might be profitable to have a look at them. They will be very informative concerning the situation of women in unstable employment at the lower end of the income distribution.
- 88. In addition to the sources mentioned above which represent either official statistics or administrative records, there are studies and research projects by universities, welfare institutions, foundations and associations (sometimes financed by international organizations), which are of relevance for the subject of this Handbook. As a rule all such projects should be consulted and, as far as results have been published, these should be examined with care. These studies use either already existing data (and might have unearthed often new or previously unusued sources) or collect basic data themselves. Such data collected for a special purpose are

frequently very pertinent and designed to fill gaps in existing information. They usually will be samples, often very small samples, and their results should not be accepted without a careful examination of their representativity and validity.

- 89. Studies of international organizations may be of two types: some of a general character intended to throw light on a broad aspect of general concern and others focusing on a project to be undertaken by, or financed by, an international organization. To the first group belongs the Living Standards Measurement Study organized by the World Bank and which covers in part the subject matter of the Handbook, although not much emphasis is given to sex. The second group consists of the preliminary and feasibility studies for development and other projects, which sometimes contain information that can be used for the present purpose. The degree to which women participate in the activities affected by the project is a significant parameter of such studies and also, though less frequently, an estimation of the repercussions such projects will have on the economic activity of women.
- 90. Many ministries produce statistics referring to their specific activities which are either published in special bulletins or kept for internal use. In some instances these statistics are being reproduced in the statistical publications of the central statistical organization, but frequently they are not. Ministries which often maintain statistics of this type are those of Labour, Industry, Education, Justice, Interior, Family, Youth and Social Affairs. Most ministries will have some statistics accessible to the enquirer. Another important institution for the present purpose is the Planning Office (or Ministry); in addition to the elaboration of already existing basic data, planning offices often collect their own data.
- 91. Statistics prepared by specialized ministries often go further than those of official publications. In as far as these statistics cover special fields (or special regions) they must be examined to determine whether they can be fitted into the general statistical framework used by the researcher. In most cases adjustments and adaptations will be necessary. The central problem is to find out how far that particular sample is representative of the universe of the estimates sought, and of course, whether they show data by sex. In case this last aspect is missing, but the data are otherwise valuable for the research, one should try to introduce the distribution by sex, taken from other sources.
 - 2. Social and economic characteristics enumerated in surveys and censuses
- 92. The main topics taken up by censuses and surveys which are relevant for the measurement of women's participation will now be considered. These, as has been said above, are: activity status, status in employment, occupation, industry, time worked, income and sometimes also sector of employment. They can be considered economic characteristics. There are, in addition, other

^{*} Sector of employment refers to whether an activity is carried out in the private or public sector. As no informal productive units exist in the public sector, this classification is not discussed here.

characteristics which, even though not economic by themselves, are relevant in estimating women's participation; the most important among them is educational attainment. (See tables 3, 4, 23-27).

- 93. Listing the characteristics which are essential for the present analysis, an important requirement have not been mentioned which is decisive: it is the cross-classification of all these characteristics with sex as well as with status in employment. Without it the task of estimating women's contribution could not be accomplished.
- 94. How much geographical detail is necessary, or to put it in terms of the person trying to use censuses and surveys for the measurement of women's participation, what detail is appropriate if geographical breakdowns are available? This will depend on how acute the differences are between different provinces or regions. Working with a multitude of small areas will enormously increase the cost but if there exists a demand for it and regional differences are substantial this would justify the extra work. In any case distinction between urban and rural regions is essential.

(a) Activity status

95. Tables on activity status show the number of men and women economically active and not economically active. The definition of economically active population given by ILO and followed by almost all national statistical offices is this:

"the economically active population comprises all persons of either sex who furnish the supply of labour for the production of economic goods and services as defined by the United Nations System of National Accounts and Balances during a specified time reference period. According to these systems, the production of economic goods and services includes all production and processing of primary products whether for the market, for barter or for own consumption, the production of all other goods and services for the market and in the case of households which produce such goods and services for the market, the corresponding production for own use."

- 96. This definition is based on a resolution of the Thirteenth Conference of Labour Statisticians in 1982 and differs from that in use in censuses taken in the 1980 round of censuses. It is highly recommended therefore to investigate the type of definition that has been used in the census that is being examined.
- 97. As a corollary, the population not economically active includes all persons who are not "economically active" as defined above. There is however an aspect that must be taken into account when working with these figures. For the measurement of the economically active population age limits are

The definitions and classifications given in this handbook follow the norms and standards recommended by international organizations for the use by national statistical authorities. Usually national norms follow these recommendations and where they deviate from them -- which is mostly due to special conditions existing in a country -- explanations are provided as to existing differences and how these can be overcome to revert to the international definitions.

usually set, while the population not economically active comprises all persons irrespective of age.

- 98. This is important for the present purpose. Because whenever the lower age limit has been fixed in a way that there is a substantial number of persons below that limit who are working, the corresponding statistics will underestimate the real number of persons economically active. Those who will be overlooked in this way, most frequently will be girls working as helpers in own-account activities. If there exist trustworthy studies on the situation of own-account workers and their family helpers and they show figures on the age and sex of unpaid family workers, these figures can be used to adjust census data.
- 99. The economically active population can be viewed in two different ways: the usually active population and the currently active population. Or, in the words of the ILO definition: the usually active population is measured in relation to a long reference period such as a year, and the currently active population, or equivalently, the labour force, is measured in relation to a short reference period such as one week or one day. National statistical offices usually use one or the other of the two measurements and they have different possible repercussions for the present analysis.
- 100. If the short reference period is used, women who work intermittently are liable in these statistics to be left out, at best from the employed population and at worst from the economically active population altogether. This is corroborated by the observed fact that statistics on the employment of women frequently show that the number of not economically active women increases in periods of cyclical down-swings, when one could reasonably expect on the contrary an increase of economically active -- even though unemployed -- women.
- 101. On the other hand, "the usually active population" is less indicative as it refers to only one -- that which the respondent conceives and remembers to be the main -- of the possibly numerous activities that s(he) might have performed during a certain number of weeks or days during the preceding twelve months or the preceding calendar year.
- 102. Nothing can be done to change or reform such figures once the census has been carried out. In this, the circumstances are similar to other traditional provisions in census and survey taking, that, without having the appearance of bias, do affect in a negative way the measurement of women's activities. It is useful to keep in mind such effects and, if considered important, to point them out when estimates based on them are published or reviewed.
- 103. The economically active population consists of those who are employed and the unemployed. Employment is sub-divided into "paid employment" and "self-employment". As self-employment is of special interest for the present analysis, it will be examined in more detail. A person in self-employment can be "at work" or "with an enterprise but not at work". Persons are considered "at work" who "during the reference period performed some work for profit or family gain in cash or in kind." Note the distinction between "profit" and "family gain". A woman working on own account would be considered as working for profit, whereas members of her family helping her

in her task without pay would be working for family gain. Both will be included in the numbers on employed population. (It will be seen later that when it comes to estimate incomes, the unpaid family workers do not receive any, precisely because they are unpaid and their contribution to family gain is included in the profit realized by the own-account worker.)

104. Persons "with an enterprise but not at work" are "those with an enterprise, which may be a business enterprise, a farm or a service undertaking, who were temporarily not at work during the reference period for any specific reason." This is a clause to be remembered, because in cases where such a business enterprise activity coexists with other activities, such as housekeeping, those persons, usually women, with an enterprise but temporarily not at work might easily be taken for not economically active.

105. One might wonder how to interpret the notion "some work" in the definition given above for persons classified as at work. In fact, this has been the subject of changes since the last round of population censuses. Presently the rule set down by ILO is: "For operational purposes the notion of "some work" may be interpreted as work for at least one hour." This is a broad interpretation and must be taken into consideration very carefully when applying it to the informal sector. There is also a special provision concerning unpaid family workers. It reads as follows:

"Unpaid family workers at work should be considered as in self-employment irrespective of the number of hours worked during the reference period. Countries which prefer for special reasons to set a minimum time criterion for the inclusion of unpaid family workers among the employed, should identify and separately classify those who worked less than the prescribed time."

106. The self-employment group as established by ILO comprises own-account workers, unpaid family workers, employers and members of producer's cooperatives. This makes it less homogeneous and so they should be separated into different sub-groups. Fortunately, almost all statistical authorities present separate figures for these categories, in view of the economic and social importance given to them. But it requieres special enquiries to obtain data for small enterprises, that is, the characteristics of employers and employees in enterprises having less than a specified number of employees. At present only a few labour force surveys have considered questions on this matter and census questionnaires include only what has been recommended by the international classifications.

107. There is still the question of economic activities performed by persons who are engaged mainly in kinds of activities which by ILO standards are not considered economic, such as students and especially homemakers. These latter will be considered in one of the following chapters. Here what should be done if both types of activity are performed by the same person is considered. In these cases preference is given to the former. The paragraph from the ILO resolution on which this classification is based states:

"Students, homemakers and others mostly engaged in non-economic activities during the reference period, who at the same time were in paid employment or self-employment as defined.... above, should be considered as employed on the same basis as other categories of employed persons and be identified separately where possible."

108. Finally, the ILO resolution presents the case of activities for own and household consumption. This would seem to depart from the general definition of what is and is not "economic". This is how it reads:

"Persons engaged in the production of economic goods and services for own and household consumption should be considered as in self-employment if such production comprises an important contribution to the total consumption of the household."

- 109. If taken at its face-value, this could be the loop-hole through which most homemaking activities of housewives would enter into the category of "economic" and they would hence be part of the economically active population. And what housewife does not make an important contribution to the consumption of the household?
- 110. Although it might seem to go beyond the definition of economically active and not economically active population, this clause in practice is not taken to be such a radical departure from established norms. Because statistics on economically active population must match those on economic production and up to the present the definition of production in the national accounts has not been extended to include the production of economic goods and services for own or household consumption whether they are or are not an important contribution to total household consumption (with the exception of such households which also produce such goods and services for the market).
- 111. So for the present that paragraph is not applied as far homemaking activities are concerned. It is however not void of significance and fits well into the concept of "expanded product" which it is expected will be taken up in the new version of the System of National Accounts. The concept of expanded national product and its significance for the measurement of women's contribution to the national product will be discussed later.
- 112. Women in the armed forces are considered part of the economically active population, but remain outside of the informal sector.
- 113. At the time this is being written it has not been decided whether "persons engaged in unpaid community and voluntary services" should be regarded as economically active or not in future international recommendations. There have been recommendations to consider them as not economically active, but some countries classify them as economically active. A considerable number of women is engaged in such activities and it is recommended to inquire in each case what the actual treatment has been.
- 114. Persons who receive income without being economically active, such as those who receive income from property or royalties or pensions from former activities, and those receiving public or private support are classified as not economically active.
- 115. When examining data on the labour force, attention must be paid to the age limits within which the count has been made. Usually a minimum age is stipulated and it differs from country to country. In as much as girls start working at lower ages than boys, under-reporting in their case is more

severe. A similar phenomenon presents itself at the other extreme of the age distribution. If there are more women than men in the upper age groups, as is sometimes the case, and assuming that there is no difference in the percentage of men and women who continue working even though past that limit, the upper age limit established in labour force statistics is bound to affect women more than men.

116. The activity status that has been examined up to now is the crucial element in deciding what women are part of the economically active population, that is, part of the national labour force. The characteristics that will be discussed now serve to determine their position within the labour force. If overall employment of women is considered without discriminating between the formal and the informal sector, their distribution by occupations and by industries shows a remarkable concentration in certain occupations and industries. The question is whether this is also true when the informal sector is being examined separately. (See tables 1, 5, 6.)

(b) Classification by kind of economic activity (industry)

117. It is not sufficient to establish the participation of women in a global form, their participation in different kinds of economic activity must also be shown. The system used internationally to classify activities and industries is the International Standard Industrial Classification (ISIC); most countries use this system or an adaptation of it, which, generally, is convertible to the ISIC. Censuses, surveys and other statistical compilations will use the ISIC for employment, production and other statistics where a sub-division by kind of economic activity or industry is of interest. The last available edition of ISIC is Revision 2; a new one, Revision 3, is being prepared. The pending revision might introduce changes some of which could be of relevance for the informal sector, such as the classification of recycling and of personal and household services. It will take some time until the revised version appears in statistical tabulations so for some time to come available data will be classified in accordance to ISIC Rev 2. But once the new revision is incorporated into the statistics of a country, the changes in classification must be taken into account when comparing figures for different years.

118. The system is divided into Major Divisions, Divisions, Major Groups and Groups. There are ten Major Divisions, as follows:

- 1. Agriculture, hunting, forestry and fishing
- 2. Mining and quarrying
- 3. Manufacturing
- 4. Electricity, gas and water
- 5. Construction
- 6. Wholesale and retail trade and restaurants and hotels
- 7. Transport, storage and communications
- 8. Financing, insurance, real estate and business services
- 9. Community, social and personal services
- 0. Activities not adequately defined.
- 119. The Major Divisions are the "one-digit" level of classification; the next lower level represents the two-digit level (Divisions); the Major

Groups are the three-digit level; and the groups the four-digit level. The lower the level, the more precise is the classification and for policy purposes one would wish to have a very detailed level of classification. But detailed subdividing of statistical data is costly and many census and surveys tabulate data at a level at which many details are lost. As the participation of women in economic activities varies greatly from one activity to the other and even in the same division from one sub-division to the other, the facts at low levels of classification are of interest. The reason for this is twofold: first in order to determine the kind of economic activity in which women are engaged with more precision and second to facilitate estimates of their earnings, which mostly will be based on average earnings in different activities. These averages will be more accurate if they refer to a narrowly defined group of activities. (See tables 7 and 18).

120. The need for detailed breakdowns varies between different divisions. Some of the activities are not even represented in the informal sector, for example "public administration and defense". And in other activities, details will be very important, as in Major Division 6, "wholesale and retail trade and restaurants and hotels" and in Major Division 9, "community, social and personal services". This last is a very heterogeneous group, comprising many dissimilar activities as can be seen by looking at the next lower level of classification, which contains the following six divisions:

- 91. Public administration and defense
- 92. Sanitary and similar services
- 93. Social and related community services
- 94. Recreational and cultural services
- 95. Personal and household services
- 96. International and other extra-territorial bodies
- 121. Even this level in most cases will not be sufficient to find an acceptable average level of earnings for the persons listed in it. A more detailed breakdown, to the three-digit or the four-digit level is needed.
- 122. The main criterion of ISIC for grouping units in one category is the similarity of output and input, and it does not take into account the way production is carried out, which is the distinguishing criterion between formal and informal productive units. The number of people engaged in a given activity as shown by ISIC will comprise without distinction employers, own-account workers, employees and unpaid family workers. Therefore, in order to obtain the number of persons engaged in an activity in the informal sector a cross-classification of kinds of activity by the classification of status in employment is needed. (See table 10.)
- 123. A listing of all divisions and groups of ISIC and a detailed index of activities is presented in the publication "Indexes to the International Standard Industrial Classification of All Economic Activities" published as Statistical Papers, Series M, No.4, Rev.2 Add.1 by the United Nations.
- 124. Classification is not the only important issue in connection with the use of industrial statistics. Even though the concern here is not to prepare such statistics but to use them, information about the scope and coverage of

the census or enquiry and the statistical units employed in the collection and tabulation of the information is needed. International recommendations define the industrial sector as "including all establishments within the territorial boundaries of the country engaged primarily in mining, manufacturing and the production and distribution of electricity, gas and water (Major divisions 2, 3 and 4 of ISIC)".

(c) Status in employment

- 125. The categories of status in employment usually found in censuses and labour force surveys are six: employer, own-account worker, employee, unpaid family worker, members of producer's cooperatives and persons not classifiable by status. (See table 9.)
- 126. Employer is a person who operates her (or his) own productive unit or engages in a profession or trade and hires one or more regular, salaried employees.
- 127. Own-account worker is a person who operates her (or his) own productive unit or engages in a profession or trade and hires no regular salaried employees.
- 128. Employee is a person who works for a private or public employer and receives remuneration in wages, salary, commission, tips, piece rates or pay in kind.
- 129. Unpaid family worker is a person who works without pay in a productive unit operated by a related person in the same household. Sometimes, where it is customary for young persons to work without pay in productive units operated by related persons who do not live in the same household, the requirement of "living in the same household" has been dropped. "Unpaid" in this connection should be understood to mean without an agreed amount to be paid for work done.
- 130. Member of producer's co-operative is a person who is an economically active member of such organization.
- 131. Persons not classifiable by status may be persons whose status is unknown or has been inadequately described.
- 132. Doubts may arise concerning how certain borderline cases have been treated in the material one is analyzing. Consultation with those in charge will clarify the situation in most cases. However, when the statistics under examination date several years back, this might not be the case. The most frequent cases where there might exist uncertainties are presented below.
- 133. Apprentices who receive pay in kind, meals and/or sleeping quarters should have been classified as employees. If not paid at all, those in productive units of a related person could be considered as unpaid family workers, and those in a different situation have probably been classified as undetermined, unless of course a special category has been created for them.
- 134. Professionals such as doctors, lawyers etc. are not included in the informal sector. Those who employ salaried assistants, secretaries, or as is

increasingly the case, work on a co-operative basis, would, in accordance with the definitions just given, not be classified as own-account workers. But those who work alone could have been enumerated in that category. In order to subtract them out one should consult those tables which cross-classify status in employment with educational attainment. By excluding all those with higher education one might subtract out some who, although with higher education are nevertheless typical components of the own-account category (an engineer working as an own-account painter or a sociologist selling postcards in the street), but the damage done in this way to the exactness of the estimates is probably less than if all professionals on the academic level were included.

- 135. Outworkers are workers who perform their work outside the site of a factory, mainly in their own home and deliver the product to the enterprise or factory that has ordered that product and furnished them with the necessary materials and tools. Doubts may arise whether such workers should be considered salaried employees or own-account workers. This question is being considered in the current revision of SNA.
- 136. Agriculture presents as far as status in employment is concerned a situation somewhat different from that prevailing in industry and services. As statistics in agriculture are not considered here, it will be sufficient to mention that the classification by status of employment in agriculture has been adapted to the peculiar conditions in that activity. Where subsistence agriculture represents a substantial part of total agricultural production, it has been set down as a special category at the same level as own-account workers.
- 137. Departures from the definitions recommended internationally in order to accommodate special national conditions will not infrequently be met, and additional effort and ingenuity will be needed to fit them into the standard classification.
- 138. Misclassifications are unavoidable. There probably is a certain number of own-account workers put into the category of "persons not classifiable by status". But unless there is some kind of evidence that this has really occurred, it is preferable not to tamper with these figures.

(d) Occupation

- 139. Statistics on the occupations of women in the informal sector are valuable by themselves as a blueprint for women's occupational structure and they serve as an alternative for estimating women's earnings.
- 140. The occupational classification is different from classification by kind of economic activity; in fact very different occupations can correspond to the same economic activity, for example a charwoman and a designer can be working in the same productive unit and both would be classified by ISIC in

the same kind of economic activity. The classification by occupations is also different from that of status in employment. In the example above, if both work for a salary, both would be classified by ICSE in the same group, as salaried employees. It is only the classification by occupations, ISCO, that would classify them separately. (See tables 8 and 11.)

141. These are the main divisions of the 1968 International Standard Classification of Occupations:

Professional, technical and related workers
Administrative and managerial workers
Clerical and related workers
Sales workers
Service workers
Agricultural and related workers
Production and related workers and transport equipment operators
Workers not classified elsewhere
Not stated

- 142. This is the highest level of classification in the system and it presents a high degree of aggregation. To visualize the specific situations of women in the informal sector a more detailed classification is required, as is presented in the lower levels of ISCO.
- 143. The importance of a data on the number of women in different occupations is evident and these statistics will most frequently be easily available. They usually will be presented in form appropriate for the present purpose (although not always on the detailed level which would be desirable) and no special handling or transformation of these data will be necessary.
- 144. But as a stepping stone for the estimate of women's earnings the question is more complex. Whenever direct information on their incomes is not available one will have to resort to estimates based on the number of women in different occupations and industries and average earnings in the different occupations and industries. (See the example in chapter V.) The more detailed this type of information, the nearer the estimate will come to the actual situation.
- 145. This type of measurement is not only an alternative procedure in case no other is feasible, it is also a must when it comes to checking figures obtained by other procedures. As has been said repeatedly, comparing results obtained by different procedures and sources is the most efficient way to improve the estimates.

Note however that this problem is more acute in the formal sector where persons with very different occupations may work in the same enterprise or establishment, usually as salaried workers or employees. In the informal sector, occupation and kind of economic activity tend to be much closer to each other. It may happen, of course, that one of the unpaid family workers within the family unit performs a special occupation, for example accounting, but since s(he) is not being paid, this will not alter the earnings situation of this particular productive unit.

146. Figures obtained by different procedures and sources will quite frequently show considerable discrepancies. What can be done in such cases? There can be no strict guidelines on this question, but in general one should try to determine which of the two sources can be considered more reliable, more detailed and nearer to the concepts and definitions appropriate for analytical purposes.

(e) Education and school enrolment

- 147. The classification used for educational attainment and school enrolment is based on the International Standard Classification of Education of UNESCO. Educational attainment is an important indicator of skills. School enrolment in turn shows on one hand the present efforts to acquire such skills and on the other what the distribution of skills will be in the future.
- 148. ISCED presents a very detailed classification, but for present purpose a condensed version from the *Handbook on Social Indicators* (6, p. 112), can be used. (See tables 3, 4 and 23-27.) It comprises the following classes:

Illiterate
No schooling
Completed primary
Entered secondary
Completed secondary
Post-secondary.

149. The definition of illiteracy established by the United Nations Educational Scientific and Cultural Organization states that

"a person is illiterate who cannot, with understanding, both read and write a short simple statement on his or her everyday life. Hence, a person capable of reading and writing only figures and his or her own name should be considered illiterate, as should a person who can read but not write and one who can read and write only a ritual phrase which has been memorized. The language or languages in which a person can read and write is not a factor in determining literacy."

(f) Time worked

- 150. This is an important characteristic by itself as available data tend to show that in certain categories of employment, hours worked by women differ considerably from those worked by men. 12 In some activities they appear to be shorter while in others they are considerably longer. This apparently is the case, more than anywhere else, in the informal sector.
- 151. In addition to increased precision in the measurement of women's efforts, data on time worked allow to give a more solid foundation to the estimates of their earnings. In conclusion, every possible effort should be made to obtain information on time worked by women in different activities.

¹¹ Quoted in (14).

¹² For an example, see chapter on Sri Lanka in (33).

152. Instructions for censuses and surveys include usually detailed indications on how time worked should be measured. As always, these instructions should be consulted and studied with care. The questions to be answered in connection with the measurement of time worked by an own-account worker refer to time spent awaiting customers, commuting, whether time should be compiled for the main job only or for different jobs together, etc. As far as recommendations go, the answers to above questions are all affirmative. (See tables 13-17).

(g) Wages and salaries

- 153. Earnings in an informal sector sector which comprises small enterprises as well as own-account workers, are mostly in the form of what is called "operating surplus", being employees a minority within this sector. It would seem therefore that there is limited use for statistics on wages and salaries for the present purpose. Nevertheless, this information can serve as a yardstick for an approximate evaluation of the earnings of an own-account worker, if no more direct information is accessible.
- 154. When using figures on wages and salaries from a survey one must find out what these figures represent. Usually they are related to all employees. Some statistics present hourly wages in different occupations excluding all other payments. Censuses and specially surveys, on the other hand, give figures on total payments, whether in cash or in kind, including bonuses, cost-of-living allowances and wages paid during vacations and sick-leave. They also include frequently taxes, social security contributions, group insurance premiums and the like, payable by the employee but deducted by the employer. These last types of payment are in fact part of the income of an employee, but they do not show up in her take-home pay, so that sometimes the interested person does not think of them as part of her income. This fact no doubt plays an important role when the income from salaried employment is to be used as a base to estimate that of an own-account worker, where such withholdings are either non-existent or play a minor role.
- 155. A priori there is no generally valid answer to the question whether the earnings of an own-account worker can be expected to be on the average equal to, or higher or lower than those of a salaried worker. Possibly the comparison is more feasible in the case of employees of small enterprises, but as difficult when considering the earnings of employers in these enterprises. There are many different situations, and subjective as well as objective factors play a role. Some women may have chosen these activities because they prefer them to others, while in most cases they simply had no other choice because all other outlets were closed for them.
- 156. On the other hand, statistics on wages and salaries and earnings in own-account productive units in the same kind of activity are examined, as far such data are available, they show different situations in different activities and different countries. In one instance it has even been observed that while male own-account workers earn more than their salaried counterparts, the inverse relationship prevails for women.

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157. In using statistics on wages and salaries to estimate earnings in own-account productive units one should therefore assemble from the Chambers of Commerce, trade associations, bureaux and associations of small and medium enterprises, welfare institutions etc. as much information as one can get on the specific local circumstances: whether they pay any taxes, the number of unpaid family workers, the type of techniques used, and if possible, make inquiries as to the economic standing of own-account workers in the respective activity. A seamstress with several members of her family working with her will normally obtain a higher income than a woman working in a tailor shop for a salary, while a woman selling fruit from a market stall may earn less than an employee in a grocery.

(h) Cross-classifications

158. A statistical publication might present a great number of tables on different classifications but the really important matter is whether it contains the right kinds of cross-classifications. Of the aspects reviewed above the most valuable cross-classifications for the present purpose are the following:

- Kind of economic activity and status in employment
- Kind of economic activity and occupation
- Kind of economic activity, status and time worked
- Occupation and status in employment
- Occupation, status and time worked
- Kind of economic activity, status and wages and salaries (or earnings)
- Occupation, status and wages and salaries (or earnings).

(See tables 18-20 and 25.)

159. Not all of these cross-classifications will appear in tables already published. The possibilities for obtaining additional cross-classifications will depend on how the basic data had been collected, on the time and resources and last but not least, on the powers of persuasion of the analysts. (See tables 10-12, 21 and 22.)

B. Industrial, trade and services statistics

1. Main sources

- 160. Statistics on industry, trade and services can be found in censuses, surveys, special reports and also through administrative records of public and even private institutions. For various reasons, data on industrial activity are more frequent than those on trade and services.
- 161. Frequently data available represent only those enterprises and establishments that employ a certain number of workers and exclude those with a number of employees below that figure. Where this is the case the figures on employment in different activities are of no use for the purpose as they represent employment in the formal sector only. However, the growth of the informal sector and increased interest in it has persuaded most statistical authorities to incorporate, in one way or another, the informal production units in their regular statistical programmes, either by including them in their periodic censuses or by implementing surveys centred on these units.
- 162. Moreover, even if a census or a survey records only establishments employing salaried employees over the number set as a boundary for the informal sector, and the corresponding figures on persons employed cannot be used in the present procedures for preparing estimates on the informal sector, it will usually contain other types of information which may be used for these estimates. If, for example, information on the average earnings of own-account workers in some economic activity is unavailable, data on

average earnings of a salaried employee in that same activity taken from the census may serve as a useful reference.

163. It will be useful to remember what has been said about the importance of submitting data from surveys to a thorough analysis as to the exact definitions applied in their design, collection of data and tabulations. The reason for this is that in the present procedure data from different sources are combined, and it is crucial to examine at each step whether figures from different sources are compatible with each other. Sometimes the description given will be sufficient, in other cases one will have to look at the questionnaire and the instructions to enumerators.

(a) Industrial censuses and surveys

- 164. Generally, an industrial census is conceived as a comprehensive inquiry conducted at infrequent intervals, usually of 5 or 10 years, while inquiries conducted at more frequent intervals are known as surveys. Surveys are usually much more restricted as to the subject matter and depend to a higher degree than do censuses on sampling procedures. The samples used in surveys may be independent or they may be selected from complete census enumerations; in the last case it will be much easier to use data of both inquiries in conjunction. However, even then it is important to ensure that common items are defined the same way.
- 165. Although censuses are conceived as comprehensive inquiries this does not mean necessarily that their coverage is complete. Frequently they omit certain types of establishments, either because information on those establishments is readily available through other sources (as can be the case for big government enterprises) or because of budgetary limitations. Categories omitted from enumeration may be small establishments, establishments operated on household premises, establishments with no salaried employees or those below a specific size or volume of business.
- 166. The dividing line between what is considered a big or a small establishment is not clear cut. Sometimes only the larger establishments are covered in censuses and the smaller ones left out to be covered by a separate survey.
- 167. Frequently the cut-off point, that is the level at which establishments are excluded from enumeration, is the number of salaried employees; the exact number below which establishments are not covered is not uniform. It varies usually depending on the economic and industrial structure of the country and even from inquiry to inquiry in the same country. Cut-off points used in the past have been 3, 5 and sometimes 10 salaried employees.
- 168. Moreover, the dividing line is not necessarily uniform for all activities. Inquiries have sometimes used different cut-off points for activities with higher or lower labour intensity.
- 169. The borderline between censuses and surveys is also somewhat blurred as in many cases an exhaustive enumeration is carried out for the bigger establishments and enterprises and simultaneously a partial enumeration, based on sampling procedures, for the smaller ones.

170. If the census or survey includes own-account workers, data corresponding to this group will usually appear separately from the other groups. Sometimes they are presented as "establishments with no salaried employees".

- 171. If this is the case a great deal of the work required for the present analysis has already been done. Assuming that the census or survey really covers the whole universe of own-account workers, most of the data needed will thus be ready: that is distribution of own-account workers by kind of economic activity and their earnings. The question is whether there is also a distribution of own-account workers by sex and if this distribution is carried through all the tables. If it is, these figures can be used directly. Adding the figures on female own-account workers to those on female unpaid family workers gives the participation of women in the employment of the own-account informal sector. The figures on earnings, on the other hand, refer to women own-account workers only. This is so because unpaid family workers, although they contribute by their work to these earnings (or, in other words, contribute to the value added of the ownaccount productive unit in which they work) do not receive any payment for it. For this reason, total earnings (equal to total value added) of ownaccount productive units are related to the number of own-account workers and not to the sum of own-account workers and unpaid family members. (See the example given in chap. VII.) A similar procedure should be applied for paid employees if the enquiry also covers small enterprises.
- 172. If the estimate of earnings by an own-account enterprise is based on value added data taken from an industrial census, it must be born in mind that value added in the census concept does not correspond to the value added concept as used in the national accounts, because the industrial census does not take into account payments and receipts for non-industrial services. These are frequently reported separately in the census tables. Whenever possible, the value added figures in the census concept should be adjusted (deducting from the given value added figure the payments and adding in the receipts for non-industrial services).
- 173. However, the above assumptions are rather optimistic. In most cases, one element or the other of the above will be missing and will have to be reconstructed using some outside source. The most frequently observed gaps will be the following:
- 174. All the above data are present, but there is no distinction by sex: the total number of persons engaged in different activities in the informal sector is known, but not how many are women. What other information on the economic activity of women does exist? The most recent population census should be consulted. The distribution of the economically active population by king of economic activity is given separately for the two sexes. But that comprises all persons in salaried employment as well as own-account workers.

¹³ Some surveys have used within the classification of persons engaged the category of "working proprietors", which comprises persons with two different types of status: employers who may employ a certain number of workers, but who actively participate in the enterprise they own, and own-account workers without any salaried personnel.

The last category can be found in the table on status in employment. Does a table exist that cross-classifies kind of economic activity and status in employment? If such such a table can be found, the numbers of women in the different industrial activities of the own-account informal sector will be available.

175. Can These data be introduced into a survey that presents earnings data for the own-account informal sector but lacks a disaggregation by sex? The dates of the population census from which the employment data were taken and of the survey should be compared. Are they sufficiently close to one another so that it is justified to assume that they portray the same situation? If not, is there any indication that changes have taken place since the last census in the number of women in the different own-account activities? Can these changes be quantified in order to introduce corrections to the outdated census figures? Are there any specialized studies on women working on own-account, even if they cover some specific activities? Regardless of the fact that they cover only part of the informal sector, such partial corrections will enhance greatly the accuracy of the ensuing estimates, as female own-account workers tend to concentrate in a few activities which most probably are those for which specialized studies have been made.

176. Alternatively, one can look for household surveys which could furnish information on women in own-account activities or even in the whole informal sector (see section C below).

177. In this situation up to now, data for the informal sector are available but disaggregation by sex is missing. In other cases, not only information regarding distribution by sex may be lacking, but the rest of the information given does not cover all, but only one segment of the productive units. This can be so because it covers only certain activities -- which from some standpoint had been considered of special importance -- or it has been implemented only in certain regions or, finally, it embraces all activities but has been designed in a way to cover not all but only a certain number of units in each activity. In the first case all possible sources must be considered in order to find out whether and what other activities, which encompass informal productive units, do exist. These sources might be the classification by status in population censuses, publications which concern themselves mainly with other problems but give some space to own-account activities, or finally, administrative records, especially those of municipalities. If data are available only for certain regions similar procedures may be applied but centred on the missing regions. In the last case, the question to be answered concerns the way in which the units included in the survey have been chosen. If the choice has been based on some sampling techniques and it is accepted that the sample is representative of the universe, the survey figures can be blown up in order to arrive at totals representing the universe, that is the nation. The type of sampling used will indicate how the process of blowing up should be carried out. On the other hand, if the units recorded have not been chosen systematically and no other information is available to substitute or complement the data, It must be accepted that the estimate will represent a crude approximation, an unavoidable expedient in the circumstances given and hopefully a step on the way to more reliable statistics.

178. Censuses and surveys of trade and services enumerate economic activities which comprise the majority of working women and more so of women working on own-account.

- 179. Originally they were part of industrial censuses, but today most countries conduct these inquiries separately. Notwithstanding, there exist from the point of view of the user, many similarities between them and much of what has been said above on the characteristics, usability and shortcomings of industrial censuses and surveys is also applicable to trade and services inquiries.
- 180. The activities falling within the scope of trade and services are the following:

ISIC group	Economic activity
6100 6200 6310 6320 8310 8323 8325 8330 9411 9413 9414	Wholesale trade Retail trade Restaurants, cafes and other eating and drinking places Hotels, rooming houses, camps and other lodging places Real estate Data processing and tabulating services Advertising services Machinery and equipment rental and leasing Motion picture production Radio and television broadcasting Theatrical producers and entertainment services Repair of foot-wear and other leather goods
9512 9513 9514 9519	Electrical repair shops Repair of motor vehicles and motorcycles Watch, clock and jewelry repair Other repair shops not elsewhere classified
9520 9591 9592	Laundries and cleaning and dyeing services Barber and beauty shops Photographic studios, incl. commercial photography

- 181. Although it is not the task of the present analysis to produce inquiries on trade and services, different types of data with figures originating in such censuses and surveys will have to be combined. In order to be able to do just that, a knowledge of the definition and contents of each division and group within the classification is necessary, especially in those groups which are broad in scope and harbour a significant number of own-account enterprises owned by women. The most important of such groups are those of wholesale and retail trade.
- 182. From the definitions given for them in ISIC the following summaries can be extracted: wholesale trade is the resale (sale without transformation) of new and used goods, or acting as agent in buying merchandise for or selling merchandise to persons or companies. The principal types of businesses included are merchant wholesalers, merchandise and commodity brokers, commission merchants and agents. Also included are scrap metal, waste and junk dealers and yards; and retail trade is the resale of new and used goods to the general public, for personal or household consumption or utilization,

by shops, department stores, stalls, mailorder houses, gasoline filling stations, retail motor vehicle dealers, hawkers and peddlers, etc. Most retailers take title to the goods they sell but some act as agents for a principal and sell either on consignment or commission basis.

(c) Retail stores surveys

183. In some countries there exist more-frequent-than-annual surveys on retail stores based on a stratified sample of stores usually subdivided by kind of economic activity and size and presenting data on main characteristics and volume of sales. Whenever such surveys exist and there is the possibility to separate those operated on a small scale and owned by women, they can be consulted or data on changes in the short run that cannot be obtained from other sources.

(d) Surveys of artisans and handicraft activities

184. Surveys on artisans and handicraft activities provide useful information on a type of economic activity poorly represented in more general inquiries. They usually include social and economic aspects in great detail. As to sex, there are two possibilities: either this distinction is included in the design of the inquiry or, if this is not the case, one can deduce the sex from the type of activity. As an example of such a survey, which shows data separately for women and men, a survey that was designed some years ago for the First Five-Year Plan of Burkina Faso is shown.

185. It presents tables separately for volume of production, its value and time worked. The layout of the tables is as follows:

(a) Volume of production

Type of activity	Number of artisans	Name of	Units	Production per capita	Total production (6)
(1)	(2)	(3)	(4)	(5)	(6)
			Female a	rtisans	
			Male ar	tisans	
		(b)	Value of	production	
Name of p	roduct C	uantity pr	roduced	Market price	Total market
(1)(2				per unit	value
					W0 W1 (00) 400 M2
			(c) Time	worked	
Artisans	Number	of months	Ave	erage number of	Number of days
(number) worked				worked in year	
(1)		(2)		(3)	(4)
			MOM	EN	
			ME	N	

- 186. Although part (b) of the table does not present a differentiation by sex, it can be established easily as columns 1 and 2 of this table correspond to columns 3 and 6 of part (a).
- 187. The instructions present a list of economic activities to be included, such as spinners, weavers, blacksmiths, potters, cobblers, clothes cleaners, producers of doughnuts, soumala, karité butter and others and remind the enumerator not to forget modern artisans such as those who construct wells, those who repair bicycles and the like.

(e) Market stalls surveys and records

- 188. The difficulty to penetrate statistically the recondite activities in the informal sector and the role played in those activities by women has led to the creation of new types of inquiry designed especially for that purpose. One of these is the survey which focuses on women selling from market stalls in popular markets. It is designed so that it can be carried out with a minimum of resources and be foolproof at the same time. What follows is based on the market stall survey as was proposed for The Gambia in 1988. Because of its simplicity it can be easily replicated elsewhere or without difficulties be adapted to specific local conditions.
- 189. The sample is not a systematic but a random sample. The enumerator (tax collector) can proceed as he always does, the only change is that every time he delivers a ticket, he fills in the questionnaire form answering the questions on sex, fee paid, type of merchandise or service. When he arrives at person number 20, that is, when he arrives at the bottom of the page, he asks the person who is paying the tax (and this person only, independently of how many are present in the stall) the additional questions. The first additional question is whether he(she) is the owner of the business (that is, of the stall, canteen or of whatever he(she) is offering in the market); or a family member of the owner; or an employee; or a partner in the business (if more than one partner is present, the one who paid the fee is the one who should be registered in the questionnaire); or a member of a cooperative. The remaining questions are self explanatory, the enumerator only has to check yes or no.
- 190. The tax collector does not need to change in any way his usual itinerary. The fact that the filling of the questionnaire accompanies the delivery of the ticket assures that there will not be neither gaps nor duplications, even if more than one tax collector is working in the same market, as nobody will pay for more than one ticket. This implies that the order in which the stalls will be visited by the tax collectors is of no importance at all; the numbers on the questionnaire reflect merely the order in which the tickets have been delivered and not the location of the different stalls.
- 191. This research should be carried out in one day for each market.
- 192. The questionnaire and accompanying instructions are shown below.

	Sex	Fee	Amount	Description of merchandise or service
	**	Basis		
1	Man Woman	Monthly_		
		Daily _		
2	ManWoman	Monthly_		
		Daily _		
3	Man Woman	Monthly		
		Daily		
4	Man Woman	Monthly		
		Daily		
5	Man Woman_	Monthly		
		Daily		
6	Man Woman	Monthly		
		Daily -		
7	Man Woman	Monthly		
		Daily		
8	Man Woman	Monthly_		
		Daily		
9	Man Woman_	Monthly_		
		Daily		
10	Man Woman	Monthly_		The second secon
		Daily		
11	Man_ Woman	Monthly_		
		Daily		
12	Man Woman	Monthly		
		Daily Daily		
13	Man Woman_	Monthly		
		Daily_		
14	Man Woman	Monthly		
		Daily_		
15	Man Woman			
	Monan	Monthly_		
16	Man Woman	Daily		
10	man woman	Monthly_		
17	Man Woman	Daily		
11	Man Woman	Monthly_		
18	Man Woman	Daily _		
10	Man Woman	Monthly_		
19	Man Manan	Daily _		
13	ManWoman	Monthly_		
20	Man Man	Daily _		
20	Man Woman	Monthly	· · · · · · · · · · · · · · · · · · ·	
		Daily		
_				
In:	relation with t	his busine	ess, are	you?
Own	er Family mem	berEmpl	.oyee Pa	artner Member of co-operative Other
Did	you buy the me	rchandise	you are	selling from others? YES NO
Is	this merchandis	e produced	l by you a	or your family? YES NO
Do :	you work here a	lone? YES	NO	If no, give N° of family helpers
				N° of apprentices
				N° of employees
				N° of partners

INSTRUCTIONS TO FILL IN THE QUESTIONNAIRE

The questionnaires will serve the purpose of counting the number of women and their proportion within the total number of vendors in the markets.

The enumerators may be the tax collectors under the direction of the Market Master. Each one of them can fill the questionnaires when collecting the tax fee; this procedure ensures that all vendors will be counted only once and that all will be included, as the tax collector gives a ticket to each one.

Each questionnaire registers 20 interviews and the last trader interviewed in each form will be asked the additional questions at the bottom of the page.

The sex of the person who is paying the tax should be shown by a check in the corresponding column.

The question on Fee basis and Amount, in the next column, refers to the period covered by it; the trader may pay it either monthly or daily; the answer will show the amount paid and shall be registered on the corresponding line of the questionnaire. In case the trader pays both, the corresponding amounts will be registered in each line:

The description of the merchandise or service has two lines in the questionnaire, to allow for clarity in the answer, to include items such as the following: 1) fresh fruit, 2) vegetables, 3) grains, 4) spices, 5) palm oil, 6) fresh fish, 7) dried or smoked fish, 8) meat, 9) other food items (sugar, salt, tinned food, tea, coffee, milk, bread, biscuits and sweets, cooked meals, bottled drinks); 10) household goods (pots, pans, basins, cutlery, plates, soap, matches, candles, baskets, rags); 11) toiletries (toothpaste, shaving cream, razor blades, perfume, cosmetics, products for personal care); 12) textiles; 13) clothes (new and second-hand); 14) dress accessories (ties, belts, hats, handkerchiefs, caps); 15) footwear; 16) watches, glasses and jewelry; 17) hardware (nails, nuts, bolts, wire, tools, locks, electric wire and goods, spare parts, motors, paint, building supplies, ropes, fishing supplies); 18) electrical appliances and repairs, including cassette tapes; 19) wood (timber, firewood); 20) tourist goods (tye and dye fabrics, clothes, wood carvings, leather goods, trinkets, postcards, curios); 21) miscellaneous (picture frames, books, magazines, tires, junk); 22) tailors and tailors supplies; 23) workshops (carpenters, furniture makers, blacksmith, mattress makers, boat repair shops; 24) financial services (money changers, money keepers); 25) scribes; 26) restaurants and canteens. The items inside the parentheses are examples to give an idea of what is included in each one of the 26 categories, which will preferably be presented as a list to facilitate the reading; but the enumerator is not expected to follow them strictly, as they serve simply as reminders; what is needed is a clear description of the merchandise or services traded, starting with the main items. In case the vending unit sells various items and the two lines are not sufficient, the enumerator can continue on the back of the form, and must indicate the number of the corresponding interview as it appears in the first column on the front side of the page.

(f) Records of Chambers of Commerce and trade associations

193. Chambers of Commerce and Trade Associations maintain card files of their associates or members and these files can be of great help. The scope of information that can be secured from them will vary in accordance with the details included in the files. There will always be the name and address of the enterprise (very useful in case they need to be contacted for additional information). They will also show the kind of activity (although usually very broadly formulated, so that one either must guess the precise type of activity or find it out through additional inquiries). Data on number of employees and volume of transactions will be found less frequently. It must be kept in mind that these are private, not public sources and might be considered of a delicate nature, so that special authorizations will be needed to get access to them. The advantages of these sources lie in the fact that often they will be more up-to-date than other sources, while the disadvantages are the difficulties to select out of the total the small enterprises (which might be badly covered) and those owned by women.

(g) Bureaux for medium and small business enterprises

194. Records of bureaux for small and medium enterprises are another potential source of valuable information from institutions created to be of assistance to small and medium enterprises. In order to comply with their task, they collect from the applicants many data precisely of the nature that are of interest for the present purpose. Not all their applicants fall into the category of informal sector, but a certain number do and on these the information available will usually be very detailed and of a kind that can not be easily collected elsewhere. Probably the individual documents have not been tabulated, which is an advantage as in the course of tabulating, details of significance for the present analysis, would have been omitted. The examination of individual records will, however, require special authorization.

195. There is probably no country where there do not exist departments or bureaux that concern themselves with small and medium enterprises. Most of them are public institutions, but in some cases there are also private ones. Their archives can be a source of information. Their weakness is the degree of coverage, which however can be quite satisfactory, especially in those circumstances where some advantages can be expected from being listed in the roster. On the other hand they usually present a very incomplete picture of the enterprise including sex of owner, number of people working, type of economic activity and financial data.

(h) Central business accounts bureaux

196. In some countries enterprises have to submit copies of their accounts, established in accordance with officially laid down standards, to a national institution in charge of centralizing the business accounts of the nation. In such circumstances it is worthwhile to find out whether that information can be used for the present analysis. While most of the efforts of such bureaux will be directed to collecting accounts and balances of big enterprises, they also receive some information on small-scale and own-account enterprises. Even if such records do not cover the whole universe,

they might be very useful as a point of reference for making estimates of sales, costs and value added in small units. When such information is used for blowing up to national totals, one should be aware of the possibility that the data of the enterprises thus obtained might be different from those which have not reported to these authorities.

(i) Special reports on specific trades and services

197. Almost always one will find some special reports on specific trades or services, usually prepared with a view to planning decisions to bring assistance to such activities. The statistical part of such reports will vary in importance but frequently may contain detailed data on the activity in question. Whether they present any disaggregation by sex or not will depend on the importance of female participation in each activity; where it is considerable one can expect to find men's activities shown separately from those of women.

(j) Municipal records on hawkers and peddlers

198. More often than not, municipal authorities have some kinds of records on persons performing these activities. In most cases there will be no data on the volume of their transactions, but such records can be used to estimate the number of persons engaged in itinerant trade and how many women there are among them.

2. Main characteristics enumerated

- 199. The sources reviewed above cover many different aspects of their relative subjects. Not all are of interest for the present purpose. In the following paragraphs those which are important for the present objective are mentioned.
- 200. In the first place there are those classifications which have already been mentioned in connection with demographic and labour statistics, such as ISIC, ISCO and ICSE and the data on hours worked and income.
- 201. The category of income however will, in industrial, trade and services statistics and the other sources that have been presented in connection with them, usually be much broader than in demographic and labour statistics, where it refers mainly to wages and salaries. In the case of the former one can expect data on production, sales, inventories, prices, labour and other costs and gross and net income of the enterprise.
- 202. If these data were to be related directly to national accounting aggregates, it should be taken into account that these latter are not necessarily the sum total of individual figures. For present purposes, however, the figures from these sources will be used indirectly in order to construct the specific aggregates desired.
- 203. The process that transforms the basic data of the sources mentioned above into the aggregates wanted can be described as follows. What is needed is the value added. The basic procedure to arrive at value added with the data given is to determine first the value of total output, as the sum of the value of sales, plus or minus changes in inventories. Whenever possible

one should also examine whether part of the production of the period had been consumed within the producing unit. If this is known, its value should be added in for calculating the output.

204. The second step is to determine the cost of production. This will include the cost of the materials used up in the reference period, including auxiliary materials, electricity and any services bought and used in production. Normally, in the case of own-account units, one would not expect to find any amount of salaries paid out, although exceptionally there might appear a sum paid out to occasional non-regular salaried workers. While it would be considered as a cost of production from the point of view of the enterprise, the amount should not be subtracted from output.

205. The present task is to arrive at value added starting from the information found in the tables of the above-mentioned sources. This final step is described in the Recommendations for the 1983 World Programme of Industrial Statistics: "Respondents do not report value added but rather the items required for the calculation of value added. Value added in the census concept is defined as the value of output, less the cost of materials and industrial services used." The difference between the census concept of value added and that of the national accounts are the non-industrial services and the consumption of fixed capital or depreciation charges.

206. In this way, by deducting costs as defined above from the output as described above, value added is obtained, provided, of course, this specific set of industrial statistics shows a distribution by size classes where one of the classes refers to establishments without regular salaried workers. What kinds of tables one may expect to find can be illustrated by the list recommended in the publication already mentioned (those that can be used here are extracted):

Principal indicators of industrial activity, classified by industrial activity and establishment size class:

- Establishments by employment size class
- Employment and earnings, classified by industry
- Value of stocks at the beginning and end of the year
- Cost of materials and industrial services used
- Cost of fuels purchased
- Cost of non-industrial services
- Value of output in producer's prices
- Receipts for non-industrial services
- Value added and its composition.

207. If the table on employment and earnings shown above is sex specific, the source will prove of great help; if not, it will be necessary to introduce in the tables figures referring to sex taken from other sources.

¹⁴ The collection of data on the cost of purchased business services presents difficulties and many countries omit them in their census enumerations. On that subject see (18).

C. Statistics on households, main sources

(a) Population censuses and surveys

- 208. Information on households will be found in population censuses and surveys, which are mainly centred on demographic characteristics, but still will show some economic information. As has been said previously they are irreplaceable as a framework for sample data.
- 209. The content of population censuses and surveys has already been examined in search of information on the labour force and data that can help to calculate the income of women in the labour force. But these censuses and surveys contain also other kinds of information which concern households and persons who by present international standards are considered outside the labour force. At the beginning of this chapter it was indicated that in addition to estimates on the employment and income creation by women in accordance with present official international standards. It is essential to show what can be done to measure that kind of work done by women which by present standards is labelled as uneconomic or non-productive.
- 210. The activities of women outside of the official production boundary refer to her role as homemaker. Her role in procreation remains outside the scope of the present Handbook.
- 211. Censuses and surveys will show the number and composition of households in the country. Even if they do not show much more then that, such figures are essential in order to blow up figures from more specialized inquiries, such as time-use studies and household sample surveys.

(b) Household sample surveys

- 212. While censuses provide the over-all figures on the number of household in the country, household sample surveys are the tool to investigate detailed economic, social and cultural characteristics of the population and its various segments. This is especially true for women's activities. Household sample surveys use a wide menu of subjects, among which the Handbook of Household Surveys mentions the following: demographic characteristics; income, consumption and expenditure; employment and work; food consumption and nutrition; agriculture; health; education and literacy and culture.
- 213. But household surveys are of course not limited to these topics only. They can take up any other topic that can be handled by means of sample surveys of households and for which there exists justified demand. The above mentioned Handbook points out that among those fields that have assumed major importance in household surveys is the role of women in development. The design of such surveys necessarily has to be worked out by the interested users. It is to be hoped that the theme of participation of women in development will soon be added to the list of subjects recommended for specialized household sample surveys.
- 214. In the total population, persons living in households are distinguished from persons not living in households. Most household sample surveys cover only the first group, but this is of no consequence for the present purpose,

since women in convents, prisons or other institutional households would not be considered as part of the informal sector.

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- 215. Returning to presently available surveys, the first three mentioned above are of special interest, especially those concerning employment and work. This will be discussed more in depth, but it will prove quite useful to look at any other survey of this type that might be available in order to examine in how far it can contribute to improve the information needed.
- 216. Demographic surveys vary in the detail and complexity of information presented. Most frequently one can find data on general demographic characteristics and some data on relevant socio-economic characteristics. These latter may include literacy, education, status, economic activities and income.
- 217. Income, consumption and expenditure surveys are possibly the most traditional of household surveys. In the past they were used mainly to furnish weights for consumer price indices, but have come since to serve many other purposes. However, they have not always adapted themselves to the new requirements and, for example, do not present always separate information by sex.
- 218. Neither does the definition of income used in household sample surveys on income, consumption and expenditures coincide completely with that used in the national accounts. Items of income which do not appear in such surveys but do figure in the national accounts must be added in when using income figures from household surveys for estimating participation in national accounts aggregates. One such item is employer's contribution in respect of their employees paid to social security. Such amounts would not be used in the present estimates directly (as there are no such payments in the informal sector) but must be taken into account whenever salaries are used as reference for average incomes of persons working in the informal sector.
- 219. Data from these surveys can also be used to compare figures on income with those on expenditure for a gross check on tentative results.
- 220. The great flexibility of household surveys facilitates the inclusion of questions adapted to specific circumstances. This is of special significance in areas where women perform activities of importance for the household, but which do not exist or are of secondary importance in more urbanized areas. Such activities though they occupy long hours of work among women, are easily lost sight of unless questions are formulated in great detail. For those who wish to use them in building up more general aggregates, as is the present case, a knowledge of local circumstances is necessary as estimates too must be made in considerable detail. The following example shows some of the questions included in a questionnaire addressed to women in the framework of a survey, already referred to above, for the First Five-Year Plan of Burkina Faso:

Questions concerning gathering activities

(a) How many times per week have you gathered:

karité?
néré?
firewood?
other? (name it).

- (b) Indicate the quantity of each product you gather each time.
- (c) Indicate at what distance you gather each product.
- (d) How much time does each gathering take ?

Questions concerning the household budget

How much of the following products did you buy last year:

millet, soap pepper samara
sorghum vegetables cotton canaris a dolo
karité nuts soumbala textiles other canaris
karité butter salt kerchiefs tobacco

How much of each product has been consumed?

How much time do you spend each day to prepare meals for the family?

How often do you go to the market?

How many times a day do you go to fetch water?

221. The preceding paragraphs show the wide range of topics that can be covered in household sample surveys. In addition household sample surveys have been carried out on questions focussing on health, culture, ethnic groups, minority populations, the poor, and so on. The specific characteristics they present for the subject they investigate can sometimes contribute to a better understanding of women in the informal sector.

(c) Labour force surveys

- 222. This section examines the kind of household sample survey that will most frequently be the major source of information on the present subject, namely labour force surveys. Fortunately labour force surveys have been carried out in almost all countries and often there exists a whole series of such surveys so that estimates can be prepared for several years and the changes between different years can be observed.
- 223. Usually the final tables which are the results of such surveys will be used. Therefore examples of tables as they usually are published will be shown here. Unfortunately there are many different kinds of presentations and coverage in the final tables. In order to understand unambiguously the

meaning of the data presented in these tables it is often necessary to consult the questionnaires from which the tables originate. This shows also what information and especially what kinds of cross-classifications, although available in the questionnaires, have nevertheless not been tabulated.

224. These are the tables most frequently published:

Population Distribution by age, sex and regions
Population (usually 5 years and over) by level of education
Economically active population by sex and regions
Economically active population by employed and unemployed and sex
Employed population by employment status and sex
Employed population by sex and level of educational attainment
Employed population by occupational groups and sex
Unemployed population by age group and sex
Unemployed population by level of educational attainment and sex
Income receivers'income
Incomes by source of income.

225. Even if they do not appear in the tables, questions are usually included in the questionnaire which permit the separation of those who were engaged in homework duties, to distinguish between regular and casual paid employees and between main occupation and secondary occupation, to give the number of days actually worked and to separate own-account workers from unpaid family workers. To obtain these characteristics from labour force surveys may be the essential condition in those cases where no other source to fill in the gaps can be found. This refers not only to information collected in the questionnaires, which is missing in the tables published but also to cross-classifications of published characteristics. Familiarity with the questionnaire is therefore essential. Some countries are now including questions concerning small enterprises. A number of employees is set as a limit. This may be the only way to collect data for the whole informal sector as, until now, it is not considered in the standard recommendations.

D. Time-use statistics

226. In reviewing population and industrial statistics the importance of figures on time worked has already been referred to. There the information obtained came from statistics on enterprises. Time-use studies are different in their coverage as well as the technique they employ.

227. These are studies or surveys mainly based on households which concern themselves with the allocation of time of the members of a household. In the last 25 years a number of such studies have been undertaken in developed and developing economies. Their use in estimates of the work of women in the informal sector has been described in these words:

"Time budgets or time use studies provide a unique source of information on the participation of women in the informal sector. They cover productive activities both outside and inside the household, they can capture activities of short duration which are characteristic of women's various activities in the informal and domestic sectors, and whether one is performing productive

activities is not decided on the basis of one or two questions about primary or secondary activity but emerges from a detailed activity listing, thus overcoming the cultural perception that women are engaged only in housework and that all other tasks are of minimal importance.....

Two main interrelated sets of concerns have been investigated in these studies. One concerns the utilization of human resources in the household, particularly of women and children, and the second, improvement in the measurement of employment, unemployment and underemployment." (33)

- 228. For the present purpose, such studies, where available should be used to complement statistics on employment given in terms of persons, substituting number of persons by hours worked.
- 229. In addition this information should be used for estimating and valuing housekeeping activities in the framework of expanded national product.

- V. MEASUREMENT OF WOMEN'S CONTRIBUTION TO DEVELOPMENT WITHIN THE FRAMEWORK OF THE SYSTEM OF NATIONAL ACCOUNTS
- 230. The last chapter covered demographic and labour statistics. The present chapter is concerned with measurement, within the framework of national accounts, of the contribution to development made by women working in the informal sector. The importance of this type of estimate has already been shown. At the same time, it must be admitted that this type of measurement is a more complex and demanding task with respect to the handling of concepts and the search for adequate sources of information.
- 231. Inevitably this objective requires familiarity with the terminology and some basic concepts of national accounts. National accounting is based on principles similar to those used in business accounting with some basic differences, especially its scope and its sources of data. While business accounting aims at measuring production, profits and net worth of the business enterprise, national accounts pretend to measure, among other phenomena, those of production, income and wealth for the nation as a whole or for a sector within it.
- 232. There are two main systems of national accounting, the United Nations System of National Accounts (SNA) and the Material Product System (MPS) designed for centrally-planned economies. The present Handbook refers to SNA. This system lays down the rules to be followed in measuring economic aggregates like production, income, consumption, savings, capital formation and wealth. The basic publication of the system is A System of National Accounts, which presents a general outline of the accounting system and discusses the concepts and definitions. It does not go into problems of how those concepts should be calculated in practice; this is left to a series of handbooks on specific questions, such as accounting for production, government accounts and the present one. It does however contain a special chapter on national accounting in developing countries in view of the fact that the economic and political questions to be solved in these countries as well as their economic structure and their statistical possibilities differ from those of the developed countries.
- 233. In order to be able to handle figures from national accounts and to combine them so that they highlight special facts, as in the present case the role played by women, familiarity with the concepts and definitions used in the system is required. These concepts and definitions are presented in (10) and the best is to consult that publication. Only the most important ones can be given here; those which are indispensable for the understanding of the sources and the techniques reviewed in this chapter. They are: gross domestic product; gross output of industries; intermediate consumption of industries; value added of industries; wages and salaries; operating surplus; consumption of fixed capital; interest; rent; current transfers; final consumption expenditures of households; direct taxes on income; indirect taxes; subsidies; households; expanded product. Some of them might seem self-explanatory, but it is the inprecise delimitation and the treatment of borderline cases that makes a knowledge of them so important.

This is not the same as establishing national accounts for women, a task that goes beyond the limits of this Handbook.

234. The main ones are listed below. The definitions given below adhere as far as possible to the wording used in the original document, omitting only those parts that are not essential for the estimates proposed in this chapter.

GROSS DOMESTIC PRODUCT:

The value of the gross outputs of resident producers, including the distributive trades and transport, less the values of their intermediate consumption plus import duties. It is also equal to the sum of the compensation of employees, consumption of fixed capital, operating surplus and indirect taxes plus import duties.

GROSS OUTPUT OF INDUSTRIES:

The value of all goods and services produced during a period of account, including work-in-progress and products for use on own-account.

INTERMEDIATE CONSUMPTION OF INDUSTRIES:

Non-durable goods and services used up in production, including repair and maintenance of capital stock, research, development and prospecting, indirect outlays on financing capital formation, such as flotation costs for loans, and transfer costs involved in purchases and sales of land, intangible assets and financial claims. (Intermediate consumption is sometimes called inputs.)

VALUE ADDED OF INDUSTRIES:

Gross output of industries less the intermediate inputs into industries.

WAGES AND SALARIES:

All payments which employees receive in respect of their work, whether in cash or in kind.

OPERATING SURPLUS:

Gross output less the sum of intermediate consumption, compensation of employees, consumption of fixed capital and indirect taxes reduced by subsidies.

CONSUMPTION OF FIXED CAPITAL:

The value, at current replacement cost, of the reproducible assets used up during a period of account as a result of normal wear and tear, foreseen obsolescence and the normal rate of accidental damage.

INTEREST:

Actual and imputed income payable or receivable in respect of bank and other deposits, bills, bonds and other loans.

RENT:

Net rents for the use of land for agricultural and other purposes are included in income from property; rents for buildings, machinery, equipment, etc. are treated as payments for a commodity-type service.

CURRENT TRANSFERS:

Transfers of income between transactors. Transfers are made from the current income of the payer to the current income of the recipient for such purposes as consumption expenditure.

FINAL CONSUMPTION EXPENDITURES OF HOUSEHOLDS:

The outlays of resident households on new durable and non-durable goods and services less their net sales there of second-hand goods, scraps and wastes. DIRECT TAXES ON INCOME:

Levies by public authorities at regular intervals (except social security contributions) on income from employment, property, capital gains or any other source.

INDIRECT TAXES:

Taxes assessed on producers in respect of the production, sale, purchase or use of goods and services, which they charge to the expense of production. SUBSIDIES:

All grants on current account made by government to private industries. HOUSEHOLDS:

Private and institutional households are distinguished. Private households may consist of a single individual who makes his own housekeeping arrangements or a group of individuals who live together and pool at least some of their income in order to provide themselves with housing, food and other essentials of living (Housekeeping concept).

EXPANDED DOMESTIC PRODUCT:

This concept is not contemplated in the SNA Blue Book. In the present context it is defined as the gross domestic product plus the estimated value of housekeeping activities.

- 235. The System of National Accounts contains different sets of accounts. There are production accounts (exact title: Production, Consumption Expenditure and Capital Formation Accounts) and income accounts (exact title: Income and Outlay and Capital Finance Accounts). The main concern here is with the production accounts. The income and outlay accounts will be referred to only briefly.
- 236. As to capital accounts they are mentioned only in passing as an area where the participation of women is of great interest, but where estimates of this type remain outside the scope of this Handbook.
- 237. Production accounts, as the name indicates, present figures on the different aspects related to production. Production can be measured as output, that is the value of all goods and services produced during a certain period of time, usually one year. But in order to avoid double counting those goods which have been produced but are then used to produce other goods, national accounting introduces the concept of value added, by subtracting from the value of the output the value of the goods used in producing them. Thus, if value added in all activities is summed up over the whole nation, what is called the national product is arrived at: the value of all goods and services produced in the country without double counting. The value added in an enterprise or industry is the product created by that enterprise or industry. An informal productive unit, although small, is also an enterprise.
- 238. Before reviewing sources, the first step is to examine how to go about estimating production and that part of production that represents the participation of women in the informal sector. One could imagine different ways to measure production. Even which activities should be considered production and which not is open to questioning. For the reasons explained previously, the norms and rules set down in SNA are followed here, but the implications of such rules on the measurement of female activities are pointed out clearly and, where necessary, additional (not alternative) types of measurement are suggested.
- 239. SNA does not take into consideration all the activities which in common language sometimes are referred to as production. It is concerned only with those activities which it defines as "economic". Only these activities, measured according to certain rules, are added up into a total, called the

"gross domestic product" or GDP, which is the most commonly known and widely used national accounting aggregate.

240. These rules will now be examined. The United Nations handbook on accounting for production (1) formulates them as follows:

"The first question that must be answered is what constitutes an economic activity, since this determines what falls within the scope of the national accounting system. There is no difficulty in defining as economic those activities that result in the production of goods and services for sale on the market. There is also general agreement that government activities.....and activities carried out by private non-profit organizations should be counted as economic, even though their output is not sold on the market. Borderline problems do, however arise in connection with some other kinds of non-market activities. The coverage of non-market production in GDP is being appraised as a part of the SNA review, and there may be some changes when the revision is completed. For the present, however, except for services of Government and private non-profit institutions, SNA does not include goods and services that are not marketed in GDP unless identical or very similar goods and services are also sold in the market. GDP includes, for example, the construction of buildings by households and enterprises for their own use, and the production of crops and livestock for consumption on the farm. There are usually close market parallels for those activities. However, SNA does not include unpaid services rendered by housewives and other household members."

241. This theoretical definition must now be expressed in numerical values. The task of estimating the actual amounts can be approached by different ways. Here again the handbook on production can be of help. It goes on to say:

"Once the boundary of economic activity has been established, GDP may be derived in three ways (or combinations of them). The first approach looks at the way output is produced. It measures the contribution to output made by each producer, by deducting from the total value of its output, the value of the goods and services it has purchased from other producers and used up in producing its own output. What is left is the value added by the producer in question, what is used up in production is intermediate consumption. With some minor adjustments, the total value added by all producers equals GDP. This method of compilation is commonly known as the production approach to GDP. The second approach considers the cost incurred by the producer within his own operation: the income paid out to employees, indirect taxes, consumption of fixed capital, and the operating surplus, this also adds up to value added. This method is often called the income approach, but may more exactly be referred to as the cost approach. The third method, known as the expenditure approach, looks at the final uses of the country's output for private consumption, government consumption, capital formation and net exports, in other words, it shows what becomes of the output once it has been produced."

242. This description is essentially the same as the income-product-expenditure table in chapter I above. However, that table is a much simplified presentation. Actually the production account in SNA looks like this:

C. Industries - Account 1, Production account

Intermediate consumption Compensation of employees Operating surplus Consumption of fixed capital Other products Indirect taxes

Characteristic products of industrial activity

Less subsidies

GROSS OUTPUT

GROSS OUTPUT

243. SNA proposes to establish accounts like the one illustrated above for different activities, following the classification of economic activities set down in ISIC. Such accounts as well as the approaches explained above refer to calculations for the nation as a whole. What must be determined is whether they can be applied in measurements, not for the nation as a whole, but for a group within that nation, in the present case the group consisting of women in the informal sector.

244. In the case of the production approach, the task consists in detecting which goods and services were produced, their prices and the cost of what was used up in production. Such information is not impossible to obtain. All countries which have data on the main national accounting aggregates, possess them. The crux of the matter is to disaggregate them by sex. With respect to production of big, formal enterprises, it is practically impossible to obtain this information classified by sex. However, for informal enterprises, there is, definitely, a possibility, which will be explored here.

245. Taking the second approach, called income or cost approach, the responsibilities improve substantially. Looking at the entries of the production account shown above, out of the four components of value added, namely income paid to employees, indirect taxes, consumption of fixed capital and the operating surplus, the concern here is mostly with the last, operating surplus. That is the amount which is obtained from the sale of goods and services produced by the enterprise minus the indirect taxes paid, the consumption of fixed capital (depreciation), and the payments to employees. In these circumstances, two things must be done: to establish the sex of the person in charge of the informal enterprise to which the operating surplus accrues and, if feasible, take account of the contribution, within that unit of men and of women working as unpaid family workers.

246. Thus far the concern here has been with the production account. It might be asked if information contained in income and outlay accounts of the system could not also be used. SNA establishes income and outlay accounts for institutional sectors, that is enterprises, government and households. It is these last that could be of help. The income and outlay account for households as it appears in a System of National Accounts, looks like this:

Income and outlay and capital finance accounts
Households, including private unincorporated non-financial enterprises
Account 3. Income and outlay account

Final consumption expenditure Property income Consumer debt interest Other interest Net casualty insurance premiums Direct taxes On income Not elsewhere classified Compulsory fees, fines and penalties Social Security contributions Current transfers to private nonprofit institutions Unfunded employee welfare contributions imputed Current transfers nec to: Residents The rest of the world Savings

Compensation of employees Operating surplus Withdrawals from entrepre neurial income of quasi corporate enterprises Property income Interest Dividends Rent Casualty insurance claims Social Security benefits Social assistance grants Unfunded employee welfare benefits Current transfers nec from Residents The rest of the world

DISBURSEMENTS

RECEIPTS

- 247. This is the format which will usually appear in national accounts publications which present accounts on income and outlay. And these could be useful were it not for the fact that presently such accounts, in addition to the household sector proper, include all private unincorporated non-financial enterprises. The figures they show correspond, therefore, to a mixture of heterogeneous transactors.
- 248. The situation will be very different if and when the presently contemplated sub-division of households into various categories, including one category representing households where the main contributor to the income of the household is part of the informal sector, becomes a reality.
- 249. The third of the three approaches presented above is the expenditures approach, and it looks at the uses that have been made of all the goods and services produced, that is consumption, accumulation and exports. For the nation as a whole, these final uses are of course equal to what had been produced. But here again, this is not necessarily true for a segment of the total population. Taking the most important of final uses, consumption: Consumption of a certain group might be greater or smaller than its income; certain groups might save or dissave, some might receive or make transfers, and the use of free facilities or goods provided by government or private non-profit organizations will differ among groups. 16
- 250. Summing up: even though on the national level, in broad terms, total product equals total income and total uses, these equalities cannot be used directly in the measurement of women's participation and, depending on the particular situation of statistics of each country, detailed information must be found for the present purpose. In what follows, those parts and entries in the national accounts and the sources and statistical series on employment that are used for this purpose are described.
- 251. National accounts are published most frequently by the statistical authorities of the country. In some countries they originate in the Central Bank or the Planning Ministry or Office. Where different sets of accounts are published by different authorities, the user faces a dilemma, as s(he) is faced with the obligation to choose the one or the other. As figures from the national accounts must be combined with those coming from other statistical documents, the compatibility of the national accounts figures with those from other sources will be the decisive element in the choice.
- 252. In some instances information obtained directly from what has been published (or is otherwise available) on the national accounts can be combined with demographic statistics on economic activities of the population. National accounts at present do not show tables on the informal sector (this might change once the revision of SNA has been finalized); but one can find separate figures on own-account workers in the worksheets. As own-account workers represent an important part of the informal sector,

¹⁶ Even if data on consumption cannot be used to calculate production, they are an important indicator of the level of living. If at this aspect is to be considered, one must move from the production accounts and turn to the income and outlay accounts of SNA.

these figures are used here as a starting point for estimating. They show the product of informal units in different kinds of economic activity but for both sexes together. In order to separate out the part corresponding to women, it is necessary to find in statistics on employed population the figures on own-account workers in different economic activities (see chap. IV for definitions and table 10 of chap. VI for a standard presentation). They usually are divided by sex and the percentage of women in each group of own-account workers can be determined; this percentage is then applied to the figure on the gross domestic product originating in the informal sector of each activity. Thus the amount of product created by feminine and by masculine own-account workers in different economic activities is obtained.

253. This is a first approximation of women's contribution to the informal sector product, which now can be refined. "Own-account worker" is the designation given to the person (man or woman) in charge of this type of productive unit, whose product became a part of the total gross domestic product and more precisely of the informal sector of the gross domestic product. But the product of this activity was not created by this person alone; there might have been unpaid family workers helping her or him. These unpaid family workers could be men or women. To refine the first estimation, the sex of these unpaid family workers in informal productive units should be taken into account. 17 Of course, no adjustment would be necessary if all and only female family workers were working for female "own account workers", but this evidently is not true. Daughters may be helping their fathers and sons their mothers. As there are no statistics which cross-classify the sex of the unpaid family worker with that of the ownaccount worker she or he is working for, the contribution of these family helpers must be estimated in an indirect way.

254. Only the total number of women and of men who are unpaid family workers is known. Their income is not known, because they are not paid any income (even though they do participate in the use of income to which they have physically contributed). All that can be done is to impute an income, that is, to assign them an approximate income more or less in accordance with what similar work would receive if it were done for a salary. This can be done more or less approximately depending on the availability of breakdowns in the statistics of unpaid family workers by industries. In some cases regional breakdowns can also be helpful. Thus an assumed value added by these persons separately for female and for male family workers is arrived at. But still how many of them work for male and how many for female own-account workers is not known.

255. There is however something else that can be done. Using figures mentioned above, the per worker income can be calculated (total product of all own-account workers in a certain economic activity divided by the total number of own-account workers).

¹⁷ The distribution of the "unpaid family workers" between those who work in an informal unit and those in the formal sector is rarely known. Some surveys do include a question on their behalf, but in most cases the distribution must be estimated based on ad hoc inquiries.

- 256. Not infrequently certain own-account activities are customarily carried out by women, while other are reserved for men. In these cases all family workers in that specific activity might be considered either female or male. In those activities where there is no such known division of labour by sex, and if no other indication is available, one can distribute the still unclassified women family workers among the remaining activities in proportion to the total number of family workers in each activity.
- 257. The number of female and of male family workers by activities and the approximate salary per person they would receive if they were working in the formal sector are now known. By multiplication the total assumed salary corresponding to women and corresponding to men in separately male and in female own-account worker units is arrived at. From the estimate made above on the operating surplus of the female-headed own-account units, the amount of assumed salaries earned by male family workers is deducted and the amount of assumed salaries earned by women family workers working in male-headed own-account worker units is added. Adding up the results obtained in different activities gives a total for the product created by women in the informal sector of the economy more refined than the first approximation.
- 258. This has been a very detailed treatment of the data available. If such detail as distribution of the labour force by status in employment and kind of economic activity is not available, or the national accounts do not show the product created by the informal sector in different kinds of economic activity, the same procedure as described above will have to be applied to the total informal sector as a whole.
- 259. Some countries publish figures on the informal sector including in it small-scale enterprises employing a limited number of salaried employees.
- 260. When national accounting data are available for more than one year one will try to produce figures accounting for female participation for all the years for which this is feasible. However, because of lack of resources or other reasons, the situation may be such that only one such estimate can be prepared and one has to decide which of the years available should be chosen to base the estimate upon. There are two kinds of considerations to envisage in such a case; the quality of the statistical material and the timeliness and significance of the finished estimate for policy purposes. For example: which of the years available presents more details of the type needed for the estimate? For what year are more data available from other sources?
- 261. On the other hand: Have there been since that date changes that would invalidate completely or partially the results arrived at? Should that year be chosen as representative of circumstances which are still present today or is it desirable to demonstrate the evolution that has been taking place since then? This last question implies of course another: do other estimates of the kind being prepared here already exist, or are there plans to carry them out in the future?
- 262. The answers that can be given to these questions depend on the uses to which the results will be put. And more specifically whether they will be used to analyze a given situation, or to show a trend or even to demonstrate the changes taking place in the course of a business cycle. In the first case, efforts should be concentrated on producing the maximum amount of

figures for one single year; in the second case data must be shown for at least two years and preferably more than two years separated from each other by intervals long enough to justify the assumption of a trend. In the last case the amount of data and the intervals to which they correspond must be such that the changes taking place in the course of a cycle can be clearly perceived.

- 263. The last named data, those which require more frequent presentation, can be of a much less detailed nature and serve to extrapolate the figures from the more exhaustive estimates which serve as benchmark estimates. 18
- 264. Here an additional problem related to the use of economic data representing values arises. Values are expressed in monetary units and these, as far as their significance as a measuring rod of economic aggregates goes, can be rather unstable in time. Between two dates, somebody's income might have increased in monetary terms, but not necessarily in "real" terms, that is in the amount of goods and services that she or he can buy with that income. And it is the latter that is of interest in examining the participation of women in economic activities and their contribution to development.
- 265. From the practical point of view, there are two sides to this problem. Out of the documents and sources that examined, which should be used, those with figures at current prices or those in constant prices? No doubt, where price differences between years have not been significant, there is no great difference between using either one, but most frequently changes in prices will have been considerable. In that case data in constant prices are preferable.
- 266. Special care must be exercised when combining data from different sources that both should be expressed in the same terms. For data in constant prices this implies that they should represent the same reference year. (Whenever data are expressed in constant terms this is shown in the title of the table as "At constant prices of the year X". This year of reference must be the same in the sets of data that are being combined.)
- 267. In case the reference year is not the same, the two sources can still be used, but in order to obtain the same reference year in both, adjusted (deflated) one of them must be by an adequate price index. Most textbooks on economic statistics explain in detail how this can be done.
- 268. Deflating the product created by women and total national product by the same price index implies that prices in both aggregates have changed in the same way. But this is not true necessarily. In most cases there is no other choice than to use the same price deflator for both magnitudes, but it is worth mentioning that, were a price index available that reflects more precisely the movement of prices of products originating in the informal sector, this deflator should be used with preference over the more inclusive one that is being used to deflate total domestic product or important parts of it. This would show the terms of trade effects between the informal sector and the rest of the economy. In most cases such a specialized price

On extrapolation of benchmark data see (1).

index will not be available, with the possible exception of agricultural products.

269. When a time series has to be prepared, it might be necessary to use for different years of the series data taken from different sources. The figures are of course different, as they are figures for different years, but one must ask oneself whether the differences for consecutive years reflect only the changes that have taken place in reality, or whether at least part of the difference is the result of some change in the procedures used to collect and adjust statistical data. One should be aware of such a possibility and, if figures for the same year can be had from both sources, even if it is not the year needed, this will permit estimating that part of the difference that is due to changes in procedures.

270. It is essential that aggregates for the informal sector should be prepared sub-divided by kind of economic activity. Some words must be said now about the sub-division by regions. First of all such a decision will depend on the availability of information. If information does exist by regions, the pros and cons of regional sub-divisions should be examined in the light of requirements. Do strong regional differences with reference to women in the informal exist? Are these differences important enough to justify the additional costs and efforts that a regional sub-division will cause?

271. Finally, in connection with the aggregates representing women's contribution in the informal sector some considerations are in place concerning the concept of the expanded national product. GDP (gross domestic product) or GNP (gross national product) are the most frequently used economic aggregates that appear in reports of governments, international bodies and the press. As explained above, they do not include the activities of the housewife and other members of the household for the satisfaction of the needs of household members. A parallel aggregate called "expanded national product" does precisely that: it adds the estimated value of housework to the traditional national or domestic product. Where this estimate has been done, the value of the new aggregate is between 20 and 40 per cent higher than that of the traditional product. Moreover, the participation of women in this product is substantially more significant. This by itself is important: it brings the estimate nearer to real life situation. But in addition to showing the real participation of women in the satisfaction of national needs, it creates new possibilities for projections and planning, shows the growth rates of the economy in a more realistic fashion and (by way of harmonization of production and employment statistics) throws light on labour force potentials. As can be seen expanded national product is an extension of the gross national product, which includes both the formal and the informal sector and cannot be treated from the point of view of the informal sector only. Moreover, it is not the purpose of this Handbook to show how housekeeping activities can be estimated in terms parallel to those used in the estimation of these same activities when market oriented. There are several publications on this subject listed in "References", at the end of the present report.

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VI. ACCOUNTS AND TABLES ON WOMEN'S CONTRIBUTION TO DEVELOPMENT

- 272. The preceding chapters have examined successively sources of basic data and techniques used to transform these basic data into aggregates that show the participation of women in the informal sector in terms of employment and in terms of value added. This chapter shows how the results obtained can be presented, that is, what accounts and tables should be prepared. Some of the tables may already exist but possibly not exactly in the format desired. Other tables can be prepared by the statistical authorities upon request and the tables shown in this chapter might be very useful to show what exactly is needed. In this connection what has been said about the adherence to established standards should be remembered. It is certainly of interest to present the results in a form familiar to all users of statistics, i.e. to use established norms and standards as far as they go; but where they do not go far enough, where they are insufficient to show the phenomena it is desired to illustrate, new types of presentation should be employed.
- 273. Because the objective is to examine the situation of women in the light of the over-all situation, that is that of both sexes, and that prevailing in the informal sector compared with that in other sectors, it will be convenient, in addition to the results obtained with the procedures presented here, to select those statistics and aggregates that can be of use in these comparisons.
- 274. Such a selection can be broad or narrow and centred on economic topics. This is what has been done here. But the fact that economic situations are influenced by a variety of non-economic factors must also be considered. When analysis centres on such influences, a wider selection of topics is advisable.
- 275. The tables presented in the following pages represent a selection of the type mentioned above. It will not always be feasible to present all of them; much will depend on the availability of basic data, or, more often, on the cross-classifications that can be obtained.
- 276. What basic data can be obtained ready-made and what has to be tailored to present needs by the compilers will vary in accordance with the statistical situation in each country. The most frequent situation is that data "exist", but that they are buried in the original questionnaires and have not been tabulated. Some of the tables presented in this chapter might have already been produced by the statistical authorities and can simply be reproduced. Other tables will depend on the capability to obtain crossclassifications of existing data that have not been tabulated in that form. In that case, these tables should be helpful in showing the statistical authorities what exactly is needed from them. And still others will require much work in order to arrive at the figures needed.
- 277. Because of these circumstances, the tables given in the following pages evolve from a simple presentation with one or two variables to more complex presentation including more variables in the same table. In this way there is a certain repetition, the same phenomenon being presented first in its most fundamental aspects only, and in subsequent tables showing its additional dimensions. How far to go in this will depend again on availability of cross-classifications in each situation.

- 278. There is however still another feature of this procedure. Independently of the possibility to present all possible phenomena in the same table, it might be wished to keep each table as simple as possible for the sake of the readers. This should be the overriding principle: while for the purpose of scientific analysis all necessary information should be accumulated, the type of presentation should be adapted to the understanding of the readers to whom the publication is addressed.
- 279. Even for detailed analysis collapsing of certain classes might be useful. For example, when considering the importance of informal productive units within manufacturing activities, it might be advisable to include in the comparison manufacturing enterprises only, or enterprises in manufacturing, trade and services, omitting agriculture from the comparison.
- 280. In case agriculture is included in comparisons, it is suggested to separate subsistence agriculture from the rest.
- 281. Many statistical documents present data separately for rural and urban regions. There are no strict lines of delimitation between these two classes and the concepts used vary from country to country. They can only be taken as approximate indicators.
- 282. The classification schemes shown in the tables refer to the International Standard Industrial Classification (ISIC), the International Standard Classification of Occupations (ISCO), the International Classification of Status in Employment (ICSE) and the International Standard Classification of Education (ISCED). Only the major divisions are shown, mainly due to the space available. In presenting the tables it is recommended to show more detailed classifications in those divisions which are of special interest from the point of view of employment of women in the informal sector in the specific conditions of each country. For example, hotels and restaurants in countries where tourism is an important activity and where there are boarding houses or other own-account units headed by women.
- 283. The main concepts and classifications used in these tables have been reviewed in chapters IV and V; those not reviewed are discussed in the notes to the tables at the end of this chapter.
- 284. While those classifications that are of special interest should be presented in more detail, those which are shown only for the purpose of comparison could be collapsed (merged) into one single category, possibly named "other". This should be done in those cases where the composition of the "other" category is not of interest.
- 285. In determining what kinds of statistics should be produced in order to measure the role of women in the informal sector, one must look at the problems which arise and the questions that are being asked. This implies that in addition to figures which show the presence of women in that sector, as much statistical data as is feasible must be collected on the circumstances that might explain the situation, show existing trends and facilitate planning and policy decisions. Therefore it will be necessary to

extend the coverage to both sexes and even, where necessary, beyond the informal sector.

- 286. In the first place statistics are needed on population by age group and sex, education and activity status, and on households. These are covered in tables 1-5. The age distribution is further examined in connection with the informal sector. Table 6 presents the participation of different age group for own-account workers and unpaid family workers. (Are certain age groups more motivated than others to work in informal productive units?)
- 287. Several tables also show percentage distributions. They indicate the degree of concentration and specialization.
- 288. Secondly come tables showing three characteristics of the labour force by sex: kind of economic activity, occupational group and status in employment, first in simple tables and then in cross-classifications. These are tables 7-12. They answer questions about the relation between employment of women and men.
- 289. In order to be more precise concerning the degree of participation in the labour force, data on time worked are essential. Such statistics can be organized by kind of economic activity or by occupational group or by status in employment, but cross-classifications enhance enormously the usefulness of such data. Statistics on time worked are collected in tables 13-17.
- 290. The next step is to look at earnings of the different participants in production, preferably classified in the same way as statistics on time worked. This appears in tables 18-22.
- 291. The role of education is examined next. Again it is analyzed in connection with kind of economic activity, occupational group and status in employment, as shown in tables 23-26. Table 25 is useful in addressing the question whether there is "underemployment" in the case of the informal sector. In addition the educational level of the unemployed population is examined in table 27.
- 292. In order to get an idea on the dynamics of the informal sector in terms of growth or decline, one has to examine employment figures through time and compare these movements with what happens in the rest of the economy. This is done in tables 28-29.
- 293. If units occupying a small number of employees are included in the enquiry, the size of such units measured by the number of persons employed must be ascertained. This aspect is covered in table 30, which shows the number of productive units of differing sizes and the total number of workers in each size group.
- 294. At the end comes the examination of production. This is best done by estimating value added (gross domestic product or GDP) created by different productive units, classified by kind of economic activity. (This procedure is a simplification. It overlooks the fact that "female" productive units, as explained in the text, might have male unpaid family workers and "male" productive units, female unpaid family workers. It implies that these two differences cancel themselves out.) Then, GDP created in formal and informal

productive units is compared. In this comparison there is no sub-division by sex as no such data exist for the formal sector. The comparison is carried out in table 31.

- 295. After total GDP for each kind of activity comes GDP (value added) per person employed, dividing these GDP figures by the corresponding employment. This is done by sex for the informal sector (table 32) and without classification by sex for the formal sector (table 34). Then the per capita figures in both sectors can be compared.
- 296. Many questions have been posed concerning the stability of informal productive units and especially those in the hands of women. To answer them it is necessary to produce statistics on the age of informal productive units at a given time. This is done in table 35 which shows the age of such units classified by kind of economic activity and the sex of heads of the productive units.
- 297. It is commonly assumed that value added per worker is highly correlated with capital per worker. As capital varies considerably between formal and informal productive units (and between productive units in the hands of women and of men), data that shed light on these aspects are crucial in appraising the status of women in the informal sector. Table 36 takes up this relation in the following way: The statistical units are the productive units in the informal sector, classified by kind of economic activity and sex of head. They show the capital/labour ratio in four classes. The capital/labour ratio in each kind of economic activity and each sex is calculated as the value of the fixed capital used in production (tools, shelter, furniture, machinery, equipment, vehicle, etc.) divided by the number of persons employed in production. As can be seen this table requires information that in most cases will be available only through ad hoc inquiries. Nevertheless, in this or similar ways it has been prepared in several countries.
- 298. Some words about the terminology used in the tables are appropriate. Sometimes the reader will find different terms used in the formats that appear in the pages that follow, referring to what is basically the same concept. This is due not so much to avoid repetition of the same word but so as to use as far as possible expressions that are used in real life situations. On the other hand, however, terminology is needed that allows clear delimitations and does not leave any doubt where one phenomenon ends and the other begins, otherwise it would be impossible to measure them with any degree of reliability. For example, there are the words "GDP" (as in table 32) or "value added" or "earnings" (as in table 38) or "income".
- 299. The relation between product and income on the national scale is treated in Part One, where total national income, total national product and total national expenditure are compared. It can be seen there that the values of product and of income are the same and that total income is divided between the part (salaries) that salaried employees receive and the remainder, which is called operating surplus and is redistributed later as rent, interest and profit. These incomes are also called earnings.
- 300. It is said that the operating surplus of an informal unit includes also the income from the "labour" of the employer, own-account worker and

unpaid family worker and, because of that, proposals have been made to create a specific category of income under the term "mixed income".

301. In the last part of this chapter some additional technical notes are given concerning the different tables.

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22.	Employed population by sex, occupational group, status in employment and earnings
23.	Economically active population by sex, kind of economic activity and educational attainment
24.	Economically active population by sex, occupational group and educational attainment
25.	Employed population by sex, status in employment, educational attainment and earnings
26.	Employed population by sex, kind of economic activity, status in employment and educational attainment
27.	Unemployed population by sex and educational attainment
28.	Employment trend in informal sector by sex and status in employment
29.	Total employment and employment in informal sector by sex
30.	Informal productive units by number of persons working and kind of economic activity
31.	Gross domestic product (GDP) by kind of economic activity in formal and informal sectors
32.	GDP and employment in informal sector by sex and kind of economic activity
33.	GDP and employment in informal sector by sex and occupational group
34.	GDP, employment and GDP per employed person by kind of economic activity
35.	Age distribution of informal productive units by sex of head and kind of economic activity
36.	Distribution of informal productive units by sex of head, kind of economic activity and capital per worker
Notes	to the tables

Table	1.	Population	by	sex	and	age	group
-------	----	------------	----	-----	-----	-----	-------

Year ____

A. Number

Age group*	F	<u>M</u>	F/M ratio
0 - 14			
15 24			
15 - 24			
25 - 44			
25 - 44			
45 - 59			
.0			
60 +			
Total			

B. Percentage distribution by age group

Age group	<u>F</u>	<u>M</u>	Both sexes
0 - 14			
15 - 24			
25 - 44			
45 - 59			
60 +			
Total	100.0	100.0	100.0

^{*} See (6), p. 30, for an explanation of this classification.

Table 2. Households

Reference year	Reference source	Total number of households	Average size	Headed by women one parent other
xxxx xxxx		xxxx xxxxx	xxx xxx	xxx xxx xxx xxx xxx

Table 3. Population 15 years and over by sex, educational attainment and age group

Year ____

A. Number

Level attained*

Age group

15 - 24 25 - 44

45 - 59 60 +

Illiterates

F

M

F/M

No schooling

F

M

F/M

Completed

primary

F

M

F/M

Entered

secondary

F

M

F/M

Completed

secondary

F

M

F/M

Post-secondary

level

F

M

F/M

TOTAL

F

M

F/M

Table 3 (cont.)

B. Percentage distribution by level attained

<u>Level attained*</u> <u>Both sexes</u> <u>F</u> <u>M</u>

Illiterates

No schooling

Completed primary

Entered secondary

Completed secondary

Post-secondary level

TOTAL 100.0 100.0

^{*} Based on the International Standard Classification of Education, as shown in (6), p. 112.

Table 4. School enrolment

Year ____

A. Number

	F	M	F/M
First level	xxx	xxx	x
Second level	xxx	xxx	x
Higher levels	xxx	xxx	x
TOTAL			

B. Percentage distribution by level

	Females	Males	Total	
First level	xxx	xxx	х	
Second level	xxx	xxx	x	
Higher levels	xxx	xxx	×	
TOTAL	100.0	100.0	100.0	

Table 5. Economically active and not economically active population by sex and age group

Year ____ Economically active Not economically active A. Number Age group Total F M F/M Total F M F/M 15 - 19 20 - 2425 - 4445 - 59 60 + TOTAL

B. Percentage distribution by age group

Age group	Economi Total	F	M 	Not ecor Total	nomical: F	ly active M
15 - 19						
20 - 24						
25 - 44						
45 - 59						
60 +						
TOTAL	100	100	100	100	100	100

Table 6. Own-account workers and unpaid family workers by sex and age group

Year ____

A. Number

TOTAL

Age group	Own-accor	unt woi	rkers M	Unpaid total	fam. wo	rkers M
15 - 19						- **
20 - 24						
25 - 44						
45 - 59						
60 +						

B. Percentage distribution by age group

Age group	Own-acco Total	unt wo	orkers M	Unpaid i	Eam. F	workers M
15 - 19						
20 - 24						
25 - 44						
45 - 59						
60 +						
TOTAL	100	100	100	100	100	100

Table 7. Economically active population by sex and kind of economic activity

Year

A. Number

Kind of economic activity TOTAL F M F/M

Agriculture, hunting, forestry and fishing

Mining and quarrying

Manufacturing

Electricity, gas and water

Construction

Wholesale and retail trade,

restaurants and hotels

Transport, storage

and communications

Financing, insurance, real

estate and business services

Community, social and personal

services

Activities not adequately defined

SUB-TOTAL

Housekeeping*

TOTAL

B. Percentage distribution by kind of economic activity

Kind of economic activity TOTAL F M

Agriculture, hunting, forestry

and fishing

Mining and quarrying

Manufacturing

Electricity, gas and water

Construction

Wholesale and retail trade

and restaurants and hotels

Transport, storage

and communication

Financing, insurance, real

estate and business services

Community, social and personal

services

Activities not adequately defined

SUB-TOTAL

Housekeeping*

TOTAL 100.0 100.0 100.0

^{*} See Notes at the end of the chapter.

Table 8. Economically ac	ctive population by	sex and occupational group
--------------------------	---------------------	----------------------------

	Year												
A. Number													
Occupational	group	F	М	F/M									

Professional, technical and related workers

Administrative and managerial workers

Clerical and related workers

Sales workers

A.

Agricultural and related workers Subsistence farmers*

Production and related workers, transport equipment operators

Service workers

Workers not classified elsewhere

Not stated

TOTAL

B. Percentage distribution by occupational group

Occupational group F M Total

Professional, technical and related workers

Administrative and managerial workers

Clerical and related workers

Sales workers

Agricultural and related workers
Subsistence farmers*

Production and related workers, transport equipment operators

Service workers

Workers not classified elsewhere

Not stated

TOTAL 100.0 100.0 100.0

^{*} Refers to a farmer who grows crops or raises poultry or livestock mainly for own consumption.

Table 9.	Employed	population	by	sex	and	status	in	employment
----------	----------	------------	----	-----	-----	--------	----	------------

Year ____ A. Number F/M M F TOTAL Status in employment ____ ____ Employer Small enterprises Other enterprises **Employee** Small enterprises Other enterprises Own-account worker Unpaid family worker Member of producing co-operative TOTAL B. Percentage distribution by status in employment M TOTAL F Status in employment ----_____ Employer Small enterprises Other enterprises **Employee** Small enterprises Other enterprises Own-account worker Unpaid family worker Member of producing co-operative 100.0 100.0 100.0 TOTAL

co-op.

Table 10. Employed population by sex, kind of economic activity and status in employment

Year ____ A. Number Employer Employee Own-account Unpaid family Member of Small Other worker Kind of economic activity and sex -----Agriculture \mathbf{F} Μ Mining F М Manufacturing F M Electricity, gas and water \mathbf{F} M Construction F M Trade, restaurants, hotels F M Transport, storage comms. \mathbf{F} M

F M

Comm., social and personal services

Business services

F

M

Not adequately

defined .

F

Μ

TOTAL

F

Μ

Table 10 (cont.)

B. Percentage distribution by kind of economic activity

Kind of economic activity and sex	Emp Small	ployer Other	Emp Small	loyee Other	Own-ac	count	Unpaid family worker		Member of co-op.	
		<u>F M</u>		<u>F</u> <u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	<u>M</u>	<u>F</u>	M

Agriculture

Mining

Manufacturing

Electricity, gas and water

Construction

Trade, restaurants,
 hotels

Transport, storage comms.

Business services

Comm., social and
 personal services

Not adequately defined

Table 11. Economically active population by sex, kind of economic activity and occupational group

Year ____

sex

Major divisions of ISIC

TOTAL DIV1 DIV2 DIV3 DIV4 DIV5 DIV6 DIV7 DIV8 DIV9 DIV0

Occupational group and
Professional,
technical and
related workers F M
Administrative and
managerial workers
F M
Clerical and
related workers
F
M
Sales workers
F
M
Agricultural and
related workers
F
M
Production and related
workers and transport
equipment operators
F
M
Service workers
F
M
Workers not
classified elsewhere F
_
M Not stated
Not stated F
r M
1-1
TOTAL

F M

Table 12. Employed population by sex, occupational group and status in employment

Year ____

A. Number

Kind of economic	E	mplo	yer			-	oyee		Own-	7.0	Unpa			Member of		
activity and sex	Sma	11	Oth	Other		nall	Ot1	ner	worker		family		co-o	ρ.		
	F	M	F	M	F	M	F	<u>M</u>	\mathbf{F}	<u>M</u>	F	<u>M</u>	<u>F</u>	M		

Professional, technical and related workers

F

М

Administrative and managerial workers

F

M

Clerical and related workers

F

M

Sales workers

 \mathbf{F}

Μ

Agricultural and related workers

F M

Subsistence farmers*

F

M

Production and related workers and transport equipment operators

F

М

Service workers

F

М

Workers not

classified elsewhere

F

M

Not stated

F

M

TOTAL

F

M

Table 12 (cont.)

B. Percentage distribution by kind of economic activity

Kind of economic	1	Emplo		Empl	oyee		Own-	acc.	Unp	aid	Member of			
activity		Small		Other		Small		her	worker		family		co-op.	
	F	M	F	M	F	M	F	M	<u>F</u>	M	F	M	<u>F</u>	<u>M</u>

Professional, technical and related workers

Administrative and managerial workers

Clerical and related workers

Sales workers

Agricultural and related workers

Subsistence farmers*

Production and related workers, transport equipment operators

Service workers

Workers not classified elsewhere

Not stated

TOTAL

^{*} Refers to a farmer who grows crops or raises poultry or livestock mainly for own consumption.

Table 13. Employed population by sex, kind of economic activity and time worked

Year ____ Hours worked per week* Kind of economic < 6 6-14 15-21 22-29 30-40 activity and sex TOTAL ____ _____ Agriculture, hunting, forestry and fishing Mining and quarrying Manufacturing F M Electricity, gas and water M Construction F M Wholesale and retail trade, restaurants and hotels Μ Transport, storage communication F M Financing, insurance, real estate, business services Community, social and personal services Activities not adequately defined M TOTAL \mathbf{F} M

^{*} Number of hours worked should correspond to the specific circumstances of each country. This is especially true for agriculture, where only a coarse estimation is possible.

41+

Table 14. Employed population by sex, occupational group and time worked Year ____

Occupations Hours worked per week* and sex < 6 6-14 15-21 22-29 30-40 TOTAL Professional, technical and related workers F M Administrative and managerial workers F M Clerical and related workers F M Sales workers F M Agricultural and related workers F Subsistence farmers** F M Production and related workers and transport equipment operators F Μ Service workers \mathbf{F} Workers not classified elsewhere F M Not stated F M TOTAL F M

^{*} Number of hours worked should correspond to the specific circumstances of each country. This is especially true for agriculture, where only a coarse estimation is possible.

^{**} Refers to a farmer who grows crops or raises poultry or livestock mainly for own consumption.

Table 15. Employed population by sex, status in employment and time worked

Year ____ Status in employment Hours worked per week* and sex TOTAL < 6 6-14 15-21 22-29 30-40 41+ Employer Small enterprises F M Other enterprises Employee Small enterprises M Other enterprises F Own-account worker F M Unpaid family worker F M Member of producing co-operative F M TOTAL F Μ

^{*} Number of hours worked should correspond to the specific circumstances of each country. This is especially true for agriculture, where only a coarse estimation is possible.

```
Table 16. Employed population by sex, kind of economic activity, status in employment and time worked
```

```
Year _
Kind of economic activity,
                                                 Hours worked per week*
status and sex
                                         < 6 6-14 15-21 22-29 30-40
                                TOTAL
                                                                           41+
                                ____
ISIC Major Div 1
     Employer
          Small enterprises
              F
              M
         Other enterprises
    Employee
         Small enterprises
              \mathbf{F}
              M
         Other enterprises
              M
     Own-account worker
         \mathbf{F}
         M
    Unpaid fam. worker
         F
         M
    Member of co-operative
         F
         Μ
ISIC Major Div 2
    Employer
         Small enterprises
              F
              М
         Other enterprises
              М
    Employee
         Small enterprises
              F
              М
         Other enterprises
              \mathbf{F}
              M
    Own-account worker
         F
         Μ
    Unpaid fam. worker
         F
    Member of co-operative
         F
         Μ
```

Kind of economic activity,

Table 16 (cont.)

Hours worked per week*

there

```
status and sex
                              TOTAL
                                      < 6 6-14 15-21 22-29 30-40 41+
Repeat for ISIC Major Divisions 3, 4, 5, 6, 7, 8, 9 and 0.
ISIC
      TOTAL
    Employer
         Small enterprises
             F
         Other enterprises
             F
             M
    Employee
         Small enterprises
             F
         Other enterprises
             F
             M
    Own-account worker
         F
         M
    Unpaid fam. worker
         M
    Member of co-operative
         F
         M
```

^{*} Number of hours worked should correspond to the specific circumstances of each country. This is especially true for agriculture, where only a coarse estimation is possible.

Table 17. Employed population by sex, occupational group, status in employment and time worked

Year

Occupational group status and sex

Hours worked per week*

<u>TOTAL</u> < 6 6-14 15-21 22-29 30-40 41+

ISCO Major Group 0/1

Employer

Small enterprises

F

Other enterprises

F

Μ

Employee

Small enterprises

F

M

Other enterprises

F

M

Own-account worker

 \mathbf{F}

M

Unpaid fam. worker

 \mathbf{F}

M

Member of co-operative

 \mathbf{F}

M

Occupational group

Table 17 (cont.)

Hours worked per week*

```
< 6 6-14 15-21 22-29 30-40 41+
status and sex
                              TOTAL
ISCO Major Group 2
    Employer
          Small enterprises
              F
          Other enterprises
              \mathbf{F}
    Employee
          Small enterprises
              F
          Other enterprises
              M
     Own-account worker
         F
          М
     Unpaid fam. worker
          \mathbf{F}^{i}
          M
     Member of cooper.
          F
          Μ
```

Repeat for ISCO Major Groups 3, 4, 5, 6, 7/8/9 and X.

^{*} Number of hours worked should correspond to the specific circumstances of each country. This is especially true for agriculture, where only a coarse estimation is possible.

Table 18. Employed population by sex, kind of economic activity and earnings

Year

Kind of economic activity		E	A	R	N	I	N	G	G	ROU	J P	S*	
	Gro	up 1	G	roı	ip 2	G	rou	p 3	Gro	up 4	Gr	oup 5)
			_			_							
	F	M		F	M		F	M	F	M	F	M	

Agriculture, hunting, forestry and fishing Mining and quarrying Manufacturing Electricity, gas and water Construction Wholesale and retail trade, restaurants and hotels Transport, storage and communication Financing, insurance, real estate and business services Community, social and personal services Activities not adequately defined

^{*} Earnings groups might be defined according to national characteristics. They may be ranges between specific amounts or be related to a variable such as the minimum salary.

Table 19. Employed population by sex, occupational group and earnings

F M

F M

Year _____ E A R N I N G G R O U P S*
TOTAL Group 1 Group 2 Group 3 Group 4 Group 5

F M

F M

F M

Professional, technical and related workers

Administrative and managerial workers

Occupational group

Clerical and related workers

Sales workers

Agricultural and related workers
Subsistence farmers

Production and related workers, and transport equipment operators

Service workers

Workers not classified elsewhere

Not stated

^{*} Earnings groups might be defined according national to characteristics. They may be ranges between specific amounts or be related to a variable such as the minimum salary.

Table 20. Employed population by sex, status in employment and earnings

Year

E A R N I N G G R O U P S*

Group 1 Group 2 Group 3 Group 4 Group 5

F M F M F M F M F M F M

Employer

Small enterprises Other enterprises

Employee

Small enterprises Other enterprises

Own-account worker

Member of producing co-operative

^{*} Earnings groups might be defined according to national characteristics. They may be ranges between specific amounts or be related to a variable such as the minimum salary.

Table 21. Employed population by sex, kind of economic activity, status in employment and earnings

	Year	
Kind of economic activity and status in employment	E A R N I N G Group 1 Group 2 Grou	
ISIC Major Div 1 Employer Small enterprises Other enterprises Employee Small enterprises Other enterprises Own-account worker Member of co-operative	<u>fm</u> <u>fm</u> <u>f</u>	M F M F M
ISIC Major Div 2 Employer Small enterprises Other enterprises Employee Small enterprises Other enterprises Own-account worker Member of co-operative		

Repeat for ISIC Major Divisions 3, 4, 5, 6, 7, 8, 9 and 0.

ISIC TOTAL

Employer

Small enterprises
Other enterprises
Employee
Small enterprises
Other enterprises
Own-account worker
Member of cooper.

^{*} Earnings groups might be defined according to national characteristics. They may be ranges between specific amounts or be related to a variable such as the minimum salary.

Table 22. Employed population by sex, occupational group, status in employment and earnings

Year

E A R N I N G G R O U P S*

Occupation and status Group 1 Group 2 Group 3 Group 4 Group 5 in employment F M F M F M F M F M F M

ISCO Major Group 0/1

Employer

Small enterprises Other enterprises

Employee

Small enterprises

Other enterprises
Own-account worker

Member of co-operative

ISCO Major Group 2

Employer

Small enterprises Other enterprises

Employee

Small enterprises

Other enterprises

Own-account worker

Member of co-operative

ISCO Major Group X

*** * * * * * * * * * * * *

Employer

Small enterprises

Other enterprises

Employee

Small enterprises

Other enterprises

Own-account worker

Member of co-operative

ISCO TOTAL

Employer

Small enterprises

Other enterprises

Employee

Small enterprises

Other enterprises

Own-account worker

Member of cooperative

^{*} Earnings groups might be defined according to national characteristics. They may be ranges between specific amounts or be related to a variable such as the minimum salary.

Table 23. Economically active population by sex, kind of economic activity and educational attainment

Year

Educational attainment

Kind of economic Illiterate No schooling First Second Post activity and sex level level secondary

Agriculture, hunting, forestry and fishing F

M Mining and quarrying

F M

Manufacturing

 \mathbf{F}

M

Electricity, gas and water

F

М

Construction

F

M Molesale and ret

Wholesale and retail trade, restaurants and hotels

 \mathbf{F}

М

Transport, storage communication

F

Μ

Financing, insurance, real estate business services

F M

Community, social and personal services

F

M

Activities not adequately defined

F

Μ

TOTAL

F

M

Table 24. Economically active population by sex, occupational group and educational attainment

Year

Educational attainment

Occupational group Illiterate No schooling First Second Post sec. level level level level and sex Professional, technical and related workers \mathbf{F} M Administrative and managerial workers \mathbf{F} M Clerical and related workers F M Sales workers F M Agricultural and related workers F M Subsistence farmers* F Production and related workers, transport equipment operators \mathbf{F} M Service workers F Μ Workers not classified elsewhere F M Not stated F Μ TOTAL F

M

* Refers to a farmer who grows crops or raises poultry or livestock mainly for own consumption.

Table 25. Employed population by sex, status in employment, educational attainment and earnings

Year ____

Educational attainment	TOTA	_						G Grou					up 5	
and status				-			-							
	F M	F	М		F	М		F	4	. F	M	F	M 	

Illiterates

Employer

Small enterprises

Other enterprises

Employee

Small enterprises

Other enterprises

Own-account worker

Member of co-operative

No schooling

Employer

Small enterprises

Other enterprises

Employee

Small enterprises

Other enterprises

Own-account worker

Member of co-operative

First level

completed

Employer

Small enterprises

Other enterprises

Employee

Small enterprises

Other enterprises

Own-account worker

Member of co-operative

Second level completed

Employer

Small enterprises

Other enterprises

Employee

Small enterprises

Other enterprises

Own-account worker

Member of co-operative

Table 25 (cont.)

E A R N I N G GROUPS*

Educational attainment	TO	TAL	Gro	up 1	Gro	up 2	Gro	up 3	Gro	up 4	Gro	up 5
and status												
	F	M	F	M	F	M	F	M	F	M	F	M

Post-secondary
level
Employer
Small enterprises
Other enterprises
Employee
Small enterprises
Other enterprises
Other enterprises
Own-account worker
Member of co-operative

TOTAL

Employer
Small enterprises
Other enterprises
Employee
Small enterprises
Other enterprises
Own-account worker
Member of co-operative

^{*} Earnings groups might be defined according national characteristics. They may be ranges between specific amounts or be related to a variable such as the minimum salary.

Own-account worker Unpaid family worker Member of co-operative

Table 26. Employed population by sex, kind of economic activity, status in employment and educational attainment

Year

status in	empl	.oy				edu	cat	iona	l at	tai	nmen	t		
	E	d	u c	a	t i	. 0	n a	1	a t	t	a i	n m	e n	t
Kind of economic activity and status in employment			erat					ing	lev		lev	el	Post	ndary
			<u>M</u>								F		F	<u>M</u>
ISIC Major Div 1 Employer Small enterprises Other enterprises Employee Small enterprises Other enterprises Own-account worker Unpaid family worker Member of co-operative	-	•	==			_				_	-	_	_	
ISIC Major Div 2 Employer Small enterprises Other enterprises Employee Small enterprises Other enterprises Own-account worker Unpaid family worker Member of co-operative														
ISIC Major Div 9 Employer Small enterprises Other enterprises Employee Small enterprises Other enterprises Own-account worker Unpaid family worker Member of co-operative														
ISIC Major Div 0 Employer Small enterprises Other enterprises Employee Small enterprises Other enterprises														

Table 27. Unemployed population by sex and educational attainment

		Yea	r	
A. Number				
Level attained		F	М	F/M
Illiterates Total First job				
No schooling Total First job				
First level completed Total First job	£-			
Second level completed Total First job				
Post-secondary Total First job				
B. Percentage	distributio		onal attainment	
		Yea		
Level attained		F	M	Both sexes
	Tot	al First	Total First	
Illiterates				
No schooling				
First level completed				
Second level completed				
Post-secondary				
TOTAL	100	100	100 10	0 100 100

Table 28. Employment trend in informal sector by sex and status in employment

Years	Own-a	ccount	workers	Unpaid	fam.	workers	Emplo	oyers/	emplo	yees
	F	M	T	F	M	T	F	M	F	M
XXXX										
XXXX										
XXXX										
XXXX										

Table 29. Total employment and employment in informal sector by sex

Years	Tota	l e	mplo	oyment	I	N	F	0	R	М	A	L	S	E	С	T	0	R
	F		T	F/T	F					as			(TE) T	<u>a</u>	s %	F /F	emp	<u> </u>
xxxx	_	_	_			_												
XXXX																		
XXXX																		
XXXX																		

Table 30. Informal productive units by number of persons working and kind of economic activity

Years ______

NUMBER OF PERSONS EMPLOYED

Kind of economic Own-account
activity worker alone 2 3 4 5+

Mining

Manufacturing
Construction
Trade and restaurants
Transport
Services

Table 31. Gross domestic product (GDP) by kind of economic activity in formal and informal sectors

Year ____

Kind of economic activity Total Formal Informal % informal

Mining and quarrying Manufacturing Electricity, gas and water Construction Wholesale and retail trade, restaurants and hotels Transport, storage and communication Financing, insurance, real estate and business services Community, social and personal services Activities not adequately defined SUB-TOTAL

Agriculture, hunting, forestry and fishing TOTAL

Table 32. GDP and employment in informal sector by sex and kind of economic activity

Year _____

						Per	empl	oyed
Kind of economic activity		<u>G</u> D	<u>P</u>	<u>Emplo</u>	<u>yment</u>	per	son	
	T	\mathbf{F}	M	\mathbf{F}	M	F	M	F/M

Mining and quarrying
Manufacturing
Electricity, gas and water
Construction
Wholesale and retail trade,
restaurants and hotels
Transport, storage and
communication
Financing, insurance,
real estate and
business services
Community, social and
personal services
Activities not
adequately defined

Table 33. GDP and employment in informal sector by occupational group and sex Year $\underline{\hspace{1cm}}$

	F	M	\mathbf{F}	M	F	M	F/M
Occupational group	G	D P	Employ	ment	g	erson	-
					Pe	er emp.	loyed

Professional, technical and related workers

Administrative and managerial workers

Clerical and related workers

Sales workers

Production and related workers, transport equipment operators

Service workers

Workers not classified elsewhere

Not stated

Table 34. GDP, employment and GDP per employed person by kind of economic activity

Year	
------	--

Kind of economic activity

GDP

Employment

GDP per employed person

Agriculture, hunting, forestry and fishing Mining and quarrying Manufacturing Electricity, gas and water Construction Wholesale and retail trade, restaurants and hotels Transport, storage and communication Financing, insurance, real estate and business services Community, social and personal services Activities not adequately defined

Table 35. Age distribution of informal productive units by sex of head and economic kind of economic activity

Year ____

Sex of head and kind of economic activity

AGE DISTRIBUTION OF PRODUCTIVE UNIT
< 1 year 1 year 2 years 3-4 years 5 years +

Mining and quarrying

F

M Manufacturing

F

М

Electricity, gas and water

F

Μ

Construction

F

M

Wholesale and retail trade, restaurants and hotels

F

M

Transport, storage and communication

F

М

Financing, insurance, real estate and business services

F

M ommunity

Community, social and personal services

F

M

Activities not

adequately defined

F

М

TOTAL

F

Μ

Table 36. Distribution of informal productive units by sex of head, kind of economic activity and capital per worker

Year ____

CAPITAL PER WORKER <u>Group 1</u> <u>Group 2</u> <u>Group 3</u> <u>Group 4</u>

Kind of economic activity and sex of head
Mining and quarrying F M
Manufacturing F M
Electricity, gas and water F M
Construction F
Wholesale and retail trade, restaurants and hotels
M Transport, storage and communication F M
Financing, insurance, real estate and business services F M
Community, social and personal services F M
Activities not adequately defined F
TOTAL

M

Notes to the tables

Table 1

The delimitation of age groups may be designed so as to suit specific (legal or other) circumstances of countries but the limits of the ranges should be comparable with the international classification.

The F/M ratio will usually fluctuate closely around 1, but departures from that value are significant for the user.

Table 2

The column on "reference source" is important because different sources will frequently be used in the table. In case the sources are different for different columns, this should be indicated in footnotes.

One-parent households headed by women might not be a frequent phenomenon in some countries, but they are often found, especially in urban environments.

The average household size has been related by some analysts to the participation rate of women in economic activities.

Table 5

This is one of the most frequently used tables for showing participation rates of women in all types of status (employers, employees, own-account workers, etc.) in accordance with international definitions.

Table 6

The female age distribution in the informal sector (as also in the formal sector) is an important element in many types of analysis of women's contribution to development.

Table 7

Shows the distribution of women of all status by activities. The concentration in certain activities should become visible. Because of limitation of space, only the main divisions are used in the illustrative table. A more detailed classification should be used whenever possible to pinpoint the areas of concentration of women's activities.

In order to show changes taking place in time, this table should be prepared for as many years as data are available.

Housekeeping includes chores such as cooking, cleaning, caring for other members of the household engaged in by a member of the same household. Paid domestic services are not included here but in the class "Community, social and personal services". The question may arise whether those who engage in more than one activity, for

example a woman that works for income and at the same time attends her house and her family should be classified here or in the ISIC division corresponding to her income creating activity. The same principle must be applied here as in other cases of multiple employment, that is, she should be classified in that class that is considered her main employment. However, if data on time use were known, housekeeping can be recorded as a secondary activity.

Table 8

Same as for table 7.

Table 9

The sex ratio (last column of the table), is the most expressive indicator of the relative position of women in employment. To show trends in their position, use table 28.

Tables 10, 11 and 12

Show the interrelation of status in employment, kind of activity and occupation of women.

Tables 13, 14, 15, 16 and 17

Same as the aforementioned but indicating time worked. Do women work more or less hours than men? Does this depend on kind of economic activity, occupation or status? Note that the table covers time worked for activities and occupations listed in ISIC and ISCO; time spent housekeeping is not included.

Tables 23 to 27

Indicate the relation between educational attainment and participation in economic activities, occupational group and status.

Table 27

Tries to answer the question whether there is a connection between women's unemployment and their educational level.

Table 28

Gives a representation of the changes that have occurred in the employment of women in the informal sector. These figures should be analyzed in connection with total employment of both sexes and total employment of women.

Table 29

Should answer questions on the size of informal productive units. Even if they do not employ salaried workers, the number of unpaid family workers can vary considerably depending on the type of activity. There might also exist considerable differences by regions.

Tables 30 and 31

Presents the contribution of women in the informal sector expressed in monetary units in accordance with national accounts rules. Table 30 is an adaptation of table 10 in SNA (10).

Tables 32 and 33

Bring together GDP and employment in the informal sector. The last column shows GDP by persons employed for women and men.

Table 34

For comparison this table shows GDP and employment for all sectors.

Table 35

This table should contribute to the discussion of the stability of informal productive units. It shows the age of informal productive units.

Table 36

This table shows the capital/labour ratio of informal productive units. Its importance was noted in para. 297.

- VII. ILLUSTRATIVE PROCEDURES FOR ESTIMATING WOMEN'S PARTICIPATION AND PRODUCTION IN THE INFORMAL SECTOR IN DIFFERENT SITUATIONS OF STATISTICAL AVAILABILITY
- 302. The preceding chapters reviewed the materials and procedures to be used to arrive at significant statistical aggregates and the way to present them. This chapter will illustrate the techniques with numerical examples.
- 303. As techniques vary in response to differences in sources, and in order to keep close to real circumstances that might prevail in different parts, the examples refer to several different scenarios. The difference between them is the availability of data and this determines what tables can be prepared and by what procedures.
- 304. In each example it is assumed that certain information and certain statistical data are available and different sets of data are assumed to be available in each example. Here again what has been said about availability should be remembered. Obtaining the data might represent no effort at all on the part of the user (that is the reader of the present Handbook) in case the data have already been calculated and possibly even published, or it can imply lengthy explanations with statistical authorities concerning the details of tabulations that have not been done before. In such circumstances, the tables as presented in last chapter should be used to show what types of cross-classifications are needed.
- 305. The examples below begin by indicating the data and tables that can readily be made "available" (sometimes after a considerable effort). These will be referred to as "source documents" to distinguish them from the tables which will be the result of the process of transformation described in the example.
- 306. There are no special difficulties in setting up tables representing employment figures. Ratios such as the activity ratio or participation ratios are easy to calculate. The difficulties appear when it comes to tables and accounts expressed in monetary values and especially when figures on employment are combined with data on earnings. Therefore the examples that are presented below refer to these situations.

First example

- 307. This example is built on a scenario where a population census is available (or even two population censuses). In addition there is a sample survey on small-size industrial production units. The censuses present data by sex, and the industrial sample survey has data for industrial establishments classified by industries and size, but no data on sex.
- 308. The years of the censuses and the industrial survey do not coincide. The survey falls between the two censuses.
- 309. The size classification in the survey is based on the number of employees on the payroll; one of the classes is "no paid employees". The principal indicators shown are the number of establishments, number of persons engaged, value of output, cost of materials and industrial services and value added.

310. The population censuses have a table on employment by status and sex, classified by industries. Before presenting these tables to start with, the figures from the population censuses must be adjusted to the year of the survey. Either this can be done by those in charge of censuses or it can calculated by the analyst using interpolation. In most cases simple interpolation will be the only possible solution.¹⁹

311. These are the documents to start with:

Source document 1. Principal indicators of industrial activity by kind of economic activity, establishments with no salaried employees.

Industry	Number of establishments	Number of persons engaged	Value of output (a)	Cost of materials, industrial services (a)	Value added (a)
Agriculture Mining Manufacture	115 16 30	432 29 70	13200 5080 23700	1700 600 11700	11500 4480 12000
_		_	_	_	_
Trade Transport	110 18	310 27	31300 7860	8200 2100	23100 5760
	_	-	* 5 6 5 0	2050	10600
Services TOTAL	90 379	201 1069	15650 96790	27350	69440
Mining Manufacture Electricity Construction Trade Transport Financing Services	16 30 - - 110 18 - 90	29 70 - 310 27 - 201	5080 23700 - 31300 7860 - 15650	1700 600 11700 - 8200 2100 - 3050	4480 12000 - 23100 5760 - 12600

⁽a). In national currency.

312. The next source document is essentially the same as table 10 in the previous chapter. The numbers in those categories which are not used in the example are omitted.

¹⁹ But one should be aware of its implications. It implies that the change has been linear i.e. has changed by the same amount each year. When it is known that this has not been the case, for example that there has been a deep depression between the two years, one should adjust the figure. In such cases the statistical authorities usually will be able to propose possible adjustments.

Source document 2. Employed population by sex, kind of economic activity and status in employment.

Industry	Empl	oyer	Empl	oyee	Own-ac worke		Unpaid wor	family ker		mber coop.
Agriculture Mining Manufacturing Electricity Construction Trade Transport Financing Services TOTAL	F	М	F	М	F 100 - - - 60 - 50 210	M 15 16 30 - 50 18 - 40 169	F	М	F	M

- 313. In source document 1, the value added by the productive units (establishments) which do not employ any salaried workers and therefore represent the informal sector is obtained. The amount for all industries is 69440 in national currency units. The sum for productive units in the informal sector is the same as the sum for all own-account workers. This then is the value added (census value added) by own-account workers of both sexes. What is still missing is the distribution of that value by sex.
- 314. In source document 2 the distribution by sex of all own-account workers is found. There is a total of 379 own-account workers, 210 women and 169 men. It could be assumed that earnings of women own-account workers are equal to those of men, 109732 would be divided in accordance to their numbers. That would give 38476 as value added by women and 30964 by men. But to assume equal earnings in the case of women and of men is to beg the question.
- 315. Thus information available is manifestly insufficient to decide the problem. Unless some additional information (possibly from an *ad hoc* inquiry as discussed below) can be obtained the only thing to do is to adjust the above figures with some general assumptions.
- 316. But even before such adjustment estimate can be improved by proceeding in more detail, using the figures given by industry. For that purpose the following worksheet can be constructed:

Value	added	and	number	of	own-account	workers	by	industry.
-------	-------	-----	--------	----	-------------	---------	----	-----------

	Total Value	Own- account	Value added	Own- acco work	-	Value	added
Industry	added	workers	per worker	F	M	F	M
Agriculture Mining	11500 4480	115 16	100 280	100	15 16	10000	1500 4480
Manufact.	12000	30	400	-	30	-	12000
Electricity Construction	_	-	_	10.000	_	_	_
Trade	23100	110	210	60	50	12600	10500
Transport Financing	5760 -	18	320	_	18	_	5760 -
Services TOTAL	12600 69440	90 379	140 183	50 210	40 169	7000 29600	5600 39840
	00110	0.0			_ , ,		

- 317. This worksheet reveals some interesting facts. If women were evenly distributed among industries, say distributed in the same proportion as their total contribution to GDP would be 38,476 (210 women own-account workers by the overall value added per worker of 183). This total contribution would be higher than that of men. But women are not distributed among industries the same way as men. They bunch in certain aggregated industries. Due to this bunching in lower income activities., their total contribution is down to 29600 (less than the contribution of men) and their per capita value added is 141.
- 318. These differences are calculated even without information on income differentials between sexes in the same activities. This additional information would show still more clearly the discrepancies in product between sexes.
- 319. The above calculation could be improved if the classification by industries were presented in a more detailed way (second or third level of ISIC), because the concentration of women in certain activities cannot be learned the one-digit classification (major divisions). Even within each division they are not distributed evenly, but cluster around the worst paid sub-classes of the major divisions.
- 320. With the figures from the worksheet table 32 shown in last chapter, can be filled out, indicating in a footnote that, because of lack of information the same per-person product was assumed for men and women.

Second example

- 321. In real-life situations, the figures being handled are rather big and this makes calculations somewhat unwieldy. In the scenario below, in order to capture at a glance the relationships within the data, use low figures are used so that calculations can be made instantly. That limitation will be relaxed in the next example.
- 322. For the present example, it is assumed that the source documents that can be obtained are the following:

Source document 3. Employment by economic activity and status in employment

Activity	Employer	Employee	Own-account worker	Unpaid family worker	Member coop.	Total
Agriculture	2	14	10	30	2	58
Mining	_	-	-	_	_	_
Manufact.	5	50	30	20	- Carr	105
Electricity	1	8	_	_	_	9
Construction	1	10	~		_	11
Trade	3	20	20	30	maga	73
Transport	2	14	5	3	1	25
Financing	2	8	_	_	-	10
Services	3	9	12	14	-	38
Total	19	133	77	97	3	329

Source document 4. Own-account workers by kind of economic activity and sex

Activity	Own-account T F		workers M	
Agriculture Mining	10	5 -	5	
Manufacturing Electricity	30	12	18	
Construction	_	_	_	
Trade	20	13	7	
Transport	5	_	5	
Financing	_	_	-	
Services	12	7	5	
Total	77	37	40	

Source document 5. Average earnings of own-account workers by kind economic activity

Activity	Monthly value added both sexes (national survey)
Agriculture	40
Mining	-
Manufacturing	90
Electricity	_
Construction	
Trade	80
Transport	70
Financing	_
Services	60

323. As can be seen the average earnings in the table above are for both sexes and there is no information on average earnings for women. However, an ad hoc inquiry has revealed that in agriculture women's average earnings were approximately three-fourths and in manufacturing only half the average earnings of both sexes and they were equal to men's average earnings in trade and services.

324. Accordingly the following values on monthly earnings of women own-account workers are assigned:

Agriculture	30
Manufacturing	45
Trade	80
Services	60.

325. With these and the data on the number of women shown in source document 4, total earnings of women in each own-account activity can be arrived at:

Agriculture	150
Manufacturing	540
Trade	1040
Services	420.

- 326. From the national point of view, these figures represent the contribution to GDP of women working in the informal sector. However, as GDP is expressed as an yearly figure, the next step is to convert the above monthly figures to yearly figures (multiply by 12).
- 327. Thus the GDP created by women own-account workers in different activities is obtained, as follows:

Agriculture	1800
Manufacturing	6480
Trade	12480
Services	5040
TOTAL	25800.

- 328. In order to compare women's contribution to that of men and arrive at the total contribution of the informal sector to GDP, the GDP created by men in the same sector must be calculated.
- 329. This can be done following the same procedures. The first step is again to calculate monthly average earnings, but this time for men. 20 They are as follows:

For a shortcut, calculate earnings for both sexes, deduct women's earnings and divide the residual by the number of male own-account workers. In the case of manufacturing: 2700 - 540 = 2160; 2160 divided by 18 = 120. The average monthly earnings of a male own-account worker in manufacturing is 120.

Average monthly earnings of male own-account workers

Agriculture	50
Manufacturing	120
Trade	80
Transport	70
Services	60

330. The next steps are to calculate men's total monthly earnings and then total yearly earnings:

Total earnings of male own-account workers

	Monthly	Yearly
Agriculture	250	3000
Manufacturing	2160	25920
Trade	560	6720
Transport	350	4200
Services	300	3600
Total	3620	43440

331. Women's and men's total yearly earnings can now be compared GDP created in the informal sector arrived at.

GDP in the informal sector by sex and kind of economic activity

		GDP	
	F	M	Total
Agriculture	1800	3000	4800
Mining	-	_	_
Manufacturing	6480	25920	32400
Electricity	_	_	_
Construction	_	_	_
Trade	12480	6720	19200
Transport	_	4200	4200
Financing	=	_	_
Services	5040	3600	8640
Total	25800	43440	69240

332. Looking back at table 32 of the last chapter, it can be seeing that the figures presented above are the first three columns of that table. Furthermore, the figures from source document 4 shown in the present chapter can be used without further elaboration to fill in the columns on employment of table 32.

333. The last three columns of table 32 are per-worker figures. This is in fact a different way to express averages. The column of per-worker for women and men can therefore be filled in from the figures given above. The last column of table 31 shows the relationship between women's and men's average

earnings (or per-worker). For those activities where there are no women own-account workers there can be no entry in the corresponding cell.

334. In this example the values for the F/M ratio are the following:

Agriculture	0.6
Manufacturing	0.375
Trade	1.0
Services	1.0

335. With these last entries, table 32 is completed, it is an essential tool in demonstrating the contribution of women in the informal sector to the economy of the nation.

Third example

336. Essentially the same procedure as those just described are used in the next example. It is more complex: the figures presented are those of a real-life situation and thus are high figures. To give a different perspective instead of working with kinds of activities the example is based on occupations.

337. This scenario assumes that data on employment by occupation and status are cross-classified by ten earning groups and presented separately for each gender (source document 6). This represents an advanced tabulation designed for a labour force or household survey. The data might be requested from the statistical authorities with reference to the layout of table 32 of chapter IV.

338. In surveys, earnings will usually be given as ranges, i.e. with an upper and a lower limit. The figures appearing in each cell indicate the number of individuals whose income falls within these limits. From these data, the average earnings of all individuals in that range have to be determined. The statistical authorities will usually be glad to be of help in doing this; quite frequently one will find that this task has already been done by them²¹. (As is the case in the example, the figures appearing in Column 2 are averages estimated from ranges.)

339. Cols. 3-12 show the number of women and men (at the middle and at the bottom of the table) own-account workers with a certain average income (A, B, C,...,J) in different occupations (professional, manager...etc). Col. 13 is the sum of each row and shows the number of individuals in all occupations having the same average income. The bottom row shows the total number of individuals with different average incomes belonging to the same occupation.

340. The next step is to estimate the total income for each income class and occupational group by gender. This is done by multiplying each cell showing the number of persons (cols. 3-12) by the corresponding average income (col. 2). The results are placed in the cells of table A: "Income of own-account workers", where the upper part shows the income of both sexes, the middle

The easiest way is to use either the middle point or the median of the range, or to distribute the population of the range according to the distribution of the whole population.

part the income of women and the lower part the income of men. Col. 1 of this table indicates the income groups (A, B, ..., J); cols. 2-11 show the income of own-account workers in each occupational group. The calculations are done separately for women and men and later added up to obtain the upper part of the table, which represents the income of different occupations and different income groups in the informal sector. Col. 12 shows total income in each income group for all occupations, the line before last the total income (sum of all income groups) for each occupation in the informal sector and the bottom line averages per month.

- 341. These data enable women's contribution to the informal sector by occupational group to be estimated, following the same procedure illustrated in the previous scenario. They serve to make the entries in table 33.
- 342. The coverage of the income concept, which is used to define the income group, determines the extent and limitation of the final estimates. In the case of the example presented above, the income data have been adjusted to the concept of income used in SNA and therefore the results can be compared with SNA estimates. As this is not always the case, sometimes the results based on labour or household surveys are not comparable with national aggregates, but they are sufficient to make comparisons between female and male contributions and that of the informal sector as a whole. In the worst case, they allow at least a comparison between women's and men's contribution to a sub-sector of the informal sector (e.g. income of street-vendors).

A. Employment and average monthly earnings

Both	sexes

	Average				Employr	nent by o	ccupation	nal group				
Document	income/		Adm.,						Handi-		Not	Total
group	month	Prof.	mgr.	Clerical	Trade	Agric.	Mining	Prod.	crafts	Services	stated	emp.
Α	0.270	135	0	0	11408	4720	0	90	12776	9019	0	38148
В	0.361	138	78	184	13668	9974	96	433	12564	9043	0	46178
С	0.575	429	0	76	21704	34517	7	1508	15058	7276	0	80575
D	0.940	1145	581	212	39120	91318	0	4199	19315	7294	0	163184
E	1.495	1338	374	208	46893	61812	119	10894	28862	10009	0	160509
F	2.164	3115	1397	621	54140	38822	519	25486	37479	8710	214	170503
G	3.139	2833	2404	571	49847	19228	50	37542	39598	6322	6	158401
Н	4.552	1791	2186	723	19520	6074	210	30445	18217	2097	49	81312
I	5.922	1739	1939	18	9776	2100	14	11558	7970	1547	0	36661
J	11.295	4460	968	90	12174	2003	0	8790	3482	713	36	32716
	TOTAL	17123	9927	2703	278250	270568	1015	130945	195321	62030	305	968187

	F	е	ľ	n	a	ιl	E

	Average				Employr	nent by o	ccupation	nal group				
Document	income/		Adm.,	·					Handi-	N	ot	Total
group	month	Prof.	mgr.	Clerical	Trade	Agric.	Mining	Prod.	crafts	Services st	ated	emp.
Α	0.257	135	0	0	9684	870	0	90	11209	8502	0	30490
В	0.330	138	78	184	8810	973	0	0	10510	7921	0	28614
C C	0.476	429	0	76	10380	1927	0	74	10796	6533	0	30215
D	0.749	657	105	77	16984	3085	0	319	11322	5793	0	38342
Ε	1.181	494	187	118	15248	1390	0	117	9090	5879	0	32523
F	1.680	1323	298	105	11915	546	0	641	4450	3747	0	23025
G	1.958	986	228	195	8899	364	0	136	1855	2396	6	15065
Н	2.809	727	481	351	2786	73	0	275	398	486	49	5626
1	3.927	385	80	0	1280	0	0	0	105	205	0	2055
J	7.617	574	126	0	1830	81	0	80	385	303	0	3379
	TOTAL	5848	1583	1106	87816	9309	0	1732	60120	41765	55	209334

M	а	ŀ	е

	Average				Employr	nent by o	ccupation	nal group				
Document	income/		Adm.,						Handi-		Not	Total
group	month	Prof.	mgr.	Clerical	Trade	Agric.	Mining	Prod.	crafts	Services	stated	emp.
Α	0.321	0	0	0	1724	3850	0	0	1567	517	0	7658
В	0.412	0	0	0	4858	9001	96	433	2054	1122	0	17564
С	0.635	0	0	0	11324	32590	7	1434	4262	743	0	50360
D	0.999	488	476	135	22136	88233	0	3880	7993	1501	0	124842
E	1.575	844	187	90	31645	60422	119	10777	19772	4130	0	127986
F	2.240	1792	1099	516	42225	38276	519	24845	33029	4963	214	147478
G	3.263	1847	2176	376	40948	18864	50	37406	37743	3926	0	143336
Н	4.682	1064	1705	372	16734	6001	210	30170	17819	1611	0	75686
1	6.041	1354	1859	18	8496	2100	14	11558	7865	1342	0	34606
J		3886	842	90	10344	1922	0	8710	3097	410	36	29337
	TOTAL	11275	8344	1597	190434	261259	1015	129213	135201	20265	250	758853

Total

Mean

70559

4.258

39411

4.723

3.480

5566 560792 419548

2.845

1.606

2.586

2625 512798 407555

3.969

3.014

53486

2.639

901 2073241

2.732

3.600

Both sexes	3										
_		<u></u>		Employ	ment by o	ccupation	nal group				
Document		Adm.,						Handi-		Not	Total
group	Prof.	mgr.	Clerical	Trade	Agric.	Mining	Prod.	crafts	Services	stated	earnings
Α	35	0	0	3040	1459	0	23	3381	2349	0	10287
В	45	26	61	4905	4029	40	178	4310	3073	0	16667
С	204	0	36	12134	21612	4	946	7848	3583	0	46367
D	980	554	193	34839	90456	0	4115	16468	5840	0	153445
É	1913	515	281	67853	96808	187	17112	41878	13449	0	239996
F	6237	2962	1332	114601	86656	1163	56730	81461	17412	479	369033
G	7957	7547	1609	151036	62266	163	122322	126787	17501	12	497200
Н	7024	9334	2728	86175	28302	983	142028	84547	8908	138	370167
1	9691	11544	109	56350	12686	85	69822	47925	8912		217124
J	49912	10827	1055	135161	23141	0	102682	39226	7113	422	369539
Total	83998	43309	7404	666094	427415	2625	515958	453831	88140	1051	2289825
Mean	4.906	4.363	2.740	2.394	1.580	2.586	3.940	2.324	1.421	3.440	2.365
Female											
				Employr	ment by o	ccupation	nal group				
Document		Adm.,						Handi-		Not	Total
group	Prof.	mgr.	Clerical	Trade	Agric.	Mining	Prod.	crafts	Services	stated	earnings
Α	35	0	0	2487	223	0	23	2878	2183	0	7829
В	45	26	61	2904	321	0	0	3464	2611	0	9432
С	204	0	36	4943	918	0	35	5142	3111	0	14389
D	492	79	58	12725	2311	0	239	8483	4340	0	28727
Ε	584	221	139	18012	1642	0	138	10738	6945	0	38419
F	2223	501	176	20017	917	0	1077	7476	6295	0	38682
G	1930	446	382	17422	713	0	266	3632	4691	12	29494
H	2042	1351	986	7826	205	0	773	1118	1365	138	15804
1	1512	314	0	5026	0	0	0	412	805	0	8069
J	4372	960	0	13940	617	0	609	2933	2308	0	25739
Total	13439	3898	1838	105302	7867	0	3160	46276	34654	150	216584
Mean	2.298	2.462	1.660	1.199	0.845		1.825	0.770	0.830	2.720	1.035
Male											
				Employr	nent by o	ccupation	nal group				
Document		Adm.,						Handi-		Not	Total
group	Prof.	mgr.	Clerical	Trade	Agric.	Mining	Prod.	crafts	Services	stated	earnings
Α	0	0	0	553	1236	0	0	503	166	0	2458
В	0	0	0	2001	3708	40	178	846	462	0	7235
С	0	0	0	7191	20694	4	911	2706	472	0	31978
D	488	475	135	22114	88145	0	3876	7985	1500	0	124718
Ε	1329	294	142	49841	95166	187	16974	31140	6504	0	201577
F	4014	2461	1156	94584	85739	1163	55653	73985	11117	479	330351
G	6027	7101	1227	133614	61553	163	122056	123155	12810	0	467706
Н	4982	7983	1742	78349	28097	983	141255	83429	7543	0	354363
1	8179	11230	109	51324	12686	85	69822	47513	8107	0	209055
J	45540	9867	1055	121221	22524	0	102073	36293	4805	422	343800

ANNEXES

I. INTERNATIONAL STANDARD INDUSTRIAL CLASSIFICATION OF ALL ECONOMIC ACTIVITIES (ISIC, 1968)*

MAJOR DIVISIONS AND SELECTED DIVISIONS AND CATEGORIES

- Agriculture, hunting, forestry and fishing
 Agriculture and hunting
 - 111 Agriculture and livestock industries
 - 112 Agricultural services
 - 113 Hunting, trapping and game propagation

 Forestry and logging
 - 121 Forestry
 - 122 Logging Fishing
- 2. Mining and quarrying
- 3. Manufacturing
- 4. Electricity, gas and water
- 5. Construction
- 6. Wholesale and retail trade and restaurants and hotels
 Wholesale trade

Retail trade

Restaurants and hotels

Restaurants, cafes and other eating and drinking places
Hotels, rooming houses, camps and other lodging places

- 7. Transport, storage and communication
- 8. Financing, insurance, real estate and business services

^{*} From International Standard Industrial Classification of All Economic Activities, Series M, No. 4, Rev.2 (United Nations publication, Sales No. E.68.XVII.8).

- 9. Community, social and personal services
 - 91. Public administration and defence
 - 1. General public services
 - 2. Defence
 - 92. Sanitary and similar services
 - 93. Social and related community services
 - 931. Education services
 - 932. Research and scientific institutes
 - 933. Medical, dental, other health and veterinary services
 - 934. Welfare institutions
 - 935. Business, professional and labour associates
 - 939. Other social and related community services
 - 94. Recreational and cultural services
 - 941. Motion picture and other entertainment services
 - 942. Libraries, museums, botanical and zoological gardens and other cultural services n.e.c.
 - 949. Amusement and recreational services n.e.c.
 - 95. Personal and household services
 - 951. Repair services not elsewhere classified
 - 952. Laundries, laundry services, and cleaning and dyeing plants
 - 953. Domestic services
 - 959. Miscellaneous personal services
 - 96. International and other extra-territorial bodies

3-0

3-1

II. INTERNATIONAL STANDARD CLASSIFICATION OF OCCUPATIONS 1968 REVISION* (ISCO) MAJOR AND MINOR GROUPS

Major Group 0/1. - Professional, technical and related workers 0 - 1Physical scientists and related technicians 0 - 2/3Architects, engineers and related technicians 0 - 4Aircraft and ships' officers 0 - 5Life scientists and related technicians 0 - 6/7Medical, dental, veterinary and related workers Statisticians, mathematicians, systems analysts and related 0 - 8technicians 0 - 9Economists 1-1 Accountants 1-2 Jurists 1-3 Teachers 1 - 4Workers in religion 1-5 Authors, journalists and related writers 1-6 Sculptors, painters, photographers and related creative artists 1-8 Athletes, sportsmen and related workers Professional, technical and related workers not elsewhere 1-9 classified Major Group 2. - Administrative and managerial workers 2-0 Legislative officials and government administrators 2-1 Managers Major Group 3. - Clerical and related workers

Clerical supervisors

Government executive officials

^{*} From International Standard Classification of Occupations, Revised Education (Geneva, International Labour Organisation, 1969).

ANNEX 133

- 9. Community, social and personal services
 - 91. Public administration and defence
 - 1. General public services
 - 2. Defence
 - 92. Sanitary and similar services
 - 93. Social and related community services
 - 931. Education services
 - 932. Research and scientific institutes
 - 933. Medical, dental, other health and veterinary services
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 - 939. Other social and related community services
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 - 959. Miscellaneous personal services
 - 96. International and other extra-territorial bodies

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II. INTERNATIONAL STANDARD CLASSIFICATION OF OCCUPATIONS 1968 REVISION* (ISCO) MAJOR AND MINOR GROUPS

Major Group 0/1. - Professional, technical and related workers Physical scientists and related technicians 0 - 10 - 2/3Architects, engineers and related technicians 0 - 4Aircraft and ships' officers 0 - 5Life scientists and related technicians Medical, dental, veterinary and related workers 0 - 6/7Statisticians, mathematicians, systems analysts and related 8 - 0technicians 0-9 Economists 1-1 Accountants 1-2 Jurists 1-3 Teachers Workers in religion 1-4 Authors, journalists and related writers 1-5 Sculptors, painters, photographers and related creative artists 1-6 Athletes, sportsmen and related workers 1-8 Professional, technical and related workers not elsewhere 1-9 classified Major Group 2. - Administrative and managerial workers Legislative officials and government administrators 2-0 2-1 Managers Major Group 3. - Clerical and related workers 3-0 Clerical supervisors 3-1 Government executive officials

^{*} From International Standard Classification of Occupations, Revised Education (Geneva, International Labour Organisation, 1969).

- 3-2 Stenographers, typists and card- and tape-punching machine operators
- 3-3 Bookkeepers, cashiers and related workers
- 3-4 Computing machine operators
- 3-5 Transport and communications supervisors
- 3-6 Transport conductors
- 3-7 Mail distribution clerks
- 3-8 Telephone and telegraph operators
- 3-9 Clerical related workers not elsewhere classified

Major Group 4. - Sales workers

- 4-0 Managers (wholesale and retail trade)
- 4-1 Working proprietors (wholesale and retail trade)
- 4-2 Sales supervisors and buyers
- 4-3 Technical salesmen, commercial travellers and manufacturers' agents
- 4-4 Insurance, real estate, securities and business services salesmen and auctioneers
- 4-5 Salesmen, shop assistants and related workers
- 4-9 Sales workers not elsewhere classified

Major Group 5. - Service workers

- 5-0 Managers (catering and lodging services)
- 5-1 Working proprietors (catering and lodging services)
- 5-2 Housekeeping and related service supervisors
- 5-3 Cooks, waiters, bartenders and related workers
- 5-4 Maids and related housekeeping service workers not elsewhere classified
- 5-5 Building caretakers, charworkers, cleaners and related workers
- 5-6 Launderers, dry-cleaners and pressers
- 5-7 Hairdressers, barbers, beauticians and related workers
- 5-8 Protective service workers
- 5-9 Service workers not elsewhere classified

ANNEX 136

Major Group 6. - Agriculture, animal husbandry and forestry workers, fishermen, and hunters

- 6-0 Farm managers and supervisors
- 6-1 Farmers
- 6-2 Agriculture and animal husbandry workers
- 6-3 Forestry workers
- 6-4 Fishermen, hunters and related workers

Major Group 7/8/9. — Production and related workers, transport equipment operators and labourers

- 7-0 Production supervisors and general foremen
- 7-1 Miners, quarrymen, well drillers and related workers
- 7-2 Metal processors
- 7-3 Wood preparation workers and papermakers
- 7-4 Chemical processors and related workers
- 7-5 Spinners, weavers, knitters, dyers and related workers
- 7-6 Tanners, fellmongers and pelt dressers
- 7-7 Food and beverage processors
- 7-8 Tobacco preparers and tobacco-product makers
- 7-9 Tailors, dressmakers, sewers, upholsterers and related workers
- 8-0 Shoemakers and leather-goods makers
- 8-1 Cabinetmakers and related woodworkers
- 8-2 Stone cutters and carvers
- 8-3 Blacksmiths, toolmakers and machine-tool operators
- 8-4 Machinery fitters, machine assemblers and precision-instrument makers (except electrical)
- 8-5 Electrical fitters and related electrical and electronic workers
- 8-6 Broadcasting station and sound equipment operators and cinema projectionists
- 8-7 Plumbers, welders, sheet metal and structural metal preparers and erectors

- 8-8 Jewellery and precious metal workers
- 8-9 Glass formers, potters and related workers
- 9-0 Rubber and plastics product makers
- 9-1 Paper and paperbound product makers
- 9-2 Printers and related workers
- 9-3 Painters
- 9-4 Production and related workers not elsewhere classified
- 9-5 Bricklayers, carpenters and other construction workers
- 9-6 Stationary engine and related equipment operators
- 9-7 Material-handling and related equipment operators, dockers and freight handlers
- 9-8 Transport equipment operators
- 9-9 Labourers not elsewhere classified

Major Group X. - Workers not classified by occupation

- X-1 New workers seeking employment
- X-2 Workers reporting occupations unidentifiable or inadequately described
 - X-3 Workers not reporting any occupation

Armed Forces - Members of the armed forces

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