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1. The original version is in French.

TOPIC 1
INFORMAL SECTOR :
DEFINITION AND IMPORTANCE

Informal sector : background and statistical definition

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I. BACKGROUND

1.1. Concept of the informal sector

The concept of the informal sector has been one of the ILO's most distinctive contributions to development thinking. The first appearance of the term "informal sector" in an official document was in the report of a comprehensive employment mission to Kenya undertaken by the ILO in 1972. One of the main findings of the mission was that, in a developing country like Kenya, the main employment problem was not unemployment, but the existence of large numbers of "working poor", many of them working very hard in the production of goods and services, but whose activities were not recognized, recorded, protected or regulated by the public authorities. This phenomenon was labelled in the report as the "informal sector", and explained by the inability of the other sectors of the economy - agriculture or other rural activities on the one hand, and modern industry and services on the other - to provide adequate incomes or employment opportunities to a rapidly growing labour force. Since then, the term "informal sector" has come into wide use, although its precise meaning has remained somewhat elusive and a subject of controversy as the concept has been defined in different contexts with different meanings. In spite of a considerable amount of research and data collection during the past 25 years, the understanding of what the informal sector is, why it exists and how it operates is still far from adequate. It is a controversial subject because there are different viewpoints from which one can observe the informal sector. It can be viewed in a positive way as a provider of employment and incomes to millions of people who would otherwise lack the means of survival. It can be viewed more negatively as a whole segment of society which escapes regulation and protection. It can be romanticized as a breeding ground of entrepreneurship which could flourish if only it were not encumbered with a system of unnecessary regulation and bureaucracy. It can be condemned as a vast area of backwardness, poverty, insanitary conditions, hazardous work, illegality and open use of child labour. Or it can simply be ignored.

While there have been, and will no doubt continue to be, controversies on precisely what types of activities and what categories of workers the informal sector covers, there does at least seem to be some common understanding about the main characteristics of the informal sector. The informal sector is a kind of umbrella concept to describe a variety of activities producing goods and services through which individuals derive employment and incomes. These activities are undertaken with the primary objective of self-generation of employment and incomes, rather than maximization of profit or of return on investments as they are typical for the formal sector. The conditions under which these activities come into existence and the constraints under which they are undertaken confer certain characteristics on them. They are informal in the sense that they are for the most part unregistered and unrecorded in official statistics, and that they are operating on a very small scale and with a low level of organization. Most of them have very low levels of capital, productivity and income. They tend to have little or no access to organized markets, to credit institutions, to modern technology, to formal education and training facilities, and to many public services and amenities. A large number of them are carried out without fixed location or in places that are not visible to the authorities, such as small shops, workshops, stalls or home-based activities. They are not recognized, supported or regulated by the government, and often compelled by circumstances to operate outside the framework of the law. The existence of informal sector activities on the fringes of the law has sometimes led public authorities to confuse them with illegal activities, and therefore to subject them to harassment and repression. Even where they are registered and respect certain aspects of the law, they are almost invariably beyond the pale of social protection, labour legislation and protective measures at the workplace.

Beyond these generalizations, the informal sector manifests itself in different ways in different countries, different regions within the same country, and even different parts of the same city. It encompasses different kinds of activities, different types of enterprises, and different motives for participation. The activities range from street vending, shoe-shining, food processing and other petty activities requiring little or no capital and skills and with marginal output to those involving a certain amount of investment in skills and capital and with higher productivity, such as manufacturing, tailoring, car repair and mechanized transport. While some informal sector activities resemble traditional activities in handicrafts, food processing or personal services, others such as car repair, recycling of waste materials or transport, are new and arise from modernization. Informal sector activities are mostly operated by single individuals working on own account as self-employed business operators, either alone or with the help of unpaid fami-

ly members, although some are micro-entrepreneurs engaging a few paid workers or apprentices. Labour relations, if existing, are based mostly on casual employment, kinship, personal or social relations rather than contracts with formal guarantees. Surveys have shown that there are considerable inequalities in the informal sector. Most people engaged in it, but not all, are poor ; some are quite destitute while others earn incomes that are higher than the minimum wage in the formal sector. The informal sector is therefore not entirely synonymous with poverty ; some formal sector wage earners are in fact in greater poverty than some of the informal sector entrepreneurs. It is important for the purposes of policy-making to recognize the considerable heterogeneity of the informal sector. In spite of their heterogeneity, all informal sector activities have in common that they are vulnerable. This vulnerability is due to the fact they have to rely as best they can on self-supporting and informal institutional arrangements for credit, training, social security, etc., which operate separately and independently of the institutions of the modern economy.

The motives for participation in the informal sector range from pure survival strategies undertaken by individuals in lack of (adequate) jobs, unemployment insurance or other forms of income maintenance, to the desire for independence and flexible work arrangements and, in some cases, the prospect of quite profitable income-earning opportunities, or the continuation of traditional activities. It should be noted in this connection that the vast majority of informal sector activities provide goods and services whose production and distribution are perfectly legal. This is contrasted with criminal activities or illegal production, i.e. activities which are forbidden by law or which become illegal when carried out by unauthorized producers (e.g. extortion, smuggling, drug traffic, prostitution, foreign exchange). There is also a difference between the concept of the informal sector and that of the hidden or underground economy. Informal sector activities are not necessarily performed with the deliberate intention of evading the payment of taxes or social security contributions, or infringing labour legislation or other regulations. Certainly, some of the units prefer to remain unregistered or unlicensed in order to avoid compliance with some or all regulations and thereby reduce production costs. One should however make a distinction between those whose business revenue is high enough to bear the costs of regulations and those who are "illegal" because they cannot afford to comply with existing regulations as their income is too low and irregular, because certain laws and regulations are quite irrelevant to their needs and conditions, or because the State is virtually non-existent in their lives and lacks the means to enforce the regulations which it has enacted. In some countries, at least, a sizeable proportion of informal sector enterprises are actually registered in some way and/or pay taxes, even though

they may not be in a position to comply with the full range of legal and administrative requirements. Being deprived, to a large extent, of the right to appeal to the courts for contracts to be enforced or to claim security of tenure, many informal sector entrepreneurs would prefer to legalize their operations whenever possible and thereby obtain legal protection from the authorities. It should also be noted that substantial segments of the hidden or underground economy originate from enterprises belonging to the formal sector ; examples include the production of goods and services “off-the-books”, undeclared financial transactions or property income, overstatement of tax-deductible expenses, employment of clandestine workers, and unreported wages and overtime work of declared employees. For these reasons, the concept of the informal sector needs to be distinguished from the concept of the hidden or underground economy. In reality, however, there will always be some overlap between the informal sector and the hidden or underground economy, and it is in respect of this overlap (i.e. deliberately concealed informal sector activities) that problems of non-response and under-reporting are most likely to occur in informal sector surveys.

In spite of its segmented, precarious and semi-legal existence, the informal sector cannot exist in total isolation from the formal sector. Although it largely serves markets which the modern sector is too inflexible or too high cost to reach, formal sector workers are informal sector customers, and the existence of the informal sector depends much on its ability to deliver goods and services at lower prices or smaller quantities than those of the formal sector, or to provide goods and services which would otherwise not be available at all. The informal sector also constitutes a huge “labour reserve” on which the formal sector can draw in times of expansion, or to which labour can be returned in times of contraction. Besides, in many countries an increasing number of informal sector activities are undertaken as secondary activities by formal sector workers in order to supplement their incomes. However, the nature of formal-informal sector relations varies. Some informal sector enterprises are highly dependent on modern enterprises for inputs, and modern sector enterprises can function as monopolies which increase the price of the inputs required. Other informal sector enterprises may act as subcontractors to the formal sector, and their weak economic power may make them vulnerable to exploitation. Other activities, consisting of jobs performed on an individual basis, are likely to be less directly linked to the formal sector, although even seemingly independent street vendors have sometimes been found to be part of well-organized commercial networks controlled by large-scale formal enterprises.

While there continues to be some controversy as to whether the informal sector concept is useful or appropriate either for analysis or for policy-making, or whether

the phenomenon that it describes can in any way be called a sector, the term “informal sector” is now widely used and accepted and is found not only in academic literature but also in many official documents and policy statements. From a statistical point of view, the informal sector has proved to be a useful concept for the collection of data on various types of activities which otherwise would not be sufficiently reflected in official statistics.

1.2. Need for statistical data collection on the informal sector

In the past, the informal sector used to be largely ignored by official statistics ; informal sector activities were either omitted from the existing statistics or, if captured, not identified separately. Little need was felt to collect data on informal sector activities because the development strategies pursued were mainly oriented towards modern, large-scale enterprises, and the informal sector was considered a transient phenomenon that would dwindle away in the near future as jobs were created through the growth of the modern, formal sector. However, during the past decade economic recession, adjustment policies and continued high rates of urbanization and population growth have led to an unprecedented expansion of the informal sector in many countries, as modern sector enterprises, and especially the public sector, were obliged to release workers or reduce wages drastically. In some countries, it was in fact only the informal sector which absorbed the labour force and kept the economy going, while the large, modern enterprises producing goods which require relatively capital-intensive technologies imported from the industrialized countries reeled under the downturn. Moreover, the process of industrial restructuring in the formal sector led to a greater decentralization of production through subcontracting to small enterprises, many of them in the informal sector. According to rough estimates, the informal sector now accounts for up to 40, 55 and 70 percent of total urban or non-agricultural employment in Latin American, Asian and African countries respectively. Its contribution to the gross domestic product is usually lower but far too high to be negligible. There is every reason to believe that a large and probably increasing segment of the labour force in many countries will be engaged in the informal sector for many years to come, and that the informal sector will remain an important and probably expanding part of the national economies. It is therefore increasingly recognized by researchers and policy-makers that the informal sector can no longer be ignored and that it needs to be integrated, in one way or the other, into the overall development process.

As a result, a growing number of national statistical agencies are being requested by their governments and others to provide, as part of their regular statistical pro-

grammes, comprehensive data on the size and characteristics of the informal sector and its evolution over time. This demand was reflected, for example, in the Addis Ababa Plan of Action for Statistical Development in Africa in the 1990s, which included the informal sector among the priority areas for future statistical programmes. The collection of data on the informal sector represents an important step forward towards the improvement of labour statistics, economic statistics and national accounts as an information base for macroeconomic analysis, planning, policy formulation and evaluation, and to recognition of the contribution of the informal sector to various aspects of economic and social development, including employment creation, production, income generation, human capital formation and the mobilization of financial resources. The data can also be used for the design and evaluation of support policies and assistance programmes for the informal sector with a view to increasing its productive potential (and, hence, its employment- and income-generating capacity), improving the working conditions and social and legal protection of persons employed in the informal sector, developing an appropriate regulatory framework and promoting the organization of informal sector producers and workers, and for analysis of the situation of particular groups of informal sector workers such as women, children, rural-urban migrants or immigrants.

Informal sector statistics are especially needed in developing countries where the informal sector plays a significant role in total employment and income generation. It is beyond doubt that an informal sector also exists in industrialized countries, but the scale of the phenomenon and the context in which it occurs are quite different. For these reasons, the development of informal sector statistics is given lesser priority in industrialized countries and may require different measurement methods.

II. INTERNATIONAL DEFINITION OF THE INFORMAL SECTOR

2.1. Fifteenth International Conference of Labour Statisticians

It is most obvious that the informal sector does not easily lend itself to statistical measurement. Due to the diversity of activities and modes of operation to which it refers, the concept of the informal sector as such is not very clear-cut. Accordingly, it is difficult to define the informal sector precisely in terms of statistical units and operational criteria, and to specify its scope and composition. Moreover, the large number of units to be surveyed and their characteristics (small size, high mobility and turnover, seasonal variations in activity, clustering in specific areas, lack of recognizable features for identification/location, lack of usable records, possible reluctance to survey participation, etc.) require modifications in traditional survey methods or the development of new methods.

In order to assist the statistical agencies of member States in these challenging tasks, the ILO Bureau of Statistics, following a request made by the Fourteenth International Conference of Labour Statisticians (1987), launched a series of activities during the late 1980's, which culminated in the adoption of a "Resolution concerning statistics of employment in the informal sector" by the Fifteenth International Conference of Labour Statisticians (15th ICLS) in January 1993. The resolution was intended, firstly, to provide the first (and so far only) internationally approved technical guidelines for the development of statistics on the informal sector, as a point of reference which would facilitate the task of national statistical agencies in developing definitions, classifications and methods of data collection on the informal sector as suited to the particular conditions of their country. Secondly, and less important in this case, the resolution was meant to reduce unnecessary differences in the informal sector statistics of different countries and thus improve the international comparability of the data.

The resolution covers a variety of issues relating to the definition of the informal sector and the design, content and conduct of informal sector surveys. It lays down the measurement objectives for informal sector data collection. It describes the concept of the informal sector and relates it to the conceptual framework of national accounting. It specifies the criteria of an operational statistical definition of the informal sector and makes a number of recommendations regarding the scope of informal sector surveys and the statistical treatment of particular cases which are at the borderline between the informal and other sectors. The resolution also provides fairly detailed guidelines for the design of informal sector data collection methods and programmes, account being taken of the measurement objectives pursued and differences in national statistical systems, and a recommendation to collect data on the informal sector on a regular basis as part of the national statistical programme. Finally, it includes a set of proposals regarding sub-classifications of the informal sector and concerning the types of data which may be collected in informal sector surveys. A copy of the resolution is attached as annex to this paper.

It should be noted that in spite of the title of the resolution, its relevance goes beyond employment statistics. In July 1993, the UN Economic and Social Council, upon recommendation of its Statistical Commission, adopted the revised System of National Accounts (SNA 1993). The informal sector definition adopted by the 15th ICLS forms part of the SNA 1993. This is because one of the new features of the SNA 1993 is the recommendation to introduce, where relevant, sub-classifications of the households sector, including a distinction between the formal and informal sectors. Such a distinction makes it possible for the national accounts to

quantify the contribution of the informal sector to the national economy. The ILO as lead agency in the promotion of the informal sector concept was requested to take part in this work by developing international guidelines for a statistical definition of the informal sector in such a way that the definition could also be used for national accounting purposes.

2.2. Links of the informal sector definition with national accounts concepts

The informal sector definition adopted by the 15th ICLS was linked with the conceptual framework of the SNA in order to : (i) enhance the compatibility of informal sector statistics with other economic and social statistics, and promote statistical integration ; (ii) measure the informal sector as part of the economy as a whole rather than in isolation ; (iii) use the same definition of the informal sector in labour statistics and national accounting ; and (iv) integrate, or even collect jointly, data on employment and data on other characteristics of the informal sector. These requirements had certain implications on the nature of the definition, as will be explained below.

Firstly, the informal sector had to be defined in terms of characteristics of the production units (enterprises) in which the activities take place, rather than in terms of the characteristics of the persons involved or of their jobs. Accordingly, the population employed in the informal sector was defined as comprising all persons who, during a given reference period, were employed in at least one production unit of the informal sector, irrespective of their status in employment and whether it is their main or a secondary job (the definition of the population employed in the informal sector stresses thus the distinction between “employed persons” and “jobs” in that it indicates that persons are classified into the informal sector through their relationship to a job in a production unit with specific characteristics ; in this way, it is possible to account for the increasing number of informal sector activities, which are undertaken as secondary jobs by persons whose main job is outside the informal sector (e.g. farmers, government employees), in order to compensate for stagnating wages and declining purchasing power). Persons exclusively employed in production units outside the informal sector are excluded, no matter how precarious their employment situation may be. Thus, the concept of persons employed in the informal sector is not identical with the concept of persons employed in informal employment relationships.

Secondly, the informal sector was considered as a subsector of the SNA institutional sector “households”, i.e. informal sector enterprises were defined as a subset of household enterprises or, synonymously, unincorporated enterprises owned by households. In accordance with the SNA 1993, household enterprises - as contras-

ted with corporations and quasi-corporations are defined as production units which are not constituted as separate legal entities independently of the households or household members that own them, and for which no complete sets of accounts (including balance sheets of assets and liabilities) are available which would permit a clear distinction of the production activities of the enterprises from the other activities of their owners and the identification of any flows of income and capital between the enterprises and the owners.

Household enterprises include unincorporated enterprises owned and operated by individual household members or by several members of the same household, as well as unincorporated partnerships and co-operatives formed by members of different households, if they lack complete sets of accounts. It should be noted that the enterprises may or may not employ paid workers, and that the activities may be carried out inside or outside the owner's home. The term "household enterprises" simply means that these units form part of the SNA institutional sector "households". The characteristic features of household enterprises correspond well to the concept of the informal sector as commonly understood. The fixed and other capital used does not belong to the production units as such but to their owners. The enterprises as such cannot engage in transactions or enter into contracts with other units, nor incur liabilities on their own behalf. The owners have to raise the necessary finance at their own risk and are personally liable, without limit, for any debts or obligations incurred in the production process. Expenditure for production is often indistinguishable from household expenditure, and capital equipment such as buildings or vehicles may be used indistinguishably for business and household purposes.

2.3. Criteria of the informal sector definition

The first two criteria of the informal sector definition adopted by the 15th ICLS refer to the legal organisation of the enterprises and the type of accounts kept for them ; these two criteria are embodied in the concept of household enterprises as described above. However, while all informal sector enterprises can be regarded as household enterprises, not all household enterprises can be considered as being part of the informal sector. The informal sector being a specific subset of the households sector, further criteria were needed to distinguish informal sector enterprises from other unincorporated enterprises owned by households. For this purpose, the 15th ICLS adopted a modular approach. As a first step, within the conceptual framework of household enterprises a distinction was made between enterprises of employers and own-account enterprises. In accordance with the definitions of employers and own-account workers of the International

Classification of Status in Employment (ICSE-93), the distinction was based on whether or not the enterprises employ at least one employee on a continuous basis (as contrasted with the employment of employees on an occasional basis and of unpaid family workers). The distinction was deemed important for definitional purposes : as compared with own-account enterprises, enterprises of employers necessarily have a higher degree of formality in their operations, and may therefore require one or more additional criteria for being classified in the informal sector. Moreover, the distinction between these two groups of enterprises was considered useful for the purposes of data analysis and policy-making, and as an important variable for the stratification of informal sector survey samples.

Accordingly, the informal sector was defined by the 15th ICLS as comprising (i) informal own-account enterprises and (ii) enterprises of informal employers, and separate criteria were specified for each of these two subgroups.

These criteria had to meet several requirements : (i) their number had to be small, as the definition was meant to serve the purposes of both data collection (i.e. specification of the scope of investigation) and data analysis ; (ii) the criteria had to be operational, i.e. clear-cut, objective, simple, easily applicable in the field, and pertaining to characteristics that were readily measurable in various types of surveys ; (iii) the criteria had to be relevant to the notion of informality, i.e. they had to be meaningful in their own specific right but at the same time be correlated with other criteria embodied in the informal sector concept ; (iv) the criteria had to refer to characteristics of production units, be relevant to all kinds of informal sector activities and should, as little as possible, define *ex ante* characteristics of the informal sector which data collection was supposed to reveal *ex post* ; (v) the definition had to be broad enough to allow for flexibility in data analysis and thereby accommodate the needs of various data users, i.e. the definition was supposed to cover as large a universe as was practically feasible and conceptually compatible with the notion of informal sector ; and (vi) the definition had to be acceptable to a wide range of countries from the various parts of the world, which meant that it had to be general enough to encompass the variety of ways in which the informal sector manifests itself in different countries, and to provide flexibility for the adoption of more specific definitions at the national level, even if such flexibility was likely to affect the international comparability of the statistics.

A review of national practices shows that basically two different ways of viewing and defining the informal sector are being used by countries which, to some extent, are interrelated. One refers to the position of the enterprises in relation to the legal and administrative framework in force, and views the informal sector as made up of units which do not conform to that framework ; this approach is

used primarily by countries in Europe and in the French-speaking part of Africa. The other approach views the informal sector as a particular form of production, and defines it in terms of the way the enterprises are organized and carry out their activities ; it is used primarily by countries in Latin America, Asia, and the English-speaking part of Africa. As is described in detail below, the international definition of the informal sector adopted by the 15th ICLS incorporates both approaches in that it specifies non-registration and/or size in terms of employment as criteria to distinguish, among household enterprises, informal sector enterprises from other unincorporated enterprises owned by households.

The 15th ICLS specified that depending on national circumstances, either all own-account enterprises should be considered informal, or only those which are not registered under specific forms of national legislation, such as factories or commercial acts, tax or social security laws, professional groups' regulatory acts, or similar acts, laws or regulations established by national legislative bodies, as distinct from non-registration under regulations enacted by local authorities for the purpose of obtaining a trade license or a permit to operate a business. These latter types of registration were not considered to be an appropriate criterion because they are governed by administrative regulations and their enforcement that may vary considerably from one country to another and, even within the same country, over time or between different regions. Moreover, they were not considered to have much of an effect on the way the businesses are organized and operate, nor on their economic objectives and behaviour (the similarity in economic objectives and behaviour is used in the SNA 1993 as guiding principle for the distinction between the various institutional sectors and subsectors). Recognizing that the criterion of non-registration would lack a clear conceptual basis unless it was specified to which of the various types of registration it referred, the inclusion in the resolution of a precise statement on this matter was felt necessary (paragraph 8.(3)). It should also be noted that the 15th ICLS did not include any size criterion in the definition of informal own-account enterprises ; such a criterion was considered superfluous as by their very nature virtually all own-account enterprises are likely to be small.

In respect of enterprises of informal employers, the 15th ICLS specified that these should be defined in terms of one or more of the following three criteria : small size of the establishment(s) in terms of employment, non-registration of the enterprise (defined in the same way as for informal own-account enterprises), and non-registration of its employees.

According to the 15th ICLS, the criterion of employment size may be formulated in terms of the number of employees employed on a continuous basis, the number of

all employees (including employees employed on an occasional basis), or the total number of persons engaged during a specific reference period (including the entrepreneur, business partners and unpaid family workers in addition to the employees). The number of employees employed on a continuous basis was considered to be the ideal measure from the conceptual point of view, as it matches best the definition of informal own-account enterprises, which does not take account of the number of enterprise owners, business partners, unpaid family workers and casual employees working in the enterprise. In practice, however, information on the number of all employees or the total number of persons engaged may be more easily obtained from survey respondents than information on the number of employees employed on a continuous basis, and may correspond more closely to the criterion used to define the lower size limit - or cut-off point - for determination of the coverage of existing establishment censuses and surveys of formal sector units.

In the case of enterprises composed of more than one establishment, the 15th ICLS recommended to use the establishment rather than the enterprise as the observation unit to which the size criterion refers. It was specified that an enterprise composed of more than one establishment should be considered informal if none of its establishments exceeds the size limit. The use of the establishment rather than the enterprise as observation unit for the size criterion ensures compatibility with the determination of coverage of establishment censuses and surveys relating to the formal sector, so that informal and formal sector statistics can complement each other. It also becomes possible in this way to capture the development of informal sector enterprises which, for various reasons, tend to grow through the creation of additional small establishments rather than through an expansion of employment in the original establishment.

The size limit for enterprises of informal employers was not specified by the 15th ICLS because it may have to vary between countries and, even within a given country, between branches of economic activity. It was recommended that the choice of the size limit should take account of the coverage of establishment censuses and surveys of the larger units in the corresponding branches of economic activity, where such inquiries exist, in order to avoid an overlap (some countries actually prefer, however, to have a certain overlap in coverage as long as it can be identified ; this is because response rates and data quality in establishment surveys tend to be relatively low in the case of the smaller units covered). During the discussions of the conference, some reservation was expressed against defining the informal sector residually as comprising all units which were not covered in existing establishment censuses and surveys. It was pointed out that such a definition might be rather unstable over time, because the informal sector would

expand or contract if the coverage of the existing inquiries were changed. It was also feared that a residual definition of the informal sector might be too broad for some countries, depending upon the level of development of their statistical system. Consequently, it was stated that where the lower cut-off point used in existing inquiries appeared too high to be an appropriate upper size limit for enterprises of informal employers, efforts should also be made to extend the coverage of the existing inquiries and thereby close or reduce the gap from both ends. It was felt that in situations, where it was not possible to lower the cut-off point of existing inquiries, it might sometimes be preferable to recognize the existence of an intermediate segment, and to cover it through a separate survey rather than to include it in the scope of informal sector surveys by substantially raising the upper size limit in the definition of enterprises of informal employers. This is because the survey methods used for informal sector enterprises may not be equally well-suited for the collection of data on medium-sized enterprises.

The criterion of non-registration of the employees of the enterprise was meant to refer to the conditions of employment regarding the workers' legal and social protection. It was defined in terms of the absence of employment or apprenticeship contracts which commit the employer to pay relevant taxes and social security contributions on behalf of the employees or which make the employment relationships subject to standard labour legislation. An enterprise can be considered to meet the criterion, if none of its employees is registered.

2.4. Treatment of particular cases

In order to complement its definition of the informal sector, the 15th ICLS adopted a number of recommendations regarding the scope of informal sector surveys and the statistical treatment of particular cases at the borderline between the informal and other sectors.

Non-economic activities : as the informal sector definition adopted by the 15th ICLS was linked with the conceptual framework of the SNA, the scope of the informal sector was restricted to economic activities, i.e. activities included in the SNA production boundary. This restriction was considered necessary to ensure that employment, production and income generation in the informal sector can be measured as a share of total employment, domestic product and national income. It should be noted in this connection that the SNA production boundary also includes illegal or concealed activities provided they are genuine processes of production whose outputs consist of goods or services for which there is an effective market demand (i.e. the transactions are made by mutual consent between the producers and consumers of the goods or services in question). In principle, all

such activities fall within the scope of the informal sector if they are undertaken by units meeting the criteria of the informal sector definition. It was recognized, however, that in practice many of such activities may go unreported in statistical surveys.

Non-market production : according to the 15th ICLS, household enterprises which are exclusively engaged in the production of goods or services for own final consumption or own fixed capital formation (i.e. building of own houses etc.) should be excluded from the informal sector, with the possible exception of households employing paid domestic workers. This recommendation was based on two considerations. Firstly, units exclusively engaged in non-market production differ in their economic objectives and behaviour from informal sector enterprises, which are typically operated for the purpose of earning one's living or obtaining an additional income through the production of goods and services for sale to others ; they should thus not be merged in the same concept. Secondly, it was considered prohibitively difficult to determine the value of goods produced for own final use unless the same units also produce some of their goods for sale to others.

Agricultural activities : conceptually, there is nothing against the inclusion of household enterprises engaged in agricultural and related activities within the scope of the informal sector. For the practical reasons of data collection, however, the 15th ICLS recommended to exclude agricultural and related activities from the scope of informal sector surveys and to measure them separately. This is because many developing countries have a large agricultural sector which is mainly composed of small, unregistered household enterprises. Their inclusion in informal sector surveys would lead to a considerable expansion of the survey operations and a substantial increase of the survey costs. Moreover, many countries have already an established system of agricultural censuses and surveys whose coverage often extends to household enterprises engaged in agricultural and related activities, or can relatively easily be so extended. These data sources appear better suited than informal sector surveys to meeting the particular requirements for measuring agricultural and related activities in terms of concepts, definitions, classifications, survey content, questionnaire design, reference periods, sampling frames and procedures, organization of field work, etc.

However, the 15th ICLS also recommended that non-agricultural activities of household enterprises mainly engaged in the agricultural sector should be included if they meet the criteria of the informal sector definition. Experience has shown that such non-agricultural activities are frequently undertaken as secondary activities of farm households or during the agricultural slack season.

Rural areas : recognizing the large number of informal sector activities in the rural areas of many countries, the 15th ICLS recommended that, in principle, the informal sector should include enterprises located in urban areas as well as enterprises located in rural areas. However, countries starting to conduct informal sector surveys were given the option to confine data collection initially to urban areas only, until resources and appropriate sampling frames become available to cover the whole national territory.

Professional and technical services : it was sometimes suggested in the past to exclude enterprises engaged in the production of professional or technical services rendered by self-employed doctors, lawyers, accountants, architects, engineers, etc. from the scope of the informal sector because of the high level of skills involved. However, the 15th ICLS recommended that such enterprises should be included in or excluded from the informal sector on the same basis as other enterprises.

Outworkers : in accordance with the SNA 1993, outworkers (homeworkers) were defined as persons who agree to work for a particular enterprise, or to supply a certain quantity of goods or services to a particular enterprise, by prior arrangement or contract with that enterprise, but whose place of work is not within any of the establishments which make up that enterprise. It was recommended that outworkers should be included among informal sector enterprises if they constitute enterprises on their own as self-employed persons, and if these enterprises meet the criteria of the informal sector definition. Criteria for the distinction between self-employed and employee outworkers include the basis of remuneration (income received as a function of the value of outputs produced vs. payment related to the amount of labour inputs provided), employment of paid workers by the outworker, existence of an employment contract with the enterprise receiving the goods or services produced by the outworker, decision-making on markets, scale of operations and finance, and ownership of machinery or equipment.

Paid domestic workers : in many situations it is virtually impossible to distinguish, among paid domestic workers engaged by households (e.g. maids, laundresses, watchmen, drivers, gardeners), those who are self-employed (i.e. owners of household enterprises producing services for sale on the market) from those who are employees of the households employing them (i.e. employees of household "enterprises" producing services for their own final consumption). Moreover, data on paid domestic workers and their remuneration are often already available from other sources, such as labour force surveys and household income and expenditure surveys. For these reasons, the issue of whether or not paid domestic workers should be included in the informal sector was left open for determination by countries themselves, depending upon their national circumstances and the intended

uses of the statistics. If included in the informal sector, paid domestic workers should however be identified as a separate sub-category in order to enhance the international comparability of the statistics.

III. CONCLUDING REMARKS

The informal sector as defined by the 15th ICLS resolution comprises a fairly heterogeneous set of units. For this reason, paragraph 36 of the resolution recommends to classify informal sector enterprises by various characteristics (e.g. urban vs. rural location, kind of activity, type of workplace, size, composition of the workforce, type of ownership, relation with other enterprises) in order (i) to show the structure of the informal sector, and (ii) to identify more homogeneous groups for data analysis, as targets for policies and support programmes, and basis for comparisons of the statistics over time and between countries. Moreover, it was recognized that for particular analytical purposes it may be necessary, at the national level, to develop more specific definitions of the informal sector by introducing further criteria on the basis of the data collected, and that such definitions may have to vary according to the needs of different users of the statistics (paragraph 10).

The approach used by the 15th ICLS in defining the informal sector corresponds to the common understanding of the informal sector as an umbrella concept which encompasses a variety of different activities : “Informal sector was ... never proposed as a definition of a homogeneous group of individuals or as a tool for analysis ; rather it was identified with a sub-set of economic activities and intended to describe a domain like rural or urban sectors only to focus research and policy. Just as in the case of rural or urban sectors, one needs to disaggregate it in order to draw meaningful conclusions” (Sethuraman, 1988). At the same time, however, the 15th ICLS withstood the temptation of misinterpreting the notion of the informal sector as a “catch-all” concept for all activities not captured by the conventional sources of statistics.

Consequently, the definition adopted was not meant to lead to a segmentation of the economy or the employed population according to a formal/informal sector dichotomy. It was recognized that activities excluded from the scope of the informal sector are not necessarily formal, and that they should be identified as separate categories outside the formal/informal sector distinction. Examples are the non-market production of goods, small-scale agriculture, paid domestic services, and activities presently falling outside the SNA production boundary, such as domestic or personal services provided by unpaid household members and volunteer services rendered to the community.

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Resolution concerning statistics of employment in the informal sector

The Fifteenth International Conference of Labour Statisticians,

Having been convened at Geneva by the Governing Body of the ILO and having met from 19 to 28 January 1993,

Recalling paragraph 33 of the resolution concerning statistics of the economically active population, employment, unemployment and underemployment (resolution I), adopted by the Thirteenth Conference (1982) and the resolution concerning the informal sector (resolution VIII), adopted by the Fourteenth Conference (1987),

Considering that statistics on employment in the informal sector are especially needed in order to improve the statistical systems of countries where informal sector activities account for a significant proportion of total employment and income generation,

Observing the development of concepts and technics for obtaining and analyzing such statistics in a number of countries,

Recognizing that although these concepts and technics will be further improved in the light of additional experience, there is currently a need for international standards to provide technical guidelines as a basis for the development of suitable definitions and classifications of informal sector activities and the design of appropriate data collection methods and programs, and recognizing the usefulness of such standards in enhancing the international comparability of statistics,

Adopts this 28th day of January 1993 the following resolution :

OBJECTIVES

1. Countries where the informal sector plays a significant role in employment and income generation and economic and social development should aim, where practicable, at developing a comprehensive system of statistics on employment in the informal sector to provide an adequate statistical base for the various users of the statistics, with account being taken of specific national needs and circumstances. The system to be developed should contribute to the improvement of labour statistics and national accounts as an information base for macroeconomic analysis, planning, policy formulation and evaluation, to the integration of the informal sector into the development process and to its institutionalization. It should provide quantitative information on the contribution of the informal sector to various aspects of economic and social development, including employment creation, pro-

duction, income generation, human capital formation and the mobilization of financial resources. The system may also provide data for the design and monitoring of specific support policies and assistance programmes for the informal sector as a whole or parts thereof with a view to increasing the productive potential and employment-and income-generating capacity of informal sector units, improving the working conditions and social and legal protection of informal sector workers, developing an appropriate regulatory framework and promoting the organization of informal sector producers and workers, and for the analysis of the economic and social situation of particular groups of informal sector workers such as women, children, rural-urban migrants or immigrants.

2. In order to fulfil the above objectives, comprehensive, detailed and reliable statistics should, as far as possible, be compiled on : (i) the total number of informal sector units, classified by various structural characteristics to provide information on the composition of the informal sector and identify particular segments ; (ii) total employment in such units, including information on the number of persons engaged by socio-demographic and other characteristics and on the conditions of their employment and work ; (iii) production and incomes generated through informal sector activities, derived, where possible, from data on outputs, inputs and related transactions ; and (iv) other characteristics pertaining to conditions under which informal sector units are created and carry out their activities, including their relationships with other units inside and outside the informal sector.

3. In order to enhance their comparability and usefulness, statistics on the informal sector should, as far as possible, be compatible with other related economic and social statistics and with national accounts as regards the definitions, classifications and reference periods used.

4. Statistics on the informal sector should be compiled at regular intervals so that changes in the size and characteristics on the informal sector over time can be monitored adequately. The frequency of data collection may vary according to the different types of statistics mentioned in paragraph 2, survey methods required and their implications for the use of human and financial resources.

CONCEPT

5.(1) The informal sector may be broadly characterized as consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned. These units typically operate at a low level of organization, with little or no division between labour and capital as factors of production and on a small scale. Labour relations - where they

exist - are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees.

(2) Production units of the informal sector have the characteristic features of household enterprises. The fixed and other assets used do not belong to the production units as such but to their owners. The units as such cannot engage in transactions or enter into contracts with other units, nor incur liabilities, on their own behalf. The owners have to raise the necessary finance at their own risk and are personally liable, without limit, for any debts or obligations incurred in the production process. Expenditure for production is often indistinguishable from household expenditure. Similarly, capital goods such as buildings or vehicles may be used indistinguishably for business and household purposes.

(3) Activities performed by production units of the informal sector are not necessarily performed with the deliberate intention of evading the payment of taxes or social security contributions, or infringing labour or other legislations or administrative provisions. Accordingly, the concept of informal sector activities should be distinguished from the concept of activities of the hidden or underground economy.

OPERATIONAL DEFINITIONS

Informal sector

6.(1) For statistical purposes, the informal sector is regarded as a group of production units which, according to the definitions and classifications provided in the United Nations System of National Accounts (Rev.4), form part of the household sector as household enterprises or, equivalently, unincorporated enterprises owned by households as defined in paragraph 7.

(2) Within the household sector, the informal sector comprises (i) "informal own-account enterprises" as defined in paragraph 8 ; and (ii) the additional component consisting of "enterprises of informal employers" as defined in paragraph 9.

(3) The informal sector is defined irrespective of the kind of workplace where the productive activities are carried out, the extent of fixed capital assets used, the duration of the operation of the enterprise (perennial, seasonal or casual), and its operation as a main or secondary activity of the owner.

Household enterprises

7. According to the United Nations System of National Accounts (Rev.4), household enterprises (or, equivalently, unincorporated enterprises owned by house-

holds) are distinguished from corporations and quasi-corporations on the basis of the legal organization of the units and the type of accounts kept for them. Household enterprises are units engaged in the production of goods or services which are not constituted as separate legal entities independently of the households or household members that own them, and for which no complete sets of accounts (including balance sheets of assets and liabilities) are available which would permit a clear distinction of the production activities of the enterprises from the other activities of their owners and the identification of any flows of income and capital between the enterprises and the owners. Household enterprises include unincorporated enterprises owned and operated by individual household members or by two or more members of the same household as well as unincorporated partnerships formed by members of different households.

Informal own-account enterprises

8.(1) Informal own-account enterprises are household enterprises (in the sense of paragraph 7) owned and operated by own-account workers, either alone or in partnership with members of the same or other households, which may employ contributing family workers and employees on an occasional basis, but do not employ employees on a continuous basis and which have the characteristics described in subparagraphs 5.(1) and (2).

(2) For operational purposes, informal own-account enterprises may comprise, depending on national circumstances, either all own-account enterprises or only those which are not registered under specific forms of national legislation.

(3) Registration may refer to registration under factories or commercial acts, tax or social security laws, professional groups' regulatory acts, or similar acts, laws, or regulations established by national legislative bodies.

(4) Own-account workers, contributing family workers, employees and the employment of employees on a continuous basis are defined in accordance with the most recently adopted version of the International Classification of Status in Employment (ICSE).

Enterprises of informal employers

9.(1) Enterprises of informal employers are household enterprises (in the sense of paragraph 7) owned and operated by employers, either alone or in partnership with members of the same or other households, with employ one or more employees on a continuous basis and which have the characteristics described in subparagraphs 5.(1) and (2).

(2) For operational purposes, enterprises of informal employers may be defined, depending on national circumstances, in terms of one or more of the following criteria :

- (i) size of the unit below a specified level of employment ;
- (ii) non-registration of the enterprise or its employees.

(3) While the size criterion should preferably refer to the number of employees employed on a continuous basis, in practice, it may also be specified in terms of the total numbers of employees or the number of persons engaged during the reference period.

(4) The upper size limit in the definition of enterprises of informal employers may vary between countries and branches of economic activity. It may be determined on the basis of minimum size requirements as embodied in relevant national legislations, where they exist, or in terms of empirically determined norms. The choice of the upper size limit should take account of the coverage of statistical inquiries of larger units in the corresponding branches of economic activity, where they exist, in order to avoid an overlap.

(5) In the case of enterprises which carry out their activities in more than one establishment, the size criterion should, in principle, refer to each of the establishments separately rather than to the enterprise as a whole. Accordingly, an enterprise should be considered to satisfy the size criterion if none of its establishments exceeds the specified upper size limit.

(6) Registration of the enterprise may refer to registration under specific forms of national legislation as specified in subparagraph 8.(3). Employees may be considered registered if they are employed on the basis of an employment or apprenticeship contract which commits the employer to pay relevant taxes and social security contributions on behalf of the employee or which makes the employment relationship subject to standard labour legislation.

(7) Employers, employees and the employment of employees on a continuous basis are defined in accordance with the most recently adopted version of the International Classification of Status in Employment (ICSE).

10. For particular analytical purposes, more specific definitions of the informal sector may be developed at the national level by introducing further criteria on the basis of the data collected. Such definitions may vary according to the needs of different users of the statistics.

Population employed in the informal sector

11.(1) The population employed in the informal sector comprises all persons who, during a given reference period, were employed (in the sense of paragraph 9 of resolution I adopted by the Thirteenth International Conference of Labour Statisticians) in at least one informal sector unit as defined in paragraphs 8 and 9, irrespective of their status in employment and whether it is their main or a secondary job.

(2) Where possible, the population employed in the informal sector should be subclassified into two categories : persons exclusively employed in the informal sector, and persons employed both in and outside the informal sector. The latter category may be further divided into two subcategories : persons whose main job is in the informal sector, and persons whose secondary job is in the informal sector.

(3) If the total employed population is to be classified into mutually exclusive categories of persons employed in and outside the informal sector, persons employed both in and outside the informal sector should be classified as a separate category, or criteria should be established to determine their main job (e.g. on the basis of self-assessment, time spent at work or amount of remuneration received in each job).

(4) In some countries, as significant number of children below the age specified for measurement of the economically active population in population censuses or household surveys work in informal sector units and may represent a group of particular concern for labour legislation and educational and social policies. In such situations, every possible effort should be made in informal sector surveys to collect information on the work of all children irrespective of age, and children below the minimum age specified in population censuses or household surveys should be identified separately.

TREATMENT OF PARTICULAR CASES

12.(1) Different members of a household may be engaged as self-employed persons in different kinds of informal sector activities during a given reference period. In order to determine whether such activities should be regarded as separate enterprises as parts of a single enterprise, due consideration should be given to the definitional requirements of an enterprise as specified in the International Standard Industrial Classification of All Economic Activities (ISIC, Rev. 3). Where it is difficult in practice to apply these requirements, different activities carried out by different household members should be treated as separate enterprises if they are perceived as such by the household members themselves.

(2) A household member or group of household members may be engaged as self-employed persons in different kinds of informal sector activities during a given reference period. For practical purposes, all activities carried out at a time by the same household member or group of household members should be treated as parts of a single enterprise rather than as separate enterprises.

13. In the case of informal sector units which are engaged in different kinds of production activities during a given reference period, efforts should be made to collect as much separate information as possible in respect of each activity, even when the enterprises concerned need not or cannot be partitioned into establishments as defined by the International Standard Industrial Classification of All Economic Activities (ISIC, Rev.3). In particular, such separate information should be collected in respect of all activities of the enterprise which are horizontally integrated (i.e. producing different kinds of goods or services for sale or exchange and carried out parallel with each other), irrespective of their share in the total value added of the enterprise.

14. Household enterprises, which are exclusively engaged in non-market production, i.e. the production of goods or services for own final consumption or own fixed capital formation as defined by the United Nations System of National Accounts (Rev.4), should be excluded from the scope of the informal sector for the purpose of statistics of employment in the informal sector. Depending on national circumstances, an exception may be made in respect of households employing domestic workers as referred to in paragraph 19.

15. With account being taken of paragraph 14, the scope of the informal sector should include household enterprises located in urban areas as well as household enterprises located in rural areas. However, countries which start to conduct surveys of the informal sector may initially confine data collection to urban areas. Depending upon the availability of resources and appropriate sampling frames, the coverage of the surveys should gradually be extended to cover the whole national territory.

16. For practical reasons, the scope of the informal sector may be limited to household enterprises engaged in non agricultural activities. With account being taken of paragraph 14, all non-agricultural activities should be included in the scope of the informal sector, irrespective of whether the household enterprises carry them out as main or secondary activities. In particular, the informal sector should include secondary non-agricultural activities of household enterprises in the agricultural sector if they fulfil the requirements of paragraph 8 or 9.

17. Units engaged in professional or technical activities carried out by self-employed persons such as doctors, lawyers, accountants, architects or engineers, should be included in the informal sector if they fulfil the requirements of paragraphs 8 or 9.

18.(1) Outworkers are persons who agree to work for a particular enterprise, or to supply a certain quantity of goods or services to a particular enterprise by prior arrangement or contract with that enterprise, but whose place of work is not within any of the establishments which make up that enterprise.

(2) In order to facilitate data collection, all outworkers should be potentially included in the scope of informal sector surveys, irrespective of whether they constitute production units on their own (self-employed outworkers) or form part of the enterprise which employs them (employee outworkers). On the basis of the information collected, self-employed and employee outworkers should be distinguished from each other by using the criteria recommended in the United Nations Systems of National Accounts (Rev.4). Outworkers should be included in the informal sector, or in the population employed in the informal sector, if the production units which they constitute as self-employed persons or for which they work as employees fulfil the requirements of paragraphs 8 or 9.

(3) In situations where the number of outworkers is significant or where outworkers represent a group of particular concern for data users, self-employed outworkers should be identified as separate subcategories of informal own-account enterprises and enterprises of informal employers or of the owners of such enterprises.

(4) For purposes of distinction between employment on a continuous basis and employment on an occasional basis, and in application of the definition of registered employees according to paragraph 9.(6), employee outworkers should be treated in the same way as other employees. Where relevant, employee out-workers may be identified as a separate subcategory of informal sector employees.

19. Domestic workers are persons exclusively engaged by households to render domestic services for payment in cash or in kind. Domestic workers should be included in or excluded from the informal sector depending upon national circumstances and the intended uses of the statistics. In either case, domestic workers should be identified as a separate subcategory in order to enhance international comparability of the statistics.

20. Activities excluded from the scope of the informal sector, such as domestic services, non-market production and agricultural activities, may be identified as separate categories outside the distinction between the informal and formal sectors.

DATA COLLECTION PROGRAM AND METHODS

21.(1) The collection of data on the informal sector should be integrated into the regular national statistical system. The data collection program should provide both for (a) the current monitoring, if possible once a year, of the evolution of employment in the informal sector and (b) the in-depth examination, if possible every five years, of informal sector units with respect to their numbers and characteristics, in particular, their organization and functioning, their production activities and levels of income generation, as well as their constraints and potentials.

(2) The data collection program with regard to the broad objective (a) should preferably be based on a household survey approach, with households as reporting units and individual household members as observation units. With regard to the broad objective (b), the data collection programme should preferably be based on an establishment survey approach or a mixed household and enterprise survey approach, or a combination of both, with the informal sector units themselves and their owners as observation and reporting units.

(3) Other measurement methods can also be considered, such as methods of indirect macroeconomic estimation or the comparative analysis of data from different sources.

Household surveys for monitoring informal sector employment

22.(1) Existing surveys of the economically active population and similar household surveys provide a useful and economical means of collecting data on employment in the informal sector in terms of the number and characteristics of the persons concerned and the conditions of their employment and work.

(2) For this purpose, questions pertaining to the definition of the informal sector should be incorporated into the survey questionnaire and asked in respect of all persons employed during the reference period of the survey, irrespective of their status in employment.

(3) Special care should be taken in the survey design and operations to ensure comprehensive coverage of the population employed in the informal sector as defined in paragraph 11.(1) above. In particular, special efforts should be made in the sample design to ensure appropriate representativeness of areas where persons

engaged in informal sector activities tend to live. It is also important to collect data on secondary activities of household members in the same detail as on the main activity, including the criteria used for defining the informal sector. Special probings may be needed with respect to informal sector activities that would otherwise go unreported, such as unpaid work in family enterprises or activities carried out by women on their own account at or from home. To obtain comprehensive data on children working in the informal sector, it may also be necessary to lower the minimum age normally used in the survey for measuring characteristics of the economically active population.

(4) The data collected should be analyzed in conjunction with other relevant information obtained from the same survey. In particular, a mutually exclusive breakdown may be made of the economically active population by employment in and outside the informal sector and unemployment. Depending on national circumstances and data needs, information on various forms of atypical or precarious employment outside the informal sector may be obtained along with data on the different forms of employment in the informal sector. For this purpose, all employed persons, whether working in the informal sector or outside, should be classified by status in employment at an appropriate level of disaggregation.

(5) In order to monitor trends in informal sector employment over time, questions on employment in the informal sector should be included, if possible, once a year in existing infraannual surveys of the economically active population or similar household surveys. Surveys conducted at less frequent intervals (e.g., annually or quinquennially) should include questions on employment in the informal sector in every survey round, if possible.

Establishment surveys of informal sector units

23. It may be possible to collect data on informal sector units through various kinds of establishment surveys depending on the measurement objectives, the intended uses of the data, the calendar and structure of the national statistical system, and the availability of sampling frames and resources.

24.(1) In conjunction with an establishment or economic census or using the latest economic census as an area sampling frame, special surveys of informal establishments may be conducted to collect specific data on employment, production, income generation and other characteristics of informal sector units and their owners.

(2) For this purpose, the economic census should, in principle, contain the required items for identifying the informal sector unit according to the definition set

forth in paragraph 6. However, as the observation unit in economic censuses is typically the establishment, the reconstitution of informal sector enterprises on the basis of the available information may not be easy to achieve in practice.

(3) Unless particular measures are taken, the coverage of such surveys of informal sector establishments is limited by the scope of the economic census on which they are based. In particular, coverage typically excludes informal sector units which do not operate in fixed premises designated for the purpose of carrying out production activities or which are not identifiable as such from the outside during the listing operation.

(4) While it is generally preferable to cover all types of informal sector activities through a single survey, branch-specific surveys or a series of such surveys may be considered if the measurement objectives are limited to particular kinds of informal sector activities, or if the scale of a single survey is considered too large to be manageable in practice.

(5) In a branch-specific survey, the listing operation should be such as to identify all and only those informal sector units that fall within the scope of the survey. Rules need to be established for informal sector units also engaged in other activities, particularly if some of these activities fall outside the scope of the survey.

(6) When the intention is to cover all types of informal sector activities through a series of branch-specific surveys rather than a single survey, the data collection programme should be designed to ensure a comprehensive coverage of informal sector units without omission or duplication between surveys. The timing of the surveys and the methodology to obtain overall aggregates should be carefully planned.

Mixed household and enterprise surveys

25.(1) The basic principle of mixed household and enterprise surveys is to construct a sampling frame of informal sector enterprises through a household survey operation, prior to the informal sector survey itself. The household survey component, if appropriately designed, makes it possible to identify informal sector enterprises rather than establishments, and to cover virtually all informal sector units irrespective of size, kind of activity, and type of workplace.

(2) Mixed household and enterprise surveys are based on area sampling and conducted in two phases : (i) informal sector enterprises and their working owners are identified during the first phase through a household listing or interviewing operation (household survey component) ; (ii) all or a sample of the business owners thus identified are interviewed during the second phase to obtain information on the characteristics of their enterprises (enterprise survey component).

26.(1) The time interval between the two phases should be kept as short as possible, to minimize loss rates of units.

(2) Informal sector enterprises should be identified on the basis of own-account workers and employers who are members of the sample households. Identification based on employees of informal sector units should be avoided.

(3) In order to avoid omissions, the household survey component must be targeted to all employers and own-account workers in the sample who are potentially included in the informal sector. The informal sector units are then subsequently identified on the basis of the information obtained from the enterprise survey component.

(4) While information during the first phase of the survey may often have to be obtained from proxy respondents, it is highly desirable in the second phase that the business owners themselves are interviewed. Where relevant, these interviews should preferably be conducted at the place of work rather than the place of residence of the household member.

27.(1) Since informal sector enterprises may be owned and operated by members of different households in business partnership, and such partnerships may differ significantly from other units in their characteristics, an appropriate procedure should be adopted, at the selection stage of the informal sector units, or, preferably, at the stage of assigning the sampling weights, to ensure that the resulting statistics are representative of the total survey universe. The sampling weights should be determined with great care.

(2) For a comprehensive coverage, all informal sector enterprises and their operators in the sample areas or in the sample households should be identified in the first phase of the survey. In particular, businesses operated as secondary activities of household members should be identified on the same basis as businesses operated as main activities. Special probing may also be necessary to identify women and children engaged in informal sector activities on their own account.

28. If information on seasonal variations of informal sector activities is to be obtained and annual estimates of the main aggregates are to be produced, data collection should be spread over a period of a whole year by dividing the sample into independent subsamples for different quarters or months of the year.

29. The nature and efficiency of the survey design of a mixed household and enterprise survey will depend on whether the survey is conceived as (i) an independent

survey, (ii) an attachment to an existing household survey, or (iii) part of an integrated survey designed to meet several objectives.

30.(1) In an independent survey, the sampling scheme may be designed to satisfy the specific requirements of informal sector measurement and to ensure an adequate representation of different types of informal sector activities or units in the sample.

(2) A sufficiently stratified sample at the first stage of selection helps avoid the need for differential last stage sampling rates for different categories of informal sector units and facilitates survey implementation in the field. Using the latest population census or other available information, an area sampling frame for the household survey component should be constructed so as to consist of area units of the desired size, stratified as far as possible according to the concentration of households that operate informal sector units. Provided data are available from the population census and retrievable at a sufficient level of geographical detail, the stratification of area units may be based on the concentration of own-account workers and employers by broad industry group, and, if possible, by type of location of the workplace and, for employers, by number of their employees. Where such data are not available, provision should be made to obtain them from the next population census.

(3) The household survey component of an independent mixed survey may be restricted to a household listing operation in the selected area units, in which information is obtained on the composition of the household and, in respect of each household member of working age, whether the person operated, as main or secondary activity, any informal sector business during a specified reference period. Basic information on the type of workplace, its location, branch of economic activity, and if possible, number of employees should also be obtained.

31.(1) If the enterprise survey component of a mixed survey is conceived as an attachment to an existing household survey (e.g. a labour force survey or a household income and expenditure survey) efforts should be made to make up for the limitations resulting from the design and selection of the base survey sample.

(2) The effective sample size of the enterprise survey component may be increased by selecting the sample of informal sector units on the basis of all households identified during the listing operation of the base survey rather than only those selected for the base survey sample. Alternative procedures would be to add, if resources are available, appropriately chosen supplementary areas to the base survey sample, or, if the base survey is of a continuing nature, to cumulate the subsamples of informal sector units over several rounds.

32. In developing integrated surveys for the collection of data on the informal sector and others (e.g. labour force, household economic activities), the requirements of informal sector measurement can be incorporated, to a greater or lesser extent, into the overall design of the survey, through appropriate methods of sample allocation and selection. The major requirement of the informal sector component is adequate representation of the different types of informal sector activities and units in the sample.

ITEMS OF DATA COLLECTION

33.(1) The type of data to be collected on the informal sector depends largely upon the specific circumstances in each country, the methods of data collection, the intended uses of the statistics and the practical feasibility of data collection. For determination of the items of data collection, the main users of the statistics should be consulted and the results of previous surveys analyzed or pilot surveys conducted.

(2) In order to enhance the usefulness of informal sector statistics for joint analysis with other related economic and social statistics and for the purposes of international comparison, the definitions and classifications of the items of data collected should, as far as possible, be compatible with those used in other national surveys or censuses and correspond to the most recently adopted versions of relevant international recommendations and standard classifications.

34. The statistics obtained should include, as a minimum, the number of persons engaged in informal sector units by status in employment and by kind of economic activity and, if possible, the number of informal sector enterprises by kind of economic activity and by type (i.e. informal own-account enterprises, enterprises of informal employers).

35.(1) In addition, data may be collected in more or less detail and with appropriate frequencies on any one or more of the following topics :

i) Employment and working conditions : number of persons engaged in informal sector units during the reference period by sex, age, migration characteristics, school attendance, educational attainment, kind of vocational training received, occupation, time spent at work and, where possible, other jobs held in or outside the informal sector taking account of the categories and subcategories mentioned in paragraph 11.(2) ; number of employees by nature of employment (continuous, casual ; registered, not registered) ; compensation of employees and its components (wages and salaries in cash or in kind, employers' social contributions), frequency and mode of remuneration, entitlement to paid annual or sick leave, etc.

(ii) *Production, income generation and fixed capital* : frequency of operation (perennial, seasonal, casual) ; duration of operation during the reference period ; quantity and value of outputs produced during the reference period ; total amount of sales ; intermediate consumption ; taxes paid on production and subsidies received, if any ; property income received and property charges payable in connection with business activities ; characteristics of loans taken for business activities ; fixed assets owned by the units ; fixed capital formation during the reference period ; etc.

(iii) *Conditions of business operation* : legal organization of the units ; type of accounts kept ; type of ownership (individual ownership, household ownership, business partnership with members of other households) ; number of business partners from other households, if any ; location (urban versus rural areas) ; type of workplace : workshop, shop, etc., fixed market or street stall, home of the enterprise owner, no fixed place (e.g. homes of clients, construction sites, mobile) ; type and number of customers, or proportion of output sold to different types of customers ; extent and terms of work performed for other enterprises under subcontracting arrangements ; sources of capital for the acquisition of fixed assets ; origin of the main goods used for further processing or resale (importation, informal sector, other) ; type of registration or licensing of units ; availability of public utilities at the place of work ; participation in informal sector support programmes and kind of assistance received, if any ; membership in associations or cooperatives of informal sector producers ; problems faced in the creation of enterprises and constraints on their operation or expansion ; year of creation and evolution of enterprises ; etc.

(iv) *Enterprise owners* : sex ; age ; marital status ; place or country of origin ; period of residence in the present area ; previous place of residence, if any ; educational attainment ; acquisition of skills needed to conduct the business (formal versus informal kinds of training) ; present occupation ; time spent at work in the business during the reference period ; engagement in other economic activities ; characteristics of other economic activities, if any, and main source of income enterprise owners ; reasons for working in the informal sector ; characteristics of previous employment in or outside the informal sector, if any ; plans for the future regarding business development or alternative employment ; etc.

(v) *Households of the enterprise owners* : other household members by sex, age, marital status, relationship to the reference person and activity status ; employment characteristics of other household members employed in or outside the informal sector ; amount and sources of income of the households ; etc.

(2) For the purposes of national accounting, the collection of data on the production and incomes generated by informal sector units should aim at providing the elements needed for the estimation of gross output, value added and mixed income (operating surplus) as defined in the United Nations System of National Accounts (Rev.4).

(3) Since production activities of informal sector units often overlap with consumption activities of the households of the enterprise owners, efforts should be made in the collection of data on intermediate consumption, property charges and fixed assets to separate usage for business purposes from usage for household consumption. If a clear distinction is not possible, the expenditures concerned should at least be allocated approximately in proportion to the use for business purposes.

(4) In the case of informal sector units engaged in several different kinds of production activities, inputs into production in the form of labour, capital, goods or services, which cannot be clearly allocated to a specific kind of activity, should be distributed in an appropriate way over all activities for which they are used.

(5) The collection of data on characteristics of the households of the enterprise owners enables informal sector activities to be analyzed in the context of households as a whole. Such analyses may include studies of the role of other household members in providing additional income to households and the impact of the household situation on the activities of women in the informal sector.

SUB-CLASSIFICATIONS

36.(1) In order to provide information on the composition of the informal sector and to identify more homogeneous groups for analytical purposes, as targets for social and economic policies and informal sector support programmes, and as basis for comparisons of statistics over time and between countries, informal sector units should be sub-classified by various characteristics on the basis of the information collected.

(2) Enterprises of informal employers, when included in statistics of the informal sector, should be identified separately from informal own-account enterprises.

(3) Useful sub-classifications of informal own-account enterprises and enterprises of informal employers, both for the analysis of informal sector statistics at the national level and international comparison, include distinctions according to the following characteristics :

(i) kind of economic activity ;

(ii) type of workplace : home of enterprise owner, other fixed premises, no fixed place ;

- (iii)** location : urban areas, rural areas ;
- (iv)** number of persons engaged ;
- (v)** type of ownership : individual ownership, household ownership, business partnership with members of other households ;
- (vi)** relation with other enterprises : independent producers, producers working under subcontracting arrangements for other enterprises.

(4) In addition, it may be useful to sub-classify informal own-account enterprises according to the composition of their workforce, distinguishing one-person units from two-and-more persons units and, among the latter, users of occasional hired labour from non-users of such labour.

(5) Depending on the needs of data users and the size of samples, two or more of these characteristics may be combined into more complex classification schemes.

(6) For the purpose of international comparisons, the classification by kind of economic activity should adhere to or be convertible into the International Standard Industrial Classification of All Economic Activities (ISIC, Rev.3). For international reporting of the statistics, data should be provided at the level of ISIC tabulation categories, except for category "Wholesale and retail trade ; repair of motor vehicles, motorcycles and personal and household goods" which should be subdivided appropriately. For other purposes, data classified according to kind of economic activity may be required in as much detail as is supported by the size of the samples. To reflect the diversity of informal sector activities, it may be necessary to develop appropriate further subdivisions of some of the groups which the activity classification commonly used provides at its most detailed level. To ensure the comparability of informal sector statistics with other statistics, any such subdivisions should be so defined that the data can be aggregated to higher level categories of the classification without cutting across their boundaries. Units engaged in more than one activity during the reference period should be classified according to their main activity which may be defined as that with the largest value added.

(7) The size intervals used for the sub-classification by number of persons engaged should be consistent with the standard size intervals recommended for the 1983 World Program of Industrial Statistics, i.e.1-4, 5-9, 10-19, etc., persons engaged. Depending upon the intended uses of the statistics, these intervals may be further subdivided.

FURTHER ACTION

37.(1) In view of the particular characteristics of informal sector units and their owners, special efforts should be made in the design and operations of informal sector surveys to increase response rates and obtain the required information as accurately as possible.

(2) Countries collecting data on the informal sector should share their experiences with the International Labour Office.

38.(1) The International Labour Office should follow the developments in designing and implementing informal sector surveys, as well as surveys of household economic activities, disseminate and evaluate information about the lessons being learned from this experience for discussion at the next International Conference of Labour Statisticians, prepare a manual to provide technical guidelines on the contents of this resolution which reflects such improvements in concepts and technics and, if necessary, arrange for a review of this resolution by a future International Conference of Labour Statisticians.

(2) The International Labour Office should cooperate, as far as possible, with countries in the development of statistics of employment in the informal sector in providing technical assistance and training.

Observation of the informal sector : its incorporation in a global statistical system

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Statisticians have given much thought to the definition of the informal sector, since unlike concepts such as the public sector, the informal sector does not always correspond to an immediately identifiable set of units. They have undoubtedly worried excessively about this, and it might perhaps have been better if statistics had not been encumbered with such a concept, because for statisticians it is not so much a question of monitoring a particular sector as trying to cover all production activities, and thus circumscribing the areas missed. Once this has been achieved, users of statistical data can then take their time composing the set of units which they feel correspond to the concept of the informal sector which they have chosen.

This transfer of the debate from the informal sector to the area not covered by statistics prompts different questions about the type of surveys to be conducted. We then have to think in general terms about the most suitable statistical system in the light of the existing statistical and administrative reality and according to the main objectives : the macro-economic estimate of employment and the estimate of the main parameters of economic activity. This paper will consider these points via a comparison with the statistical systems in place in western countries, which are organised in the opposite way from those developed in African countries.

I. DEFINITION OF THE INFORMAL SECTOR AND THE SCOPE OF UNREGISTERED ACTIVITIES

1.1. Definitions centred around two concepts : non-organization and informality

There are a great many definitions of the informal sector, usually based on a combination of multiple criteria. However, these definitions essentially refer to two main concepts :

- the **non-organized** character of informal units, i.e. in simple terms : small size, rudimentary facilities, no accounts, no distinction between the owner's personal property and the business assets, etc.
- the **informality** of these units, i.e. their position on the fringes of official regulation, reflected in the fact that they are not registered with the main authorities (tax office, social security authority, chambers of commerce or trade, etc.).

The first of the two concepts, i.e. non-organization, refers to the intrinsic characteristics of these units and in that sense should permit a relatively uniform definition of a set of units. However, in statistical terms it is very difficult to summarize this in a single synthetic criterion : size, which comes most readily to mind, will not do, because there are modern micro-units such as liberal professions and conversely units with more than ten people operating on pre-industrial lines. The ILO definition¹ is relatively vague, since it allows all small one-man businesses, people working on their own account or informal enterprises of employers, or just the smallest units or the non-registered units, to be designated according to “national circumstances”.

On the other hand, the second concept, informality, refers to an external feature of small units in that non-registration or non-compliance with the various regulations is not due to any implicit strategy on the part of informal units but depends instead on the efficiency with which the various authorities cover production activities. Compliance with the regulations by micro-enterprises also varies considerably from one country to another² or from one set of regulations to another. Informality is therefore unlikely to be sufficient in itself to define a group of relatively uniform units : micro-units such as independent taxis are usually registered with the tax authorities, if only to obtain a licence ; in contrast, medium-sized enterprises such as certain restaurants or traditional wholesalers may not be covered.

Therefore, from the point of view of economic analysis, it is probably more interesting to have statistics on the units' behaviour with regard to various administrative authorities according to unit size, sector of activity and country in the same way, rather than to analyse a sector of units whose common factor is that they are not registered, and similarly to have statistics on investment or financing behaviour by unit size or activity rather than statistics confined purely to investors or units financed by credit.

1. ILO, “Resolution concerning employment statistics in the informal sector”, Fifteenth International Conference of Labour Statisticians, 1993.

2. Thus, according to the OECD data available on this question for five countries, tax on income or profits is paid by 92% of micro-enterprises in Algeria, 63% in Ecuador, 60% in Thailand, 16% in Swaziland and 9% in Niger. Cf. Morrisson C., Solignac H., Oudin X., “Micro-enterprises and the institutional framework in developing countries” Paris, OECD, 1994.

1.2. Definition of the scope of non-registered activities

The debate over the definition of the informal sector is rendered all the more complicated and confused by the addition of a macro-economic point of concern to the national accounts, **the aim of systematic coverage of all production activities, and thus monitoring other areas in addition to those traditionally covered by the statistical system.** This major concern should be dealt with separately : in this case it is not a question of monitoring a sector (in the sense of a more or less uniform group of units) but **a field** of statistical units (in the sense of an artificial group of units which may be heterogeneous) complementing the production activities covered by statistics, and preparing **a statistical system** which achieves this aim of systematic coverage.

From this statistical angle, the definition of the informal sector appears secondary, since once all production activity is covered, various sub-divisions can be introduced, making it possible to circumscribe an informal sector with genuine economic or sociological significance.

In the countries of Sub-Saharan Africa, statistical coverage of production activity may be organized around two major operational criteria : **the visibility** of the units (i.e. the fact that they have a fixed location in a place which is readily identifiable and accessible to the survey officer) and **their registration for tax purposes.** The visibility of the units determines the type of statistical investigation to be conducted, and particularly the difficulty of recording the units for incorporation in the sampling base. Registration for tax purposes, which is the primary issue for the State, is the most complete administrative record available and the one which is most efficiently monitored over time (statistical registration in a business directory, which currently exists in only a minority of African countries, is mostly of no use because of the lack of updating procedures). This criterion offers some guarantee of access to auxiliary information (though admittedly it is often very limited) to supplement that obtained from specific statistical investigations.

1.3. Operational typology of productive units

In the light of these two operational criteria, we propose to divide production activity into six types of units (cf. table 1). The concept of visibility poses no special problems except for undeclared building activities. The most important of these are recorded on the basis of building sites in the course of censuses of informal establishments, methods taking account of the average duration of the site permitting annual estimates to be obtained.

Table 1 : *Typology of productive units according to visibility and tax registration*

Type of units	Visibility	Tax registration	Tax source
Large enterprises	YES (sometimes more than one location)	YES	Real industrial or commercial profits
Intermediate-sized	YES	YES	Estimated industrial or commercial profits
Micro-enterprises (fixed establishments or displays)	YES	YES (establishments) or NO (displays)	PERMITS
Micro-enterprise transport (taxis, owner - operated lorries, etc.)	NO	YES (usually)	LICENCES
Building workers	YES (if sites are visible)	NO (with some exceptions)	(sometimes a building permit)
Small traders (working at home or itinerant)	NO	NO	

The concept of registration for tax purposes is more complicated. It is often regarded as similar to the taxation of real industrial and commercial profits, i.e. the keeping of business accounts (even taxation based on estimated income still requires a record of revenue and expenditure). This comparison imposes particular restrictions. To my knowledge, there are at least two systems for taxing industrial and commercial profits in African countries : the normal real system and the estimated system. Moreover, some countries also have a relatively well monitored system of collecting licence fees (according to various systems). Table 2 below offers a synthetic, simplified illustration of fiscal data which exist in our host country, Mali (they could also be broken down according to the various regional or local inspectorates of taxes). The number of units concerned varies considerably, depending on the particular type of tax source taken to define registration. The tax data available on micro-enterprises are often unknown to statisticians, or even to central government itself, since unlike tax returns based on real figures, they are rarely centralised and usually remain with the various local or regional inspectorates. In general, the enterprises are most unlikely to be unknown to the tax authorities, but for a wide variety of reasons, some of them (and not necessarily the smallest) are not monitored.

Table 2 : The different types of fiscal and statistical coverage of enterprises - The case of Mali

Annual turnover threshold (million CFA francs)	Permit system			Industrial and commercial profit systems		Tax directorate for large enterprises		Individual registration	Collection of annual statistics
	Trade	Industry and craft activities	Import-export	Industry and trade	Services	Industry and trade	Services		
>1 000	Class 1								
1 000	Class 1								
500	Class 2-20							740	between
300	Class 3-42					approx. 250		active or	400
250	Class 4							inactive	and 600
200	Class 1			Class 4				companies	sets of
150	Class 1			Class 4				and	business
100	Class 2			Class 4				28 000	account
50	Class 1			Class 4				active	depending
25	Class 1			Class 4				or dead	on the
20	Class 2			Class 4				persons	years
15	Class 2 (by activity and by size)			Class 4					
10	Class 3			Class 4					
5	Class 4			Class 4					
2,5	Class 5			Class 4					
1	Tax certificate (C6)			Class 4					
0	Tax certificate (C7)			Class 4					

II. STRATEGIES FOR OBSERVING THE INFORMAL SECTOR

In a statistical approach, the macro-economic perspective predominates over micro-economic or micro-sociological explanations even if the latter are the only way to make sense of the data in question. Taking this macro-economic view, statistical investigations into the informal sector in African countries have two main aims :

- to estimate employment in urban areas on the fringes of the public or private formal sector ;
- to estimate the economic activity of production units in this sector in order to incorporate it in the national accounts and revise the estimate of GDP and the main aggregates.

The first of these two aims is probably the older, being based on the initial studies on this subject in the early 1970s, particularly that of K. Hart in Kenya. In the past two decades it has been the focus of constant attention by the ILO. The second aim seems to have emerged in the early 1980s, and was explicitly taken into account in the fourth revision of the United Nations System of National Accounts.

2.1. The observation of employment and economic activity in African countries is organized in the opposite way from that in industrial countries

In order to compare the statistical systems in western countries with those in Sub-Saharan Africa, we propose to take the preceding typology and simplify it, confining ourselves to four unit categories : large enterprises, intermediate enterprises, micro-enterprises (and micro-enterprises providing transport) and "small traders".

Owing to the difference of scale between the number of enterprises in western countries and in Africa, but also because of the difference in statistical and administrative coverage, these four categories do not designate identical enterprise populations but populations which could be regarded as "**equivalent**" in the light of their position in the production system (cf. table 3).

In a way, the last two components constitute the informal sector as defined by the ILO (in that micro-enterprises in western countries are essentially one-man businesses). We can assume that they have much greater economic importance in developing countries, but with two reservations :

- small one-man businesses are far more important in industrial countries than is ordinarily assumed. For instance, in the European Union around half of enterprises have no paid employees and 90% have fewer than ten.

- small traders represent a relatively large proportion of urban jobs in most African countries, but their contribution to GDP is probably relatively marginal.

Table 3 : *Breakdown of production activity in industrial and African countries into four types of unit*

	Countries of Sub-Saharan Africa	Western countries
Large enterprises	"In the modern sector" : taxation based on real profits and surveyed annually by the statistical service, either TSR or equivalent annual surveys	Community definition : enterprises with over 250 employees
Intermediate size	Have filed articles of association and are therefore entered in the register of the Commercial Court. They are taxed on real profits and keep accounts, or may in some cases be taxed on estimated profits (keeping a record of revenue)	Community definition of SMEs : from 10 to 249 employees
Micro-enterprises	They do not keep accounts and are not registered. They are sometimes taxed on the basis of estimates, and generally pay for a permit, otherwise they pay a local tax	Enterprises with 0 to 9 employees
Small traders	Activities with no premises or based at home. They do not pay income tax and generally also avoid the permit fee.	Working less than half-time per annum (in terms of working hours or income generated) ; undeclared work (building, repairs, etc.)

Given the same aims - to estimate employment and the parameters of economic activity - we find that the countries of Sub-Saharan Africa have developed a system of statistical surveys which is the opposite of that used in all western countries, based on two major "**thematic**" **surveys** of employment and, in simple terms, economic activity (cf. fig. 1).

Figure 1 : *Systems of surveying employment and economic activity in industrial countries*

	Western countries		African countries (surveys of informal establishments)		African countries (two-phase surveys)	
	Employment	Economic Activity	Employment	Economic Activity	Employment	Economic Activity
Large enterprises	Employment survey	(exhaustive) Survey enterprises (by sampling)	Modern sector survey	Phase 1 Employment survey	Modern sector survey	
Intermediate						
Micro-enterprises		Survey of the informal sector (establishments)			Phase 2 Survey of production units	
Small traders						

The first survey system in African countries is based on a survey of the modern sector (or at least on an analysis of the accounts of enterprises in that sector) and surveys of establishments in the informal sector, generally based on a prior census³. Its defects are obvious. Two populations of units are largely omitted from the estimates of employment and economic activity :

- intermediate enterprises, considered too modern to be regarded as informal, which should logically be monitored by the modern sector enterprise surveys ;
- “small traders” who, not being visible, are not usually covered by establishment censuses.

Also, in the absence of any employment survey covering persons or households, the multiple activity of many workers in African countries may cause problems of double counting.

The second system supplements the survey of modern sector enterprises with a two-phase survey system. These are the 1-2-3 surveys developed by DIAL⁴

3. However, there are some interesting exceptions to this dominant scheme, such as the analysis of municipal permits in the survey of establishments in Abidjan in 1993, cf. X. Oudin, “Small establishments and the unstructured sector in Abidjan”, *STATECO* n° 47, INSEE 9/1986.

4. DIAL, DSCN, “The 1-2-3 survey of the informal sector in Yaoundé”, *STATECO* n° 78, INSEE 1994.

in recent years, with a first phase devoted to an employment survey and a second covering informal production units, or the earlier experiment conducted on the informal sector in Rwanda, with a first phase devoted to a consumption-budget survey and the second covering one-man businesses and self-employed activities⁵.

The system of 1-2-3 type two-phase surveys does provide an estimate of employment, since it is based on a survey of persons or households. On the other hand, the economic activity of intermediate enterprises is not covered, for the same reason as that mentioned above. Incidentally, the economic activity of small traders is observed directly, whereas it is ignored in western countries, i.e. it is estimated indirectly.

2.2. Observation of employment and of economic activity requires different approaches

Although the estimate of employment and the estimate of output or value added satisfy similar needs, the quality of these estimates is not based on the same statistical ingredients and different observation methods are necessary.

First, a relatively trivial point : estimates of employment must be based on the person as the observation unit ; estimates of economic activity are based on the establishment or enterprise :

- The observation of employment on the basis of a survey of persons reveals the active population in work, the active population seeking work or the inactive population, while at the same time avoiding the problems which would be caused in this connection by a survey of enterprises or establishments : non-exhaustivity, double counting (because some workers have multiple activities), under-declaration by employers, etc.⁶ ;
- The observation of economic activity on the basis of establishments or enterprises, when applied to the place where the activity is pursued, permits entrepreneurs' declarations to be checked by direct observation ; it also allows information on medium-sized or large enterprises to be collected from different persons depending on their responsibilities and functions.

5. D. Blaizeau, J. Charmes, "Method of analysing the unstructured sector via a consumption-budget survey. The Rwanda experience", *STATECO* n° 42, INSEE 6/1985.

6. The statistical systems of communist countries departed from this rule, and made direct use of declarations by enterprises or administrative authorities, without conducting an employment survey. Employees were in fact required to declare to their employer whether the enterprise was their principal place of activity or a secondary location ; thus, in statistical questionnaires, enterprises divided their workforce into those employed in their principal activity and those in their secondary activity, which avoided the risks of double counting. The coverage of employment was automatically assumed to be exhaustive since every job had to be officially declared.

Second, and this is the more important point : the macro-economic quality of the respective estimates of employment and variables such as output or value added is not based on the same conditions. In the case of employment, the rate of coverage of the field being analysed has a major impact, whereas the variance of the estimator over the observed population has a relatively minimal impact. Conversely, in the case of value added, the exhaustiveness of the coverage of the field being analysed has only a limited impact, whereas the variance of the estimator over the observed population has a considerable impact. This leads to **varying choices as regards the degree of coverage and the accuracy of the estimators over the field actually observed, and therefore to the use of different survey systems for employment and economic activity, which may be totally unconnected or linked.**

For the purpose of estimating employment, every observation unit, i.e. every person, is of equal importance : the owner of a business or the senior manager is as important as the apprentice mechanic or the street peddler. It is therefore essential to aim at virtually exhaustive coverage of the reference universe, which can be achieved only by a sampling base using persons or households, i.e. homes, broadly speaking. As F. Roubaud⁷ remarked, this makes it possible, in particular, to reach the large fringe of non-visible jobs in the informal sector, such as itinerant or home workers. On the other hand, the variance of the employment estimator is small, at least at global level, and a relatively small unstratified sample will suffice, of the type formed for the 1-2-3 surveys in Yaoundé and Antananarivo.

When it comes to estimating value added or output, the problems are quite different, since the observation units, i.e. the production units, obviously differ in size. Since it is necessary, on cost grounds, to select the enterprises to be surveyed, the alternatives for the same size population of units to be surveyed are as follows :

- to cover virtually all output and hence production units but with a very large margin of uncertainty regarding the estimator, since one is monitoring two populations of very different units : micro-enterprises and small traders (the apparent productivity of the work of micro-enterprises is generally much closer to that of modern enterprises than of small traders) ;
- or to omit say 10% of the output generated by the smallest one third of units, i.e. small traders (these figures are only an example), to arrive at a relatively accurate estimate of the other 90% of output.

7. Cf. F. Roubaud and M. Sérurier, Economy not recorded by statistics and the informal sector in developing countries, *STATECO* n° 68, INSEE 12/1991.

This is the type of choice behind France's decision to produce the index of industrial output for a field which covers 84% of output, namely 14% of industrial and building enterprises, or the monthly index of turnover using a field which covers 90% of the total turnover of enterprises, namely one third of enterprises.

When choosing the sampling base, these differences cause us to look for one which provides almost exhaustive coverage of the reference universe for estimating employment, while for estimating output or value added we want a sampling base which covers all the larger units and also contains **additional information** on the size and activity of those units, so that the largest enterprises can be surveyed exhaustively, with a stratified sampling plan for the smallest to achieve greater accuracy.

2.3. Mixed survey or parallel systems of employment and enterprise surveys

In view of these comments on method, it is essential to organise genuine employment surveys in Africa, e.g. on the lines of population censuses, or perhaps in other ways. We then need to find out whether it is better to link such a survey with a specific investigation into informal production units, such as the 1-2-3 surveys, or to develop a system of enterprise statistics which extends to micro-enterprises.

Being organised in two phases, surveys of the 1-2-3 type have the advantage of properly achieving the two aims of the estimates as well as being relatively simple to set up⁸. Two problems arise, and once they are solved, I think this system will be better still :

- in order to ensure systematic coverage of production activities, the distinction between surveys of the informal and "formal" sectors should not be based on the concept of statistical recording or on the content of a set of accounts (since without a prior expert report, there is no guarantee that accounting documents are usable or that they will reach the statistical service), but on the effective statistical coverage of enterprises. We must therefore either extend the coverage of modern sector surveys, which is highly desirable, or provisionally consider also surveying intermediate size units which are recorded but are not covered by the business statistics, even if they are regarded as "outside the scope" of the informal sector. The data on these enterprises outside the formal sector would then be reincorporated in the business statistics, which amounts to **retrospective coordination** of the analysis of the 1-2-3 survey data with those from the modern sector enterprise survey.

8. DIAL, DSCN, "The 1-2-3 survey on the informal sector in Yaoundé", *STATECO* n° 78, INSEE 1994.

- the quality of the estimates of economic parameters makes it necessary to isolate the largest units (import/export, wholesalers, restaurants or large drinking establishments, etc.) or units engaging in very local activities, thereby **recovering in the sampling base on informal production units auxiliary information obtained from tax sources** on such units, permitting the preparation of a stratified sampling plan. This more sustained attention (high rate of sampling, long observation period in order to conduct a direct check on entrepreneurs' declarations) should improve the quality of the estimates, **even if this is at the expense of covering small traders in this second phase.**

The second option is to organise employment surveys in certain years (e.g. following the censuses or intercensal surveys) and at the same time to develop a genuine system of enterprise surveys. The scope of the enterprise surveys straightaway excludes urban micro-activities, which are forms of self-employment below enterprise level, but in my opinion includes micro-enterprises, which, by the way they operate, are much closer to intermediate sized enterprises than micro-activities such as those of small traders⁹. This survey system must cover the largest enterprises exhaustively each year, and must provide sample coverage of the other enterprises taxed on their industrial or commercial profits (small companies taxed on real profit or enterprises taxed on the basis of estimates). In the case of units not paying tax on industrial and commercial profits, a sample survey organized every three to five years is probably sufficient. However, so that this operation is not too expensive or cumbersome, it is better to have an administrative sampling base rather than conduct a census each time.

Direct use of administrative sources would remain confined to the accounting documents of enterprises taxed on real profits ; it is unthinkable in the case of estimated tax returns, which are often very crude and bear little relation to the actual performance of the enterprises. For these and perhaps for micro-enterprises, one would therefore use lists or registers of taxpayers to conduct statistical investigations. **This second option, is therefore possible only in countries where the tax authorities are able or expressly intend¹⁰ to ensure efficient coverage of all market production units.** In that case, this is an attractive option, since it

9. B. Savoye, "Comparative analysis of micro-enterprises in developing and industrial countries, a critical approach to the informal sector", *Third World Review*, vol. XXXVIII n° 148, 10/1996.

10. The deterioration in the administration of African countries has often become accentuated in recent years and in principle argues against any attempt at statistical analysis of the data, except for the traditional analysis of the annual accounts of enterprises, or in some cases the statistical and fiscal declarations. However, it would be wrong to regard this situation as permanent. These sources were often of better quality in the past, and it is entirely possible that they may improve again in future years, especially given the sustained attention of international lenders (enlargement of the tax base and the recovery rate in order to rehabilitate public finances, etc.).

assumes the mobilisation of both the statistical and the tax authorities (e.g. by making enterprises which are taxed on estimated profits switch to the real profit system in the case of under-declaration), by developing the coordination¹¹ of their efforts, in particular (e.g. by using tax information to update a statistical directory of enterprises which can in turn be made available to the tax authorities, etc.).

2.4. Monitoring investigations into micro-enterprises over time

This use of administrative sources also ensures regular monitoring of enterprises over time. In the case of two-phase surveys, this monitoring should be done via a panel of households. In the case of a system of enterprise surveys, this monitoring would be based on the annual use of tax registers. It should not pose any special problems for large and intermediate sized enterprises. On the other hand, even if annual tax information exists, it could prove relatively onerous for micro-enterprises, especially if statistical investigations are ultimately conducted on this population only every three or five years. For example, assuming that there are 5000 such micro-enterprises, it will probably be necessary to record around 1500 to 2000 events each year (assuming annual creation and cessation rates between 15% and 20%, and taking no account of other events such as possible changes in tax rules).

Another, easier, solution might also be a panel of micro-activity locations (and not micro-enterprises). Like any panel, this solution is relatively complicated to implement, and certain conditions are essential. The main one, which should be verified, is that the density of micro-enterprises in built-up areas remains stable over time, the increase in the number of informal units coming mainly from the development of new districts. In that case, it would therefore be necessary to monitor activity locations over time, which would be recorded according to their geographical location and regardless of their owner (unlike the enterprise and its establishments) or their activity. This concept would be similar to the ETEC concept used in the French SIRENE directory, i.e. a set of production facilities located in a specific place which can be allocated only to a single enterprise at any one time.

11. However, such coordination must not be apparent of the general public, so that the statistical services continue to appear clearly separate from the tax authorities.

The new definition of the informal sector and its consequences for measurement systems and methods

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The notion of the informal sector was coined in the early 1970s, with regard to the small-scale activities essentially geared toward obtaining subsistence incomes among the new populations of the large cities of the Third World that rural-urban migrations, amplified by modernization, if not necessarily by industrialization, had tended to swell. Subsequently the concept was extended to a larger set of small-scale activities which, because they are either part of tradition or conversely very recent and spontaneous, have stayed outside the boundaries of legislation and the various forms of registration, especially of statistical records.

The diffusion of the concept in the early 1970s (Hart, 1973 ; ILO, 1972) only induced labour economists and sociologists to acknowledge the importance of a phenomenon that national accountants of the countries concerned must take into consideration in estimating GNP, accompanied by a great many hypotheses and indirect methods. These small-scale activities, hitherto beyond the reach of surveys or their types of data collection and pigeon-holed under the term of "tradition sector", found themselves cast into the conceptual realm of labour force.

These activities, once they were recognized as such, induced considerable interest because of their ease of entry and flexibility. For this reason they played a role in alleviating unemployment for migrants left to the mercy of urban life by a particularly intense rural exodus. But hadn't they existed even before salaried employment, whose recent appearance along with modernity led to the invention of unemployment (Salais et al., 1988) ? At the start, unemployment was tied to the loss of (leading to the search for) salaried work, whereas independent and family-based workers had only to open their shops and start to work, albeit still underemployed, in order to avoid having no occupation at all.

However these activities were considered with a certain disregard coupled with tolerance : weren't they doomed to disappear with the advent of modernization, industrialization and the inescapable generalization of salaried employment ?

For two decades (1970 - 1990) the concept thus fuelled many controversial debates, some useful some futile, which did not deter statisticians and official statistics collecting organisations from launching surveys and other measurement of the phenomenon. All the more so indeed that, far from disappearing, the informal sector was experiencing significant growth in terms of employment and GNP, aided by the economic crisis.

Even in the developed countries, the persistence of the crisis elicited effects which, although neither identical nor comparable to those observed in the developing world, took the form of large-scale adjustments and turned economic and social structures upside down. In countries where traditional activities had long been absorbed almost completely by salary-based employment, small-scale firms and self-employment have experienced some new impetus in comparison to a salaried sector which is less dynamic, sometimes even stagnating or receding.

In this way, in parallel with and independently from the underground economy and illicit non-declared work, activities develop that help explain why industrialized countries feel also concerned by the definition of the concept of the informal sector. This all the more in view of the attempts of a country such as Italy to determine the extent of multiple occupations-another form the phenomenon takes-show that the numbers are significant.

The elements of the new international definition are now briefly recalled. The criteria it sets out and the aspects of work it aims to distinguish are identified. We will then show what the implications are for survey and measurement methods.

I. MAIN ELEMENTS OF THE INTERNATIONAL DEFINITION

The "resolution concerning employment statistics in the informal sector" (ILO, 1993b) initially restates the main characteristics of what it is convenient to call the informal sector, on which they confer the richness, the diversity and descriptive value of the multicriterial definitions.

The informal sector consists of economic units producing goods and services aiming mainly to generate employment and income, working on a small scale, with a low level of organization and little division between labour and capital. Labour relations are closely bound with family, personal and social ties, connections strictly involving work being often occasional rather permanent, contracted and guaranteed. Enterprises are scarcely dissociable from those of their proprietors' household. These businesses in no way intend deliberately to extract themselves from legal obligations and are distinct from the so-called underground economy.

On the basis of these general characteristics, an operational definition of the informal sector has been constructed, to facilitate statistical observation in countries where this type of enterprise plays a sufficiently important part in terms of employment and contribution to GNP, and requires that this sector especially be taken into account for macro-economic modelling and sector-based policies.

According to this operational definition, the informal sector is a subset of the institutional sector of households as used for national accounting. It consists of a fraction of the individual enterprises entered in the institutional household sector. These businesses are distinct from corporated enterprises or quasi-corporated enterprises, insofar as they do not keep a complete set of accounts and do not constitute from a legal viewpoint an entity distinct from the households they belong to.

Regardless of the premises where the work is done, or of the amount of fixed capital used, or of the duration of the activity (permanent, seasonal or occasional) and of whether it is the principal or secondary occupation, the individual economic units categorized under the informal sector should satisfy the following criteria :

- household enterprises or “informal enterprises made up of own-account workers”. They do not continuously employ salaried staff, but can take on family members as workers and/or occasional salaried people. “For operational reasons” and “depending on national circumstances”, this category may comprise all enterprises of this type, or just those that are not registered according to the specific form of national legislation concerned (such as commercial, taxation and professional regulations) ;

- micro-enterprises or “firms whose proprietors are informal employers”. These enterprises involve individuals who take on one or several salaried employees on a continual basis. “For operational reasons” and “depending on national circumstances”, this category will cover firms of this type satisfying one or more of the following criteria :

- the size of the establishment smaller than a certain level, which differs with the country and the branch of activity concerned and depends also on national legislation and the scope of statistical surveys on large units ;
- the firm is not registered ;
- or the salaried employees are not registered.

The population participating in the informal sector involves all those who, during the period of reference, were employed in the informal sector in at least one unit, independently of their occupational status and of whether the activity is their main or secondary source of income.

For practical reasons, the scope of the informal sector could be restricted to non-agricultural activities, which naturally does not exclude non-agricultural work taken on by farmers (which is frequent).

Non-trade production or services is excluded from the field of the informal sector ; domestic workers may be included or left out according to national circumstances, but it is recommended to place all of them in a separate category. Technical workers and professionals, however, should be included only insofar as they satisfy the criteria of the proposed definition.

As for outworkers-people who work for a firm as sub-contractors or salaried but not on the firm's premises (work or subcontracting at home), their classification in the informal sector depends on whether or not the unit they constitute or the firm they depend on, belong to this sector. In short, the terms of the new international definition of the informal sector is based strongly on and remains close to the previous procedures adopted by survey statisticians and labour economists who had attempted to capture a clear record of this real yet multiform and ever-moving field.

II. THE DEFINITION'S CRITERIA AND THE SEGMENTS OF THE WORLD OF WORK AND ECONOMIC ACTIVITY THEY AIM TO DISTINGUISH

Among the many definitions - descriptive (multicriteria), analytical (functional) and empirical (statistical) - the distinctive criteria of the last category have been used by the international definition, mainly because they are operational. They involve the following alternative or linked (interlocking) dimension :

- legal status
- type of accounting system
- type of registration of the economic unit or its employees
- occupational status
- size of the establishment.

In applying these criteria, they are adjusted to emphasize :

- the economic unit rather than the individual
- the establishment and not the enterprise
- the job and not the active individual.

To these criteria it is advisable to add the destination of the products (seeing that non-trade production is excluded from the informal sector field) and the branch of activity (agriculture and domestic services for instance are dealt with separately).

The legal status is in principle the first and clearest of the criteria to apply, seeing that the status as a corporated enterprise implies a certain formalization, particularly with regard to the registration and maintenance of proper accounts. These corporated enterprises are by definition excluded from the informal sector. However, once more it is appropriate to make an exception for de facto companies, in other words for associations of a number of people : for example two petty individual entrepreneurs could decide to work together without formally legally registering their association, or even without any written contract. Further, in the industrialized countries, what can be said about a number of individual own-account entrepreneurs becoming salaried staff of the companies they themselves have created ?

Nevertheless, in the concrete case observed in developing countries, it is generally agreed to consider it an unambiguous criterion, otherwise usefully complemented by the criterion of the type of accounting system.

Maintenance of a complete set of accounts (with balance sheets of assets and liabilities) is a criterion allowing exclusion from the informal sector field of all units that have almost the characteristics of corporated enterprises, in the same way as for real corporated firms. Here again, the criterion is supposed to be unequivocal since a balance sheet cannot be confused with ledgers simply recording cash receipts and payments or sales and purchases. However, a doubt hangs over the category of accounts kept by accountants external to the firm : they can sometimes be the full set, sometimes highly oversimplified.

Registration (or the opposite, non-registration) is a more hazy criterion. It takes on several meanings and applies either to the economic unit or to its employees. Registration for tax or statistics purposes is associated most of the time with the keeping of full accounts (notably in Statistical and Fiscal Declarations, SFD, well known to National Accounts). However, registration with Social Security departments, is relatively disconnected from the foregoing criteria, because it includes the category of domestic workers and household salaried employees ; and moreover it could be that a firm registers only a proportion of its salaried staff. If this criterion of employee registration has indeed been adopted in the definition of microfirms, it cannot, on the sole basis of social security statistics, distinguish clearly between the informal and formal sectors.

Furthermore, it is advisable to distinguish the non-registration resulting from the inability of the State and its administration to enforce its own regulations, from illegal practices that amount to fraud and a deliberate intent to remain concealed, on which is founded the definition of the underground or parallel economy, a different notion from that of the informal sector.

Occupational status and notably the distinction between salaried and non-salaried employment (often considered as a “proxy” indicator of informal employment in population censuses and labour force surveys), concerns the definition of two distinct segments of the informal sector : on the one hand, the household enterprises lumped together with independent, self-employed workers and with family workers and occasional salaried staff they could employ ; on the other, microfirms employing permanent salaried personnel.

Size of the economic unit (in terms of the number of employees or, better, jobs) is a criterion that has always stirred up the strongest polemics. And yet we will see that it is undoubtedly the most workable. It is also the most all-embracing : it in fact incorporates the different legislation in force insofar as such laws could refer to such a criterion, or again - if they do not refer to them explicitly - they could use it indirectly (through tax inspection for example).

Consequently, there are significant size thresholds which vary across countries in function of local legislations. These thresholds specify the economic units that want to maintain a certain degree of informality (and therefore of freedom ?) in relation to the regulations concerned.

According to the international definition, this size criterion applies to the establishment and not the enterprise.

The choice of the establishment as unit of observation is justified by the statistical illusion which has generated the “missing middle” thesis. Assimilating establishment, into economic units is easy to understand insofar as it is at this level that both operate activity and labour management. However, the effect of this is to hide the existence of a intermediate segment of middle-sized microfirms (10 to 20 jobs) themselves consisting of small-sized establishment (less than 10 jobs). As this reductionist hypothesis renders this intermediate sector invisible, any application of the size criterion to the establishment is therefore a necessary, albeit insufficient condition to reconstruct it.

Last we will mention once more the distinctive characteristic of the concept of the informal sector in relation to other notions of the active population : it applies to the economic unit, not the individual. Thus the concept can shed a specific light

on the active population, regardless of underemployment (whether visible or invisible), even though it is true that it covers indistinctly salaried jobs, and diverse forms of insecure work, underemployment and employment. Above all, it avoids mixing up precarious, insecure jobs and informal jobs, work outside the firm (outwork) and informal employment. While many forms of precarious employment and outwork exist in the informal sector, there do so even more clearly in the modern sector, including among the most transnational concerns. For these reason, it is essential to evaluate the revenues drawn from the informal sector.

Generally, the application of the foregoing criteria is geared toward focusing on the economic unit rather than the individual, on the establishment rather than the enterprise (regarding size) finally on the job rather the active individual, in order to measure what is conveniently called multiactivity.

Multiactivity, otherwise the practising of secondary activities, has classically been associated with insufficient income from the principal job, hence with invisible underemployment. However, the terms of the problem differ whenever the main activity is shown to be a salaried, theoretically full-time job and the secondary work informal but more lucrative than the main one. Measurement of this phenomenon (once characteristically rural but now arising increasingly in urban areas), is a new major issue in labour statistics and economics. Taking it into consideration could lead to large-scale revaluations, particularly in terms of national accounts.

Decidedly the choice and identification of the criteria and field of the new international definition of the informal sector influence methodologies for gaining an understanding of the sector.

III. IMPLICATIONS OF THE NEW INTERNATIONAL DEFINITION OF THE INFORMAL SECTOR ON MEASUREMENT AND SURVEY METHODS

The questions raised and possibly answerable by the statistics gathering system used, in the context of the new international recommendations, are as follows :

- how can the active population and employment in the informal sector be estimated (labour statistics) ?
- how can the production and revenues generated by this sector be evaluated (national accounts) ?

Once answered, these two questions elicit three others :

- how to achieve an exhaustive coverage for the field of informal activities ?
- how to distinguish the various segments of this sector from one another ?
- how to perceive short and long-term trends of the informal sector ?

In fact agreement on the international definition leaves open the questions of assessing the thoroughness of the data collection (question 3), their regularity/consistency or the length of intervals between surveys (question 5), the co-existence of two objectives which can, however, work against the desired level of accuracy (question 4) and reliability (question 2).

How can efforts best be made to achieve most (if not all) of these objectives by the methods used to deal with the informal sector consisting of :

- indirect evaluation
- households surveys
- establishments surveys
- mixed surveys of both households and establishments.

3.1. Nature of the data collection problem

The wide heterogeneity of informal sector activities, the diversity of their modes of operation and of their work premises are so great that it is easy to see one of the reasons for generally adopting the term lying in the very diversity of forms (to hazard this paradox) unrecognizable by statistical systems forged to capture a sharp picture of a clearly identified form of economic activity : the one based on salaried work.

Because of these characteristics, it is only through an indirect macro-economic approach based on the comparison of various sources, that it has been possible to evaluate the importance of the informal sector : the underlying quest of exhaustiveness has been and remains useful. But it is still not satisfactory insofar as it can be achieved only at the expense of accuracy reliability. Comparing the active population figures from censuses (or household surveys) with those concerning the registered employment, or again the GDP with the accounts of registered firms' results, represent mere estimates based on the use of the residual balance technique. These techniques have enhanced our awareness of the importance of the role played by the informal sector and indeed the inadequacies of our measurement instruments. But now they enable us nevertheless to assess its trends (Charmes, 1996). Today however, it is clearly advisable to improve these methods by defining the limits below which the residual balance technique remains necessary.

Yet, progress in data collection for the informal sector raises problems :

- surveys conducted on households, facilitate the gathering of exhaustive and frequent data, they prevent the use of detailed questions on activities and establishments ;
- as long as the questions presented are appropriately adapted, censuses and surveys on establishments can gather more reliable and detailed data concerning economic activity, but these procedures cannot achieve exhaustiveness and therefore require the use of residual balance techniques ; moreover, these surveys can hardly be administered on a regularly basis ;
- the quality and reliability of the data collected depend on whether the recording techniques have been adapted and on the form of the questions. Too often there has not been enough concern to adapt questionnaires and too little use has been made of information acquired by preliminary qualitative surveys. Yet it is precisely such prior knowledge gleaned about the behaviour and attitudes of those active in the informal sector, of their ways of reasoning and counting that can improve considerably the reliability of statistical data collection. Both the frequent lack of knowledge and various types of misunderstanding of the specific forms that the salary systems or accounting methods (to give just two examples) can take in the informal sector often lower the quality of survey results. When the salary regime is akin to sharecropping in applying a multiplying coefficient to a given expenditure, the way questions are formulated must be taken into account otherwise the revenues (salary and non salary) derived from informal work will be underestimated and one will get a distorted picture of the real situation ;
- the diversity of the informal sector results not only from the different branches of activity in which people operate (production, building and construction, trade, services), but also from their mode of operation (such as microfirm, working at home or in the street, multiactivity) such that it is difficult to envisage one universal gathering method. Combining the door-to-door approaches for households and establishments and the ensuing need to diversify questionnaires is likely to render collection systems more complex, which lower data quality and prevents the rapid availability of findings.

3.2. Problems presented by the application of the new international definition in estimation and survey methods

Indirect evaluation methods

The residual balance technique consists in choosing a specific definition of registration from which the field of the informal sector can be inferred. With regard to

the active population, the main purpose is to locate the salaried employees enumerated in the population census or the labour force survey, in order to determine which ones belong to the informal sector (microfirms) and which ones to the modern sector. It is in fact practically impossible to apply strictly the concept of informal sector, insofar as surveys do not generally include questions on the economic unit in which the employee works. From then on it is necessary to formulate hypotheses to build estimates.

- the exhaustive source (population census or labour force survey) may distinguish between occasional and permanent salaried employees, whereas the registration source hardly ever reveals this distinction, or cannot count the occasional workers. The modern sector employment is therefore limited to permanent salaried jobs. Hence originates the risk of attributing to the informal sector occasional salaried staff, apprentices and family workers who in principle belong to the modern sector. Moreover the number of firms in the modern sector will be lumped together with the number of employers in this sector.

- whatever the level of detail found in the exhaustive source, choice of registration source will generally be restricted, in a given country, to one of the following cases :

- figures for permanent salaried employees will originate from a complementary questionnaire distributed to firms that have filled in the Statistical and Fiscal Declaration (SFD), the results of which are not always used or available (Niger for example).

- figures for permanent salaried staff will be derived from a census or rather a survey intended to be exhaustive regarding the modern sector (for example Burkina Faso, Bénin).

- salaried employees are taken as those registered with the Social Security department, providing that one excludes domestic workers and that one makes sure that declared seasonal workers (notably in building and public works) do not erroneously inflate the statistics (Mauritania for example).

- salaried (and non-salaried) staff figures are those in firms or establishments of a size beyond a certain threshold (conforming with the definition adopted), when a census of establishments is available (Guinea, Benin, Mauritania).

In most cases therefore there is at least one source that can be used. The level of approximation will depend on its quality. It would be wrong, however, to reject the residual balance technique on the grounds that these approximations make it less certain : the distribution of family workers, apprentices and employers involve only small numbers. There remains the category of occasional workers which, in

any situation and even in direct surveys, is difficult to identify. Jobbers in the building industry, for example, subcontracting sites for firms working under the modern sector, always risk being recorded as "external" workers of these firms, whereas they consider themselves as small businessmen in the informal sector in household surveys.

But reverse situations can also occur.

Here we refer once more to the residual balance technique, just a reminder since it differentiates production output only indirectly estimated with the heavy use of hypotheses, elaborated by the National Accounts. The ratio between the indirect estimation of informal employment and the indirect estimation of its contribution to the GNP only reveals circular reasoning : the low capita productivity which results is simply the product of the initial assumption.

Household surveys

Surveys of the active population (or the labour force or employment through households, depending) remain one shot technique in Sub-Sahara Africa, whereas in other countries (in North Africa for example) they have reached a certain degree of regularity (sometimes annual, even half-yearly). We leave aside here other household surveys. Because of their specific angle (budget consumption surveys, for example), they focus only on restricted numbers of samples too small to give a sufficient amount of detail of the active population.

Just as in the case of population censuses (but then the scale of the operation makes it difficult to use questionnaires that are more detailed), the challenge is to develop questions in household surveys that make it possible to extract a clear picture of the limits of the informal sector, in other words of applying the criteria already presented here.

Independent and employers have no problem answering these questions (except that sometimes they wish to conceal the real situation by declaring themselves as registered when in fact they are not, or by stating a lower number of salaried employees than the real figure, for example). This is not the case, however, for people with other occupational status : salaried staff, apprentices, family workers, occasional workers for the most part do not know, for instance, the status of the firms in which they work. Nor do they know whether or not the enterprise keeps a complete record of accounts or whether it is registered. Nevertheless they have better knowledge of the number of people working in the firm, as long as it is small.

This is why the size criterion - which as has already been said incorporates elements of legislation and regulations in force - works particularly well in house-

hold surveys. It is regrettable that employees are rarely asked this question which is commonly put to employers.

Since labour force surveys are to become annual (notably for monitoring unemployment figures or underemployment) and that generally they offer points of comparison between censuses, it is particularly appropriate to introduce in their content the definition criteria for the informal sector.

However, it must be acknowledged that apart from Burkina Faso (Demographic Survey of 1989 and Priority Survey of 1994-95), Mali (National Survey of Economic Activities of Households, known as the 1989 Survey on the Informal Sector, and the Malian Survey of the Economic and Social Situation, "EMCES" 1994), and Tanzania (Labour Force Survey 1990-91) there are few national enquiries that can provide real direct evaluations of informal employment. The sector is still most often known by way of indirect methods from census years (or from years when enquiries were conducted among households). However, one interesting experiment was conducted in Benin (Light Survey of Households) which, on a yearly basis between 1990 and 1994, and on a half yearly basis since, facilitates the monitoring of the behaviour of urban households in a situation of structural adjustment and especially the monitoring of trends in the informal employment rate.

Censuses and surveys among establishments or firms

They are today valued less than household surveys for obtaining a picture of the informal sector, because evidently their scope and coverage are much more restricted and they only succeed in recording the fringes of informal work activities practised within establishments (even though sometimes these censuses go as far as counting street vendors (Niamey, towns in Guinea, urban areas of Benin) and some succeed in identifying the occupations operating in appropriate domestic set up (Egypt)). Distributions are much easier to identify in these surveys since the informal sector definition criteria apply to economic units which are the units of observation rather than to individuals.

In reality, however, it is the surveys involving establishments which have offered the most reliable estimates of entrepreneurs' revenues, which is a decisive element for understanding how the informal sector works and how it is distinguished from underemployment.

Enquiries on firms or establishments have led to two considerable advances which, unfortunately, have not always been followed up due to the priority given so far to household surveys and mixed or combined surveys (households and firms in measuring the informal sector :

- The first progress is that questionnaires have been adapted in function of the phenomena to be observed : the choice of the rythm and of the period of reference represents an improvement which has been introduced and remains incorporated in the surveys ; however, the choice left to the person answering the questionnaires to define this period of reference (and differently depending on the questions) is not always recognized.
- Adaptation of questions must, however, go well beyond the choice of the period covered. In the case of Tunisia for example, estimates based on the time worked or on production capacity, and especially on intermediate consumption or technical coefficients of production, and stock rotation has yield an evaluation of the value added of small firms twice as large as that found by direct declarations, as if the latter consisted in spontaneously dividing the real value by two. The level of income obtained using these methods is known (Charmes, J., 1990 and 1996c) ; they are several times higher than the legal minimum wage, and higher even than the average salary in the modern sector. Income figures for other professional statuses also necessitate the adaptation of questionnaires, if only for the existence of multiactivity which usually reveals the general ambiguity of the status : not only are many employees paid by task or percentage (what we called urban sharecropping), but moreover they are not only salaried (or apprentices or family workers) ; they are simultaneously independent, working for themselves in their employer's workshop when the latter has no order to give them, or when he lets them practise what they have learnt during apprenticeship.
- The second significant progress stemming from surveys and censuses on establishments is the determination of the "missing middle" corresponding to small-scale establishments that make up intermediate size firms. Certainly, the method for showing this gradual growth necessitates the standardization of both family names and corporate names, because monitoring the declarations of heads of establishments or their managers (in the establishment branches) requires putting the names of proprietors and entrepreneurs side by side, in order to show those who own and manage several units, without generally declaring them spontaneously : in other words, the hypothesis regarding premises or establishment = business or firm should be abandoned. This method has been successfully tested and applied at true scale in Tunisia where the proportion of the "missing middle" thus defined appears to be 16 % of the establishments and 12 % of the total employment.

Mixed surveys

They combine the approaches of household and establishment enquiries. A priori nothing in these approaches prevent the combination and coordination of the

advantages of household surveys (exhaustiveness of the field and procedures, regularity and consistency of information gathering) with those covering establishments (easy application of definition criteria to economic units, adaptation of questionnaires). They consist of :

- a) drawing a representative sample of households in order to identify employers and independent operators, whether they practise their activity as a main or a secondary occupation ;
- b) subsequently sending out a questionnaire for establishment, b1 (or simultaneously b2) to this subsample of small businessmen ;
- c) in a possible third phase c1 (or simultaneously c2) gathering information complementary to data collected for production, i.e. on household consumption or budgets. Or information collected from businessmen could be complemented by data from their employees about their personal situation and working conditions.

The method has now been tested or is undergoing trials in several countries including Mali (1989 : a + b2), Cameroon and Madagascar (Yaoundé in 1992 and 1993 ; Antananarivo 1994 and 1995, surveys 1-2-3 : a + b1 + c1), Chad (ECOSIT Enquiry 1995-96 on the country's 4 main cities : a + b1 + c2), Tanzania (Zanzibar, 1990 : a + b1 ; Mainland, 1991 : a + b1 and Dar es Salaam, 1995 : a + b1 + c2) and Ethiopia.

Providing that mixed surveys are linked to other tools dealing with employment, they can succeed in obtaining a two-pronged estimate of informal employment :

- through the partition of the diverse occupational statuses derived from the definition criteria adopted in the first phase ;
- through distinguishing independent operators and employers of the subsample of the second phase, and taking into account their respective labour force, to the extent the subsample is considered representative.

Such surveys may be viewed as cumbersome (simultaneous surveys or those consisting of several successive phases), but in the end there has been no obstacle to their implementation, as seen by the size of samples in surveys conducted in Mali (more than 10 000) or Chad (more than 5 000), or in the repetition of surveys 1-2-3 in Cameroon and Madagascar. However, there is a tendency towards reducing and simplifying questionnaires, which can only be at the expense of the quality and reliability of information gathered on revenues.

Furthermore, disparities between the representativeness of the branches of activity, and the relevant universes they are in reality can result in figures that are

too low for certain domains (particularly for manufacturing) and too high for others (trade), which is a drawback for National Accounting. This problem can be resolved only by achieving a good stratification of samples of similar units (at the first stage) and/or businesses (second stage), as has been attempted in informal sector surveys in Tanzania and Ethiopia.

The criteria of the new international definition revealed themselves to be relatively easy and efficient to apply in measurement and survey systems designed to capture the informal sector : but at the condition to be flexible - as allowed by the international definition - in the choice and combination of alternative criteria (legal status/accountancy ; size/registration) spelled out by the selected method.

Undoubtedly the method of mixed surveys is the one most satisfactory (although its administration becomes heavy, if the whole set of user's needs is to be taken into account), but still the indirect estimates will remain for long useful and efficient for the follow up of major trends in the informal sector and it has to be kept in mind that the choice of methods depends on the needs of users and policy-makers. Mixed surveys are the most efficient for national accounts, establishment censuses and surveys are more adequate for the design of policies focused on the promotion of micro-entreprises and their transition to the modern sector, and finally labour force surveys are the most appropriate for the follow up of the various segments of employment, especially the segments of the informal sector.

As a result, we should not impose uniformization. Methods diversity should be the rule, since it facilitates the exploration of shadow areas and the test of new original tools. Few are the fields of statistical knowledge and data collection where it is possible to recommend definitive and standardized methods. In other words, harmonization is not synonymous with uniformity. Concepts, classifications, tabulations of the results, and methods for taking the informal sector into National Accounts have for sure to be harmonized and standardized but not the data collection systems.

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TOPIC 2

SURVEY TECHNIQUES FOR MEASURING THE INFORMAL SECTOR

Statistical measurement of the informal sector in Africa : data collection strategies

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I. INTRODUCTION

At a time when most developing countries, and more specifically the African countries, are pursuing economic policies aimed at introducing a sustained growth model, we are bound to note the extreme paucity of systems providing statistical information on households and the informal sector. This weakness seriously hampers analysis of the viability of the policies implemented both in the short term ("social consequences" of adjustment) and in the medium and long term (mobilization of human resources for a new national development strategy). Moreover, whatever the assumptions that one can reasonably make about the future growth of the sub-continent, employment in the informal sector is bound to grow in both the short and medium term.

Recent experience in collecting data on the informal sector has shown that, contrary to preconceived ideas, the statistical measurement of this sector was not only possible but was no more complicated than other types of statistical work forming part of the survey statistician's traditional "tool kit" (surveys of enterprises in the modern sector, consumption-budget surveys, etc.). The object of this paper is to present the various options for quantifying the informal sector, highlighting their respective advantages and possible limitations.

II. THE VIEWPOINT OF THE SURVEY STATISTICIAN

The collection strategy is influenced upstream by the specific characteristics of the subject being studied (in this case the informal sector) but also downstream by users' requirements. From the demand point of view, our aim is primarily to satisfy the needs of the national economic information system, coordinated by the national statistical institutes ; the national accounts represent a major output here. The viewpoint is therefore clearly statistical, representative and macro-economic, even if the basic data may be treated in specific ways : thematic or regional.

In this context we define our proposals in accordance with the recommendations of the competent international agencies. Two of them, the United Nations Bureau of Statistics and the ILO [International Labour Office], recently made such recommendations in 1993, the first in connection with the SNA revision 4 and the second following the Fifteenth International Conference of Labour Statisticians.

In box 1 we show the main points of the ILO "Resolution on employment statistics in the informal sector".

BOX 1
THE ILO RESOLUTION
CONCERNING STATISTICS ON THE INFORMAL SECTOR

The ILO's discussion of statistics on the informal sector, on the agenda of the 14th and 15th international conferences of labour statisticians, finally resulted in the publication of a resolution in 1993. This sets out the international standards forming the basis for developing definitions and classifications of activities in the informal sector, and appropriate methods of collecting data. These international standards aim to improve the international comparability of statistics.

CONCEPT

Generally speaking, the informal sector can be described as a set of units producing goods or services mainly for the purpose of creating jobs and income for the persons concerned.

Production units in the informal sector have the characteristics of one-man businesses, as defined in SNA revision 4.

The activities pursued by production units in the informal sector are not necessarily carried out with the deliberate intention of avoiding the payment of tax or social security contributions, or infringing the employment legislation or other laws or administrative provisions. In consequence, the concept of informal sector activities should be distinguished from the concept of activities in the hidden or underground economy.

OPERATIONAL DEFINITION

There are two types of informal enterprise :

- informal enterprises in which people work on their own account ;
- enterprises of informal employers.

Depending on national circumstances, the former may include all enterprises in which people work on their own account, or only those not recorded in the specific form laid down by national law. For operational reasons, informal employer enterprises may be defined according to one or more of the following criteria, depending on national circumstances :

- i) unit size below a level of employment ;
- ii) non-registration of the enterprise or its employees.

Registration may refer to the record entry stipulated by the industrial or commercial regulations, tax or social security laws, the rules of professional groups or similar texts, laws or regulations laid down by national legislative bodies.

DATA COLLECTION PROGRAMME AND METHODS

The collection of data on the informal sector should be incorporated in the normal national statistical system. The collection programme should provide for :

- a) regular monitoring, if possible at least once a year, of changes in employment in the informal sector ; and
- b) detailed examination of units in the informal sector, if possible at least every five years.

As regards general objective a), the data collection programme should preferably be based on a household survey. In the case of general objective b), the collection programme should preferably be based on a survey of establishments or a mixed survey of households and enterprises, or a combination of the two.

The clarification and unification of concepts relating to the informal sector call for some comments.

Indirect or direct measurement ?

There is a simple principle which ought to act as a guide : direct measurement should be systematically preferred to indirect estimates if the former produces sufficiently reliable results at non-prohibitive cost. Though an indirect estimate of the informal sector (or some of its components) is not a new concern for the national accounts, statistical surveys of the informal sector over the past twenty years have proved the viability of a direct approach. This should therefore be the preferred method of quantifying the informal sector.

The unit of production as the starting point

Our choice of concept led us to adopt the unit of production as the reference unit for defining the informal sector. The only possible source of information is therefore a

survey of establishments, so we need to define what we mean by “establishment” in the statistical sense, i.e. the term to be used in an actual survey procedure.

By “establishment” we mean an economic unit where a productive activity is pursued, whatever the rate of activity (“full-time” or “part-time”) or the type of premises used (“permanent”, on the public highway or at home). This choice deviates from the one traditionally made by statisticians in charge of establishment surveys. Very often, only establishments with a fixed location are considered, i.e. those which have specific premises from which to operate. Our definition clearly includes this limited concept of an establishment. There is no apparent justification for ignoring many production activities (within the meaning of the national accounts) merely because they do not take place in “permanent” facilities. To avoid confusion, we shall therefore use the term “informal production units” rather than “informal establishments” to define all the basic units making up the informal sector. These informal production units may pursue their activity independently or they may depend on one informal enterprise comprising several production units.

This definition of the unit of production is therefore the necessary and sufficient precondition for exhaustive coverage of all production activities, whatever the institutional sector to which they belong, especially the activities of the informal sector. In particular, it leads us to discard household surveys which aim to record informal employment characteristics only, at least as regards measuring the output of the informal sector, its technical coefficients and its outlets.

III. THE CONVENTIONAL METHOD : CENSUS OF ESTABLISHMENTS / SAMPLE SURVEYS

3.1. Principles

The combination of establishment censuses and informal sector surveys is the conventional method of acquiring statistics on this sector. Africa is the place where this has been done most often : Tunisia (1980), Guinea (1987), Niger (1987/88), Zaire (1989), etc. After almost 15 years' experience, it has been possible to refine the data collection methods, which have been the focus of major innovations in questionnaires adapted to the real-life operating conditions of informal activities. The hiatus which existed between the concepts of the experts (economists, national accountants and statisticians) and the logic of producers has been reduced.

From this point of view, the establishment censuses are an essential precondition for conducting more detailed investigations. Their central aim is to list all establishments, in order to gather essential information allowing stratified sampling

procedures to be developed in a second phase. The census officers comb the streets of the town or towns in question and record the physical locations where production activities are pursued. In certain cases, plots or concessions are also visited (Niger) to detect the presence of establishments in these inner courtyards. Non-sedentary activities are not systematically taken into account. When they are included, the statistical work consists in listing them : only rarely is a detailed questionnaire applied to them.

There are three different types of establishment censuses, depending on the scope covered : censuses of all establishments, censuses of informal establishments only and censuses which simply list establishments without collecting data. In the vast majority of cases, they are conducted in particular areas of the country, usually the capital but sometimes all urban areas, and in very rare cases nationwide.

3.2. Limitations

This strategy has weaknesses which are difficult to overcome. First, the objective of an exhaustive census of establishments to be used as a basis for subsequent surveys is not attainable in the case of informal production units, particularly those based at home, or itinerant activities on the public highway. Second, the time taken to process data from establishment censuses imposes a crippling constraint on samples of informal units derived from them, in view of the erratic pattern of establishment creation and closures. This therefore casts doubt on the statistical representativeness of the universe of informal establishments surveyed directly.

The problem of establishment “visibility”

First, the census of establishments cannot be an exhaustive sampling base for economic units in the informal sector, owing to the extreme difficulty of locating informal units. Most itinerant activities are overlooked by censuses (even if some may be listed in certain cases) and all home-based activities, in particular, are omitted.

In the majority of cases, census officials proceed by combing the streets, so that it is the “visibility” of establishments that is the real factor restricting the definition of the field covered. To conduct a genuinely exhaustive census of economic activities based on establishments, it would be necessary to produce a systematic list not only of establishments with specific premises but also of all dwellings which might potentially house informal units.

Such a method is used for population censuses. Unless the two censuses are conducted simultaneously, introducing questions on home-based establishments into the population census, such a strategy is generally ruled out, mainly on cost grounds.

In reality, the problem of the visibility of production units is not confined to the informal sector. Some formal one-man businesses or even some companies do not have physically identifiable establishments (notably in the transport sector, building and civil engineering or business or household services). In all sectors the field covered by the establishment censuses is incomplete. Naturally, it is in the informal sector that coverage is poorest.

The risk of double counting

The statistician faces the problem of the basic statistical unit for the census. For the purpose of directly locating activities, it is necessary to be able to produce an exhaustive list not only of dwellings but also of premises used strictly for economic activities ; hence the risk of double counting. A self-employed person in the informal sector may very well store some of his materials and carry out certain operations at home while having his own premises where he conducts most of his activities. Such an economic unit would then be counted twice.

The place of the survey for non-localised activities

Direct measurement of informal activities at the workplace is not appropriate for itinerant units or activities pursued on the public highway. The street is certainly not a suitable place to complete a survey questionnaire. This type of problem does not arise in the case of mixed surveys, since the place of residence is a uniform basic statistical unit.

Problems in setting up computerized registers of informal establishments

Finally, it is not possible to set up a computerized register of informal units allowing their activities to be monitored over time. Given the particularly erratic pattern of creation and closure for this type of unit, it becomes impossible to update the registers. The longer the time lapse between the census and the detailed surveys of informal establishments, the more distorted the picture presented by the sample. For instance, in Mexico it was shown that the rate of non-location on account of a change in activity could be up to 20% in certain sectors after a 2-year interval.

In conclusion, these production units which are not establishments are precisely the ones which cannot be taken into account by the traditional approach of an establishment census or a survey of establishments in the informal sector.

If one wanted to pursue the establishment census method in order to measure the activity of the informal sector, it would be necessary to amend the original procedure in order to cover the whole field and not just the "visible" part seen on the

surface. Moreover, the first censuses of establishments attempted to cover only this visible segment which could perhaps be “modernized”. The main ILO programmes in this field aimed more specifically at the “modern” part of the informal sector, i.e. micro-enterprises eligible for promotion policies. In many cases, only manufacturing activities were surveyed¹.

Finally, the establishment census/random survey approach is a good way of collecting data on the visible segment of the informal sector, which is often targeted by development agency programmes supporting micro and small enterprises. In the face of such problems in surveying establishments directly, however, the current tendency seems to be to prefer to tackle the informal sector by two-phase surveys (households/production units).

IV. THE TWO-PHASE SURVEY METHOD

4.1. Principles

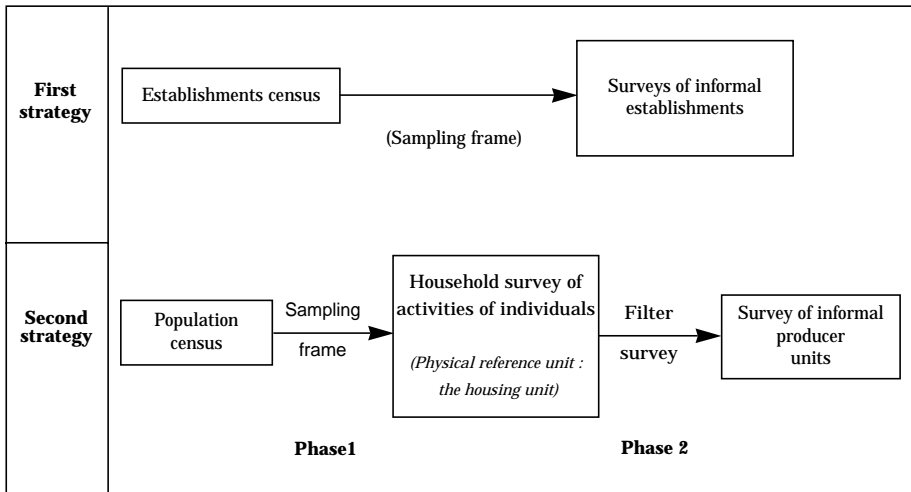
The two-phase survey method is an appropriate alternative strategy for solving the sampling problems posed in measuring the informal sector. This technique consists in selecting a sample of production units to which a specific questionnaire on informal activities is applied (phase 2), based on information obtained from a household survey and relating to the activity of individuals (phase 1).

For each individual belonging to the active population in work (e.g. any individual who has worked for at least one hour during the reference week, if we take the ILO definition), who states that he is the owner or a self-employed worker in a unit satisfying the condition of membership of the informal sector (criterion relating to size or non-registration) the questionnaire is applied to the informal unit in question.

1. This bias is one reason why many surveys of the informal sector reach an optimistic conclusion on the capacity of the sector to generate lucrative jobs. By considering only the informal sector with fixed premises they greatly overestimate the average level of income.

Diagram 1

Two alternative sampling strategies to measure the activity of the informal sector



Note : if the sampling frames are not available (population or establishments censuses) or out of date, the two methods may be applied using primary units selected from an area frame.

The major strength in this method is that a sampling base obtained from a housing census (as part of a population census) is much more exhaustive than a sampling base derived from a census of establishments, especially in the case of surveys of activities as difficult to cover as those in the informal sector. The statistical properties of the estimators obtained from a survey of the informal sector are derived from the characteristics of the survey used as a filter.

Places where this type of two-phase survey has been conducted include Cameroon (1993), Madagascar (1995), Niger (1995) and Tanzania (1995).

General characteristics of the survey

Choice of filter survey and geographical coverage

There are several possible options, depending on the specific characteristics of the statistical recording system in force in each country. In our opinion, **the employment survey serves as the best filter for the specific survey of the informal sector**, in that it supplies the necessary information to identify all informal units.

Most countries in Asia and Latin America already have surveys of this type. In Africa, on the other hand, there is a real deficiency, but setting up employment surveys on that continent should allow us to achieve two aims simultaneously.

There is a genuine need, which is not confined to the informal sector, to know more about the situation and trends on the labour market, while the structural adjustment policies introduced in recent years are likely to have a profound effect on the structure of employment in these countries : identification of vulnerable groups, focusing incomes policies, etc.

An alternative to using the employment survey is **to use consumption budget surveys or any other type of household survey (population and health surveys, etc.)**. In general, these are national in character and gather all information on the activity of individuals necessary to list informal establishments. However, the small number of households surveyed in certain countries may impair the quality of the results of the informal sector module.

The population census can of course be used as a sampling base. Two pre-conditions must be met if it is to be used for a survey of the informal sector. First, the time lapse between the census and the informal sector survey must be kept to a minimum. Second, information on the activity of individuals, necessary to filter out informal "one-man businesses", must be included in the census questionnaire. These conditions are not generally met, for economic reasons.

In the absence of a full national survey, it is still possible to keep the first part of the two-phase survey to its absolute minimum (i.e. the part addressed to households and serving as a filter). On the basis of a sample of households or individuals, representative at national level, it is sufficient in this first phase to collect data only on the labour market situation (active or inactive), the status of activity (owners or self-employed workers as opposed to employees or family helpers) and the institutional sector of the economic unit in which they work (informal or other). This is the type of choice which was made in Mali in 1989.

In general, the sampling strategy of the filter survey adopts conventional household survey procedures. In most cases, **a multi-level, stratified area survey is used.**

For national accounts purposes, the survey should cover the whole country. Since the geographical coverage includes both urban and rural areas, one might consider different treatment according to the location. In certain cases, the agricultural census (and the whole armoury of specific survey techniques developed to cover economic activities in rural areas) could be used as the sampling base for surveys of the informal sector in rural areas, while the employment survey could cover urban areas.

Identification of informal production units

It must be possible for the process of selecting the representative sample to be adapted according to the definition of the informal sector adopted. We have seen

that the ILO leaves a free choice of criterion for identifying informal establishments : size criteria and/or non-registration. It is therefore necessary to introduce a question into the module addressed to households allowing informal units to be recorded. The cost of such an addition is negligible : experience has shown that even in the case of non-registration, the question asked does not pose any major problems.

The filter survey must also permit identification of all informal production units, whether they are run as the principal or secondary activity of the person in charge. For this purpose **it is essential that the filter survey should endeavour to provide accurate information on the common phenomenon of multiple activity**. The fact that the population censuses provide little or no data on this, for obvious cost reasons, disqualifies this type of census from being used as a filter survey.

The accuracy of the estimators : construction of the implicit population of informal production units

The procedure for selecting the sample of establishments from the filter survey on the activity of individuals is based on the one-to-one relationship between self-employed workers (business owners and people working on their own account) and the establishments which they run. By definition, every self-employed worker in the informal sector is the head of an informal establishment and for any informal establishment it is possible to identify the person in charge.

The filter survey therefore enables us to record a set of informal establishments with the characteristics of statistical representativeness. However, the number of informal establishments thus isolated cannot satisfy the specific objectives of the survey of the informal sector, having regard to the desired estimator accuracy. There are two possibilities :

Let N_D = the number of informal establishments desired for the purpose of the survey,

N_F = the number of informal establishments identified in the filter survey.

1) $N_D < N_F$

This configuration is the easier to handle. It may arise if, for example, the household survey consists of a particularly large sample and/or the degree of “informality” in the economy is high. In this case, it is necessary to take a sample of establishments of size N_D from the N_F recorded in the filter survey. The sampling

strategy is left to the discretion of those instigating the survey, according to their own objectives (with or without a reduction, stratified or not, etc.). The coefficients of extrapolation (or the converse of the probability of inclusion) associated with each establishment will be equal to the product of the coefficients of extrapolation allocated to dependent workers in the informal sector and the converse of the probability of inclusion for informal establishments among those identified in the filter survey.

2) $N_D > N_F$

This may occur if the accuracy of the estimators (their variance) desired by the statisticians in charge of the survey of the informal sector is not satisfied because N_F is too small. It is then necessary to select $N_D - N_F$ supplementary informal establishments. One solution is to make greater use of the information contained in the filter survey.

This records a representative sample of the active population. In particular, it identifies dependent workers in the informal sector (employees, apprentices, family helpers). On the basis of these dependent workers in the informal sector, it is possible to find the establishments in which they are employed. For that purpose it is necessary to ask the respondent for the address where he works.

This approach should not cause any major problems given the close social ties between employers and employees in the informal sector. In the great majority of cases, there are particular links between the labour force and self-employed workers in the informal sector, extending beyond the purely commercial relationship (family relationships, friendship, acquaintance based on solidarity networks, etc.). This is true not only of family helpers (by definition) but also of informal paid employees.

This strategy leads to recalculation of the extrapolation coefficients associated with each establishment if several individuals present in the filter survey and working in the informal sector lead us to the same production unit. The probability of inclusion of a particular establishment will have to be weighted in inverse proportion to the number of persons working there.

If analysis of data relating to dependent workers in the informal sector does not yield sufficient supplementary establishments, the sample will have to be completed by an ad hoc procedure (mobilizing surveys of household activity other than the filter survey, drawing new households into the master sample if there is one, or an area sample).

In reality, depending on the branches of activity, geographical areas, etc., it is possible for cases 1 and 2 to occur simultaneously (for certain branches i , $N_D^i < N_F^i$,

for other branches j , $N_D^j > N_F^j$). The two methods will then have to be combined.

A mis-match between N_D and N_F can occur only in cases where the filter survey was not designed specifically to cover the informal sector. Where there is no support survey and the two phases have to be carried out for the purpose of the survey of informal establishments, the number of households is chosen so as to obtain N_D informal establishments. This was the procedure used in the surveys in Mali, Cameroon and Madagascar.

In all cases, the statistical properties of the estimators can be explicitly calculated.

Monitoring over time

The question of temporal monitoring of the informal sector is vital to understanding its macro-economic dynamics. Since the censuses and surveys of the informal sector were conducted as one-off operations, the experience gained did not provide an answer on this central point.

While the national survey of the informal sector enables us to evaluate all operations connected with the informal sector for the base year, it is necessary to propose an operational solution for monitoring this sector over time. Since it is not possible to repeat such an operation every year, for cost reasons, it is therefore necessary to use other sources. Once again, it is the employment surveys (and all other household surveys) that are the right tool for preparing trend indices.

Given the extremely close connection in the informal sector between the total remuneration distributed (in the form of wages or profits of own-account entrepreneurs) and the amount of value added created, associated with the small amount of tax paid and operating subsidies, it is possible to construct an indicator which faithfully reflects the trend in output in the informal sector². It is therefore possible to monitor, year after year, with an acceptable degree of reliability, the trend in the production account in the informal sector on the basis of the employment surveys, or the whole armoury of simple income surveys generated each year by a country's statistical institute. National coverage may not be systematically provided, in which case it will be necessary to make assumptions regarding the differential dynamics of the regions. For the variables not observed (such as intermediate consumption, gross fixed capital formation, the amount of taxes and duties, or the interest paid) it will always be possible to re-establish the structure observed for the base year or to produce an estimate based on more sophisticated econometric relationships. One might count on a new national survey of the informal sector to readjust the real composition of the various headings in the accounts.

2. See ROUBAUD F., "Value added of the unregistered urban sector in Mexico : an approach using the employment survey", *STATECO* n° 57, INSEE Paris, 1989.

In any case, knowing the total wage bill and the compensation of own-account entrepreneurs, indicated simply by the question on income in the employment survey or the consumption-budget survey, we know about the vast majority of the economic flows taking place in the informal sector. This procedure supposes a minimum level of harmonization between the concepts used in the employment statistics and those obtained from establishments (concept of active population, classification of branches, reference period), and that harmonization is essential.

4.2. Limitations

In spite of their good statistical properties for providing information on the informal sector, the two-phase surveys raise a number of problems which must be taken into account.

The question of marginal and/or geographically concentrated activities

Owing to their specific characteristics, certain informal activities are liable to be poorly covered by a standard two-phase survey procedure. This is true in particular of branches of activity where there are few informal production units, and those concentrated in specific geographical locations. In some countries, artisan traditions cause trades to be grouped in clearly identified locations (jewellers, tailors, kebab sellers). To prevent these activities from being poorly represented, it is necessary to mobilize all the information available in advance and introduce it into the sampling plan as a stratification criterion. In particular, it is advisable when drawing the area units to take account of the density of informal activities and to over-represent them in the sample, so as to improve the accuracy of the estimators and reduce the survey costs. This information may be obtained from previous surveys (proportion of self-employed workers in the population census, census of establishments, etc.) or from prior reconnaissance work.

Identification of informal establishments by dependent workers

Another difficulty may arise. Though each individual can evaluate the approximate number of employees in his unit, he does not necessarily know its legal status. If the sample of informal establishments is obtained only from the responses of informal entrepreneurs, who know the legal status of the establishment which they run, the problem is solved. Only if, for reasons of statistical representativeness (insufficient number of business owners and informal self-employed persons in the household sample), informal units have to be identified from dependent workers, it is necessary to ensure the consistency of the responses by cross-comparison of various indicators on the establishment (size, branch, declaration of legal status by the employee). There would, in any case, be very few cases of dispute.

Collection times between the two phases of the survey

In view of the particularly erratic demography of the informal sector (creation, disappearance) **it is necessary to minimise the time lag between the collection of the data from the households (phase 1) and the survey of informal production units (phase 2)**, to avoid the risks of loss. This problem arises only in cases where phase 1 of the survey was designed for a purpose other than measuring the informal sector. In that case, it may be necessary to wait for the end of phase 1 before drawing the sample of informal production units. To reduce processing times, it is then preferable to undertake manual, partial analysis of the survey data (only the information necessary for drawing the phase 2 sample will be used) rather than wait for the full computerized records on phase 1 (cf. 1-2-3 survey in Madagascar). In other cases, the phase 2 questionnaire may be applied immediately after phase 1, once the informal production units have been identified.

V. CONCLUSION

This paper has shown, on the basis of recent experience in Africa, that if it is essential to collect data on the informal sector, there are well-tried methods of meeting this need, even though they still need to be refined. Today it is not so much a question of inventing new procedures but rather disseminating those which have proved effective, so that they come into general use. We also need to set up institutional channels whereby the results of surveys on the informal sector can be continuously incorporated in national economic information systems. In particular, close collaboration must be established between survey statisticians in charge of collecting data on the informal sector and potential users, notably the national accounts, right at the stage of designing the survey.

* * *

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General methodological report

1-2-3 survey of employment and the informal sector in the Antananarivo conurbation in 1995

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The continuing economic crisis and Madagascar's transition to a free market economy are changing both the structure of employment and the conditions of activity for operators. The informal sector has expanded dramatically over the past ten years, especially in urban areas. It is acquiring a predominant role, especially in satisfying domestic demand and bringing young people and women into the working world.

However, the information available on employment and especially the informal sector is very sparse in Madagascar, often being confined to empirical observations. No real survey of the informal sector has been conducted since the 1980s.

To fill this gap and perform its role of "providing macro-economic background information" in Madagascar, basing economic analyses on data which are as reliable and complete as possible, the MADIO Project (Madagascar - DIAL - INSTAT - ORSTOM) introduced the 1-2-3 survey of employment and the informal sector in the Antananarivo conurbation as part of its work in the second quarter of 1995. This is the first representative survey of the informal sector to be conducted in Madagascar. This type of survey was tried out in Mexico (Mexico City) and Cameroon (Yaoundé). It will be repeated periodically with some changes of method to monitor the trend over time in the employment situation and the informal sector in the Antananarivo conurbation. The survey is to be extended to give national coverage as part of the work of the Directorate of Household Statistics at the National Institute of Statistics.

This paper describes the survey : the objectives, the methodology adopted, and the organization and progress of the survey.

I. OBJECTIVES OF THE SURVEY

A dual objective : monitoring the conditions of household activity and a macro-economic approach to the informal sector

The MADIO project conducts a series of studies for INSTAT on the current process of macro-economic transition and the medium-term prospects in Madagascar.

It soon became apparent that in order to assess the conditions concerning the production sector's adjustment to the crisis, it would be necessary to utilise adequate statistical information, particularly on the informal sector. This sector is seen not only as a component of the production sector but is also viewed in terms of its role in satisfying demand. The ultimate objective is to incorporate this sector in macro-economic studies on the basis of the results of survey data ; this approach should make it possible to validate a formalized representation of the sector's macro-economic role in order to come up with proposals for economic policy on the subject.

The second objective of the series of surveys conducted by the MADIO project is to permit the monitoring of conditions relating to household activity and the operation of the labour market over time. In a country where labour is the most abundant factor, and the main aim of economic policy is to alleviate poverty, while the vast majority of the poor obtain their income from labour, it was paradoxical that the national statistical information system did not comprise any permanent monitoring arrangements on this subject. The surveys whose results we present here are meant to fill this gap ; they are initially confined to the capital.

The 1-2-3 survey is conducted in three phases :

- **The first phase aims to cover employment and the conditions of activity of the population of working age in the Antananarivo conurbation.** As regards the labour supply, it provides information on the socio-demographic characteristics of the active population, the quality of labour and the structure of employment. It also gives some indicators concerning the labour market situation (compensation of labour, rate of unemployment and underemployment, rate of paid employment, mobility, etc.) and the conditions of activity of active persons in work (place of work, working hours, etc.). **This phase also serves particularly to produce the sampling base for taking a representative sample of production units in the informal sector on which the second phase of the survey is conducted.**

During this phase, information was collected on housing conditions and housing amenities.

- **The second phase is designed to assess the integration, performance and prospects of production units in the informal sector.** In particular, the main aims are :

- to understand productive behaviour in the informal sector (production function, investment function, conditions of activity, etc.) ;

- to analyse how the informal sector is integrated into the national economic system (origin of inputs, destination of products, intersectoral mobility of labour, method of financing, etc.) ;

- to obtain additional information for preparing the national accounts (production account, generation of income account, capital account, etc.) ;

- to find out about the behaviour of economic operators in the informal sector, their points of view and strategies in the face of macro-economic measures (floating of the Madagascan Franc, liberalization of the economic system, etc.).

• **The third phase permits analysis of household consumption and measurement of the informal sector's role in satisfying household demand.**

The information collected provides an insight into the behaviour of households in relation to the informal sector (choice of formal or informal products, choice of formal or informal sales outlets). It also permits updating of the basket of consumption by type of household (level of consumption, weighting by product).

II. METHODOLOGY

2.1. Definitions and concepts

Household : The definition of a household is the one used for the 1993 General Census of Population and Housing and the 1993 Permanent Household Survey.

A **household** is defined as a group of related or unrelated persons, living under the same roof or in the same concession, taking their meals together or in small groups, pooling all or part of their income for the benefit of the group, and with the same authority, called "head of household", controlling their expenditure.

NB : The household does not include persons who were resident, have been resident for less than 6 months or intend to be resident in the household for less than 6 months. They are also included in the survey. On the other hand, the head of the household, new-born babies and newly married couples form part of the household even if they have been resident for less than 6 months.

Activity - Employment - Unemployment : The concept of Activity adopted refers to the economic concept of output as defined in the National Accounts. The concepts adopted for employment and unemployment correspond to those adopted by the International Conference of Labour Statisticians (ILO Geneva, October 1982).

*The object of **activity** is to produce goods and services, whether or not for the market, in return for a wage or salary in cash or in kind, or for profit or the benefit of the family.*

*Any person aged 10 years or over is regarded as of **working age**.*

***Active** persons are defined as those with a job (active in work) or seeking a job.*

***Unemployed** means any person of working age meeting all four of the following conditions :*

- having no occupational activity during the reference week ;*
- seeking a job ;*
- taking steps to find work ;*
- available for work.*

Production unit - informal sector

Of the many criteria available for defining the informal sector, we chose **non-registration with the administrative authorities**. We consider this the most relevant from our point of view, namely for judging the importance and macro-economic role of the informal sector in its relationship with the productive system of a given national economy. In particular, it means that the informal sector can be properly reincorporated in the national accounts, the preferred framework for macro-economic analysis.

Of the various administrative registers in use in Madagascar, we chose the statistical reference number (**STAT no.**) because every production activity is legally required to maintain such a register. This is also the one required for meeting a number of institutional obligations and governing access to certain benefits (taxation, etc.). **Finally, the informal sector is defined as all production units with no statistical reference number and/or no formal written accounts.** This criterion concerning written accounts was added so as not to exclude from the scope of the investigations production units which for totally random reasons had a STAT number but could not be treated as formal units in view of their method of organization and production ; the keeping of accounts is a good indicator here.

A production unit is an elementary unit mobilizing factors of production (labour, capital) to generate output and value added within the meaning of the national accounts.

NB : The production unit is the same thing as an establishment if the activity is pursued in a physical location specifically designed for the purpose (shop, workshop, stall)

It will be treated as a "pseudo-establishment" if it has no location (home-based activity, itinerant activity). For example, a dressmaker working alone at home and making clothes for customers represents a production unit in the "made-up articles" branch. Similarly, a vendor retailing cigarettes on the street represents a production unit in the "trade" branch.

Informal production unit (IPU) means any production unit without a STAT number and/or official written accounts (in the sense of direct taxation).

The **informal sector** means all informal production units.

2.2. Sampling plan

An original technique for the preparation of the sampling plan

The sampling plan adopted, designed specially for the survey of employment and the informal sector, has the following original features :

- **Combination of the household approach and the establishment approach**

The conventional "establishment" approach is not an effective way of covering the whole informal sector, because geographical and intersectoral mobility are too great in the case of informal activities, and the majority of the production units have no premises (home-based, on the public highway, etc.). A sampling base using informal production units is therefore only valid for a very short period. The "two-phase" method is specially designed to provide a genuine, statistically representative sample of all informal production units whatever the type of location and whatever the nature of the activity. It consists in combining the household approach (phase 1) and the "establishment" approach (phase 2). The first phase of the survey targets the active population in work, having their principal or secondary activity in an informal production unit. They form the sampling base for the second phase.

- **Delimitation of the Antananarivo conurbation using aerial photographs (remote sensing)**

In view of the rapid growth of the urban population and the expansion of the town of Antananarivo (with no well-defined town plan), this technique indicated the real boundaries of the labour pool for Antananarivo, one of the necessary conditions for the success of the survey method which combines the household approach (place of residence) and the establishment approach (place of work).

The Antananarivo conurbation was delineated in several stages. An initial outline was drawn from aerial photographs of the town of Antananarivo and its sur-

rounding area, taken by the FTM (Madagascar Cartography Centre) in February 1994. Reconnaissance on the ground was then undertaken to validate this initial outline and modify it as necessary. A built-up area belongs to the Antananarivo conurbation if it is linked to the administrative district of Antananarivo and fewer than 200 metres away from it. This yielded another provisional outline. The final version of the boundaries of the Antananarivo conurbation consisted of the external envelope containing all the census segments or zones used in the 1993 General Census of Population and Housing and included in the final provisional outline.

Sampling plan for phase 1 : Employment survey

A two-stage area sampling plan was adopted : census segments or zones were taken in the first stage and households in the segments in the second stage.

Selecting the segments

Since at the time of the survey only the data on the census zones taken for the 1 in 10 sample by the Census Directorate were available, these areas were all included for the employment survey. This did not present any major technical problems, because the segments are fairly uniform in size (around 200 households per zone). 78 segments taken for the 1 in 10 sample were included in the Antananarivo conurbation, of which 57 were in the administrative district of Antananarivo and 21 in surrounding suburbs.

The census was conducted in all 78 of these segments in order to produce an exhaustive list of households resident there. For this purpose, the supervisor and his team carried out a reconnaissance of the segment. After that, each census officer had to complete the segment census form containing a plan of the segment with details of the sites of dwellings located there. These dwellings were numbered sequentially in each segment. The census form also contained a list of households belonging to the segment. During this operation a total of 19,690 households were counted in the 78 segments.

Selecting the households

In the second stage, the households to be surveyed were selected systematically from each segment. The size of the sample had to depend on the assumption made beforehand concerning the level of informal activities as a proportion of all household activities (coefficient of informality). The RGPH (General Census of Population and Housing) data made it possible to estimate the number of informal production units as approximately one for every two households.

In order to produce a sample of 1000 informal production units in phase 2 of the survey, the sample size for the first phase was therefore set at 2560 households. This gave a sampling rate in the order of 13/100. The sampling rate was uniform for all segments.

In each segment the households surveyed were numbered sequentially. The households to be surveyed next were obtained systematically by adding the “ratio” until the segment sample size was attained. In each segment the “ratio” is N_s/n_s , in which N_s is the number of the household counted in segment s and n_s is the number of households to be selected in segment s according to the sampling rate.

If, for various reasons, it proved impossible to survey a household in the sample, it was replaced by the household immediately after it on the list of households counted in the same segment. This preserves the geographical distribution of the sample.

Sampling plan for phase 2 : Informal Sector Survey

The statistical units adopted for phase 2 of the 1-2-3 survey on the informal sector are the “**Informal production units**” (IPUs) located in the Antananarivo conurbation.

The results of the first phase of the survey of employment identified 1724 informal production units (taking all branches together) run by one of the active, working members (aged 10 or over) of the selected households. Running such production units is the principal or secondary activity of the active person. In view of the specific problems of urban agriculture, production units in the primary branch were excluded from the survey. The 1603 non-agricultural informal production units form the sampling base for phase 2 of the informal sector survey. The validity of this sampling base depends on the time lapse between the first 2 phases of the 1-2-3 survey.

We adopted a stratified sampling plan with unequal probabilities, according to the following criteria :

- branch of activity,
- status of the head of the production unit : employer¹, own account worker.

20 strata were created. The selection probabilities are determined in advance according to the strategic importance of the strata in the country's economic development (see table 1), while ensuring the significance of the information which each stratum

1. Head of a production unit employing at least one paid worker for its operations.

is meant to supply. In any stratum, the selection is systematically random (with ratios). **The initial sample consisted of 1108 informal production units.**

The production units not surveyed were replaced within each stratum to preserve the initial structure of the sample as far as possible. The selection rates by strata are summarized afterwards in table 1.

In the end, after some replacements, 1018 IPUs were actually surveyed.

Table 1 : *Sampling rate during phase 2 of the 1-2-3 survey*

Status of head of unit	Employer		Own account worker	
	a priori	a posteriori	a priori	a posteriori
Made-up goods	1	0.75	0.8	0.70
Other industries	1	0.83	1	0.91
Building/civil engineering	1	1.36	1	0.85
Wholesale trade	1	2.00	1	1.41
Trade in primary products	1	0.27	0.5	0.30
Other trade	1	0.14	1	0.86
Transport	1	0.58	1	0.49
Repairs	1	1.33	1	0.84
Hotels & catering	1	0.59	1	1.46
Other services	1	0.75	0.5	0.36

Sources : 1995 1-2-3 Survey, phase 2, MADIO calculations

Phase 3 sampling plan : household consumption survey

The sampling base for phase 3 consisted of all households surveyed in phase 1. The sample was stratified according to the following three criteria :

- sex of head of household,
- institutional sector in which the head of the household works,
- head of household's income.

50 strata were established.

On the basis of the assumption that household consumption depends on income and that there are fewer wealthy households, the probabilities of selection for the two "wealthiest" types of household were three times greater than for the other types of household. Selection was systematic according to a ratio calculated for each stratum. The sample consisted of 400 households. Any household not surveyed was replaced by another in the same stratum.

Table 2 : *Sampling rate during phase 3 of the 1-2-3- survey*

Institutional sector of head of household	Income of head of household (in MGF)					
	0	0 to 64,000	64,000 to 128,000	128,000 to 320,000	320,000 to 640,000	more than 640,000
Government, public enterprise	0	0	14.4	13.4	31.1	27.3
Formal private enterprise	0	17.5	15.1	16.0	40.8	37.5
Informal sector	0	13.8	12.9	12.6	37.5	17.6
Unemployed	12.5	0	0	0	0	0
Inactive	18.7	12.0	0	14.6	0	50.0

Sources : 1995 1-2-3 survey, phase 3, MADIO calculations

$$\begin{aligned} \text{Rate of exchange : } 1 \text{ FF (French franc)} &= 100 \text{ F CFA (CFA franc)} \\ &= 0.175 \text{ US\$} = 850 \text{ MGF} \end{aligned}$$

The households in the sample were divided into two groups. Each is monitored for two weeks.

III. QUESTIONNAIRE

Phase 1 : Employment Survey

The survey reference month is March 1995.

The questionnaire used to collect the data in phase 1 is in two sections, **the household section and the personal section**. Apart from the personal characteristics of household members, the household section also contains questions on housing characteristics and household amenities. The personal section comprises the following modules :

1. Current employment
2. Principal activity
3. Secondary activity
4. Seeking employment
5. Unemployed
6. Background and prospects.

In each household surveyed, individuals aged over 10 have to answer the questions in the personal section.

The **current employment module** enables the individual to be classified according to whether he/she is active and in work, unemployed or inactive. The active population comprises all persons of working age (10 or over). The active working population is all those persons of working age who have employment, whether or not it is paid. The unemployed are persons who do not currently have a job and have been actively seeking one for a month. For the purposes of this survey, the inactive are people who have no job and have not been seeking one for at least a month.

The **principal activity module** contains questions on the individual's employment : occupation, branch of activity, socio-occupational category, legal form of enterprise, size of establishment, existence of statistical reference number, affiliation to the CNAPS, vocational experience, remuneration etc.

The **secondary activity module** includes many of the questions in the principal activity module. Owing to the under-employment of some individuals, there are a number of people with more than one job.

These last two modules make it possible to identify the active population in work, running one or more informal production units forming the sampling base for the second phase.

The **seeking employment module** aims to find out about individuals who are under-employed.

The **unemployment module** relates to individuals who have no job, have not looked for work in the past four weeks maximum and are ready to start work in less than a week.

The **background and prospects module** concerns all individuals in the household aged over 15 years. It comprises three sub-modules : the activity of the father, and the individual's previous employment and job prospects.

Phase 2 : Informal Sector Survey

The reference month for the phase 2 survey is April 1995. The financial year to which the survey relates runs from May 1994 to April 1995. The phase 2 questionnaire was designed to handle the following six main topics :

- Conditions of activity in the informal sector (branch structures, locations, IPU history or origins, etc.),
- Labour and employment in the informal sector (size of workforce, training, remuneration, socio-demographic characteristics),

- Output, position in the production system, competition (structure of supply, value added, pricing, apparent productivity, outlets),
- The informal sector and the State,
- Adjustment strategies for coping with the floating MGF,
- Problems and prospects.

The phase 2 questionnaire comprises a section reserved for identifying the IPU to be surveyed and 8 main modules.

The “**identification**” section is mainly a safeguard for the survey officer. It enables him to find the right IPU and the right person. It contains :

- the characteristics of the head of the IPU to be surveyed (identification code in phase 1, name, age),
- the characteristics of the IPU to be surveyed (branch, statistical reference number, size, accounts, etc.),
- his information is copied on to the questionnaire from the phase 1 questionnaire.

The **filter** module (S) serves to ensure that the person before you is actually the person recorded in the employment survey, i.e. the subject of the survey.

The **establishment characteristics** module is a description of the origins of the informal production unit and its history.

The **labour** module describes the characteristics of **all active persons** (paid employee, apprentice, family helper) working in the unit, whatever their status. The person in charge has to be able to answer most of the questions ; he may ask the active persons in his unit for some additional information. It is not necessary for you to question them directly. The module also aims to find out the opinion of the person in charge regarding his labour problems and wage policy.

The **production** module aims to describe the production structure of the production unit by nature, purpose or use (type of customers, periodicity, etc.).

The **expenditure** module aims to give a precise estimate of the unit's operating costs (whether or not paid) for the past month. The second aim is to provide an estimate of each expense item (for the informal sector national accounts). The third aim is to find out for each of these items how the unit is supplied : main type of supplier, periodicity, etc.).

The **customers, suppliers, competition** module aims to assess the method of integration of the informal sector, upstream (suppliers), and downstream (customers), and the informal sector's position on the market (competitors). In particular, there are questions on pricing.

The **capital, investment, finance** module permits :

- evaluation of the unit's productive capital, i.e. the total value of the equipment which the unit uses for its activity ;
- evaluation of investment expenditure (GFCF) by the unit during the past year ;
- identification of the various methods of financing in the informal sector.

The **problems and prospects** module aims to find out about the problems encountered by economic operators in the course of their activities and the type of help which they would like. The second aim is to analyse the strategies adopted by these operators in the face of the recent macro-economic changes, particularly the floating of the Malagasy Franc.

Phase 3 : Household Consumption Survey

The phase 3 questionnaire is in five sections :

- the household identification section,
- the household composition module,
- the monetary and non-monetary expenditure module,
- the module concerning household income and the impact of changes in income on household consumption,
- the module concerning the opinion of household members aged 18 or more regarding the country's economic situation,
- the module concerning sources of information, leisure and methods of transport.

Household expenditure is estimated in two ways :

- daily expenditure for the two weeks of observation,
- retrospective expenditure over the past six, twelve or twenty four months.

For all products the household has to keep a record of expenditure showing the amount, quantity, unit price, place of purchase and main reason for choosing that place of purchase, country of origin of the product and its condition when purchased.

IV. ORGANIZATION AND EXECUTION OF THE SURVEY

4.1. Execution of the survey

As mentioned above, the time lapse between the data collection operations in the first 2 phases of the 1-2-3 survey affects the success of the collection of data on the informal sector because the reliability of the phase 2 sampling base depends on it.

The longer the time lapse, the higher the rate of disappearance of the informal production units. In the 1-2-3 survey of the Antananarivo conurbation in 1995, this time lapse was 3 weeks and the rate of disappearance of the informal production units was 10.5%.

In spite of the rainy season, which caused some delays in the execution of the survey in certain segments (flooding), it took only around 6 months to complete the three phases of the 1-2-3 survey in the Antananarivo conurbation (from collection to entering the data). The counting began in February 1995, field operations ended in June 1995 and all the data had been entered by July 1995 :

- Delineation of the Antananarivo conurbation : 13 days' work ;
- Counting the households commenced one week after the delineation of the Antananarivo conurbation and took 21 working days ;
- The phase 1 collection operation (Employment Survey) began one week after the counting phase and lasted 28 working days ;
- The collection operations for phase 2 (Informal Sector Survey) and phase 3 (Household Consumption Survey) started simultaneously three weeks after completion of the phase 1 collection and took 40 working days.

4.2. Organization of the survey

Transfer of responsibility and internalization of operations at the National Institute of Statistics

The survey was designed by the central MADIO project team consisting of researchers from DIAL-ORSTOM and young Madagascan Economist-Statisticians : some were from the National Institute of Statistics, others were not. In 1996, the Employment survey (phase 1) was carried out by the Madagascan team only and responsibility for its management was shared equally between a MADIO project manager and an official from the National Institute of Statistics. The purpose of this was to transfer responsibility and internalize operations in INSTAT. In 1997, all operations will be conducted by INSTAT officers. The MADIO project will provide only a certain amount of technical support.

Field collection team

The field collection team consists of supervisors and survey officers. Officials of the National Institute of Statistics were given preference in recruitment. As far as possible, the same team was used for all three survey phases.

The role of the supervisors is to ensure the proper execution of field operations and the good quality of the data collected. Their main functions are as follows :

- contact with local authorities,
- coordination of the work within the group,
- continuous training of survey officers,
- monitoring and control of field operations,
- validation and coding of questionnaires,
- adjustment of the data.

They were selected on the basis of their survey experience and their qualifications in economics. They hold at least a degree in economics.

Survey officers were recruited at “A-level” standard. Special consideration was given to those who had been trained in accounting or economics.

- For the census, nine teams were formed consisting of 9 supervisors and 18 census officers.
- The phase 1 data collection was carried out by nine teams consisting of 9 supervisors and 45 survey officers.
- The phase 2 data collection team consisted of seven groups comprising 7 supervisors and 28 survey officers.
- The phase 3 data collection team consisted of six groups comprising 6 supervisors and 23 survey officers.

Data input team

The data were entered by the team from the “Computerized Administration Systems Operating Directorate” (DESAI) at the National Institute of Statistics (INSTAT). The team comprised :

- 1 person in charge of developing the input mask,
- 2 input supervisors,
- 8 input operators.

Two data processing consultants were specially recruited to process the crude files as Dbase files and to program data consistency tests. A French expert provided assistance with this.

Data analysis team

The analysis of the 1-2-3 survey data was carried out by the MADIO project's central team with officers from the National Institute of Statistics.

V. EVALUATION OF THE DATA COLLECTION

Phase 1 : Employment Survey

During phase 1, according to survey officers' estimates, 57% of individuals aged over 10 years gave satisfactory answers and only 1.3% gave unsatisfactory answers ; 66% of interviewees answered the survey officers in person. Some households had to be replaced for the following reasons : either the household refused to answer the survey officers after several attempts at persuasion, or the household had moved and the dwelling it had occupied was no longer inhabited.

Phase 2 : Informal Sector Survey

The survey was always conducted in the presence, or with the consent, of the head of the production unit (IPU) concerned, either at his place of work or at home. Contrary to preconceived ideas, most informal sector operators are not reluctant to answer purely statistical surveys. According to survey officers' estimates, 48.6% of the information is of good quality, 46.0% is average and 5.4% poor.

116 IPUs in the initial sample (corresponding to a disappearance rate of 10.5%) could not be surveyed for various reasons :

- head had moved house or disappeared (dead, gone away) : 42.8%,
- head's activity had changed or ceased : 37.2%,
- phase 1 collection errors : 10.5%,
- head categorically refused to reply : 9.5%.

In view of the intra-stratum replacement method adopted, some production units which had disappeared could not be replaced. The replacement rate was 8%.

Phase 3 : Household Consumption Survey

The rate of household replacement was 16%, mostly on account of refusal to reply. The most reluctant households are the well-off. On the other hand, some poor households felt that the questions concerning expenditure on food were too inquisitive.

VI. EXTRAPOLATION OF THE DATA

Phase 1 : Employment survey

The proportion of the individuals and the sampling rate were calculated for each segment. The coefficient of extrapolation per segment was equal to $(N_s * 10/n_s)$ and the sampling rate was $1/(N_s * 10/n_s)$ (where N_s is the number of households counted in segment s and n_s is the size of the sample).

Phase 2 : Informal Sector Survey

In view of the modifications to the sample structure due to changes in activity, the status of the head of the IPU or phase 1 coding errors, the coefficients of extrapolation of the data were calculated subsequently by the following formula.

$$P_i^1 (N_s / n_s)$$

in which

P_i^1 = the weighting of the head of the IPU i in phase 1,

N_s = size of stratum s containing the IPU i in the sampling base,

n_s = size of stratum s containing the IPU i in the final sample according to phase 2 information.

These coefficients may be summarized by the following statistics :

- average value : 120.8
- minimum value : 38.7
- maximum value : 544.6
- standard deviation : 65.7

Phase 3 : Household Consumption Survey

The proportion of the households is calculated retrospectively to take account of replacements and refusals to answer. The data extrapolations are calculated according to the sampling rates per stratum.

The coefficients of extrapolation may be summarized by the following statistics :

- average value : 490.9
- minimum value : 77.2
- maximum value : 1308.3
- standard deviation : 147.7

VII. INITIAL RESULTS AND DISTRIBUTION PLAN

In order to supply reliable information in real time, several MADIO project managers (all economist statisticians) were brought in during the analysis of the data. For each phase of the survey, rapid analyses - in under two weeks - of the data obtained yielded overall results and the major economic aggregates relating to the various topics covered by the survey.

The first results were officially presented to all those concerned (government, len-

ders, NGOs, press) at the INSTAT - Information Point, followed by publication in the form of brochures. In view of the level of demand, the brochures went on sale (at reproduction cost) in all bookshops in the capital. Many international bodies, NGOs and students use the services of the MADIO project to obtain other results on quite specific subjects, based on the survey data.

VIII. TECHNICAL AND ORGANIZATIONAL IMPROVEMENTS

The 1-2-3 survey is repeated periodically (every year in the case of the employment survey and every 4 years for the three phases of the 1-2-3 survey), initially in the Antananarivo conurbation, to provide a series of reliable, uniform data on employment and to analyse the temporal trend in the labour market situation and the informal sector. Technical and organizational changes have been adopted or will be applied to future surveys.

In October 1996, the master sample formed on the basis of the results of the 1993 General Census of Population and Housing was published by the Directorate of Demographic and Social Statistics of the National Institute of Statistics. In order to make full use of this work and harmonize the results of the various statistical operations, the sampling plan for the 1-2-3 survey will be based on this master sample from 1997 onwards. The sample will be formed in accordance with the one third renewal principle (1/3 rotating panel).

Responsibility for managing the employment survey in 1996 was shared equally between a MADIO manager and an INSTAT official. The management of the employment survey involved a tacit agreement between these two people and the person in charge of data processing, a MADIO project manager :

- the first joint manager, a member of MADIO, took charge of the administrative and financial aspects of the survey ;
- the second joint manager, the official, was particularly concerned with monitoring and surveillance of the field operations ;
- management of the data base, adjustment of the data (computerized formulation of consistency tests and their initiation) fell to the person in charge of data processing, from MADIO. He was the one who served as the interface between the collection team and the data entry team.

Obviously, this “triumvirate” management greatly reduced the burden of responsibility which might have been imposed on one person, thus helping to improve the quality of the work and adherence to the set timetable.

Surveys of the informal sector in Tanzania : methods, results and problems of data collection

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I. INTRODUCTION

Since the term “informal sector” came into use, many variations on the concept and definition of the sector have been expressed and the exact meaning had remained illusive. However, as more efforts in the form of studies and research work have been made for over a decade by individual countries and the international organizations, in particular ILO, its meaning is no longer diverse as it used to be. The recommendations of the 15th International Conference of Labour Statisticians, ICLS, on the definition of the informal sector which individual countries can adopt, illustrate the convergence of the individual ideas and conception of what this sector exactly is. What remains, however, is the identification of country specific peculiarities that need be taken into account within the broader internationally accepted view.

The difficulty in defining the informal sector lies in the heterogeneity of the production units which are to be circumscribed by the definition. They are heterogeneous in character due to the overlap of legal and illegal status of the sector, where in many occasions it is difficult to draw a dividing line even within one country or town.

Tanzania accepted and acknowledged the importance of the concept of the informal sector because it was trying to describe a phenomenon which was emerging from its labour market and was spreading with an increasing but unquantifiable magnitude. Before seventies, the employed population was divided in two main sectors of the economy. Subsistence agriculture was the largest employer (about 90% of total employment) followed by formal sector employment (including large plantations and public services) and only a small fraction of workers were employed outside these sectors. In the years that followed the growth in the economy was seemingly unable to absorb all the new entrants to the labour force in the two sectors and unusual growth of employment outside these sectors began to emerge. For example in 1984 for which information on total employment in the formal sector is available, the share of employment of the subsistence agriculture had dropped to 84% and formal sector employment was shown to be only 6%, indicating that the “unknown sector” was now commanding a quite substantial share (about 10%), larger than the known formal sector.

Population census (1988) recorded 533,359 persons as working (employed) in Dar es Salaam Region. Using census information on economic activity characteristics of all persons of 10 years of age and above (main activity status during the last 12 months, main occupation and status in employment from whom this information was collected) it can be deduced that about 308,000 persons (58%) were employed outside the two main sectors and only about 127,000 (24%) were in paid employment mostly in the formal sector, the rest being mainly cultivators.

It is from these revealing facts that Tanzania in the past 10 years has given the studies on this unknown but a growing sector a priority in order to uncover the secrets behind its emergence and its good and bad characteristics. The first set of studies revealed that the sector is not another devil but it portrays human efforts in search of employment and income opportunities using not necessarily illegal means. Their contribution to GDP and total employment was quite high and kept increasing, unlike in other sectors.

The rest of this paper aims to review the achievements made to meet the information needs of the informal sector. The paper reviews the development of the informal sector definition, survey methodology, presentation of main survey results, problems of data collection followed by the concluding remarks.

It is unavoidable to put the ILO, through its Bureau of Labour Statistics, in the centre of whatever achievements have been made in this sector in Tanzania. ILO has been behind all phases of planning and undertaking of the major surveys of the informal sector and with their cooperation Tanzania expects to plan more work on the sector which has attained priority in the national employment and economic policies and programmes.

So far, the Tanzanian government agencies have had four experiences in the statistical measurement of the informal sector : (i) the Zanzibar Informal Sector Survey 1990 ; (ii) the Labour Force Survey 1990/91, which included a set of questions for the identification of persons employed in the informal sector ; (iii) the National Informal Sector Survey 1991, covering all geographic sectors of Mainland Tanzania (Dar es Salaam, other urban areas, rural areas) ; and (iv) the Dar es Salaam Urban Informal Sector Survey 1995. (i) was conducted as a kind of pilot exercise for (iii), and the informal sector module of (ii) was basically designed for control purposes. The remainder of this paper focusses on (iii) and (iv), which were the most important operations in terms of geographic scope, survey design, sample size and topics covered.

II. DEFINITION OF THE INFORMAL SECTOR

2.1. The first attempt to define the informal sector at national level was made at the workshop on the informal sector study held in Dar es Salaam in 1989. Before this time there was no standard national definition of the sector and any statistical information which was made available then depended upon the individual interpretation of the producer. This had limitations on the usefulness of the information for planning purposes. The workshop which was attended by national and international experts defined the sector as :

“That the Informal Sector is constituted of urban and rural activities with or without hired labour, production units typically operate with low level of organization, low capital, low technology and often on temporary premises. They are not usually supported by formal financing institutions, and are not usually measured in official government statistics”.

It was also recommended that the Informal Sector studies should identify key production and services activities with potential for economic development in order not to unduly exaggerate the importance of the sector in terms of :

- employment creation,
- income generation,
- skills promotion,
- efficient utilization of local resources,
- savings on foreign exchange,
- appropriate products and services.

Both the broad definition and the recommendation were used to derive the definition of the informal sector production units in designing the questionnaire for the first national informal sector survey (1991).

2.2. A more detailed definition of the informal sector was however developed from the broader definition in order to make it easily applicable in the field by interviewers and included the following main feature :

- Informal Sector is restricted to the private sector. Excluded are all Government and Parastatal concerns and registered Co-operatives.
- Only urban agricultural activities to be included if they were business enterprises with the objective of raising income and not solely for home consumption. Fishing was included in both urban and rural areas with the same restriction.

- The activities had to have 5 or less paid employees.
- Activities operating at the following locations were included if they met the above restrictions :
 - at a market place,
 - in a temporary structure,
 - on a footpath, in the street or in an open space.
- A number of qualitative restrictions were further applied to exclude activities with formal characteristics :
 - no continuous use of high technology,
 - no large formally organized or specialty shops and no large shops in main street,
 - no larger restaurants with modern premises, furniture and cooking arrangements,
 - professional businesses and services were regarded as formal and excluded (e.g. doctors, lawyers, accountants, consultancy, etc.).
- Domestic servants were excluded.

2.3. For Dar es Salaam Urban Informal Sector Survey 1995 the definition of the sector as developed by the 15th ICLS was adopted because it provided a clearer description of characteristics of the production units of the informal sector and removed the difficulties of using some of the restrictions particularly the qualitative parts, as it was revealed in 1991 National Informal Sector Survey. The international standard definition has the advantage in that it is possible for the informal production units to be identified by the design of survey instruments (listing form and questionnaire) and require no judgment from interviewers in the field. However some specifications of the definition were necessary in order to take into account the local circumstances. For example, agricultural activities were included if they occurred and undertaken as main or supplementary income earning activity of the household and located in Dar es Salaam. The number of employees (not persons engaged) of the business was decided to be less than 11 in the case of manufacturing and construction but less than 6 in the case of all other activities.

Broadly in Tanzania informal sector has been understood as the sector that offers alternative employment to public or private formal employment besides agriculture. The sector therefore consists of legal activities though not necessarily complying with business regulations and procedures. Illegal activities are not considered to be in the informal sector as nationally defined. Each township or municipality maintains a list of legal activities which can be undertaken by its residents.

III. SURVEY DESIGN

3.1. The National Informal Sector Survey (NISS) and Dar es Salaam Urban Informal Sector Survey (DUISS) were conducted as independent surveys based on mixed household and enterprise survey approach. This approach makes use of area sampling techniques and it consists of the following two main stages. In the first stage a complete list of all households with one or more members operating a business or businesses which fall within the (broader part of) definition of the informal sector, is obtained from a census sub-sample (most recent 1988 population census) of enumeration areas and the owners of such businesses identified (household survey component).

The process involves collecting information that uniquely identifies each household, household head, members of the household (name, sex and age). All members of a household of age 5 years or above who operated as self employed persons any business (as main or secondary) for income raising purposes at any time of the year (last 12 months) were then identified and each was eligible to be included in the final sample. In respect of each household member thus identified as business operator, information on the number of his/her employees (0, 1-5, 6-10, 11 or more) was collected, excluding him/herself, business partners and unpaid family workers. For businesses with less than 11 for (6 for 1991) employees, the type of activity was recorded using a list of 11 (9 for 1991) activity codes defined in terms of the kind of economic activity (combined with the presence or absence of employees in the case of 1995 survey). The information on the number of employees and type of activity was used to identify businesses which fall within the scope of the survey and later used for stratification of the businesses according to type of economic activity and the selection of the final survey sample. Up to three businesses per operator could be recorded. The main activity was determined in giving priority to activities which were of more policy interest and which are usually small in number and are usually not evenly distributed (clustered) in order to ensure for a fair representation of all types of activities in the final sample. For 1995 survey such activities included :

- Manufacturing with employees,
- Manufacturing without employee,
- Construction with employees,
- Construction without employee,
- Transport (with or without employees),
- Trade, restaurants, hotels - with employees.

The priority schedule was later used to assign a single activity code to each household where such activity occurred (otherwise main activity code of the household head was used) so that the household could be allocated in only one of the 11 activity strata and at the same time improving the coverage of the six types of activities in the final sample.

In this stage a comprehensive sampling frame of the units falling within the scope of the survey was developed for the use in the second stage. However in order to obtain better estimates the census sample of EAs from which a sampling frame was developed were classified according to low, medium or high intensity strata of informal sector businesses. This required the knowledge of the level of informal businesses in each area. For the 1991 NISS this information was obtained by field screening where the information was provided by ten cell leaders in the sample areas or physical counting of identifiable units by interviewers. However, for 1995 survey more complete information for stratification of EAs according to the density of informal businesses was now available from 1988 population census, supplemented with the information obtained during the 1991 NISS household listing operation. The comparison of the two approaches indicated that census information was more adequate than field screening and produced better stratification of the EAs.

3.2. The second stage (enterprise survey component) involved interviewing a sample of business owners identified in the first stage to obtain information on their business, workers and operators themselves. This sample of interviewees was obtained by first drawing a sample of households from each informal density stratum and activity stratum code and preparing a workload sheet containing a list of households actually selected for the survey with particulars of the owners and businesses from which the information of survey interest was to be obtained. Sampling of EAs from informal sector density strata and household from activity strata were both made systematically. Once a household was selected in the sample, all informal sector operators in that household were interviewed and information collected for all activities of each operator (up to 3 activities). The target was to select 240 households from each activity stratum but some strata were enumerated completely because they had fewer households. The shortfall was compensated by increasing the sample size for other strata in order to maintain the overall sample size. Also generally the sampling fraction varied between the three strata of the sample areas, for example in 1995, 33 EAs were selected from the high informal sector density (100% as they were few), 23 from the medium stratum (47%) and 14 from the low stratum (21%).

The final samples selected for the two surveys were as follows :

	1991 Tanzania	1991 Dar es Salaam	1995 Dar es Salaam
Population Census (sample) Eas		152	146
Survey (sub-sample) Eas	237	50	70
Listed informal sector households (frame)	20,581	3,038	4,848
Survey households (sample)	6,966	1,473	2,626

3.3. In 1995 three questionnaires were used (two in 1991) : (i) a household questionnaire, (ii) an operator questionnaire, and (iii) an employee questionnaire (not used in 1991). The operator questionnaire was the main survey instrument supplemented with the other two shorter questionnaires. Respondents for the household questionnaire were the heads of the sample households (or knowledgeable adult) and the interviews took place at the residence of the household. The information for the operator questionnaire was obtained from the business operators themselves either at the actual workplace, wherever it was possible, or else at the residence of the operator. Data were collected on : the nature of the business (kind of activity, legal organization, number of partners) and its creation ; characteristics of the workplace ; type of business accounts ; outputs and inputs during the reference period ; variations in business activity over the year ; number and characteristics of the persons working in the business last month and conditions of their employment and work (status in employment, occupation, working time, earnings, mode of remuneration, type of contract, grant of paid annual leave and other benefits, social protection, etc.) ; conditions of business operation and linkages with the formal sector incl. sub-contracting ; capital equipment and capital formation during the last 12 months ; credit and loans ; problems affecting the business, plans for business development during the next 5 years, and kind of assistance received, if any ; occupational safety and health ; business registration ; membership in employers/workers' organizations, business associations, self-help organizations or co-operatives ; social protection of the operator ; and other characteristics of the operator (place of birth, migration to the city, previous activity, educational level, vocational training, motive for participation in the informal sector, engagement in other work, amount of income from other work, main source of household income).

A sub-sample of employees responded for the employee questionnaire which contained more or less the same information as given in the main questionnaire (operator questionnaire-employee part). All employees were recorded during the interview with the business operators and grouped into six categories :

- permanent paid employees,
- temporary paid employees,
- casual paid employees,
- paid apprentices,
- unpaid apprentices and,
- homeworkers/sub-contractors.

The sub-sample of employees was obtained by taking from each business with employee(s) one employee of each employee category (except homeworkers/sub-contractors), with instruction to interviewers to obtain a balance of gender and age of employees. The employees provided additional information on themselves such as marital status, household size, place of birth, motive for informal sector participation, trade union membership, etc., i.e. information which otherwise could not be provided by their employers. The information obtained through the employee questionnaire also facilitated the cross-checks on the information provided by the employers who might tend to give a somewhat better picture of the conditions of employment and work in their businesses than the employees themselves would give.

3.4. In order to capture business variations, which is one of the main characteristics of such businesses, information collected for short reference periods (months, week, or day) was supported with information on the business intensity during each of the past 12 months and the average level of receipts in months of high/low business as a percentage of receipts of normal business. The approach was followed instead of other known procedures which could be more optimal, because of operational reasons.

The choice of a mixed household and enterprise survey approach was reached due to the need to capture the information from the finest level possible of various components of the informal sector in order to generate quite comprehensive information on the sector and facilitate analysis at both the enterprise and household level.

IV. SOME HIGHLIGHTS ON SURVEY RESULTS

4.1. Employment

National Informal Sector Survey conducted in 1991 indicated about 2.4 million persons, 1 million in urban areas, were engaged in the informal sector at someti-

me of the year. Compared to total employed persons estimates as obtained from a Labour Force Survey conducted in the same year, of about 10.9 million (1.7m in urban), total employment in the informal sector was 22 percent of all employed persons. The sector's share in urban employment was close to 60 percent. Studies in other african countries give about the same or higher proportions.

Using the results of the survey conducted in 1995 in the City of Dar es Salaam, the total employment in the city increased by 9 per cent to 345,869 from 315,958 persons in the informal sector in 1991. The number of business operators increased by 12 percent to 222,915 whereas the number of employees was indicated to have increased by about 5 percent to 122,954 employees, in 1995. It is implied almost the entire growth of the informal sector employment is caused by more and more people entering the sector as operators (the increase in the number of businesses) than as employees and that there is almost no employment expansion in the existing businesses. The following tables show the distribution by type of activity of both operators and employees in the two surveys :

Table 1 : *Total IS employment - Tanzania (Mainland) 1991*

Type of business	Total number of businesses	Employment			Average N° of persons engaged per business
		Operators	Employees	Total	
Agriculture, livestock	142,109	132,933	103,444	236,377	2
Mining & Quarry	17,139	14,320	7,401	21,721	1
Manufacturing	439,540	426,339	99,910	526,249	1
Construction	116,496	113,410	50,028	163,438	1
Trade / Restaurant / Hotels	933,915	910,621	303,079	1,213,700	1
Transport	49,379	48,662	29,408	78,070	2
Comm. & Personal services	102,965	96,389	33,436	129,825	1
Total	1,801,543	1,742,674	626,706	2,369,380	1

Source : *National Informal Sector Survey, 1991*

Table 2 : Total IS employment - Dar es Salaam, 1991/1995

Type of business	Total No. of businesses		Operators		Employees		Total employment		Average No. of persons engaged	
	1991	1995	1991	1995	1991	1995	1991	1995 ¹	1991	1995
Agriculture, livestock	11,810	8,568	8,858	7,757	12,977	14,467	21,835	22,224	2	2
Manufacturing	31,456	27,675	30,047	28,248	14,172	23,468	44,219	51,716	1	1
Construction	10,762	15,009	10,600	15,375	11,727	15,921	22,327	31,296	2	1
Trade/Restaurant/Hotels	142,041	159,083	135,769	153,409	67,431	61,351	203,200	214,760	1	1
Transport	2,314	4,002	2,313	3,960	2,106	3,162	4,419	7,122	2	1
Comm. & Personal services	12,759	14,300	11,047	14,166	8,911	4,586	19,958	18,752	2	1
Total	211,142	228,637	198,634	222,915	117,324	122,954	315,958	345,869	1	1

Sources : *National Informal Sector Survey, 1991*
Dar es Salaam urban Informal Sector Survey, 1995

1 : *The estimates have been adjusted for what looked to be under-reporting of employees in 1995 survey.*

Of the two components of total employment in the informal sector, estimate for the number of operators in both 1991 and 1995 seem to be quite good while the estimate of the number of employees in the two years initially did not seem to agree. Assuming the estimated number of employees in 1991 was correct, the 1995 estimated number of employees was too small and had to be increased by a factor of more than 2 to make it compare reasonably with 1991 estimates, as there were no explanation for the drastic fall. Though there are no good reasons which can be advanced for this problem, the fear on the part of interviewer of increasing his/her workload by identifying correctly the number of employee for a particular business, could provide a possible explanation. As it was mentioned in section 3.3, an interviewer was required to administer a minimum of two questionnaires ; a household questionnaire and the main (operator) questionnaire (if there is only one operator and the activity has no employee) for each household but the number of questionnaires could be more depending on the number of operators in the household and the number of employees employed by their businesses (main questionnaire had more than 100 questions, some of them were quite detailed/complicated). Many interviewers might have decided to avoid employee interviews in order to be able to complete their workload within the planned time (duration of one month) on fixed pay terms. Bonus was paid to interviewers who managed to com-

plete their interviews within one month duration, which might have induced some of interviewers with bigger workloads to ignore the employee part of the questionnaire. Another explanation could be that the main interviews were conducted after the demolitions of the informal sector business structures in the city center by the local authorities as an attempt to prevent the operators from conducting their businesses in unauthorised areas. This might have led the operators to temporarily “lay off” their workers while they were trying to look for other premises.

4.2. Income generation

Earlier estimate of GDP for 1991 was T.Shs. 574 billion and when it was related to informal sector estimate of value added (1991) of T.Shs. 183 billion, it showed that informal sector generates an equivalent of 32 percent of GDP. However GDP estimates have been revised upwards and the share of informal sector to GDP for 1991 can be revised down to about 22 per cent. Even at this level the contribution of the sector to overall income generation cannot be said to be less important, ILO estimates put the average share of informal sector output in total GDP for Sub-Saharan Africa at 20 per cent (in 1985).

Unfortunately there has been no other survey nationwide for comparison but since the city of Dar es Salaam was also covered in 1991, some indications about any relative changes in the output of the informal sector businesses can be drawn from 1995 survey. Tables 3 and 4 show overall output in 1991 and 1995 by type of business. It is indicated from this information that the share of the sector has increased from 25 per cent to over 50 per cent of GDP for Dar es Salaam. The sharp differences however can not be attributed to natural growth alone but is due also to changes of definition and measurements in the two periods. As it was mentioned in Section 2.3, 1995 survey adopted the definition of the informal sector as recommended by the Fifteenth ICLS which is broader and less discriminatory and have allowed more borderline activities to be graded as informal sector business which would not be the case in 1991. The application of business variations (Section 3.4) to take into account the seasonality aspect of these activities has contributed significantly to the differences in the estimates. Seasonal variations were not considered in 1991 Survey. Also the measurements of GDP by current system of national accounts (SNA) have not fully taken into account the new developments in the informal sector and cannot be said to be perfectly correct.

Table 3 : Annual value added by industry - Tanzania (Mainland), 1991

Type of business	Dar es Salaam		Other towns		Rural		Country	
	Total	Average	Total	Average	Total	Average	Total	Average
Agriculture, livestock	3,244	274,672	6,227	118,243	10,975	141,373	20,447	143,879
Mining & Quarry	-	-	894	67,800	265	67,083	1,159	67,634
Manufacturing	5,293	168,256	9,171	171,242	15,336	43,259	29,800	67,798
Construction	3,064	284,672	3,421	188,617	4,380	49,996	10,864	93,256
Trade / restaurants / hotels	25,922	182,500	42,585	160,006	36,220	68,894	104,727	112,137
Transport	1,496	646,409	1,689	303,852	2,929	70,577	6,114	123,814
Comm. & Personal services	2,821	221,120	4,202	155,516	3,283	51,963	10,307	100,100
Total	41,840	198,158	68,188	156,300	73,389	63,588	183,417	101,811

Source : National Informal Sector Survey, 1991 (Official GDP in 1991 = T.shs. mill 834,730 - selected statistical series 1957 - 1993)

Total in T. shillings millions - Average in T. shillings

Table 4 : Annual value added by industry - Dar es Salaam, 1991/1995

Type of Business	Total (T. millions of shillings)		Average (T. shillings)	
	1991	1995 ²	1991	1995 ²
Agriculture, livestock	3,244	10,860	274,672	2,178,262
Manufacturing	5,293	21,255	168,256	1,056,733
Construction	3,064	8,315	284,672	727,084
Trade/Restaurants/Hotels	25,922	122,023	182,500	799,173
Transport	1,496	8,677	646,409	2,307,601
Comm. & Personal services	2,821	7,051	221,120	746,047
Total	41,840	178,181	198,158	892,491

Sources : National Informal Sector Survey, 1991 ; Dar es Salaam Urban Informal Sector Survey, 1995

Total in T. shillings millions - Average in T. shillings

2. The estimates have been adjusted for close definition & measurements as used in 1991 Survey (Official GDP 1991 = T.shs. millions 163,955 ; 1994 = T.shs. millions 316,541 - Dar es Salaam Regional Statistical Abstract, 1993)

V. OTHER CHARACTERISTICS OF I.S. BUSINESSES

After the second survey in the City of Dar es Salaam it can now be safely stated that the bulk of the informal sector in Tanzania in terms of value added (Table 3 and 4) and number of businesses (Table 5) is comprised of two major sub-sectors : trade, restaurant and hotel and manufacturing. The two sub-sectors contribute more than seventy per cent of total value added and account for over seventy five percent of all businesses in the informal sector. More than 50% of both total value added and total number of businesses in the informal sector come from trade, restaurant and hotel sub-sector alone. The main reason for this predominance can be explained by relatively low (initial) capital and skills requirements characterizing these businesses as evidenced from the survey data.

5.1. Type of business

Table 5 : *Distribution (%) of IS businesses by type - Tanzania (Mainland) 1991*

Type of business	Dar es Salaam	Other urban	Rural	National
Agriculture, livestock	6	12	7	8
Mining & Quarry	-	3	-	1
Manufacturing	15	13	31	24
Construction	5	4	8	6
Trade / Restaurant / Hotels	67	61	45	52
Transport	1	1	4	3
Comm. & Personal services	6	6	5	6
Total	100	100	100	100

For Dar es Salaam, relative share by type of activity has not changed much over the period even though trade, restaurant and hotel group is shown to have slightly increased and slight drop in agriculture and light manufacturing groups. Generally the pattern of people entering in the sector remained static indicating that factors and preferences which induce people to join the sector have practically remained the same.

5.2. Duration of existence of businesses

It is often stated that business in the informal sector have a high rate of turnover. However true the statement is, it needs the support of a kind of measure in order to make it more meaningful. While this was not possible from the first survey,

with the undertaking of the second survey in 1995 it is now possible to derive survival rates for these small businesses in the City of Dar es Salaam. In Table 6 estimated survival rates of IS businesses have been derived by identifying a cohort of businesses in 1991 with 1995 survey information and expressing the corresponding number of businesses as identified in 1995 as a percentage of the base cohort of 1991. Columns 2 and 3 of Table 6 show actual survey estimates while columns 4 and 5 show cohorts of activities in the two periods from which survival rates are computed in the last column. The first remarkable thing is that the estimated number of businesses of less than one year of existence was lower (39,913) than in 1991 survey (42,000) but was higher for businesses which existed between 5 < 10 and 10 or more years. Two assumptions can be made. First, it can be a reflection that entry into the sector is (becoming) not as easy as in the previous years, perhaps due to high density of these activities. Secondly, it reflects a more stable situation, that once activities are started they tend to remain operating for a longer period and thus reduce the re-entries of businesses in the sector.

While there is no information to support the first assumption, comparison of the estimated number of businesses which have existed for 5 years or more with their corresponding cohorts from 1991 survey (ENT,5), clearly support the second assumption. As is shown in Table 6, the probability that a business once started will remain operating in the next five to 10 years is 0.37 (or 37 per cent). Most business which survive the first four to five years have a higher rate of survival (60%) for the rest of the time. However the survival rates differ remarkably from one type of business to another and are much higher for construction and transport businesses while quite low for the rest.

In 1995 when operators of businesses were asked about their future business plans, over 90 per cent of the total IS businesses either planned to continue with the same business (58%) or to switch to other business (most likely in the same sector - 33%). This is an indication that the majority of IS business operators decide to join in the sector as a permanent rather than temporary measure. However about two thirds of them do not survive for more than 4 years. Further businesses which cross this line, 40 per cent of them disappear before reaching 10 years. It has been shown that amongst the most important problems of operation are lack of credit, equipment and raw materials, making it difficult for many of them to keep their businesses running.

Also when they were asked what were the reasons which made them decided to undertake such businesses, the answers showed that about two thirds of IS businesses were started due to lack of employment opportunities (34%) or the need for additional family income (30%). Other two important reasons were to earn higher income (9%)

and released from other work (including retrenchment in the public sector - 6%).

The knowledge of what causes people to go into the informal sector is the key for the proper understanding of the nature of the sector in each individual country. Such knowledge will form the basis for decision making by Governments, NGO's and individual experts on the appropriate measures to be taken in order to assist the sector for the aim of exploiting its employment and income generation potential, improvement of productivity, working conditions and social protection of its workers.

Table 6 : *Estimated survival rates of IS businesses by industry*

Industry	Number of businesses less than 1 year		1995 Businesses 5 < 10 years	1991 Cohort (1 < 5 years)	Survival Rate %
	1991	1995			
Agriculture	3,404	477	3,698	7,942	46
Mining & Quarry	-	87	235	-	-
Manufacturies	4,579	2,483	7,852	19,841	40
Construction	696	791	3,871	4,331	89
Trade	31,863	34,188	32,554	103,123	32
Transport	382	795	1,067	1,439	74
Finance	-	318	54	-	-
Services	1,076	775	2,737	5,570	49
Total	42,000	39,913	52,068	142,246	37
	Number of business less 5 < 10 years		1995 10 + years	1991 (5 or more years)	Survival Rate %
	1991	1995			
Agriculture	2,067	3,698	1,416	3,868	37
Mining & Quarry	-	235	-	-	-
Manufacturies	5,062	7,852	7,997	11,615	69
Construction	2,398	3,871	5,232	6,431	81
Trade	27,045	32,554	22,870	38,571	59
Transport	525	1,067	888	875	100
Finance	-	54	-	-	-
Services	4,054	2,737	2,453	7,189	34
Total	41,151	52,068	40,855	68,549	60

VI. MEASUREMENT PROBLEMS OF THE INFORMAL SECTOR

6.1. Resources

Data requirements of the informal sector as expressed both at the national and international levels invariably entail large scale survey operations which give demand for sizeable resources. These resources, in addition to funds for survey operations, include availability of a workforce of a reasonable size comprising of good and experienced interviewers and highly skilled professional staff with the necessary support for transport and computing equipment. In undertaking the two surveys these problems were evident. Many funding sources had to be sought which usually took long time and it was difficult to plan for regular surveys. Though the problem of manpower and processing equipment was solved by conducting the surveys as joint activity of three government departments : Human Resources Planning, Bureau of Statistics and Department of Labour, this did not remove the transport problems and shortage of relevant computing skills. These problems no doubt impose considerable limitation in achieving good quality data and timely production of survey information. Considerable effort are still required to search for more appropriate means of meeting the same information demands of the Informal Sector particularly in developing countries. One way is to develop an international fund from which poor countries can be promptly assisted in a programmed manner. Simpler and cheaper methods of data collection such as the use of key informants or use of population census and other existing surveys can also be explored.

6.2. Coverage

Lack of comprehensive sampling frame for informal sector studies calls for serious efforts from survey statisticians to ensure that in the process of developing such a frame no unit which is within the scope of the survey is excluded from the selection process (to avoid undercoverage) and that units which are not in the survey are not included (to avoid overcoverage). Household listing which is the basis for selection of the eligible units is therefore a crucial part of mixed household and enterprise survey. Information from the two Informal Sector Surveys conducted in Dar es Salaam have shown that a good number of businesses which are not in the scope of the survey are listed (number unknown) and some are actually selected in the sample (number is known).

In both 1991 and 1995 about 4 per cent of total sample households were wrongly listed as operating informal sector activities while not. On the other hand it is not known how many households were excluded in the sampling frame while they operate such businesses. Household listing errors no doubt cause distortions in the

selection process and weighting procedures and therefore bear an impact on the final survey estimates. The main cause of this problem is that listing information is normally obtained from household head but in many cases due to the difficulty of contacting him or her, the information is obtained from a close relative adult, neighbour or ten cell leader who are less knowledgeable about the activities of the household. Sometimes even the household head does not know clearly what other members of his/her family are doing. The problem can also be caused by interviewers who do not state clearly to the respondents the ownership criterion as one of the objective of household listing is to identify owners (not employees) of businesses as respondents for enterprise (and sometimes employees) information.

6.3. Mobility and duration of IS businesses

From section 5.2 of this paper it is evident that informal sector businesses are characterised by high rate of turnover and are also well known for their high mobility. These characteristics cause high non-contact rates in the studies of the informal sector. In the two comprehensive informal sector surveys which have been undertaken, the high rates of non-response (10 to 20%) were due to non-contact and listing errors. Together they accounted for more than 60% of non-responding households. Non-contact cases occur when sample units either stop business or move to a new location. These tend to increase with time interval between household listing and main interviewing. Non-contact cases can therefore be reduced by keeping the time interval between the two main survey phases as short as possible. For sample units which have moved, every possible effort should be made to trace them at their new location - as replacement by other units is usually not recommended. Interviewers should also make contact-schedules bearing time, place and date of visit as agreed in advance with his/her interviewees. Preferably such interviews should be arranged to take place at the workplace wherever possible in order to improve the quality of the information. Other measures which can improve response rates include good survey publicity, assurance of confidentiality of the information provided and good training and motivation of interviewers.

6.4. High business variations and lack of record

Intensity of informal sector businesses are known to vary considerably over time which leads to the need to capture such variations in the estimation of annual values. As most informal sector business operators have a low level of education and do not keep comprehensive records of their business activities, the use of short reference periods is imperative. Business variations which can be quite sub-

stantial, as was revealed in 1995 where they accounted for over 15% (about 50 bill) of the increase in total output, can be captured by spreading data collection over a period of 12 months (whole year) and dividing the sample into independent sub-samples for different parts of the year, or, by supplementing the information provided for a short reference period with information on the average level of business intensity for each month (whether low, normal or high) and expressing such information as a percentage of normal business activity (as explained in section 3.4). In this case the annual values will be obtained as a sum of estimated values for the individual months over the 12 months.

6.5. Interpreting survey data

Information on values (output or expenditure) as provided by the respondent can have a different meaning (if no further probing is done) to the supplier of the information and the survey personnel. For example a carpenter interviewee responding to the question on output (total receipts) or expenses said last day (s)he received/spent X units of money. The respondent knows in addition whether on the average (s)he receives/spends that amount of money every day or not. Survey personnel on the other hand do not know more than what is provided in the questionnaire. In many cases such daily (or weekly) values will be inferred as being the average receipts/expenses of the respondent for each day (week) of operation but which may not be the case. It may occur the receipts/expenses are actually for the whole one month or more and when they are taken to correspond to the reference period under which they have been provided invariably their annual estimates go out of proportions and may cause serious distortions in the overall estimates. Every possible effort should be made to check the validity of information provided in respect of the reference period under which it is given in order to obtain high quality survey estimates.

VII. CONCLUSION

Informal sector concept is widely used though its real meaning remains somehow diverse due to different business practices and regulations as prescribed by the authorities in individual countries. Differences also emerge due to economic peculiarities among countries.

In Tanzania informal sector has been understood as the sector that offers alternative employment to public or private formal employment besides agriculture. The sector therefore consists of legal activities though not necessarily complying with business regulations and procedures. Illegal activities are not considered to

be in the informal sector as nationally defined. Each township or municipality maintains a list of legal activities which can be undertaken by its residents.

Measurements of the informal sector have proved the importance of the sector in terms of contribution to GDP and total employment. It is estimated the sector contributes over one fifth of both total GDP and employed persons. In urban areas the proportions are much higher (over 50%).

Business operators have decided to join in the sector as a permanent solution to their inability to secure employment in other sectors or need of additional income. Many of the operators have a low level of education, skill and technology and are not usually supported with official credit facilities. As such, many of the businesses either stop or change after a short period.

The heterogeneity nature of informal sector businesses entail careful approach in all survey phases ; development of a practical definitions, development of sampling frame, sample design and questionnaire design in order to take into account the specific problems experienced by such activities.

The Tanzanian experience has shown that, in spite of the problems involved, it is possible to conduct large-scale surveys of the informal sector and to obtain representative statistical data of acceptable quality on the sector, if the survey design and operations are adapted to the particular characteristics of the informal sector and if the staff involved are committed to their work. The series of informal sector surveys conducted in Tanzania since 1990 made it possible to develop, test, evaluate and gradually improve the methodologies for informal sector data collection. At the same time, a substantial amount of statistical information on the informal sector was built up. The data obtained represented an important step forward towards the improvement of labour statistics, economic statistics and national accounts as an information base for macroeconomic analysis, planning, policy formulation and evaluation, and to recognition of the contribution of the informal sector to economic and social development. The data collected are also very useful for the design of support policies and assistance programmes for the informal sector with a view to increasing its productive potential (and, hence, its employment- and income-generating capacity), improving the working conditions and social and legal protection of informal sector workers, developing an appropriate regulatory framework and promoting the organization of informal sector workers, and for analysis of the situation of particular groups of informal sector workers, such as women, children, migrants and disabled persons.

The agencies involved in the Tanzanian work in this rather new area of statistics

endeavoured to document, in as much detail as possible, the surveys undertaken and the lessons learnt. It is hoped that this will bring statisticians from other agencies inside or outside the country in a better position if they wish to benefit from the experiences gained in Tanzania.

* * *

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TOPIC 3

INTEGRATION OF THE INFORMAL SECTOR IN ECONOMIC INFORMATION SYSTEMS AND NATIONAL ACCOUNTS

Integration of the informal sector in economic information systems and the national accounts

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I. INTRODUCTION

The concept of the informal sector was developed some 25 years ago to take account of the specific aspects of urban self-employed activity in the context of the massive rural exodus and accelerating urban growth.

Development economists believed that some of the development stages experienced by the now developed countries would be transposed to the developing countries. This was based on the simplistic view which considered agricultural development as the starting point. This argument maintained that agriculture would open the way to agro-industry, ultimately stimulating heavy industry with the capacity to produce capital goods. An alternative advocated starting with what was known as "industrializing industry" to attain development. In both these schemes, development was seen as a set of economic criteria, one of the most important being the level of industrial development.

According to this argument, the rural exodus should not be a major problem. As the primary sector - in this case agriculture - develops, we can expect an increase in productivity which would release surplus but useful labour. Stimulated by the primary sector, the secondary sector would absorb this excess labour. This synergy can cope with the large accumulation of the urban unemployed resulting from the rural exodus.

One could hardly imagine the current scale of the informal sector, which was insignificant at the time or confined to what were known as traditional activities, essentially limited to the primary sector or arts and crafts. At the very most, it was expected to be a transient phenomenon which would disappear with full employment. Economists in general therefore paid very little attention to it¹, and even the national accountants initially regarded it as marginal.

Today, this sector reigns in all its diversity in the developing countries. The development schemes, which continue to proliferate, are inappropriate ; development

1. The rural exodus was considered by economists such as Harris and Todaro in their search for factors explaining the phenomenon in order to recommend solutions. The informal sector phenomenon then became a development problem.

itself is becoming more complex, and needs thinking out in ever greater depth. This widespread, progressive development of the informal sector is attracting the attention of economists, sociologists, statisticians specializing in collection methods, national accountants and other researchers, requiring them to put more effort than previously into analyzing and measuring the phenomenon, which has in fact become an integral part of the economy of developing countries.

The object of this paper is to state the problem, to mention the difficulties in measuring it and to indicate the substantial contribution which can be made by suitable informal surveys. It will also point out the need to adopt a precise definition so that the same concept is used at all levels, facilitating the understanding and effective use of the data. Finally, it will highlight the necessity of integrating the informal sector into economic information systems and the national accounts, and state how this can be achieved.

II. WHY INTEGRATE THE INFORMAL SECTOR INTO ECONOMIC INFORMATION SYSTEMS AND THE NATIONAL ACCOUNTS ?

The answer to this question will follow from the definition and importance of this sector. There are currently many papers and expert studies on the informal sector. To find out about it, many surveys - some more sophisticated than others - have been conducted or are in progress in several developing countries. The phenomenon extends beyond Africa to include the countries of Central and South America. We thus have a large volume of expert studies. However, careful examination of the investigations shows that differences persist in the way the phenomenon is defined and therefore understood. To be sure that we are all talking about the same thing in all cases, a precise definition is required. It will encourage and facilitate the dialogue between producers and users of data on the informal sector.

An effort has nevertheless been made² and we are making steady progress towards convergence. For the national accountants, "non-registered"³ activities are an integral part of the economy. In their studies they distinguish the informal sector from other non-registered elements such as tax evasion, illegal activities, etc. for which specific adjustments are made. In the ILO's proposed definition, agriculture is said to be excluded from the informal sector for practical reasons. It is essential to note that agriculture is excluded for practical reasons, and not on

2. The ILO has defined the contours of the informal sector. It may still be necessary for these contours to be interpreted in simpler terms according to the spheres where they are used, giving preference to operational aspects.

3. An activity is said to be non-registered if it does not meet the statutory conditions of activity ; these conditions concern taxes, labour laws, product quality standards, etc. The decisive criterion seems to concern tax.

account of its nature. This in fact represents a large volume of activity, since it certainly includes stock-farming and hunting. Specific surveys of the countryside have provided more or less reliable data on these activities, which generally occupy over 90% of the active rural population in African countries. Logically, therefore, what we need to know is the active population of the informal sector outside agriculture, which is therefore found mainly in the towns. However, in the presentation of the general results for the informal sector, agriculture should be included⁴, even if only to specify its share of the total.

III. DEFINITION OF THE INFORMAL SECTOR

Far from putting forward a personal definition of the informal sector, I shall take a definition proposed by a UNDP working party, which I suspect is an interpretation or even a simplification of the ILO definition. This definition will be supplemented by clarification of the contours of the informal sector according to the ideas of national accountants.

Any business or enterprise which is not registered with the national or local government (other than illicit activities) belongs to the informal sector. Or in the words of another working party, "the informal sector is composed of all activities not directly and regularly registered".

Obviously, a traditional farm is not registered anywhere and in fact belongs to the informal sector. Activities which are lawful but regulated and which are consequently not registered belong to the informal sector, this being regarded as the limit of underground activity. But when can we say that an enterprise is registered? There are several levels of business registration. There is entry in the commercial register: this does not systematically lead to recognition by the tax authorities - it all depends on the investment code system. Payment of licence fees, taxation on estimated profits and local taxes are not rigorously monitored by the tax authorities. In order to distinguish between the modern sector and the informal sector from the point of view of registration, some people propose including in the informal sector all enterprises which are not taxed on industrial or commercial profits. Those which are will certainly have revenue and expenditure accounts and a balance sheet, and belong to the modern sector.

According to the ILO definition in its strict sense, the informal sector does not include agriculture. Adopting this point of view, some authorities perceive the informal sector as the urban economy which avoids state control - in this case

4. Traditional agriculture in the sense that it is not set up as a company entered in the commercial register or keeping sets of accounts.

taxes. Even if the informal sector does give rise to tax evasion, there are a considerable number of informal sector enterprises which are taxed on estimated profits. These authorities are also wrong in considering the importance of this sector in an economy as an indicator of efforts to counter the state's attempts to impose taxation on economic activity. The result presented in the national accounts is therefore sometimes difficult to accept. There are two aspects to these problems. First, when better account is taken of the informal sector, this generally raises the level of GDP, bringing the risk that the country concerned may cease to be a Less Developed Country (if it still is one), thus losing the advantages associated with this status. Second, a poor understanding of the contours of the informal sector or a definition which is not universally shared leads to misinterpretations which sometimes result in unjustified rejection of new results produced by the national accounts, or a reluctance to use them.

This apparently simple definition actually raises other problems : the main one concerns how to obtain a full understanding of the sector and make it fit the national accounts concepts of branch of activity and institutional sector⁵. For example if the informal sector is regarded as a grouping of firms, which is the best solution, nevertheless it will not be possible to build a complete sequence of the accounts. Only production account, generation of income account and allocation of primary income account can be built. If the informal sector is regarded as a grouping of specific household involved in such production, many cases are possible that are not quite satisfactory. For instance, the grouping of all household that own informal firms has the advantage to be exhaustive but does not give an interesting partition of the household sector. The essential of them will be in the informal sector.

IV. POSITION OF THE INFORMAL SECTOR IN AFRICAN DEVELOPMENT STRATEGY

In almost all economies the informal sector has existed in one form or another at a certain stage of development. However, the economic development theory to which we alluded in the introduction to this paper has worked well in other countries. It is reported that in the United States of America the informal sector was gradually fully absorbed into the structured sector. In Japan it has apparently been the pivot of industrialisation. Asian countries such as the Republic of Korea, Singapore and Hong Kong have managed to devise strategies which effectively transformed the informal sector into a structured sector.

For over ten years now, development economists with the best facilities and

5. For details of the problems and practical solutions proposed, see the book "Constructing the national accounts according to SNA 1993" by Michel Sérurier chapter 9, pages 361-396.

advisors, supported by experienced planners, have been proposing development strategies and plans. Nevertheless, it seems that it will be a long time yet before the informal sector in Africa is absorbed. Many people actually think that this sector will have to be encouraged and stimulated : it is regarded as a positive factor in development. The new United Nations agenda for development in Africa in the 1990s, the Tokyo declaration in 1993, the Copenhagen declaration on social development (1995) and the Beijing Action Programme for Women (1995) have all highlighted the need to consolidate and support the informal sector in Africa.

In reality, the question of development in Africa is not as simple as might be believed by naive economists and planners with their ready-made development models. There are fundamental problems which need to be thought out in greater depth. There are some really important factors which affect development, not least of which is political stability. So whatever the importance of the informal sector and its dynamism in initiating development, it is more realistic to recognize its limitations, otherwise we should be using large amounts of drugs to treat the symptoms without knowing the real cause of the disease.

However, in the present context we urgently need to bring down the fever, otherwise the patient could die. Here we see the informal sector playing an important role in reducing poverty and enabling a large section of the population to survive. In the less advanced countries the informal sector is estimated to employ 60% of the urban labour force⁶. In those countries it also represents some 20% of GNP, and that figure probably does not include agriculture. In my opinion, this persistence or even expansion of the informal sector in our economies bears witness to the failure of development policies.

The phenomenon is not without detriment to both the environment and individuals. We are seeing the countryside blighted by towns which feature a total lack of planning, with unrestricted housing development and insanitary shanty towns. We only need to look at the clean-up needed every time one of our cities has to host an international or regional summit or conference. The detrimental effects on individuals are of various kinds : there are the itinerant vendors everywhere, particularly at major crossroads and in the irregular restaurants, which are themselves one of the sector's innovations. In these restaurants you are bombarded with every kind of article for sale. In urban districts it is not easy to relax, because shoemenders, tool grinders, barbers, tailors, etc., all these itinerants with the tools of their trade on their shoulders are shouting

6. This figure comes from a UNDP study "Informal sector development in Africa".

out their services just as our market traders cry their wares. These are, however, just a few of the visible problems which we can describe, and are provoked by the development of the informal sector in Africa : no-one can predict all the good or bad developments and changes which we have yet to see. But once again, we have to put up with these nuisances in order to give priority to people's survival.

Meanwhile, the informal sector remains - and will remain for a good while yet - a development stopgap which we cannot ignore. We must manage it properly by moderating its harmful impact and ultimately consider its effective absorption into the structured sector. Since it remains a development strategy, managing it correctly entails accurately measuring its volume, how it is changing and the direction in which it is moving, and any interrelations between it and other development strategies. Let us now look at how it is measured by the national accounts.

V. MEASURING THE INFORMAL SECTOR IN A DIFFICULT CONTEXT

Since surveys are often absent, limited in scale, old or unsatisfactory, there are many areas on which national accountants lack information for correct incorporation of the economic data in the accounts. Regardless of the contours of the informal sector now emerging, accountants have always used instruments to estimate areas such as the rural economy (agriculture, stock-farming, hunting), small-scale production which now forms part of the informal sector, producer prices because data are rarely collected, housing services, etc.

Faced with such a statistical vacuum, some accountants in developed countries have felt helpless, and many believed with some justification that national accounts in Africa are an illusion, at least in the form advocated by the SNA. Apart from a few much-quoted, unfortunate examples of estimates in various African countries, we are often unaware of the work being done by both African and expatriate accountants to tackle the unknown in a difficult context.

At this very moment when surveys on the informal sector abound, reading the results yields little of direct use for the national accounts. These therefore continue to produce a best estimate of the data using the partial information obtained from surveys, where appropriate.

VI. SURVEYS NECESSARY FOR BETTER INTEGRATION OF THE INFORMAL SECTOR INTO THE NATIONAL ACCOUNTS

It is not a question here of listing all the statistical surveys required, but of mentioning some of the most urgent being demanded by accountants, and the problems which that poses.

6.1. The census of population and housing

The population censuses provide much useful information. When followed by demographic surveys, they are even more useful and make it possible to deduce trends in variables established at the time of the censuses. The national accountant is particularly interested in population characteristics and data on employment and housing, such as :

- The population by age and sex, rural and urban ;
- The active population in work by branch of activity⁷, and by occupational status ;
- An estimate of the above tables if the surveys permit that for intercensal periods ;
- Where housing is included in the census, it is useful to have data on housing conditions such as :
 - type of housing by occupational status,
 - type of housing by the nature of the walls, roof, floor, lighting system, etc.

As we can see, for the national accounts the main contribution made by population censuses is the group of data on employment and housing. These variables are generally included in census questionnaires, which have become more or less standard. It is the optimum breakdowns of these variables that are most frequently lacking. When they are given, the level of detail is not always satisfactory. Estimating the data for intercensal years, with or without demographic surveys, is a question of great concern to national accountants, but demographers do not always seem to appreciate its urgency.

6.2. The agricultural census

This is a difficult operation. It should provide information on the level of output for each crop, the means of production, fixed installations, the population involved, marketing networks, production for own consumption and farm prices. Increasingly, just as the demographic surveys follow closely behind the population

7. Branch of activity, preferably with at least the level of detail required for national accounts purposes.

censuses, the permanent system of agricultural surveys follows the agricultural censuses and reveals trends in output and agricultural prices. In general, agricultural survey statisticians manage quite well, apart from some classic errors due to the special characteristics of certain crops. However, except in the reference year when the census takes place, the post-census years leave us with no estimate for a large proportion of products. This is true of fruit and vegetables. The accountant is obliged to estimate output as best he can, since it is certainly not zero. There is no indicator of fixed installations enabling the accountant to allow for the trend, if any, taken into account in the base year.

Generally speaking, in the case of crops which go for export or industrial processing, the collection systems permit cross-checking, so there are relatively few mistakes about the level of output in relation to subsistence crops, where the experience and good judgement of the accountant must come into play.

6.3. Stock-farming surveys

This is a special subject concerning animal demography. Detailed information is often lacking. This survey should be able to indicate the age structure of the herd, the zootechnical parameters and herd movements. It is preferable to check the accuracy of the formula for animal production, stocks and GFCF. In general, the stock-farming experts also manage well. It would also be useful to have information on the marketing network for cattle and meat.

6.4. Consumption-budget surveys

This is an onerous task, perhaps the most onerous in the field of collecting statistics. It should yield a large amount of useful information for the national accounts. Since they cover an entire year, household expenditure records are better, giving a good idea of the demand satisfied and household income and sources. In some cases they might reveal the supply of certain goods, particularly agricultural products, in terms of quantity and value. This is also an opportunity to obtain information on employment and housing. The advantage of the consumption-budget survey is that it covers a wider range of quantified data and therefore alleviates the shortcomings regarding data on certain specific topics. Like the censuses, however, they provide no information on the trend in the variables observed or ways of monitoring them over time.

6.5. Specific surveys on the informal sector

These surveys are increasingly numerous and varied in view of the diversity of situations caused by the social systems applicable in each country. Whether they

concern establishments or households, they are small-scale surveys which cover either an urban district or towns of a certain size, etc. They are rarely conducted on a national scale. In general, they do not really aim to indicate the level of informal national output broken down by activity, but rather to reveal the structures of production and an order of magnitude for per capita income broken down by type of activity and the trend in these variables. These surveys would be particularly helpful if they used the same concepts as the national surveys such as the censuses and the consumption-budget survey. Their representativeness rarely extends beyond a few towns and they certainly do not reflect the whole nation. This applies to the 1-2-3 surveys in Cameroon. Financial constraints severely limit the level of detail required and the data significance threshold, and they cannot therefore be put to optimum use by the national accounts. In the case of Cameroon, the 1-2-3 surveys have been used despite the fact that they were later than the period referred to by the accounts. It is sure that all the possibilities that those surveys can offer has not been yet exploited. In Benin the "Programme d'Etudes et d'Enquêtes sur le Secteur Informel" (PEESI) brought an important amount of data. We expect them to enrich the national account of that country.

Nevertheless, all the surveys are of use to national accountants, from the population censuses to the specific surveys of the informal sector, and the consumption-budget survey. However, to make optimum use of these various surveys, they need to be properly coordinated and must use the same concepts and definitions, plus classifications which should be those used in the national accounts for data relevant to national accounting. These same national accounts classifications should be discussed with everyone involved in their use. However many surveys there are, and however complicated their attempt to reflect reality, they nevertheless sometimes miss areas of the economy which the national accountant is obliged to cover in full. It will take further progress and adequate logistical and financial resources before survey statisticians can provide the accountants with everything they need.

VII. WHAT SHOULD WE DO IF THERE IS NO SURVEY PROVIDING INFORMATION ON A PARTICULAR SUBJECT ?

We sometimes face the total absence of any survey which can help us to estimate output in a particular area. In that case the accountant will have to offer an estimate for the missing information. Putting nothing is equivalent to stating that the activity is zero when the output may be far in excess of zero. Accountants have always relied on their good sense in trying to suggest a figure. In Senegal⁸ an ana-

8. Cf. the study by Abdoulaye DIOP in *STATECO* n° 39, September 1984.

lysis of domestic demand is taken as the basis for estimating the output of the informal sector. After deducting imports and the output of the modern sector, an estimate of the non-organised sector's contribution is deduced, using some additional factors to help provide an accurate picture. The sector's contribution to the total tax revenue of the state is the balance between the total revenue and that obtained from the modern sector. As in Senegal, most developing country accountants are careful to suggest output for the informal sector, each using the method which seems most appropriate to actual local conditions. Another more recent example occurred in Cameroon in connection with the treatment of the "hairdressing and beauty treatment" sub-sector. This example combines the three approaches - demand, supply and income - to arrive at an acceptable output figure. For demand, the basis is taken as the population deemed to want this service ; for this purpose it is necessary to know the breakdown of the population by sex in each age group and its distribution by urban and rural areas. We have to estimate the average annual per capita demand and the average price of a haircut for men and plaiting for women. At this stage the demand figure is an initial estimate to be compared with the supply of this service. The modern element of supply can be ascertained relatively easily. The informal part has to be estimated. At this level the ERE-TES module⁹ permits a better appraisal of the assumptions adopted. The workforce involved in the informal output of the "hairdressing and beauty treatment" subsector is taken as the basis ; having obtained an idea of per capita income, one deduces the informal output of hairdressing and beauty treatments. The comparison between supply and demand determined in this way results in the acceptance of an output figure for the branch. A similar procedure is adopted for repair work, housing services, etc. Obviously, the more surveys there are on the informal sector, the more accurate the work of the accountant on this subject and the fewer the criticisms levelled at it. The ERE-TES module also permits some exploration of non-registered activities and reveals any contradictions and inconsistencies, sometimes explained by under-declaration, tax evasion, etc.

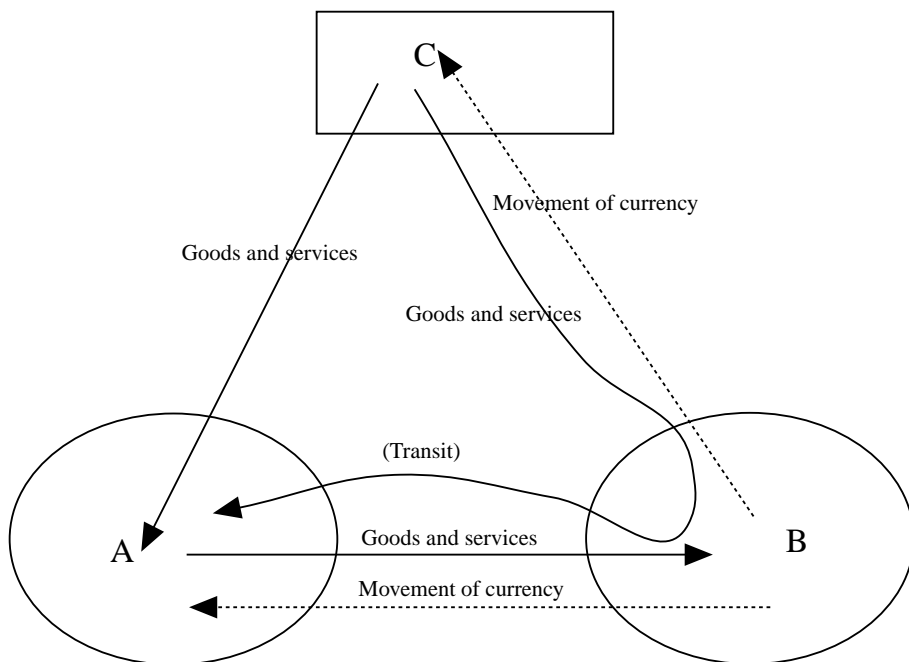
In the few cases where it is decided to conduct an in-depth analysis, the ERE-TES module is a considerable help. Analysis of a balance between uses and resources may suggest the existence of illicit imports. This interrogation prompts an investigation. If it proves that illicit imports are actually taking place, an attempt will be made to find out which country the goods come from and hence how the imports are being financed. There may also be prior knowledge of a number of products recognized as subject to illicit importation. In the case of Cameroon, these are fuel,

9. The ERE-TES module is a tool for preparing the national accounts in accordance with SNA 93. ERE-TES stands for "Equilibre Ressources Emplois / Tableau Entrées-Sorties" or "balance between uses and ressources / input-output tables".

clocks and watches, beauty products, spare parts, etc. from Nigeria. In that case there is the problem of recycling the Naira.

The situation in Cameroon is not an isolated instance ; the same thing is probably happening between Benin and Nigeria, Niger and Nigeria, Ghana and Togo, Ghana and the Ivory Coast, Ghana and Burkina Faso, etc. These movements of goods and flows of money usually come under non-registered activities and supply the informal sector with which we are concerned.

VIII. ATTEMPT TO EXPLAIN THE RECYCLING OF THE CURRENCY OF AFRICAN COUNTRIES OUTSIDE THE FRANC ZONE VIA FRANC ZONE COUNTRIES WHICH BORDER ON THEM



- A : African countries outside the CFA area
 B : African countries in the CFA area
 C : Non-African countries where the CFA is convertible

Trade between A and B takes place mainly from A to B. Goods originating in A cross the frontier officially or are smuggled. They are sold in B for CFA francs. The proceeds return by the same route to purchase new supplies, but at the frontier the currency is exchanged informally. The exchange value in currency A is suffi-

cient to encourage continuation of the trade. This causes the informal traders to accumulate CFA francs. Another group of more affluent operators from country A buys the CFA francs, deposits them in banks in country B and uses them for various transactions with country C. This results in imports from country C for the benefit of importers in A. Everything proceeds just as if it were the non-convertible currency of country A being used to buy from country C. In consequence, the currency reserves of country B are used indirectly by country A. Country B gains by its position as a transit country, but its industry faces competition from A's products which are cheaper. The informal trade continues to be sustained in both directions and this ensures its survival. In the case in point there are itinerant vendors who are not residents. Only a proper analysis combining the three aspects of demand, supply and income can provide an idea of the true figures. The specific surveys will help to provide better information on income broken down by activities and production structures. Economic analyses will enable us to tackle demand and supply by combining other information obtained from national surveys and transboundary surveys.

IX. CONCLUSION

SNA 93 gives the developing countries the opportunity to harmonize methods of preparing their national accounts. The informal sector must be brought under better control ; its contours and the problems entailed in taking it into account have been mentioned. We shall need to adopt a precise, practical definition. We ought to take full advantage of the surveys, which must be better adapted to the needs expressed by users, especially the national accountants. The facilities offered by the ERE-TES module will certainly be a substantial help in reorganizing the accounts of the African countries.

Compiling production and generation of incomes accounts by industry, with attention to the "informal sector"

	APU ISBL	Corporations	Formal unincorporated enterprises	Formal economy not statistical recorded	Informal unincorporated enterprises	Underground unincorporated enterprises	Own-account households production	TOTAL
Main market output								
Main non market output								
Secondary market output								
Secondary non market output								
Intermediate consumption								
VALUE ADDED								
Gross wages and salaries for recorded jobs								
Gross wages and salaries for non recorded jobs								
Social contributions (actual)								
Social contributions (imputed)								
Other taxes on production								
Other subsidies on production								
MIXT INCOME								
GROSS OPERATING SURPLUS								
Consumption of fixed capital								
Recorded employee jobs								
Not recorded employee jobs								
Self employment jobs (employers)								
Self employment jobs (own account workers)								
Family workers								

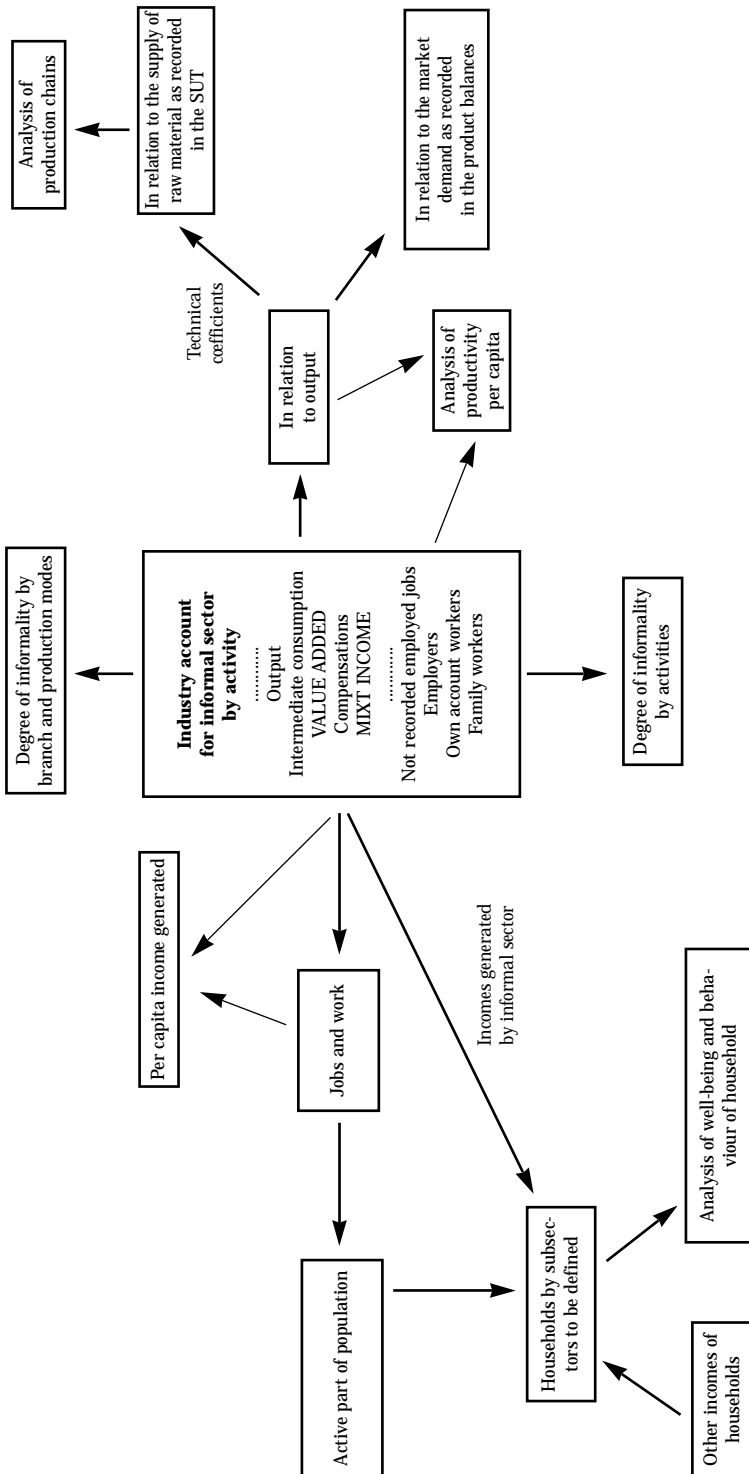
Economic ratios : Intermediate consumption/Output • Output/Total employment • Value added/Total employment

GOS + mixt income/Total employment • Gross wages and salaries for recorded jobs/Total of recorded jobs

Gross wages and salaries for non recorded jobs/Total of non recorded jobs

Mixt income/(Total of self employment jobs + Family workers) • Actual social contributions/Gross wages and salaries for recorded jobs

The sets in relation to what compile the informal sector



The informal sector in the national accounts : the case of Senegal

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Dakar - Senegal

I. BACKGROUND

The initial work on national accounts in Africa has already shown up the need for better knowledge of the activities taking place on the fringes of industry, administration and the large service units. These activities involve a huge number of workers and provide a large share of the population's resources.

Post-independence interventionist industrialization policies had, however, predicted that these activities would retreat to the point where the statistical offices' attempts at investigation were no longer up to this growing phenomenon.

During this period, estimating methods - which were mostly indirect - were unsuccessful.

In the 1970s, most countries (particularly the Sahel) were hit by drought, which caused an unprecedented rural exodus. The industrial sector's absorption capacity was placed under severe strain as a result of the inexorable wave of rural migrants moving into the shanty towns to form pockets of poverty, fleeing from under-employment in rural areas.

This was the situation which gave rise to the term "informal sector" coined by writers at the International Labour Office (ILO) on the subject of employment and equity in Kenya¹.

The absence of effective regulation by the public authorities is helping to accentuate this phenomenon and the development of small traders, who are swelling the ranks of the informal sector.

It was mainly international institutions such as the ILO which were behind the large data collection programmes of this period, the efforts of the national accounts services concentrating mainly on the modern sector.

In view of the failure of industrial development policies, the informal sector seems a credible alternative to interventionist policies and a way of alleviating the difficulties connected with the adjustment programmes of the 1980s.

1. Jacques Charmes - *National accounts and informal or unregistered activities.*

The need for observation therefore explains the measures taken to finance the surveys which provide information on the sector.

Differences of approach are generating some controversy over the definition of concepts and methods.

II. DEFINITIONS

The most widely accepted definition of the informal sector distinguishes it from illegal underground activities : the concept of the underground economy concerns activities which are inherently illegal or wrong (e.g. producing and dealing in drugs). Informal enterprises pursue a legal activity, but the authorities are limited in their ability to monitor these units or apply the regulations to them, notably registration in the various administrative records (NINEA² directory, Register of Commerce and Personal Credit, tax records, pension and social security funds, chambers of commerce, chambers of trade, etc.).

This very general definition is not sufficiently precise to be of use for the national accounts, which need to evaluate the macro-economic aggregates. The various sets of records mentioned do not cover the same field and therefore do not arrive at the same total figures for informal enterprises and hence output.

Another approach to the sector uses inclusion or exclusion criteria to determine membership of the informal sector.

Altogether, there are several types of definitions of the informal sector : multi-criteria definitions, functional definitions and statistical definitions. The first two categories are descriptive or analytical definitions, ex post definitions which are very useful in providing a good understanding of how the sector operates.

The multi-criteria definitions are generally based on traditional competition theory (fragmentation and fluidity of the market in products and of factors of production). The best known of these definitions is that proposed by the ILO report on Kenya and comprises seven criteria :

- ease of entry
- unregulated competing markets (non-application of laws and administrative regulations, absence of timetables or fixed working hours, etc.)
- use of local resources
- family-owned enterprises (employing family members)
- small-scale activities (employing a maximum of ten persons)

2. National Identification Number for Enterprises and Associations.

- technology suited to very labour-intensive work
- training acquired outside the education system (workers have less than six years schooling).

We can say that in the case of Senegal the informal sector defies neo-classical analysis, since its development is not connected with opportunities for investment but with the need to create jobs or to survive in a context of accelerating urbanization and industrialization.

The survey of "Population - Labour - Migration" conducted by the Directorate of Statistics in 1979/80 covered enterprises employing fewer than 10 workers.

The census conducted in the Dakar region by USAID at the end of 1988 was based on :

- the absence of accounts
- the small size or absence of premises
- unpaid workers
- use of apprentices or family helpers paid little or nothing
- low energy use.

The general census of artisan enterprises in Senegal conducted by the Directorate of Artisan Activities in collaboration with the Directorate of Forecasts and Statistics [DPS] covered enterprises meeting two criteria :

- those engaged in an activity listed among the artisan activities defined by decree (excluding trade and transport), and
- employing fewer than five (5) permanent workers, not including family helpers or apprentices ; however, this second rule did not apply to Economic Interest Groupings (EIGs), co-operatives and groups.

Two main implications may be drawn from this debate on the definition of the informal sector :

- before any attempt to put a figure to the size of the informal sector, it is necessary to be aware of the definition adopted by the source being used ;
- comparisons between different sources have to take account of differences in the definitions. In each case it is necessary to specify whether an estimate is a maximum or minimum figure for the variable which one is attempting to measure.

In the case of the national accounts, these definitions are not really of any use in evaluating output or the other macro-economic aggregates. That is why the national accounts department preferred a statistical and accounting definition.

By the Informal Sector we therefore mean small units producing and distributing goods and services which do not appear in the sampling base of the “modern” structured sector³.

The first consequence of this approach in our national accounts work is the identification of a third category of (generally small) enterprises which do not submit their end of year reports to CUCI⁴. In principle, such units are covered by the Senegal Accounting Plan but are not systematically included in the annual surveys conducted by CUCI and are taxed on the basis of estimated profit. They form the subject of specific estimates and are grouped in a category which we identify as “non-CUCI” modern enterprises. These estimates accord with current statistical practice in the absence of replies to surveys.

Units in the informal sector generally belong to self-employed workers who sometimes employ workers in their family or even paid employees or apprentices.

III. METHODS OF ESTIMATING THE INFORMAL SECTOR

In rural areas, the seasonal nature of the work is the reason for secondary activities or the rural exodus. Forced out of the countryside by severe under-employment and drought, the mass of rural migrants is flooding into the towns, which have a strong attraction for them in spite of the low and declining absorption capacity of the modern sector.

Employees with multiple jobs are therefore becoming increasingly common as a result of the crisis, structural adjustment and the decline in purchasing power.

This is why, in recent years, the informal sector has expanded dramatically in Senegal and particularly in Dakar.

Estimating the output of the informal sector is a matter of constant concern for the African national accounts in view of its importance. The national accounts departments are thus obliged to pursue investigations in the informal sector in order to make the estimates as reliable as possible.

In Senegal, the Directorate of Forecasts and Statistics periodically conducts surveys and studies in order to establish basic data. These are then updated each year by comparison with other sources and by formulating assumptions, after which they are incorporated in the national accounts.

3. The sampling base was formed by matching the records kept by CUCI (DPS), the social security fund and IPRES.

4. Single Information Collection Centre / Directorate of Forecasts and Statistics.

3.1. Basic data

The latest basic survey was conducted in 1992 in connection with the preparation of the Input-Output Table for the Senegal economy. The main problem was to establish an exhaustive sampling base, taking account of the nature of the sector.

In order to create a sampling base, the General Census of Artisan Enterprises was cross-checked against the General Census of the Population and Housing.

The 1991 census of artisans is the most exhaustive project so far on this subject in Senegal.

This project identified 77,927 artisan enterprises nationwide (not including trade and transport), employing a total of 158,270 people ; Dakar clearly predominates, with 20,705 artisan units employing an estimated 45,636 people. 60% of the enterprises surveyed employ one person, and the average per artisan unit is two people.

Artisan production activities predominate, representing 68% of all units surveyed. These are followed by artisan services (19%) and arts and crafts (13%).

Most of the people working in artisan enterprises are men. Overall, they represent 78.6% of the labour force.

Thirty seven per cent (37%) of people working in these artisan units have no qualifications (apprentices and others). Overall, paid workers represent 5.2% of the labour force ; 63.6% of paid workers are temporary ; apprentices represent one third of the labour force.

Artisan production activities employ over two-thirds of the labour force (66.8%) compared to 20.1% and 13.1% for artisan services and arts and crafts respectively. For Dakar these ratios are : 70.1%, 20.4% and 9.5% respectively.

In Dakar, 56% of the units recorded are located in the Dakar commune, 25% in the Pikine commune and 18% in Rufisque. Three quarters of enterprises in the region are engaged in artisan production activities. These consist mainly of tailoring and made-up articles, representing a quarter of enterprises, and the manufacture of food products (fritters, kebabs, tanganas, etc.) with 17%. Artisan services account for some 18% of all enterprises in the region, consisting mainly of laundries, hair-dressing (including plaiting and braiding), general mechanical services, panel beating, painting and motor vehicle body shops. Arts and crafts represent about 10% of the total and comprise mainly jewellery, sculpture, weaving and spinning, which employ over three quarters of this sub-sector. 90% of enterprises in Dakar are managed by their owners and of these managers 93% are artisans, i.e. they

hold a vocational certificate equivalent to the CAP (certificat d'aptitude professionnelle) or can show that they have at least three years' professional experience after apprenticeship. 6% are master artisans, i.e. they hold a certificate equivalent to the BEP (brevet d'études professionnelles) or can show that they have at least 5 years' experience.

However, this has its limitations for the purposes of the national accounts in that some areas not fully covered were found in certain regions, including Dakar, and some sectors - notably trade and transport - are not included in the scope of the survey.

The General Census of Population and Housing (RGPH) gives the breakdown of the active population by occupation and occupational status (employer, self-employed, employee, family helper, apprentice). The evaluation of the number of enterprises from this source is based on the number of employers and people working for themselves, i.e. the self-employed.

The breakdown of the active population by occupation and status reveals the total active population as 2,108,041 comprising 19,488 employers, 326,894 employees, 1,146,173 self-employed and 615,496 others.

This approximation gives the figure of 1,166,000 employers and self-employed persons. Of these, almost 809,700 were farmers ; the others are employers (19,500) and artisans, some of whom do not work full-time or whose activities are very informal (street vendors, small repairers, etc.).

The RGPH figures were compared with those from other sources.

The census of artisans found 77,927 artisan enterprises in the sectors covered, so according to the RGPH there are around 300,000 employers and self-employed workers excluding farmers.

Comparison of the two sources by type of occupation and use of other information such as the data from the Directorate of Land Transport yielded a final figure of 61,862 enterprises in Dakar and 121,073 in the other regions of Senegal, or a total of 182,935 units broken down by activity (see Annex 1). These enterprises formed the population used as the basis in the extrapolation of the national accounts.

A survey relating to the production and consumption of enterprises in the informal sector was conducted on a representative sample of local units in the Dakar region. The results by type of occupation were extrapolated for the whole Dakar region using direct methods. For a variable Y, the sample average was taken to estimate the average for a particular type of occupation. For example, the total output of occupation type h is given by :

$$Y_h = \frac{N_h}{n_h} \sum_i y_{hi}$$

in which

N_h = total number in occupation type h

n_h = size of sample in occupation type h

y_{hi} = the different products in stratum h

Supplementary analysis of the results of the artisan census produced an estimate of the economic importance of artisan enterprises in Dakar and the other regions. This proportion between Dakar and the other regions was retained and applied to the results of the survey in Dakar so as to estimate the national aggregates.

For each sector a ratio r_h = "total output outside Dakar/total output in Dakar" was calculated together with an extrapolation coefficient given by :

$$C_h = (1+r_h) * N_{Dh}/n_{Dh}$$

This coefficient was then applied directly to the results of the Dakar survey to estimate the national figure.

However, these direct estimating methods were not always adopted, particularly in sectors poorly represented in the various bases. Thus, indirect estimating methods were used to tackle bakery output, building and civil engineering and trade.

The indirect estimating methods are based on the balance of product resources and uses :

$$P_{mod} + P_{inf} + M = IC_{mod} + IC_{inf} + FC_{households} + FC_{adm} + GFCF_{ent} + GFCF_{households} + \Delta stocks + X$$

legend :

P_{mod} = production of modern sector

P_{inf} = production of informal sector

M = imports

X = exports

IC = Intermediate Consumption

FC = Final Consumption

GFCF = Gross Fixed Capital Formation

In Senegal's national accounts, there are two main indirect methods used to estimate informal activity : one is based on an estimate of demand in the sector, the other is based on the quantity of inputs available for output (local output adjusted by the balance of imports and exports) and technical manufacturing coefficients.

In the case of building and civil engineering, informal activity occurs mainly in building construction. Two different groups are identified : the Dakar region and other regions ; in the other regions a distinction is made between urban and rural areas. For each group the RGPH gives the most common housing characteristics and materials used.

The quantities of materials required (notably cement and concrete) for each type of building are worked out on the basis of the studies conducted.

The main people questioned were experts at the Directorate of Public Works, the Directorate of Town Planning, the Directorate of Community Technical Services, the Directorate of Urban Water Engineering and Drainage, and people running large enterprises closely involved in the building and civil engineering sector (CDE, CSE, EGCAP, SONEES, SENELEC, etc.).

These discussions supplemented by the consultation of documents (CUCI) permit an estimate of the quantities of materials used in work other than the construction of buildings (roads, tracks, dams, cement fibre sheets, etc.). The number of dwellings or equivalents is then determined by type of construction in order to estimate the total output in the sector on the basis of the different material resources available. A second stage is then necessary to deduce output in the informal sector as a residual figure.

The technical coefficients obtained then permit an estimate of the output of sand extraction and quarrying activity.

The approach is similar in the case of bakers, for whom an overall estimate is based on imports and the available production of flour and on technical coefficients for manufacturing bread. The share of the informal sector is then determined as a residual figure.

Production of "tiga-dégué" and roasted maize is then added to this estimate. The tiga-dégué figure is obtained via assumptions on the use of groundnuts which do not pass through official channels (small-scale crushing, direct sale, seed). In the case of roasted maize, the resources/uses balances provide data on human consumption of the raw product.

By definition, trade output is estimated by the gross margin (difference between selling price and purchase price). Surveys of the modern and informal sectors yielded margins for the products sold, so that official margins were not applied. These observed margins were applied to the various categories of imported goods and local products sold other than by simple, direct sale by the producer to the consumer.

Once output has been estimated in these branches for each subdivision of the informal sector, the structure of the production account derived from the survey results is used to estimate the other aggregates.

3.2. Updating the data

The resources are insufficient for the investigations to be repeated every year. It is therefore necessary to identify the most satisfactory estimating methods possible. In this situation, specific assumptions are put forward for each branch.

The following are the main branches of the informal sector accorded specific treatment at secondary level :

- artisan food production, which includes slaughtering, small-scale oilseed crushing, palm wine and fish processing ;
- production of tiga-dégué (groundnut paste) ;
- manufacture of artisan leatherwork, the two main categories being basketwork and leather goods ;
- hand-made wood products ;
- manufacture of building materials (breeze blocks, bricks, etc.) ;
- garages ;
- metalworking ;
- jewellery ;
- sand extraction and quarrying ;
- miscellaneous artisan activities ;
- miscellaneous services (tailors, cobblers and weavers).

We shall confine ourselves to presenting a few of these methods to indicate their diversity.

Salt extraction

The estimate is based on demand (mainly household consumption). First, we assume the average daily salt consumption per household on the basis of a simple study. Next we estimate the number of households in Senegal on the basis of the ESP ⁵ data (837,408 households in 1990 with the number of households growing at a rate of 1.89%). The total volume of exports is taken as the control variable.

5. Survey of Priorities conducted by the Directorate of Forecasts and Statistics.

The structure of the production account is then applied :

Output	100.0
Intermediate consumption	0.0
Value added	100.0
Wages	0.6
Gross operating surplus	99.4

Woodworking

The quantities of timber produced and imported, i.e. timber resources, are determined each year. We then use the ratio from the informal Input-Output Table "Intermediate consumption of timber by woodworkers/timber resources", namely 11.09% of total timber resources in 1990.

These two items of information allow us to estimate the value of intermediate consumption and hence output on the basis of the 1990 structure.

Output	100.0
Intermediate consumption	39.7
Value added	60.3
Wages	3.4
Gross operating surplus	56.9

Metal and metallurgical industries (general engineering)

The 1973-1975 survey recorded 3091 garages, and the total was estimated at 9784 fifteen years later, i.e. in 1990, representing a growth rate of 8% per annum. Using this rate we can update the figures taking account of price factors, with spare part imports as the control variable. The survey structure will also be used :

Output	100.0
Intermediate consumption	58.9
Value added	41.1
Wages	3.7
Gross operating surplus	37.4

Slaughtering

We must point out that slaughtering is not included in stock farming. The estimates of the national output of animals and meat are produced by the stock farming directorate. The output of the informal sector will therefore be obtained as a residual figure, since it is easier to ascertain the output of the modern sector (SERAS, SAFINA-AGROCAP, SODESP, etc.).

Output	100.0
Intermediate consumption	89.4
Value added	10.6

Edible fats

The main sources are the Directorate of Agriculture (for groundnut output), SONACOS and SONAGRAINE (for the quantities bought by oil mills or exported) and enterprises in the modern sector such as Patisen (for their inputs).

The intermediate consumption of the informal sector is estimated as the residual figure after assuming a rate of production for own consumption. However, the quantities used in the informal sector generally relate to the manufacture of oil, tige-dégué (to be classified in "grain and flour processing" as it is in the accounts) and trade. Once the allocation formula has been decided, output is estimated and the structure of the generation of income account is applied :

Output	100.0
Intermediate consumption	53.6
Value added	46.4
Wages	1.2
Gross operating surplus	45.2

Other food industries

In the case of beverage manufacture, the principle is to have data on the quantities of "bissap", monkey bread and other inputs in the sector and to apply the structure obtained from the basic survey.

Output	100.0
Intermediate consumption	56.1
Value added	43.9
Wages	0.0
Gross operating surplus	43.9

Made-up goods and leatherwork

The relevant types of estimate relate mainly to basketwork and leatherwork.

Basketwork : There were 837,408 households in Senegal (source : ESP 1991) increasing at 1.89% per annum. Assuming that each household uses one mat per annum and each mat costs 500 FCFA, we arrive at an estimate of output.

Leatherwork : Each year, DPS estimates give the total male population of Senegal. Assuming that each man buys one pair of sandals per annum, and deducting the number of sandals imported from Morocco (if known), we arrive at an estimate of the number of sandals produced. Next, assuming the rate of value added we obtain an estimate of the value added. Estimates of bag output are based on assumptions regarding demand by schoolchildren and women, taking account of imports.

Building material industries

This concerns other building materials produced by the informal sector : breeze blocks, decorative bricks and other concrete-based items.

Informal workshops engaged in such activity were estimated at 664 in 1990 on the basis of information supplied by the general census of artisans. The accounts of the smallest enterprise manufacturing building materials in the modern sector are taken as the reference, and the growth rate for the number of units is assumed to be 3% per annum.

Output	100.0
Intermediate consumption	48.8
Value added	51.2
Wages	0.9
Gross operating surplus	50.3

Transport & auxiliary services

The volume of transport output is based on the number of road tax discs sold each year for the carriage of passengers. The value is estimated on the basis of the DPS price indices.

Where freight is concerned, output moves in line with the main products carried (groundnuts, cement, phosphates, rice, etc.).

Caleches are found mainly in the suburbs, more precisely in Rufisque, where they

totalled around 500 in 1989, and in certain towns in the interior. The total number of caleches was estimated at 2215 in 1990.

Carts and rickshaws (non-motorized freight transport) were estimated at 4245 in 1990. As regards carts and caleches for the other years, taking account of the special characteristics of the sector, assumptions are made on the development of the total stock, and the structure of the generation of income account is applied.

Output	100.0
Intermediate consumption	54.0
Value added	46.0
Wages	6.0
Gross operating surplus	40.0

Other services

Other services include services to enterprises and households.

Services to households are based on the growth of the population with an estimate for the trend in purchasing power.

The branches of the informal sector estimated as a residual figure following a global evaluation concern bakeries, road transport (passengers and goods) and trade. The branches of the primary sector are also evaluated globally. The informal activity of these branches is determined by deducting the output of modern types of units such as AGROCAP in agriculture, large-scale fishing in the case of fisheries, etc.

IV. SHARE OF THE INFORMAL SECTOR IN GROSS DOMESTIC PRODUCT

In the system of national accounts, detailed information on the informal sector is available only in the final version of the accounts when all the sources are available for the relevant comparisons.

The table taken from the final national accounts (base 1987) gives the share of the informal sector in each major sector and in the economy as a whole.

These results reveal the dynamic nature of informal activity in the secondary and tertiary sectors.

The share of the informal sector in GDP is closely linked to the results of the primary sector, which fluctuate very widely.

Except for 1991, when there was a sharp decline, the share of informal activity in the secondary sector has been rising, going up from 34% to 41% between 1987 and

1990. In the public service, 1990 was notable mainly for the voluntary resignations and compulsory redundancies of several officials. This is one factor explaining the peak recorded that year.

In 1991, agriculture's problems were reflected in a reduction in demand for the informal sector in particular. Although there is as yet no objective criterion for monitoring the number of enterprises set up by those leaving the public service, it is known that many of them have failed.

Table 1 : *Structure of gross domestic product - in billion F CFA*

YEAR	1987	1988	1989	1990	1991
PRIMARY SECTOR	299.5	333.0	285.9	308.4	299.8
SECONDARY SECTOR	246.9	275.6	277.5	290.4	278.5
TERTIARY SECTOR ⁶	667.6	705.6	735.0	774.4	790.6
HOUSEHOLDS (non market)	23.2	23.9	24.8	25.5	25.7
GENERAL GOVERNMENT	145.1	147.6	153.5	153.9	154.7
TOTAL G D P	1,382.3	1,485.7	1,476.7	1,552.6	1,549.4

Table 2 : *Share of the informal sector in GDP (%)*

YEAR	1987	1988	1989	1990	1991
PRIMARY SECTOR	95.8 %	96.6 %	96.0 %	95.9 %	93.8 %
SECONDARY SECTOR	34.4 %	33.9 %	36.0 %	41.4 %	32.9 %
TERTIARY SECTOR ⁶	52.5 %	52.9 %	51.7 %	49.9 %	53.0 %
HOUSEHOLDS (non market)	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
GENERAL GOVERNMENT	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %
TOTAL G D P	53.9 %	54.7 %	52.8 %	53.3 %	52.8 %

Source : *Directorate of Forecasts and Statistics/DSE - National Accounts*

6. Including import duties and taxes, VAT, equalization system for local rice.

V. CONCLUSION ⁷

In view of its importance to the economy, we might ask ourselves how the efficiency of the informal sector compares with that of the modern sector. What is its capacity to accumulate, to create jobs and redistribute income ? What is the social and sociological importance of the sector in solving the problems of unemployment, poverty and nutrition ?

A clear answer to these various questions should allow us to assess the effort which the community should make to give producers in this sector greater access to land, education, credit and technology.

Should we really apply current regulations with all due stringency at the risk of impeding this sector, or should we make sacrifices by renouncing some of the tax which it should pay for a certain period of time, so that it can consolidate its gains and proceed to flourish ?

A proper appreciation of the opportunity costs might perhaps help reveal the need to reconsider the importance of the informal sector in the development strategy.

A strategy aimed at better integration of the informal sector requires improved knowledge and understanding of the sector and how it operates. We therefore need to design cheap, simple ways of collecting data on this sector. A suitable accounting plan should enable the various partners to monitor the sector at low cost. But first, it is essential for the target populations to acquire basic literacy.

7. The opinions in this section are purely the personal views of the author.

Annex 1 : Coefficient of extrapolation for output by type of occupation

PRINCIPAL ACTIVITY	CODE	Average output of other Regions	Number of units other Regions	Average output Dakar	Number of units Dakar	Dakar size class	Ratio Regions/Dakar	Coefficient of extrapolation
Bakeries	101	2,268,988.8	782	12,611,520	2,002	4	0.1	535.6
Modern Bakeries	1,011	42,093,825.6	19	46,196,881	48	1	0.4	65.1
Independent Bakeries	1,012	1,290,600.0	763	1,416,400	1,954	3	0.4	883.1
Catering	102	995,486.0	4,839	3,529,391	3,562	103	0.4	47.8
Manufacture of beverages	103	361,014.7	729	7,379,589	25	25	1.4	2.4
Drying/smoking fish	104	424,882.6	663	3,968,491	1,552	18	0.0	90.2
Woodworking	105	740,488.6	12,368	10,106,830	4,433	35	0.2	152.5 *
Metalworking	107	2,081,056.2	1,262	9,915,042	521	12	0.5	65.5 *
Forging	108	674,917.0	4,231	2,774,530	405	12	2.5	119.5 *
Stonework, bricklaying	111	692,977.0	21,622	8,880,135	2,970	19	0.6	245.1 *
Brick manufacture	112	955,888.9	561	5,962,142	103	7	0.9	27.6
Tailoring	113	495,985.5	20,381	3,675,919	10,313	67	0.3	195.0 *
Manufacture of woven articles	114	455,000.0	128	9,373,169	14	3	0.4	6.7
Shoemaking repairs	116	658,475.3	5,721	2,389,213	4,128	38	0.4	150.1 *
Manufacture beads	122	575,750.0	42	1,079,490	32	2	0.7	27.2
Furnishings	127	488,536.0	232	4,114,198	336	5	0.1	72.7 *
Basketware	129	292,095.8	2,262	2,444,589	17	3	15.9	95.8 *
Individual	131				1,471	1	0.0	1471.0
Sand lorries	1,313				316	6	0.0	52.7
Laundries	201	397,433.8	268	1,264,100	813	16	0.1	56.1 *
Prepared meat/Produce/Butchery	202	2,068,450.0	720	11,058,031	217	6	0.6	58.6 *
Hairdressing	203	390,913.8	2,790	2,352,179	484	16	1.0	59.2
Car electric	204	793,273.7	210	2,972,705	110	11	0.5	15.1
General engineering	205	814,187.4	6,030	5,422,929	3,754	13	0.2	358.4 *
Clocks and watches	206	567,500.0	228	548,184	117	5	2.0	70.6
Milling	207	764,686.2	981	1,185,600	152	2	4.2	392.4
Painting, Building	208	751,043.3	1,064	9,174,039	277	4	0.3	91.0 *
Plumbing	210	432,502.3	527	1,033,115	247	2	0.9	233.8 *
Refrigerator repairs	211	741,687.5	87	2,284,800	101	1	0.3	129.2
Cycle repairs	212	425,843.1	1,088	617,143	79	3	9.5	276.6
Spectacle repairs	214	292,000.0	25	492,750	51	2	0.3	32.9
Radio repairs	215	623,740.6	2,681	1,170,540	1,028	10	1.4	245.7 *
Ironwork	223	862,000.0	59	1,451,100	19	2	1.8	27.0
Panel/paint/body work	229	696,612.0	1,404	12,594,302	1,429	12	0.1	125.6 *
Vulcanization	232	683,712.5	601	2,530,800	95	3	1.7	85.8
Photography	236	913,611.1	271	5,918,397	56	4	0.7	24.5
Electricity, building	237	1,773,695.0	945	1,817,703	316	2	2.9	619.1 *
Misc. activities and services	238	853,125.0	203	1,108,800	112	2	1.4	134.1
Jewellery	301	921,570.0	3,356	6,649,087	2,039	14	0.2	178.9 *
Leatherwork	302	940,000.0	76	6,095,958	87	5	0.1	19.7
Artistic Painting	303	372,142.9	185	17,448,451	63	2	0.1	33.5 *
Sculpture	305	672,834.2	1,163	2,682,890	998	14	0.3	92.1 *
Dyeing	306	395,613.1	1,070	7,827,600	151	3	0.4	68.4 *
Weaving and spinning	307	521,472.0	3,654	2,075,641	977	9	0.9	210.6 *
Pearl manufacture	311	546,228.6	100	5,040,000	25	1	0.4	35.8
Manufacture of games and toys	313	315,000.0	40	960,000	23	1	0.6	36.1
Embroidery	315	647,773.0	4,052	2,567,171	226	7	4.5	178.3 *
Taxis with meters	4,101			3,960,000	3,583	11	0.0	325.7
Illicit taxis	4,102	667,526.1	1,369	1,276,933	1,465	13	0.5	167.7
Caleches	4,103	306,163.9	1,703	453,750	512	1	2.2	1,661.1
Over 18 seats	4,104	7,094,052.8	827	7,308,750	3,500	15	0.2	286.8
11 to 17 seats	4,105	5,469,707.1	1,141	7,144,500	967	9	0.9	204.5
7-8 seats	4,106	2,869,937.7	359	5,490,000	40	6	4.7	37.9
Motorized freight transport	420	11,501,354.2	2,029	11,501,354	1,372	21	1.5	162.0
Unmotorized freight transport	430	1,128,748.8	2,745	1,128,748	1,500	11	1.8	385.9
Activities allied to transport	440	2,712,391.0	417	2,712,391	675	7	0.6	156.0
TOTAL			121,073		61,862	771		

* Number of units adjusted on the basis of the RGPH data.

The measurement of informal sector services in the Ghanaian national accounts

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I. SERVICES IN THE GHANAIAN ECONOMY

The National Accounts of Ghana are compiled at both current and constant prices and published in a number of tables by the Ghana Statistical Service. Some of the tables show the components of Gross Domestic product by sector (industry) while the others present GDP (plus factor income and transfers from overseas) from an expenditure standpoint. The expenditure side of the accounts is derived by adding imports of goods and services to value added so as to provide an estimate of total supply. Netting out intermediate consumption and deducting imports, investment, and government final consumption expenditure, leaves private final consumption expenditure as a residual. The basic methodology for calculating current price estimates of gross output and intermediate consumption for each industry as set out in by Singal and Nartey (1971) in "Sources and Methods of Estimation of National Income at Current Prices in Ghana" published by the Central Bureau of Statistics in 1971 and the corresponding constant price estimates on Singal (1973). The constant price methodology has since been updated by altering the reference year to 1975.

There is no separate entry in the accounts for informal activity such activity probably exists in almost every sector and this is reflected to a greater or lesser extent in the estimation methods and hence in the estimates derived. In addition, it needs to be emphasised that the estimation methods for the national accounts in Ghana are currently undergoing major changes (in part to incorporate the results of the GLSS) so that the methods described below do not necessary fully represent current or evolving practice.

II. SECTORAL METHODOLOGY

2.1. Agriculture

The agricultural sector comprises six sub-sectors : cocoa, crop farming (other than cocoa), poultry, animal husbandry, forestry, and fisheries. All sub-sectors are likely to contain a significant amount of informal activity and in order to ascertain the likely coverage and reliability of the estimates we now consider each of these sub-sectors in turn.

Cocoa : although cocoa farming is undertaken mainly by small farmers, most of whom may be regarded as belonging to the informal sector, the crop is marketed entirely through the Cocoa Marketing Board whose records provide data on output and prices. The Board also carries out surveys to estimate yields and intermediate consumption, compensation of employees, and depreciation per acre. Hence value added in the cocoa sector is likely to be quite reliably estimated.

Crop Farming : crop farming, other than cocoa, is a sector which is almost entirely dominated by small scale farms. The land area under cultivation is estimated annually by the Ministry of Food and Agriculture (MFA) in its farm survey. The same survey also provides estimates of yield rates and producer prices and so the gross value of output can be readily estimated.

Intermediate consumption and other items in the national accounts such as compensation of employees, and depreciation, are estimated using a 1982 sample survey conducted by MFA to provide estimates of costs per acre. Suitable indices are then used to inflate 1982 values to current years values. Unfortunately the MFA is only able to provide data for a very limited (and decreasing) range of crops and so it has been necessary to assume that changes in output for other crops occurs at the same rate as for reported crops. These methods have recently been improved using GLSS result for baseline estimates.

Historically, formal sector agriculture has been of negligible importance and has not therefore been separately estimated in either the MFA estimates or the national accounts. However, since the introduction of the ERP some large farms have developed and attempts are now being made to measure their output using an annual survey.

Poultry : the poultry industry consists of two sectors : there are medium and large scale poultry farms averaging 5,000 or more birds per farm and small scale poultry farms mainly managed on a household basis. Both sectors are covered by a census conducted by district veterinary officers. However, they are not separately identified and the extent to which estimates of the number of eggs consumed and birds killed for consumption reflect egg and bird consumption by households in rural communities is questionable. Intermediate consumption and the compensation of employees are estimated as ratios of gross output value derived from a sample survey conducted by the Statistical Service.

Animal Husbandry : the animal health and production division of MFA derives information on the animal population, the number of animals slaughtered and imported and the producer price per animal. These data are used to estimate the

value of gross output. Ratios derived from a sample survey by the Statistical Service are used to estimate intermediate consumption, compensation of employees and depreciation. However, it is important to note that number animals slaughtered does not include those slaughtered outside the slaughter houses ; that is, excludes likely informal sector activity in this sector.

Forestry and Logging : this sub-sector is also characterized by substantial informal sector activity. For estimates of output we rely on data provided by the Forestry Department which compiles these data from reports sent from the district forestry departments in each region. Output is divided into industrial wood, charcoal and firewood, and minor forest products. Producers of industrial wood include some large companies that produce for export but the other sub-sectors are dominated by informal sector activities. Estimation of output is generally very difficult and the Forestry Department is still reviewing its methodology. Data on the production of logs does not include chain saw operations. Coverage of this activity is difficult as much of the output is illegal. However, despite its illegal nature, it remains an important economic activity producing a very high percentage of timber consumed locally. The Forestry Commission is currently preparing a report on recent studies made on chain saw operations and efforts are being made to obtain figures on this as soon as the report is published. It is anticipated that the coverage of this sector will improve over time. Again, intermediate consumption, compensation of employees and depreciation are all estimated using ratios derived from a survey conducted by the Statistical Service.

Fishing : this sector includes large scale marine fishing, small scale marine fishing and inland fishing. Data on large scale marine fishing is covered by a census of large vessels that are registered and monitored. It is the small scale marine fishing that is predominantly informal. However, a reliable sample survey procedure has been put in place at the research unit of the Fisheries Department. For inland fisheries fishery staff have made estimates of optimal yield for inland fishing and this is taken as an indicator of the actual catch. This estimate is multiplied by prices to estimate current values of output. As in other sectors intermediate consumption, compensation of employees, and depreciation are computed using historic ratios derived from a survey conducted by the Statistical Service.

2.2. Industry

In the National Accounts of Ghana the industry sector contains four sub-sectors : Mining and Quarrying, Manufacturing, Electricity and Water, and Construction. The incidence of informal activity across these sub-sectors varies considerably.

Mining and Quarrying

Mining and Quarrying is defined to cover the extraction of all minerals that occur in nature either as solids, liquids or as gases. It covers the underground and surface mines and quarries with all supplemental operations for dressing and processing ores and other crude materials, such as breaking, milling, washing, cleaning and grading carried out by the establishment. This definition (Singal and Nartey 1971 ; p.29) conforms to Major Division 2 of the "International Standard Industrial Classification of all Economic Activities" (ISIC). In the National Accounts mining is separated into the production of gold, diamonds, manganese, bauxite, stone quarrying, salt winning and sand winning.

For the major gold, diamond, manganese, and bauxite mines and stone quarries the Industrial Section of the Statistical Service collects data on production on monthly and annual basis. The National Accounts Section also collect information from establishments directly through annual surveys. These activities are carried out by a few large companies which provide relevant information on output and input costs of production for the calculation of value added.

In the past, the output of "African diggers" (individual operators who mine diamond or gold) could not be captured. However, in recent years all individual prospectors (or Galamsay operators) are obliged by law to sell their diamonds and gold to the Precious Mineral Marketing Corporation (PMMC) which provides information to the Statistical Service on such activities. Thus informal sector activity in diamond and gold production is likely to be covered in the national accounts, at least as far as legal forms of this activity is concerned.

Informal sector activity also exists in salt mining. Apart from one large-scale producer, most salt production in the country is carried out in the informal sector. On the basis of historic data it has been estimated that the Pambros Salt Factory is producing about two fifths of all the salt produced in the country. Applying the reciprocal of this fraction to the gross output and intermediate consumption of Pambros Salt Factory, an estimate of value added is derived for salt winning activity as a whole. Thus, although the informal sector is notionally covered the reliability of the estimates is more questionable. The mining sector also includes sand winning which is an activity of increasing importance, especially in providing inputs for construction activity. However, production of sand winning is unorganized and often semi-legal, hence the estimation of output is problematic. Unfortunately, this is one instance where the GLSS will not be especially helpful because sand winning is not identified as a separate activity in the survey's classifications.

Manufacturing

The most important source of information on manufacturing industry in Ghana is the Statistical Service's 1987 Industrial Census. This provides estimates of output, intermediate consumption and components of value added for all establishments with ten employees or more. These figures are up-dated from information provided by the Industrial Section together with some sales tax records from the Customs, Excise and Preventive Service (CEPS) and these have formed the basis of all estimates of GDP for manufacturing.

The estimates based on large scale establishments are supplemented by information from a 1963 survey of small-scale industries. However, no separate indicator variables for small-scale industries are available and output is simply assumed to move in line with output in the larger industries. This is another of the areas where GLSS data may prove most useful.

Electricity and Water

Although it is theoretically possible to have some informal activity in the production and distribution of electricity and water the Ghana Statistical Service considers such activity to be negligible in Ghana. Estimates for the sectors as a whole are drawn from administrative records (from Volta River Authority, the Electricity Corporation of Ghana, and the Ghana Water and Sewerage Corporation).

Construction

The activities covered under this industrial category comprise construction, repair, alteration and demolition of buildings, highways, streets, bridges, feeder roads, sewers, water and electricity mains, railways, harbours, airports, dams, land drainage and reclamation, hydro-electric plants and communication systems, whether undertaken by private bodies or governmental authorities. In principle, it covers all own-account construction activity in addition to those activities carried out by general and special trade contractors such as masons, carpenters, plumbers, electricians, etc.

For the purposes of estimating gross output and value-added the construction sector is sub-divided into four sub-sectors, as follows :

1. Repair and maintenance

Value added in repair and maintenance of buildings is estimated by allocating the total cost of repairs and maintenance of building (which is estimated as one month's rental value for all buildings) across various cost components, namely :

(a) materials, (b) labour, including the contractor's margin and (c) transportation. This allocation is based on historic ratios derived by Singal and Narthey (1971) with the assistance of the Chief Engineer of the Public Works Department (PWD). They established that the percentage shares of (a) materials (b) labour (c) transport in the total expenditure on repairs of permanent buildings were 40, 55 and 5% respectively while the corresponding percentages for non-permanent buildings were 35, 45 and 20%. Also the allocation of the total cost of repairs and maintenance between permanent and non-permanent buildings was estimated to be 56 and 44 % respectively.

2. Construction of non-permanent buildings

The total value of construction of non-permanent building is estimated by :

- deriving the value of houses by taking the total number of houses from the 1960 Population Census and applying an average value derived from a sample of 22,500 houses drawn from rating records by the Statistical Service ;
- assuming a growth rate in the number of houses (i.e. the volume of new construction) equal to half the rate of growth of the population ;
- applying the building cost index to allow for price changes.

Value added in this sub-sector is then derived using established ratios.

3. Construction of permanent buildings

For permanent buildings a commodity-flow approach is used. The total supply of locally manufactured and imported construction materials (including trade and transport margins of 20 %) less materials used for non-permanent buildings, repairs and maintenance, and other construction work, is assumed to equal the value of materials utilized in the construction on permanent buildings. Singal and Narthey (1971) established that these materials accounted for 55 % of the total value of permanent construction and that 40 % was value added. These ratios provide the basis for estimating value added and should cover both formal and informal sector activity.

4. Other construction work

The total value of capital expenditure on buildings for government and parastatals during the year is assumed to constitute the gross output for "other construction". Intermediate consumption is then derived as the total value of cement and other construction materials plus a further 20 % of the value of gross output to cover distributive margins. Other construction is further classified into : roads and bridges, airports and aerodromes, harbours, railways, sewerage and drainage, post and telecommunications installations, electricity generation and distribution, dams and powerhouse, control works, water supplies, other construction works, and land

improvement. Data on total capital expenditures are obtained directly from public records whilst previous estimates of intermediate consumption made by Singal and Nartey with the assistance of the PWD provide the basis for the ratios used. Informal activities do not arise in “other construction” sector as defined here.

2.3. Wholesale and Retail Trade

A large number of informal sector units participate in the distributive trades sector. Estimates are obtained under the following commodity sub-headings : imported goods, locally manufactured goods, agricultural products, forest products, fish, livestock and petrol retailing.

Although formal sector enterprises carry out almost all wholesale trading activity they account for only a small proportion of the retail trade activities. The number of persons in the informal sector who are engaged in retail trading is so large and, by definition, so unorganized it has not been possible to identify the statistical units to collect any meaningful information. Therefore, although it has been possible for some time to collect data on activities of the formal sector enterprises engaged in wholesale trade, data relating to informal sector operators cannot easily be compiled and it must be concluded that coverage of this activity is incomplete.

Because of these handicaps, the estimation of the domestic product arising from distributive trade in commodities other than petrol retailing have only been achieved by the commodity flow method. The production and the value of output of all commodities entering domestic trade are established under their different commodity groupings. By applying ratios which have been established previously estimates of the proportion of each of the different types of goods and commodities traded domestically can be calculated. Then, applying previous estimates of the ratios of the trade margins to gross outputs, values of the gross output of trade services can be derived. Previously derived percentages of intermediate consumption and depreciation are applied to the gross output values in order to arrive at value added. This method potentially covers both formal and informal activities although as noted above the coverage of informal sector activity may be incomplete. This will probably remain as the general methodology for the time being although surveys will be carried out to improve the estimates of the ratios used and hence of the resulting estimates of value added.

2.4. Restaurants and Hotels

Alongside efforts to improve the estimates for the distributive trades, the coverage for the estimation of formal sector operations under hotels and restaurant activities is also being improved by the use of revised lists of establishments and ope-

rators obtained from Ghana Tourist Board. This is used to draw a sample and information from this sample is used to provide estimates of total activity based on the collections of hotel and restaurant tax. However, we are yet to improve on estimates of informal sector activities relating to the operations of chopbars, cafes and other eating and drinking establishments as it is believed that many of these are not registered with the Ghana Tourist Board and do not pay hotel tax.

2.5. Transport, Storage and Communication

Analysis of this broad sector is divided into the following subdivisions :

(i) Land transport

- Railway transport services
- Road transport services (subdivided into)
 - State-owned commercial road transport services
 - Private commercial road passenger transport services
 - Freight transport by road.

(ii) Water transport

- Ocean and inland water transport services
- Supporting services to water transport.

(iii) Air transport

(iv) Services allied to transport

(v) Storage and warehousing services

(vi) Communication services.

Informal sector activities are highly prevalent in the sub-sectors of private commercial road passenger transportation services as well as freight transport services by road. Benchmark survey inquiries have been carried out to compute per vehicle average income or earnings, average values of intermediate consumption, indirect tax payments, and average amounts of salaries, wages, allowances and other forms of compensations paid to employee drivers, driver mates and other persons who render direct services in the running of the transport. The inquiries covered a cross-section of the various organizational class groupings of operating unit vehicles under the following class groupings :

(a) Passenger buses and other passenger vehicles

- Long distance passenger buses and vehicles
- Short distance passenger buses and vehicles
- Trotro service buses and vehicles which operate within cities and town areas
- Taxi services

(b) Cargo/tipper and other freight haulage vehicles

- Articulated trucks and vehicles which convey cocoa, imported goods and other manufactured goods, etc.
- Cargo trucks, which convey agricultural products, salt, saw timber and other timber products, charcoal and firewood, etc.
- Container cargo vehicles
- Tipper trucks which convey sand and stone.

In the absence of data on the annual population of vehicles in Ghana, the yearly figures on the roadworthiness certificates of private commercial vehicles and buses provided by the Licensing Unit of the Motor Division of the Ghana Police Service are used as motor vehicle population data from which the value of gross output and other components of the value added estimates for the private commercial road transport sector are computed. The last time such a benchmark inquiry was carried out was in 1988. Another benchmark survey is being planned to be carried out in 1996 in which information would be associated with operating activities in 1994 and 1995.

Informal activity also exists in water transport services but transport services operated by canoe and other board units on rivers, lagoons and lakes are not covered in our present estimates.

Under the subsector concerning “services allied to transport”, many of the operating units relating to forwarding and removing activities and shipping agents as well as tour operators and travel agencies fall under the category of informal employers. These are sampled using the Statistical Service’s establishment register but as many shipping agents are not fully organized units the coverage and the quality of data which they supply falls short of desired levels, even when they are registered. In particular many of the units operating under storage and warehousing services are small unorganized units and are not registered operators. We find many such unregistered units under “cold storage services”. These units own deep freezers and they carry out preservation of food, fish, etc., on a fee basis to customers.

2.6. Financial, Insurance and Business Services

At first sight these services seem just as unlikely to be candidates for informal activity as the sector for electricity and gas. However, anecdotal evidence suggests the existence of informal money lending on quite a large scale. This activity is not covered in the present methodology and unfortunately it is likely to be difficult to identify it from the GLSS. Formal financial activity is measured using surveys based on the registers of the Bank of Ghana and direct information from the commercial banks and insurance companies.

2.7. Real Estate Services

GDP estimates for estate services are compiled as a subsector within the major sector of "Finance, Insurance and Business Services". In Ghana, this subsector embraces income generated largely from rental and owner-occupied dwellings and apartments were compiled for actual and imputed rental of dwellings only. The activities now covered in the sector encompass the following :

- the letting, management and operation of real estate, on own account, such as non-residential buildings, apartment buildings and dwellings ;
- developers and builders of residential and industrial estates ;
- estate agents, brokers and managers engaged in renting, buying, selling, managing and appraising real estate on contract or fee basis.

In our efforts to improve these estimates, information is being sought from at least a cross-section of the 146 operating units who are registered members of the Ghana Real Estate Developers Association (GREDA). It is our hope to present a new analysis for the real estate services in our new base year under the following categories :

- domestic product from owner-occupied and rental dwellings ;
- domestic product from publicly-owned real estate organizations (namely the state housing corporation and SSNIT Real Estate Development Division) ;
- domestic product from privately-owned real estate units or enterprises.

Domestic product generated by real estate from owner-occupied and rental dwelling can be considered as operations of informal own-account enterprises. Because of lack of information on this sub-sector, data used for preparing estimates are obtained from growth rates of urban and rural households computed from the 1970 and 1984 Population Census records. These growth rates are used to project yearly rental estimates drawn from GLSS2. In the final stage of the computation the rent index from the CPI is used to calculate the value of the gross output in respect of the imputed rents of owner-occupied dwellings as well as all rental units in the country. Estimates of intermediate consumption is assumed to be equal to one twelfth of gross output (that is, one month's total rent payable for the whole country).

The compilation of GDP estimates for the publicly-owned real estate organizations and the privately-owned enterprises all fall under the formal sector activities and are measured using public records and surveys of registered operators.

2.8. Business Services

Output is estimated using surveys relying on the membership lists of professional organizations including lawyers, doctors engineers, accountants, etc. These exclude any attributable output of informal sector activity.

2.9. Government Services, Public Sector Aid and Development

Again, the question of informal activity is not relevant since by definition we are dealing with the public sector. Data is drawn from public records.

2.10. Private Non-Profit Organizations :

By definition these are registered organizations and thus they are unquestionably formal. Certainly, they do not fall under any reasonable definition of household production. The Ghana Statistical Service measures such activity for national accounts purposes by direct inquiry using a list of private non-profit organizations. However, efforts are underway to update this methodology by relying on employment records coupled with sample surveys of more organized establishments such as schools and hospitals.

2.11. Community Social and Personal Services

This sector covers a vast array of mostly small service activities many which are in the informal sector. Coverage has traditionally been based on occupational data from the Population Census projected forward using the growth work force together with assumptions about average earnings in each occupation. This method is currently being improved by establishment surveys of some especially important personal services such as hairdressing. However, this may be an area where the GLSS data will be extremely important.

III. CONCLUSIONS

The extent to which the informal sector is covered in the present National Accounts methodology varies considerably from sector to sector. However, even where the present coverage is most comprehensive and of highest quality it may still be possible to improve it using data from the GLSS estimates. Data on farming for example drawn from the Ministry of Agriculture's annual survey of small scale farmers, can be supplemented using the longer list of crops covered in the GLSS. Conversely even in the areas where coverage is poorest it is not possible to simply incorporate the GLSS-based estimate as an addition to the existing figures.

Some general conclusions for future work emerge from this review of current and past practice. In the first place it should be remembered that the accounts must be produced on at least an annual basis. While this does not mean that we are restricted to information which is available on an annual basis it does imply that the data must relate directly or indirectly to some annual series. Secondly, the information should ideally be sufficiently disaggregated to allow us to use our traditional sectoral classifications. This makes it difficult to use a category as broad as say "trade" which combine table-top sellers, chop bars and other trade outlets under the same heading. Thirdly we must be sure that there is no double-counting. That is, we must ensure that we are not including as extra informal sector activity those parts of production already covered in our estimates for the formal sector. In practice this requires more disaggregation as different components of the same industry may have different estimation techniques. For example in order to incorporate informal sector information for wholesale and retail trade, and hotel and restaurants, separate estimates for each sub-sector are required. Finally, there will be some areas where the GLSS information is less suitable than other sources. In particular, household surveys such as the GLSS are designed to cover a relatively uniform geographical spread of households across the whole country and so the data on certain activities such as alluvial gold mining that are concentrated in particular areas are likely to be of relatively poor quality. Therefore, for these activities it will continue to be necessary to rely on dedicated surveys and alternative sources for basic information.

* * *

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TOPIC 4

DISSEMINATION OF RESULTS TO USERS : ANALYSIS AND ECONOMIC POLICY

Promoting productivity and social protection in the urban informal sector : an integrated policy approach and implications for data collection methodology

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I. INTRODUCTION

1.1. The changing policy environment

The attitude of policy makers, in the past, to the informal sector has been at least ambivalent. It has variously been ignored, harassed or suppressed. In spite of this, the informal sector has been growing.

However, throughout Africa attitudes are changing in a positive manner toward the informal sector. This is due to the realisation of the contribution to economic growth, poverty eradication, employment creation and the potential of the informal sector. Furthermore, its role in the indigenization process now being pursued in many African countries is now being appreciated and encouraged.

However if statement of good intentions are to be translated into action programmes it is important :

- to define development objectives for the informal sector ;
- design appropriate stately of policies and programmes to achieve the objectives ;
- determine the appropriate data collection methodology.

Those of us who are involved in finding practical means of improving productivity in the sector, the application of a specific methodology for data collection depends on our data requirements which in turn is determined by the nature and type of the programme we are designing. In other words, the ultimate objectives of the data collection process determines the choice of methodology framework for data collection.

This paper serves the purposes of :

- illustrating the linkages between policy and programme objectives and data collecting methodologies and ;

- a presentation of an integrated policy and programme approach and its advantages in the informal sector.

The paper is based on the design, implementation and lessons learned from an integrated programme which the author was responsible for in 1994/1995. It was designed as an integrated multidisciplinary project to demonstrate how to strengthen institutions to improve productivity and social protection through enhanced access to resources, markets, social services and regulatory reforms using broad policy packages.

The conception of the idea of the project dates back to the 78th Session (1991) of the International Labour Conference at which the central theme of discussion was the Director-General's report on "The Dilemma of the Informal Sector". The dilemma as explained in the report, was whether to promote the Informal Sector as a provider of employment and incomes, or to seek to extend regulations and social protection to it and thereby possibly reduce its capacity to provide jobs and incomes for an expanding labour force.

Although it is recognized that the full range of existing laws, regulations and labour legislation cannot be immediately applied in the informal sector without reducing its capacity to create jobs and/or drive it further underground, this project was conceived on the assumption that it is not necessary to make a choice between the above two objectives and that productivity and social protection are mutually reinforcing. Its activities were meant to show how the two objectives might be reconciled and pursued simultaneously to improve the quality of employment.

The project was implemented experimentally in Bogota, Dar es Salaam and Manila. It was believed that a successful implementation would generate enough interest to facilitate replication in other countries by governments and other agencies.

1.2. The problem

In spite of the important role that the informal sector plays in employment generation, many segments of the sector are beset with **low productivity and absence of the basic elements of social protection**. In Bogota, one of the project cities with relatively well-developed social protection services, 74 per cent of informal sector operators are not covered by any form of social protection schemes. In Dar es Salaam and Manila, more than 90 per cent are not covered. These problems are due to lack of access to productive resources, markets and social services which, in turn, are caused by unfavourable enabling policy environment and absence of appropriate and adequate institutions to support productivity growth and improvement in social protection.

Formal institutions

Institutions and economic development policies, in general, are biased against the informal sector. Ministries of Labour, Economic and Human Resource Development Planning are structured to deal only with the formal sector and the concerns of the informal sector are hardly ever incorporated into their functions. Similarly, employers' and workers' organisations, like Chambers of Commerce and trade unions, are constituted to draw their memberships from the wage sector. Furthermore, financial institutions are also structured to deal with formal sector enterprises.

The requirements of social security schemes, such as registration, identification of employers from employees and regular contributions, are often inappropriate and unsuitable to self-employed persons and casual workers with unstable employment relationship. In addition bureaucratic inefficiencies often raise the cost of social security schemes to levels which are unattractive to informal sector producers.

Informal institutions

The rapid growth of the informal sector, in spite of the failure of the formal sector institutions and policies to respond to its needs, is largely due to the fact that the informal sector has its own institutions and structures. It has its own group solidarity associations like artisans' or traders' associations, and it has its own credit and means of acquiring skills and technology.

Many of these informal sector institutions are well adapted and suited to conditions in the informal sector. However, based on their traditional organizational forms, they have serious limitations in attempts to meet the needs of entrepreneurs in modern economies. For instance, the knowledge acquired by an apprentice through the traditional apprenticeship system is limited to what his/her master possesses which may not be enough to absorb new technologies. The traditional credit schemes lack resources and financial intermediation to match supply and demand for investment funds. Due to risk aversion, it tends to drive interest rates high.

Due to lack of confidence in formal social protection schemes among informal sector operators, they are tending to experiment with voluntary schemes organized by self-help associations. Among the well-known of these experiments is the scheme operated by the Self-Employed Women's Association in India (SEWA). These voluntary schemes, like the credit and traditional training schemes, suffer from lack of resources and technical competence.

Given these weaknesses and the lack of attention from formal sector institutions, many governments have created parallel small industry development organizations aimed at meeting credit and training needs of small-scale enterprises. While these efforts are laudable, they have been criticized for their failure to build on the existing structures in the informal sector and for increasing the risk of perpetuating the dualistic economic and market structures that characterize formal/informal sectors in most countries. Furthermore, allocative efficiency requires that the formal and informal sectors should be integrated to reduce costs of production in general and to remove constraints on the informal sector in particular.

1.3. Objectives of the project

The long-term objective is to bring about progressive integration of the informal sector into the formal economy by productivity enhancement and the application of elements of labour law. The immediate objectives of this project were :

- **Immediate objective (i) :**

ILO units, governments and local authorities as the social partners will have improved capacity to analyse, assess and formulate policies on the urban informal sector.

- **Immediate objective (ii) :**

Self-help organizations of the urban informal sector in the selected cities will have improved capacities to mobilize resources, provide protection for their members and articulate their interest in the policy-making process.

- **Immediate objective (iii) :**

Process will have started at city level to reach consensus among public authorities and employers' and workers' organizations, and with representative organizations of informal sector producers and workers, on the policies to be pursued and the practical measures to be undertaken.

1.4. Scope and purpose of the report

The report covers the major activities, achievements and lessons learned in all the three cities¹. The last chapter deals with the implications of the integrated policy and programme approach for the choice of data collection methodology. It is intended to describe the activities and the achievements of the project and to disseminate information on the general lessons learned, to elaborate problems to guide further action in the informal sector and to highlight the challenges ahead.

1. Detailed reports specific to each city are available separately.

II. THE STRATEGY OF THE PROJECT

2.1. The integrated programme approach

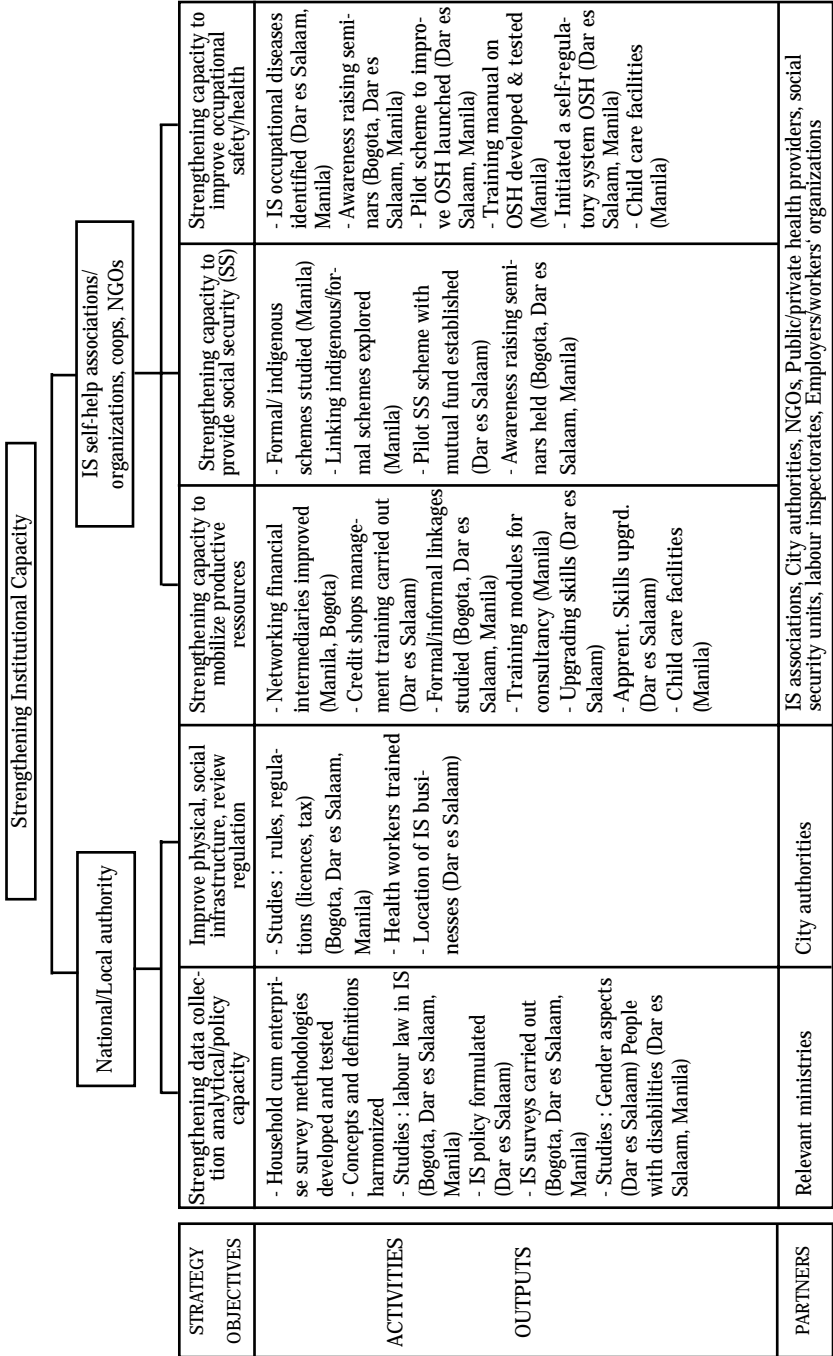
Since the problems described above are interlinked and mutually reinforcing, this project is designed as an **integrated multidisciplinary** type to seek practical solutions and explore the possibilities of increasing productivity, improving social protection and improving working conditions.

It is designed with both **capacity building and direct support** components. The linchpin of the strategy is **collective action**, represented by self-help associations, co-operatives and NGOs, to mobilize resources for production and social protection. In addition self-help associations can influence policy in favour of their members. Furthermore, they can act as major channels for assistance to the informal sector. However, for collective action to succeed, **policy and regulatory reforms and institutional support from government and local authorities are essential**. The main areas of intervention covered were :

- the legal policy and regulatory framework : nature, impact and need for reform
- informal sector statistics : coverage and methodology
- the role of the informal sector : determinants of stagnation, growth and transformation
- productive resources and market : access to financial services, skills training technology sources and markets
- working conditions
- social protection
- informal sector self-help organizations/associations.

The diagram below illustrates **the strategy, main activities and the major partners** of the project. The capacity strengthening process was achieved through the implementation of specific activities with the targeted institutions/beneficiaries as the diagram shows. The institutional framework comprised a varied number of partners emphasizing the need to widen the scope of collaborating organizations in such a programme approach.

SUMMARY OF THE INFORMAL SECTOR INTEGRATED PROGRAMME APPROACH



III. MAIN ACTIVITIES AND ACHIEVEMENTS

Using a combination of institutional development and direct support activities, pilot projects were implemented to strengthen capacity at national/local government authorities, employers' and workers' organizations, NGOs and informal sector self-help associations. Informal Sector operators also benefited directly from specific activities. Below are the general comments and conclusions on the main activities.

3.1. Informal sector statistics : coverage and methodology

The main activity of this component was the conduct of large-scale statistical surveys of the informal sector in the three project cities in co-operation with the national statistical agencies. Through advisory services and other technical inputs provided by STAT, the project contributed to the building/strengthening of the national capacities for informal sector data collection regarding the survey methodology, preparation of survey instruments, sample selection, interviewer training, data processing, tabulation and drafting of the survey reports ; and to collect a wide range of representative up-to-date statistical data as basis for policy assessment and future action plans.

Through the above activities, the project succeeded to develop, test and evaluate statistical methodologies for informal sector data collection on the basis of the international guidelines on informal sector statistics developed by the ILO and adopted by the International Conference of Labour Statisticians in 1993. The project also promoted the application of these guidelines and thereby harmonized concepts, definitions and survey methods for informal sector data collection. The methodologies were based on mixed household and enterprise surveys which proved to have many advantages over other methodologies such as labour force surveys and establishment surveys. Labour force surveys cannot provide information on productivity and income generation while establishment surveys tend to capture only the visible enterprises.

The methodologies tested by the project provided comprehensive data (employment, incomes, social protection, legal status, collective action, etc.) on all segments of the informal sector. In all 3,600 households and 400 establishments engaged in informal sector activities (Manila) ; 2,868 business operators (Bogota) ; 2,626 households with informal sector operators in Dar es Salaam were included in the final survey samples.

The data made it possible to analyse differences between various segments of the informal sector regarding their characteristics, potential for employment and income generation, and their main constraints. A novelty was that for the first time a sub-sample of the employees of informal sector operators were interviewed

directly. The main purpose was to obtain information on the employees' personal characteristics, the conditions of their employment and work, and their social protection status and priorities in addition to the information provided by their employers on the same topics. Some questions related to topics on which only the employees themselves could provide information, such as their membership in workers' organizations, reasons for working in the informal sector, additional sources of income, and future plans regarding their work.

The surveys were undertaken either as the first part of a national informal sector survey or as a pilot for such a nation-wide survey which the national statistical agencies plan to complete or conduct on their own in the near future, ensuring the sustainability and replication of this project component. This would facilitate the achievement of the long-term aims of the project, i.e. the strengthening of national capacities to provide informal sector statistics at regular intervals, and the integration of informal sector data into the national statistical systems in order to facilitate policy and regulatory reforms for creation of a favourable policy and institutional environment.

This project component was strongly supported by the national authorities and the donor community who made substantial contributions to cover the survey costs. As much as half of the funds were provided by the national authorities, indicating their lively interest in this component. The financial contribution of the project amounted to only one-third of the total costs. In addition, the national statistical agencies released technical and administrative personnel, office space, vehicles, computer equipment and stationery for the execution of the surveys.

The implementation of this component revealed various features which could help to increase response rates and data quality in informal sector surveys. These include : advance information to respondents on the survey and its purposes, possibly with the help for their own associations and representatives. The project also showed that many informal sector activities are subject to seasonal and other variations over the year. Due to the short duration of the project, such variations had to be estimated on the basis of retrospective questions ; however, they would have been captured more accurately if data collection had been spread over a period of a whole year.

The project has demonstrated the vital importance of comprehensive statistical data on the informal sector as a basis for the formulation and evaluation of policies and action programmes. However, the quality of informal sector statistics depends to a large extent on the willingness of respondents to participate in surveys. In all three cities, the hope for assistance was a factor which motivated many

informal sector operators to answer the surveys questions. If a lack of follow-up action shatters this hope, non-response rates are likely to increase in future surveys.

The lessons learned will be taken into account by the national counterpart agencies in their future work in this area, including the information obtained from interviewer reports and during the debriefing of interviewers which provided useful hints for further improvement of the survey questionnaires. The experiences gained from the surveys will also represent an important contribution to a technical manual on informal sector surveys which the ILO will prepare following a request by the International Conference of Labour Statisticians.

The data from the surveys would help to clarify the various concepts of the informal sector and emphasize the need to target policies to the sector's heterogeneous segments. Factors that affect growth, stagnation and transformation were also analysed.

Among the issues being examined are :

- role of the informal sector in productive employment creation ;
- enterprises classified by employment status (wage labour, family labour, etc.) ;
- enterprises classified by capital invested ;
- internal/external problems.

3.2. The legal regulatory framework : nature, impact and need for reform

The project examined the rules and regulations that govern the establishment and operation of enterprises and labour law and legislation with the objective of improving compliance in order to enhance access to resources, working conditions and social security.

In the view of the project, due to the prevailing low productivity and the paternalistic employment relations, the full range of existing laws, regulations and labour legislation cannot be immediately applied in the informal sector. Due to the inappropriateness of rules and regulations and the high rates of taxes and levies, the viability of many informal sector enterprises depends on their informality and the absence of formal taxation. Therefore, any attempt to enforce the full range of laws and regulations in the informal sector would reduce its capacity to create jobs and/or drive it further underground. Therefore, progressive application of rules and regulations should be regarded as a long-term goal.

However, there are certain basic principles, laid down in ILO's fundamental human rights Conventions, which should be promoted immediately. These concern freedom of association, forced labour, discrimination, and child labour. The principle most

extensively addressed by this project was freedom of association. Aspects related to discrimination were addressed only as regards women, and were limited to matters relating to access to credit and working conditions. Child labour activities were left to IPEC, already active in the three project cities. Finally, as regards forced labour, a study on indebtedness and bonded labour envisaged in the original project document was not included in the project activities since they were not regarded as major issues in the project cities. Nevertheless, continuous efforts should be made by the ILO to assist in the promotion of these standards in the informal sector.

Two other important groups of standards well covered by ILO Conventions and which were covered by this project are occupational safety and health and social security. The project research showed that the promotion of such standards can be done by firstly, defining and identifying the more viable enterprises that have the ability to bear the costs of compliance ; secondly, identifying the regulations and labour laws in question ; and thirdly, by determining how to promote them. In this process, self-help associations may be instrumental in influencing government policies and advocating the interest of their members. Moreover, they can facilitate the collective action needed to mobilize resources for social protection and production.

The project implemented research activities and pilot action projects in the above three areas and the main findings, recommendations and lessons learned are described under the respective headings below.

With regard to the promotion of labour law, in general the studies showed that a prerequisite for the application of the labour law is the existence of clearly defined employer-employee relations. Hence labour law is not applicable in most segments of the informal sector where self-employment and family labour prevail. The recommendations include :

- define and disaggregate the informal sector more precisely by activity, productivity, employment status, etc. ;
- seek to understand better the temporary nature of employment relations ;
- examine the definition and role of family labour ;
- revise labour law in line with conditions in the informal sector.

Regarding the regulations that govern the establishment and operation of informal sector enterprises, the aim is to develop appropriate rules and regulations, to provide permanent locations for informal sector business enterprises and to improve access to social services and infrastructure. It was revealed that in spite of the low legal awareness and compliance, there is a strong positive correlation between the degree of legality and business performance. In order to promote

compliance the studies emphasized the need to :

- simplify and streamline rules and regulations governing registration of enterprises ;
- simplify taxation procedures.

In order to analyse the advantages/disadvantages of compliance with regulations and labour law the studies were carried out on the processes of formality/informality in Manila.

The studies which are still ongoing examined :

- the factors that induce formalization / informalization ;
- the processes leading to formalization / informalization ;
- the economic consequences of formalization / informalization.

The main tentative conclusions and lessons from the studies are entrepreneurs who register their enterprises and formalize their operations and who are upwardly mobile while those who move from formal to informal status tend to be downsizing their operations.

Formalization is induced by the desire to increase access to markets (domestic and export), and production resources. It involves a tedious registration process (e.g. 47 sets of documents may have to be completed !) and payment of various fees and taxes are among the consequences of formality. However, the effect on wages and labour costs in general is regarded as minimal.

Entrepreneurs deregister enterprises and operate informally as a result of managerial, production or market difficulties which force them to reduce the level of activity. Since registration is required to gain access to certain markets, informalization would tend to exacerbate the loss of market share which the enterprise may be experiencing.

In general, the studies tend to support the view that entrepreneurs who want to increase economic activity beyond certain limits would like to formalize their enterprises. This process can be facilitated by streamlining the relevant rules and regulations.

Gender aspects

The negative impact of rules and regulations is greater on women entrepreneurs. A study in Dar es Salaam revealed that the traditional household roles of women reinforced by modern laws, tend to push women into low-productivity activities and limits their access to productive resources and vertical mobility of their enter-

prises. In the United Republic of Tanzania, the Marriage Act of 1971, the Laws of succession and Inheritance and the Customary Law of 1963, deny women the right of succession and inheritance of property and land allocation. This is regarded as a major hindrance to establishment and expansion of business enterprises by women. Women, therefore, constitute the large part of the unpaid family labour and the underpaid workers in the informal sector.

3.3. Informal sector self-help organizations/associations

The marginalization of the informal sector from the mainstream of policy and its lack of access to resources are partly due to the fact that the sector has no recognized associations to represent its interests, and mobilize resources. In order to promote collective action, the project sought to strengthen the resource mobilization and advocacy roles of self-help associations through on-the-job training as project partners.

To achieve these objectives the project carried out research in the three cities to determine the objectives, strengths and weaknesses of the associations. Representative members of the associations were co-opted as members of the project advisory committees. In Bogota, the project contributed to the development of a technical manual for strengthening associations in the informal sector. In addition, all the major activities described above, with the exception of the statistical component, were implemented with the associations as project partners and beneficiaries. In the action programme on social security (Dar es Salaam), the associations established a health care fund with contributions from their members. With regard to occupational safety and health, they are playing the major role in awareness raising and provision of first aid when an accident occurs. In Manila, the project collaborated with a self-help association (Sama-Sama) to develop a strategy for promoting enterprises, including integrated physical infrastructure development and support services.

Other areas of intervention were to create or strengthen networks and linkages between the associations and the city authorities, employers' and workers' organizations and NGOs. Through workshops, seminars, contact in the project advisory committees and pilot action projects platforms were established to tackle issues of concern to all parties. Among the issues were the allocation of business sites to informal sector operators (Dar es Salaam, Manila), access to primary health services provided by the city authorities (Dar es Salaam), and reform of rules and regulations. The workers' organizations in all the three cities showed keen interest in developing/strengthening contacts with the informal sector self-help associations. Consequently, a number of seminars and

workshops were organized to discuss strategies to that effect. The seminars recommended how workers' organizations could aid the efforts to organize the informal sector, raise awareness on occupational safety and health measures and extend social security to cover workers in the sector. Follow-up activities are ongoing. Some examples : in Dar es Salaam the OTTU has decided to set up informal sector units within its structure ; in Bogota, the trade unions have developed a two-year action programme for involvement in the informal sector. In Manila, the Trade Union Congress of the Philippines is implementing a project to extend social security to the informal sector.

Another activity carried out with regard to self-help associations is assistance to organize people with disabilities (PWDs) in Marikina, Manila, into a community-based association and secure registration for their association.

The activities with self-help organizations underscored the views that :

- the success of efforts to integrate the informal sector in the mainstream of policy and to improve the sector's quality of employment would depend, largely, on the recognition accorded to self-help associations as advocates of their members and as means for mobilizing and administering resources for production and social protection ;
- informal sector self-help associations are playing crucial roles in resource mobilization and advocacy. They should be recognized and strengthened as representatives of informal sector producers.

An important channel for communication and follow up as regards consultations with informal sector representatives is provided by the supervision related to the Employment Policy Convention, 1964 (N°122), currently ratified by around half of ILO's member States, including the Philippines. The third Article of this Convention requires countries in the process of creating and implementing employment policies to consult representatives of the persons affected by the measures to be taken, in particular workers' and employers' representatives, with a view to taking full account of their experience and views. In its comments directed to countries, the ILO's Committee of Experts has emphasized the importance of including representatives of the informal sector in such consultations. Governments, in their reports under Convention N°122, have sometimes pointed to difficulties in locating and identifying such representatives. This dialogue should be pursued, with a view to assisting governments in creating workable fora for consulting all kinds of persons concerned in the informal sector. Policies encouraging the creation of self-help associations are essential for this process.

3.4. Production resources : access to financial services, skills training technology and markets

Labour productivity which establishes the basis for incomes, part of which can be used for contributions to social security schemes and for investments in occupational safety and health measures thereby guaranteeing improvements in the quality of employment is low in the informal sector. To address this problem the project aimed to facilitate access to financial services, training, markets and technology.

Financial services : lack of access to financial resources to establish and operate business is a well-known problem facing informal sector operators. Less publicized, but equally important if not more important, is the weak and often the grossly inadequate capacity of financial intermediaries whose functions include the delivery and recovery of loanable funds. An assessment of the problem revealed that, in both Manila and Dar es Salaam, while efforts are being made to make loanable funds available, there is hardly any support to build the capacity of financial intermediaries in the informal sector. Consequently, there is a growing imbalance between the availability of the funds and the means to be used to reach the operators in the sector. In Dar es Salaam an association of informal sector operators collected money from its members to establish a revolving fund only to realise that it had no capacity to develop a system to lend and recover the loans. Furthermore, in spite of the existence of many NGOs, particularly in Bogota and Manila, there is no adequate institutional mechanism to facilitate information sharing and collaboration to achieve common objectives. To address these problems, the project carried out activities to strengthen capacity and to encourage networking and collaboration between NGOs and development institutions. A process was initiated to establish a financial services centre in Manila involving NGOs and financial intermediaries.

In Bogota the project contributed to activities to establish a micro-enterprises centre to promote collective methods to improve productivity and social protection. The services to be provided by the centre include legal advice, training, management consultancy, and marketing strategies.

In Dar es Salaam, a training programme on how to manage credit shops was prepared and carried out.

Training : training was the main activity in the capacity-building process undertaken by the project in all the areas of intervention described under the respective headings in the report. In addition, pilot activities were carried out to assess

the relevance and effectiveness of specific training programmes, approaches and delivery mechanisms.

With regard to training programmes, it was realised in Dar es Salaam and Manila that due to the heterogeneity of the informal sector, it is important to precisely identify the target groups and the segment of the informal sector concerned. With regard to operators in the “street economy”, who are more likely to move to other jobs, general training programmes on how to establish a business and counselling would be appropriate. In Dar es Salaam, neighbourhood community training programmes of these types were found to be very relevant. With regard to operators at the upper levels of the informal sector with viable businesses, management and specific skills training to improve their businesses were more preferable.

Great demand for consultancy and business advisory services was revealed in all the three cities. Most of the NGOs who work in the informal sector lack the capacity to develop training programmes on business management and practices. The project collaborated with local institutions to develop appropriate training modules and delivery mechanisms. In collaboration with the Philippine Enterprise Development Foundation, modules on business advisory service including a module on occupational safety and health was developed and tested. In Dar es Salaam, a training programme was developed and delivered by the Small Industries Development Organization (SIDO). The pilot projects implemented in the three cities showed that the provision of consultancy services with modules on business regulations, on management, technical training and business practices were highly useful and appreciated by NGOs and informal sector operators.

The projects also indicated that modules on occupational safety and health can be successfully tagged on business management training programmes.

The pilot projects in Manila showed that extension workers could be very effective in delivering training programmes tailored to needs and absorption capacity of information sector operators ; while in Dar es Salaam, the vocational training institutions and SIDO were the main project partners.

Training approaches : taking into consideration the need of operators to be at their business sites every day, the most suitable training approach tested by the project was to run short intensive evening courses. For those who could afford to be absent from their business the day release approach was also suitable. In both cases, a combination of on-the-job training and classroom instruction proved to be effective means of delivery. These approaches were successfully applied in Dar es Salaam.

3.5. Working conditions²

In general, labour legislation is not enforced in the informal sector. The labour inspectorate systems lack the capacity to enforce legislation in household and informal businesses with their peculiar employment relations. In any case, inspection and enforcement of labour legislation are not likely to succeed in household-based enterprises with paternalistic labour relations.

The identified causes of the lack of concern for occupational safety and health issues included information deficiencies, ignorance and lack of relevant skills. The strategy of the project had, therefore, been to strengthen capacity at the City Council Health Services, the informal sector self-help associations and co-operatives to address occupational health and safety problems.

Pilot projects which are still in operation were set up in Dar es Salaam and Manila. A training manual on occupational safety and health was developed and tested in Manila with the collaboration of Save the Children Foundation. Another training programme was developed by the Federation of Free Workers of the Philippines. In Dar es Salaam, a pilot project was established and implemented in collaboration with a local consultant. The pilot projects focused on :

- raising awareness of the most common occupational hazards ;
- training local authority and NGO health workers and informal sector operators on preventive and first-aid methods ;
- provide assistance to set up first-aid clinics run by self-help associations in clusters of informal sector businesses ;
- encouraging associations to set up their own self-regulatory systems through safety and health committees ;
- linking informal sector to existing national primary health care facilities ;
- contributing to alleviating child-care problems of female operators.

Experience gained from these activities indicated that :

- by taking simple measures such as training and awareness raising, the existing primary health services available at the city level can be used to achieve substantial improvements on occupational safety and health and working conditions in the informal sector ;
- the active participation of the city authorities to provide the necessary services and basic infrastructure is crucial to the success of such schemes ;
- due to the heterogeneity of the informal sector, occupational safety and health programmes should be gender and activity specific ;

2. Child labour is the subject of another "Programme on the elimination of child labour" being implemented by the ILO. Therefore, it is not covered under this project.

- measures to improve working conditions should be linked to programmes to enhance productivity, such as credits, training, etc. ;
- trade unions from the formal sector should assist displaced fellow workers in the informal sector ;
- with regard to female operators who normally take children to work, solving their child-care problems is a priority.

3.6. Social security

The project examined two main approaches, namely, extending existing formal sector social protection schemes to cover the informal sector or supporting informal sector indigenous schemes based on voluntary initiatives. The problems involved in extending formal schemes are well known. The main ones are that many formal social security schemes are focused on pensions and not on health insurance which is the main priority for informal sector workers. Additional problems are that the formal social security schemes are too expensive. Furthermore, irregularity of incomes and frequent changes of jobs render regular contributions difficult.

In the Philippines, where both the indigenous and the formal schemes are in operation, their merits and limitations have become apparent. While the indigenous schemes are more appropriate and effective in meeting the needs of operators they suffer from lack of resources and administrative weakness and therefore, their scope and coverage are limited. The recommended approaches by INTER-DEP studies include the strengthening of the indigenous schemes and exploring ways of linking them to resources the formal schemes. This would improve access of the indigenous schemes to the resources available in the formal sector.

The main action project under this work item had been the setting up of a pilot health insurance scheme organized for and administered by five informal sector workers associations with about 1,500 members in Dar es Salaam. In order to ensure ability to contribute, the scheme was limited to the relatively more viable segments of the informal sector. In addition, the designers of the scheme had to take the administrative weaknesses of the self-help associations into consideration.

Based on advisory services provided by the project contacts were established between informal sector associations and private medical centres ; a mutual health insurance fund to defray medical expenses collectively was established with contributions from members of the associations.

Other activities of the project comprised :

- training members of the associations to administer the scheme (collection of contributions, payment of benefits, negotiating with medical centres) ;

- assisting in the design of the scheme (determine size of contributions and benefits, price of medical services, eligibility criteria, etc.) ;
- creating networking among key interested partners (ILO social partners, city authorities, donor community and NGOs) ;
- monitoring the implementation of the scheme.

The following were the main experiences and lessons from the social protection activities implemented by the project :

- even though low productivity is not conducive to the establishment of a comprehensive social protection scheme, there is no conflict between investment in health care aspects of social protection and job creation. At present, most operators in the sector do pay for medical services on an individual basis. The experience of the project tends to support the view that a scheme organized on a collective basis may reduce costs to individual operators and thereby free resources for investment in job creation activities ;
- informal sector producers are willing and capable of contributing to improving social protection based on their priority needs if appropriate schemes can be devised ;
- in planning social protection schemes it is imperative to base them on specific priority needs of the would-be beneficiaries and not on comprehensive packages ;
- given the widespread lack of confidence in formal social protection schemes, while making efforts to reform such schemes and extend them to the informal sector, voluntary self-help schemes should be supported. Therefore, training to strengthen the administrative capacity of self-help associations should form part of such schemes ;
- a certain degree of formalization through registration of associations and its members is required to determine entitlements and beneficiaries.

IV. MAIN LESSONS LEARNED AND IMPLICATIONS FOR DATA COLLECTION AND SURVEY METHODOLOGIES

4.1. The main lessons learned

Conceptual issue and project design

- reconciling the dilemma of the informal sector : the project brought to the fore, the need to take measures to improve working conditions and social protection in addition to efforts being made to enhance productivity. The pilot activities implemented by the project indicated that by combining efforts and existing resources available with national authorities, informal sector self-help associations and

NGOs, substantial improvements can be achieved in health care and occupational safety and health without impairing the ability of the informal sector to generate productive employment.

- the productivity and social protection linkages, the need for institutional collaboration : the linkages between the problems of productivity and social protection demand policy packages for their solution. However, since development agencies dealing with access to productive resources and those providing social services tend to operate in specific and specialized fields, it is essential to establish platforms and fora to facilitate cooperation and exchange of ideas.
- the integrated programme approach could be very useful in tackling the problems of the informal sector. However, for such an approach to be successful, the involvement of governments, city/local authorities, NGOs, social partners, and the informal sector self-help associations is essential. In institutional collaboration and networking among these organizations feasible solutions may be found.
- problem identification : due to the heterogeneity of the informal sector, surveys and studies should be carried out to clearly and precisely identify the problems and target groups prior to the design of projects of this type. Alternatively, this should be built into the project in an action-oriented research manner.
- recognizing the heterogeneity of the informal sector : the informal sector is heterogeneous. It contains, on the one hand, segments with relatively high productivity and incomes where enterprises employ wage labour as well as low productivity, own-account segments, on the other hand. Programmes of security which involve contributions from operators should target the former ; the latter should be considered for tax-financed social assistance.

4.2. Implications for Data Collection and Survey Methodologies

- Survey methodologies : the mixed household and enterprise survey methodology which was tested by the project, proved to have many advantages over other methodologies such as labour force surveys and establishment surveys. Labour force surveys cannot provide information on productivity and income generation while establishment surveys tend to capture only the visible enterprises. Furthermore, since employment creation takes place largely through establishment of new enterprises it is essential to estimate accurately the number of both visible and invisible production units. In addition, the mixed survey methodology enables us to obtain a

comprehensive data in a single sample frame in such a way as to highlight the interrelationships between the various problems facing the informal sector.

- Seasonal variation in economic activity : due to the substantial seasonal variations in the level of activities, data collection should be spread over a reasonably long period.
- Response rate in surveys : the hope for assistance was a factor which motivated many informal sector operators to answer the survey questions. If a lack of follow-up action shatters that hope, non-response rates are likely to increase in future surveys. Therefore, whenever possible, surveys should be followed by technical cooperation projects.

In conclusion, a summary of data requirements for the integrated programme ranked against the main data collection methodologies is presented below.

Data requirements	SURVEY METHODOLOGY		
	Household	Establishment	Mixed
1. Estimations of total number of informal sector production units			*
2. Total number persons engaged/their social economic characteristics	*		
3. Working/operating conditions and social protection			*
4. Production and incomes		*	*
5. Formal/informal sector relationships (legal and production)		*	*
6. Formal/informal institutions and associations			*

BASIC STATISCAL INDICATORS

Table 1 : *Population and GNP per Capita*

	Colombia	Philippines	Tanzania
Population (1993, millions)	35.7	64.8	28
GNP per Capita (1993, US \$)	1,400	850	90

Source : *Trends in Developing Economies, 1995, World Bank*

Table 2 : *Urbanization*

	Urban Population				Population in urban agglomerations of 1 million more in 1990, as % of			
	As % Total population		Av. Annual growth rater (%)		Urban		Total	
	1980	1994	1980-90	1990-94	1980	1994	1980	1994
Tanzania	15	24	6.8	6.4	30	24	5	6
Philippines	38	53	5.2	4.4	33	25	12	13
Colombia	64	72	2.8	2.7	34	38	22	28

Source : *World Development Report 1996, World Bank*

Table 3 : Total Gross output value added (Rural and Urban) by industry group for Tanzania's informal sector

Industry Group	Share of No of Enterprise	Annual Gross Output (T.Shs. Million)	Annual Value Added (T.Shs. Million)	Average Gross Output (T. Shs)	Average Value Added (T.Shs)	Official Formal Economy's Value Added (T.Shs. Million)	Inf. Sector's Annual Value Added as % of Official Formal Economy's Value Added (%)
Agriculture and Fishing	142,109	35,036	20,447	246,542	143,879	358,693	5.7
Mining & Quarry	17,139	1,665	1,159	97,151	67,634	6,975	16.6
Manufacturing	439,540	59,396	29,800	135,132	67,798	20,680	144.1
Construction	116,496	14,577	10,864	125,128	93,256	14,416	74.4
Trade/Restaurant/Hotel	933,915	344,234	104,727	368,592	112,137	83,325	125.7
Transport	49,379	13,796	6,114	279,399	123,814	47,017	13.0
Community and personal services	102,965	18,165	10,307	176,420	100,100	3,619	284.8
Other	0	0	0	0	0	38,811	
TOTAL	1,801,543	486,869	183,418	270,251	101,811	573,536	32.0

Source : National Informal Sector Survey 1991

Table 4 : Tanzania : Informal Sector : Employment by Industry Group, by Geographic Area and by Sex

Industry Group	Dar es Salaam	Other Urban Total	Rural Total	TOTAL			Rural as (%) of Total	Dar es Salaam (%)	Other Urban as (%)	Male as (%) of Total	Female as (%) of Total
				Male	Female	Total					
Agriculture and Fishing	21,835	104,490	110,052	188,063	48,314	236,377	7.75	6.91	16.48	79.56	20.44
Mining and Quarry	0	17,400	4,321	18,723	2,998	21,721	0.30	0.00	2.74	86.20	13.80
Manufacturing	44,219	77,529	404,501	395,247	131,002	526,249	28.50	14.00	12.23	75.11	24.89
Construction	22,327	28,785	112,326	162,216	1,222	163,438	7.91	7.07	4.54	99.25	0.75
Trade Restaurant Hotel	203,200	359,325	651,175	575,389	638,311	1,213,700	45.88	64.31	56.66	47.41	52.59
Transport	4,419	7,758	65,893	75,292	2,778	78,070	4.64	1.40	1.22	96.44	3.56
Community and personal service	19,958	38,858	71,009	116,164	13,661	129,825	5.00	6.32	6.13	89.48	10.52
TOTAL	315,958	634,145	1,419,277	1,531,094	838,286	2,369,380	100.00	100.00	100.00	64.62	35.38

Some Wider Social and Socio-Economic aspects of the Informal Sector

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Note : *The views expressed in this paper are personal and should not be interpreted as reflecting the views or policy of ODA in any way.*

INTRODUCTION

Typically administrators and policy makers who are inexperienced in the informal sector will ask the following questions :

- what is the informal sector ?
- why do I need to know about it ?
- who is involved and what are they doing ?
- should I be doing anything about it and if so what ?
- what impact are my policies having on the informal sector ?

As statisticians our job is to define and deliver the information needed to enable soundly based decisions to be taken on these questions, although our role and level of input for each will obviously vary. To answer these questions properly we should have as wide a knowledge as possible of the informal sector so that we do not mislead ourselves or others through a lack of understanding. However, as a profession we can sometimes run the risk of doing this by become too narrowly focused on technical issues of data collection and analysis at the expense of an appreciation of the wider subject matter.

This workshop has examined and debated some of the wider issues from an economic viewpoint. This paper seeks to open a similar debate on the social aspects by discussing briefly below the above questions from a “social viewpoint”.

What is the Informal Sector ?

There are two quite different socio-economic perspectives on the conceptual framework of the informal sector in the published literature. One is that it is a dynamic engine of economic growth and is an alternative to interventionist models of national economic development. Under this scenario the informal sector is a victim of excessive state intervention in the economy which has diverted

resources to favour a small and inefficient formal sector (Meagher, 1995). However given the right conditions the informal sector would develop rapidly with great potential for employment creation and poverty alleviation.

The alternative viewpoint is also set out by Meagher, "far from representing the entrepreneurial triumph of informal sector activity over state regulation, the rise of informality in the 1980s is seen as an attempt by formal sector capital, acting with the complicity of the state, to reduce wage costs and enhance flexibility by making use of unprotected workers in the informal sector". This viewpoint is based mainly upon experiences in developed countries and Latin America but some researchers think it provides a conceptual framework which may help to understand urban informal sector activity in Africa.

Nearer home, the 1993 SNA includes an extract from the 15th International Conference of Labour Statisticians which defines the informal sector as :

"a group of production units which form part of the household sector as household enterprises or, equivalently, unincorporated enterprises owned by households".

It goes on to split this down further into "informal own-account enterprises" and "enterprises of informal employers".

Whilst this is seemingly technically precise and specific it does nothing to underline the fact that what we are talking about is not a homogeneous group but a large number of people doing what they can to make a living. Some workers in this sector will have a good standard of living and be reasonably secure. Others will barely make enough money to subsist and will live in a state of constant insecurity. Rogerson in a paper on urban poverty in South Africa (Rogerson, 1996) underlines this by dividing the informal sector conceptually into two distinct categories of activities :

- survivalist enterprises - these represent a set of activities undertaken by people unable to secure regular wage employment or access to an economic sector of their choice. Generally speaking these have very low income, little capital investment, virtually no skills training and very constrained opportunities for business expansion. The majority of these enterprises are run by women and their prime features are poverty and a desperate attempt to survive.
- micro-enterprises or growth enterprises - these are very small business, often involving only the owner, some family members and possibly a handful of paid employees. They usually lack all formal business trappings (such as business licences or operating permits) and have only limited access to capital and business

skills. However such enterprises do have the potential to develop into larger businesses given the right circumstances.

Although this categorization is based upon the South African experience the same picture is evident elsewhere and in order to investigate and analyse the informal sector sensibly we should constantly bear in mind its diversity. Clearly questions targeted at one of the above groups may have little relevance for the other and a simplistic analysis of the sector as a whole could easily generate erroneous conclusions. We should also remember that these are people we are looking at and not just "production units". This is not simply an emotive plea. It reflects also that people are endlessly complex and that we run the risk of underestimating their flexibility and speed of response to economic and social changes if we classify them unthinkingly in the same way as we do formal sector enterprises.

Why do I need to know about it ?

From a social viewpoint the key response to this question is that the sector is important as it provides a livelihood for millions of people. The ILO have estimated that up to 60% of urban workers in Africa could be employed in this sector - and in some countries the figure is higher. In the short term this is more likely to increase than fall as economic reform and structural adjustment reduce the number of unskilled jobs in the government sector and the formal sector within Africa continues to show little sign of being able to absorb surplus labour.

Another important aspect is the opportunity it gives for alleviation of poverty. The living standards surveys carried out by the Ghana Statistical Service (GSS, 1995) in the late 1980s / early 1990s found that people working in the informal sector, either as employees or as "non-farm self-employed", had a higher living standard than did either food crop or export crop farmers. It is not clear whether there is a causal link here, and intuitively one would expect that people who join the marginal end of the informal sector do so only because they cannot find better livelihood security in formal sector employment. Nevertheless continuing urbanization and increases in informal sector employment suggests that conditions there are better than elsewhere - even if the move is out of necessity rather than choice and is being forced by deteriorating circumstances in more traditional sectors. The implication being that without the informal sector conditions for those involved would be even worse.

Who is involved and what are they doing ?

Formal methods of surveying and recording the activities and areas of work of those active in the informal sector have been covered elsewhere in the workshop and there

have been several contributions from those countries who have carried out such surveys setting out their findings. Without going over similar ground the opportunity is taken here to highlight the gender split of those involved and to raise a question on micro-enterprise growth and employment opportunities in the sector.

In Ghana 75% of non-farm enterprises are operated by women. Within this total they run nearly 90% of the trading enterprises and nearly 70% of the manufacturing enterprises ; but only 24% of other businesses, which includes personal and household services, construction, fishing and transport, etc. (GSS, 1995).

According to the UNDP (1995) the situation is similar elsewhere in Africa : in the Congo and Zambia women account for two-thirds of informal production in the service sector (excluding transport) ; in Botswana nearly half of employed women in 1984-85 were working in the informal sector compared with only 10% of employed men.

However, despite the apparent benefits and opportunities for women in the informal sector, micro studies in South Africa indicate (Liedholm and McPherson, 1991, quoted in Rogerson, 1996) that they were disadvantaged compared with men. Their enterprises grew more slowly than men's, they employed fewer people and in general earned less than men and tended to concentrate at the survivalist end of the informal sector. This was not because women lacked business ability, as there were several instances of successful women entrepreneurs, but more to do with lack of access to material resources including finance and credit. Men faced the same problems of access but it is noticeable that the fastest growing areas of small scale activity were male dominated.

More widely, studies from a range of countries show that successful informal sector activities tend to be run not by the unemployed but as a second occupation by skilled people in formal sector employment with access to capital and other resources (Meagher, 1995). On the other hand those enterprises started by the unemployed, with perhaps low levels of education and no business skills or training, are in the survivalist part of the informal sector where entry barriers are lowest but competition is fiercest and income at bare subsistence levels.

The point has already been made that pressure on the informal sector to provide additional employment is more likely to increase than decrease with the reduction of unskilled jobs in the government sector and little sign that formal sector employment will increase.

However although the informal sector has expanded rapidly in terms of output and employment, few enterprises, if any, ever grow to become medium or large sized firms (Ndua and Ng'ethe, "Role of the Informal Sector" p32, quoted in Fafchamps,

1994) and the growth has been based on increasing numbers of enterprises, ie “extensive” growth rather than “intensive” growth. Fafchamps goes on to argue that this state of affairs has existed for too long to be purely a transitional phenomenon and that there must be some inherent reason why they do not grow. Possible reasons he identifies include the existence of niche markets which are not well served by large competitors (such as the provision of cheap low-quality goods for poor consumers or alternatively high quality craft goods) ; and cost advantages which favour micro-enterprises and large enterprises but penalize medium sized enterprises¹ thereby discouraging the one from growing incrementally into the other.

It is not clear whether the conditions which prevent growth can be removed by Government action but this would appear to be crucial. Without it employment within the informal sector would seem to be increasingly dependant upon survivalist enterprises and increasing numbers of people trying to obtain a living from an already congested market with limited opportunities for growth.

Should I be doing anything about it and if so what ?

It is not the job of national statistical organizations to set national economic or social policy. However if statisticians are to play an intelligent part in the debate on how best to encourage the growth of the informal sector and to contribute information which is relevant and appropriate they need to be aware of the broader economic and social options open to the policy maker as these will direct and inform data collection activities.

Two conceptual frameworks for the informal sector are set out above. Under the first, “dynamic engine”, model the generally accepted policy prescription is that Governments should do all that they can to encourage growth by providing access to training, credit and other resources and to withdraw from direct involvement with the economy.

Under the second, more pessimistic, model Governments should again be providing training, credit and marketing support to the informal sector which the free market will not provide. However, as the growth in the informal sector is occurring in direct response to the attempt by formal sector capital (both local and international) to preserve its position, proponents of this view also suggest that the ability of the sector to be anything else than a source of cheap labour and basic survival for those involved is limited. The key constraint is perceived to be the

1. E.g. - Business laws and employment regulations which micro-enterprises can avoid but which medium sized enterprises cannot. And at the other end of the scale returns to scale and government policy which deliberately favours large businesses against small and medium ones.

whole process of structural adjustment and its emphasis on economic reform and downsizing in the public sector and the parallel drive to reduce labour costs in the formal sector, and whilst it continues national Governments' freedom of manoeuvre is limited.

This paper does not attempt to evaluate which, if either, of these viewpoints is right and as a result what Government policy should be. Both have arguments in their favour but neither seem likely to provide a full answer to explain the past growth of the informal sector and how best to nurture its beneficial growth. However, when setting policy national Governments will be acting explicitly or implicitly on the basis of these or other perceptions. Government statisticians should ensure that they know which, and what the implications are for their data collection and analysis activities, by maintaining a close relationship and a continuing dialogue with the appropriate policy makers.

What impact are my policies having on the informal sector ?

As well as requiring baseline data about the informal sector administrators and policy makers require information to monitor and evaluate the success or otherwise of their policies. It is not a simple task. At the survivalist level informal sector enterprises will be fluid and flexible, changing fast to meet new circumstances and difficult to track over time in a consistent way. More successful enterprises may be less fluid and easier to codify but if they exist at the margins of legality or beyond they are likely to be reluctant to co-operate with formal surveys which seek to monitor the effectiveness of Government policy. Both may have activities which are locality specific requiring specialized survey techniques to identify and cover. On top of this administrators and policy makers will want monitoring information quickly.

There is unlikely to be any one information system which will meet all the requirements as :

- almost by definition administrative systems will not provide any useful information on this sector.
- traditional large scale surveys provide valuable baseline information but are not suitable for monitoring as typically they take considerable time to provide useable results. In addition they rarely provide detailed information at the small area level.
- micro-studies report quickly and often provide personal or individual insights that bigger surveys miss, particularly if they use participatory appraisal techniques to uncover the views and perceptions of the target group themselves.

However, such studies are usually area and time specific and even if designed appropriately there are problems of generalizing to other areas and in providing a national picture. NSOs rarely have experience or expertise in carrying out such exercises.

The World Bank's CWIQ (Core Welfare Indicators Questionnaire) survey which produces fast results by means of pre-specified analyses and machine scan-able questionnaires may be a partial solution to the problem of getting relevant and timely information. But, it is still at a comparatively early stage of development and has not been tested on the type of detailed and open ended questions which are required to gain a better understanding of the complexities of the informal sector and its response to new Government initiatives.

In the absence of a single best choice for monitoring a multi-track approach using a variety of different data collection techniques is probably required. NSOs are unlikely to have either the resources or the expertise to do this themselves and so will need to collaborate with academics and other researchers to make the best use of available resources. Again the need for close links with the responsible policy makers is emphasized as this is critical in ensuring that their needs and requirements are met as far as is possible.

CONCLUSION

This paper has looked at some of the wider social and socio-economic aspects of the informal sector, e.g. two conceptual frameworks for the sector ; the split between survivalist and growth enterprises ; the disadvantaged role of women and the unemployed in the sector ; the problems of micro-enterprise growth ; problems in how to monitor policy impact ; and the need for close links with policy makers and researchers in academia and elsewhere. These issues have not been discussed in depth but simply highlighted with the aim of increasing general awareness amongst statisticians. In turn it is hoped that by doing this statisticians will be better informed and hence better able to produce useful and reliable information on the sector.

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