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The 1-2 Survey Methodology:
A Data Collection Strategy for
Informal Sector & Informal Employment Statistic

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1. Background and Problem Analysis

The statistical measurement of employment in and contribution to GDP of the informal sector (IS) continue to be a major challenge for developing countries and economies in transition. Not many countries conduct surveys to measure the employment of this sector on a regular basis, and even fewer countries measure its contribution to GDP. Most developing countries, therefore, do not have time series for monitoring employment trends, the contribution to economic growth and structural changes of the informal sector.

Some of the main reasons that explain the lack of comparable data across time and countries are limited resources of national statistical systems; the lack of international guidelines to assist countries in selecting an affordable data collection methodology; and the lack of consensus on a harmonised statistical definition of the informal sector. The integration of the collection of data on the informal sector into regular statistical programmes requires considerable additional resources in terms of initially setting up the system and subsequently for periodic conduct of the surveys. Regular collection of data on the informal sector usually involves intensive additional work on the construction of sampling frames and survey design, the development of questionnaires with specific probing questions, and additional data collection operations. Besides, survey design and operations, in particular, are usually more complex as informal sector units can be mobile or difficult to locate and their business is often seasonal and sometimes short-lived.

A variety of survey tools have been used for measuring the informal sector, including independent ad-hoc surveys, mixed household-enterprise surveys, labour force or other household surveys, enterprise/establishment surveys and economic censuses.¹ In setting up a system for regular collection of data on the informal sector, the diversity of possible options can be confusing. Besides, there is insufficient information on the merits and the caveats of these various methodologies. Although there are comparative discussions of the different survey tools in the literature, they often remain at the theoretical level. Thus, there is still a need for assessing these methodologies for estimation of challenges and the utility of results. Also, the scope and coverage of the various types of informal sector surveys are different, which complicates their comparison and applicability. Moreover, in some countries different methods have been employed over time for different informal sector surveys. Thus, in most cases, the survey data cannot be used as official statistics for labour statistics and national accounts.

The informal sector as defined by the 15th ICLS of the Resolution Concerning Statistics of Employment in the Informal Sector² situates informal sector enterprises within the group of household unincorporated enterprises with at least some production for sale or bartering. The fact that the informal sector is characterized by national practices in terms of concepts used, data coverage and specification of definitional criteria, it makes it methodologically difficult to collect internationally comparable informal sector data. For some countries, the definitions and operational criteria change even across surveys and over time. These issues will be discussed in more detail in section 4 of this paper.

¹ A detailed account of the survey tools and their main characteristics can be found in the draft chapters of the Delhi Group's Manual on Informal Sector and Informal Employment at http://mospi.nic.in/informal_sector_manual.pdf

² Resolution concerning statistics of employment in the informal sector, 1993. 15th International Conference of Labour Statisticians (ICLS).

2. The Development Account Project: “Interregional Cooperation on the Measurement of the Informal Sector and Informal Employment”, (2006-2009)

The Interregional Development Account Project, the implementation of which is lead by ESCAP and implemented together with two other United Nations Regional Commissions, the Economic Commission for Latin America and the Caribbean (ECLAC) and the Economic and Social Commission for Western Asia (ESCWA), aims to improve the availability of sound and internationally comparable informal sector and informal employment data, and to strengthen analysis for evidence-based socio-economic policies at national & international levels.

The project experiments the 1-2 Survey methodology, which utilizes the Labour Force Survey (LFS) in the first phase as a tool to collect information on informal employment and some informal sector data items. The data collected through the LFS is used to construct the sample frame for the second phase, which is an Enterprise Survey with household unincorporated enterprises with at least some market production (HUEMs) as the statistical unit.

By targeting countries that have regular LFS programmes, the project aims to conduct data collection with already available resources to the extent possible, and hence enables the sustainability of the informal sector data collection programme. As part of the project, the 1-2 Survey methodology is being piloted in five countries, Mongolia, Palestine, Philippines, Sri Lanka and Saint Lucia, all of which have regular LFS programmes.

The project outputs are detailed documentation of the implementation process, the results, and the advantages and caveats of the methodology. In this way, the project intends to contribute to the compilation of specific informal sector data collection options that have been tested, are cost-efficient and sustainable in an effort to assist countries in evaluating and narrowing down their choices.

3. The Data Collection Methodology

The 1-2 Survey methodology broadens the scope of data collection from informal sector enterprises to all HUEMs. Informal sector enterprises are a subset of HUEMs. Thus, countries collect data on all HUEMs, regardless of location, industry, employment size, etc., and then identify the subset of informal sector enterprises according to national definitions, if any.

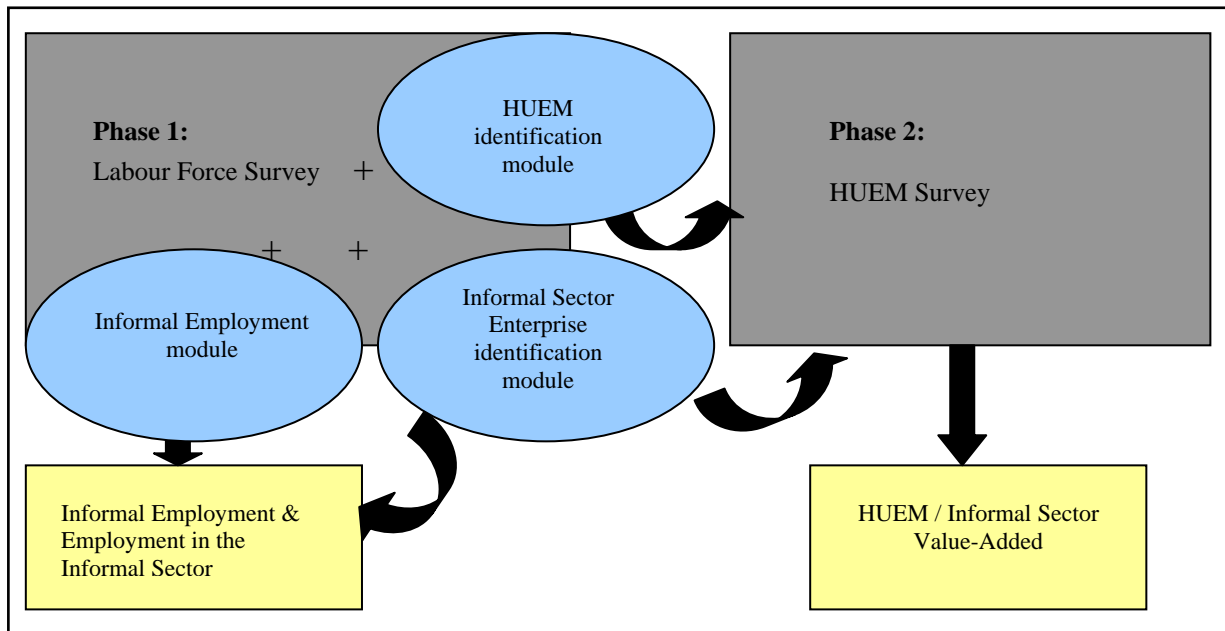
The 1-2 Survey requires two sample frames - the sample frame for the Phase 1 Household (Labour Force) Survey and the other for the Phase 2 Enterprise or HUEM Survey. From the sampled households in the first phase, HUEMs are identified which form the sample frame for Phase 2. Thus, HUEMs are the statistical unit for Phase 2.

3.1 Phase 1 of the 1-2 Survey

The main objectives of Phase 1 are to estimate informal employment and employment in the informal sector, to identify HUEMs and construct a sample frame for the second phase Enterprise Survey. Identification of the informal sector enterprises within the group of HUEMs is based on national criteria, if defined. Thus, as illustrated in Figure 1, Phase 1 constitutes an existing LFS with a sufficiently large sample of households which is preferably conducted on a quarterly or monthly basis; and modules attached to or integrated within the

LFS which are designed to identify HUEMs, informal sector enterprises, and informal employment, including jobs in the informal sector.

Figure 1: The 1-2 Survey Methodology



The LFS is designed in relation to its main objective, i.e., measurement of employment or unemployment, generally involving a typical multi-stage sample with an area-based frame at the penultimate stage and households or housing units at the last stage. The recommended design for Phase 1 is preferably a single questionnaire with the additional modules integrated into the LFS. However, if countries wish to retain their existing LFS questionnaire, a separate questionnaire module can be used to complement the main LFS.

Note that employment in the informal sector and informal employment though related, are distinct concepts. The former refers to number of persons employed in the informal sector, while the latter includes the former plus own-account workers who produce for own final use and contributing family workers, employees with informal jobs in the formal sector as well as unincorporated private enterprises engaged in non-market production.

The advantages of anchoring the 1-2 Survey on an existing LFS are that the LFS provides basic information on total employment and employment characteristics for the entire population, and when suitably enhanced, it can serve as an instrument to derive data for estimating informal employment, and employment in the informal sector as a share of total employment. A more updated frame of HUEM units can be derived as compared to lists drawn from, for instance, economic or population censuses, which are conducted less frequently. A quarterly LFS also allows for the measurement of seasonality in informal sector employment. Also, riding on an existing data collection vehicle, can make the process cost-efficient and sustainable.

However, collecting information about enterprise characteristics from paid employees, in particular, could affect the accuracy of information. Paid employees may not know the characteristics of the enterprise where they work (e.g., legal status, accounting practices, registration with the public authorities, employment size, etc.). In addition,

identification of HUEMs through employees gives rise to the need for complicated weighting procedures, as HUEMs surveyed in the second phase can no longer be associated with the households, hindering the efficient use of population weights. Also, the use of proxy respondents in Phase 1 could affect the quality of the information.

3.2 Phase 2 of the 1-2 Survey

The main objective of Phase 2 is to obtain data for estimating the contribution of HUEMs and the subset of informal sector enterprises to GDP. Data relating to the production activities of the HUEMs collected in Phase 2 are helpful in compiling the production account of the households sector in the national accounts. Either all HUEMs identified through Phase 1 are surveyed in the second phase or, provided the number identified is large enough, a sub-sample of HUEMs is selected for Phase 2.

The owner or operator of the HUEM (employer or own-account worker) is the required respondent for Phase 2. If the premises are fixed, the interview is done at the premises of the HUEM. For household-based operators the interview is conducted in the household, and for enterprises operating in a location other than the house of the owner, the interview should be conducted at the location of the enterprise. For non-fixed premises (i.e. mobile enterprises), the interview has to be conducted in the owner's household.

It is recommended that the list of variables for Phase 2 should be restricted to general-purpose economic statistics and to the data items suggested by the international recommendations on business statistics. However, countries may wish to collect a broader set of characteristics of HUEMs for purposes of industrial policy and other uses on an optional basis. Data collection for Phase 2 is undertaken after Phase 1 enumeration is completed. However, preferably, the data collection for the second phase should be completed immediately following the first phase, which would have obvious advantages of operational efficiency and quality of data. In designing the questionnaire, short reference periods, preferably a month or shorter, should be used to allow for recall of requested information.

4. The Concept of HUEMs and the Informal Sector

The main source for the definition of the informal sector is the 15th ICLS Resolution Concerning Statistics of Employment in the Informal Sector. As mentioned above, according to the 15th ICLS Resolution, informal sector enterprises are a subset of household unincorporated enterprises with at least some production for the market. Figure 2 illustrates the relationship between household unincorporated enterprises, HUEMs and informal sector enterprises.

Figure 2: Relationship between Household Unincorporated Enterprises, HUEMs and the Informal Sector

Household Enterprises					
Producing at least some goods and services for market (HUEMs)				Producing goods and services only for own final use	
Formal Sector		Informal Sector			
Non-agricultural activities	Agricultural activities	Non-agricultural activities	Agricultural activities	Non-agricultural activities	Agricultural activities

Embodied in the definition of HUEMs are the following three criteria:

(i) Legal organization

A HUEM is not a separate legal entity independent of its owner. Thus, the enterprise cannot engage in transactions or enter into contracts with other units, nor incur liabilities on its own behalf. The owners have to raise the necessary finance at their own risk and are personally liable for any debts or obligations incurred at different stages of the economic activity. Regarding the ownership of the enterprise, fixed and other capital used to produce goods or services does not belong to the enterprise as such, but to the household members who own the enterprises.

(ii) Book-keeping practice

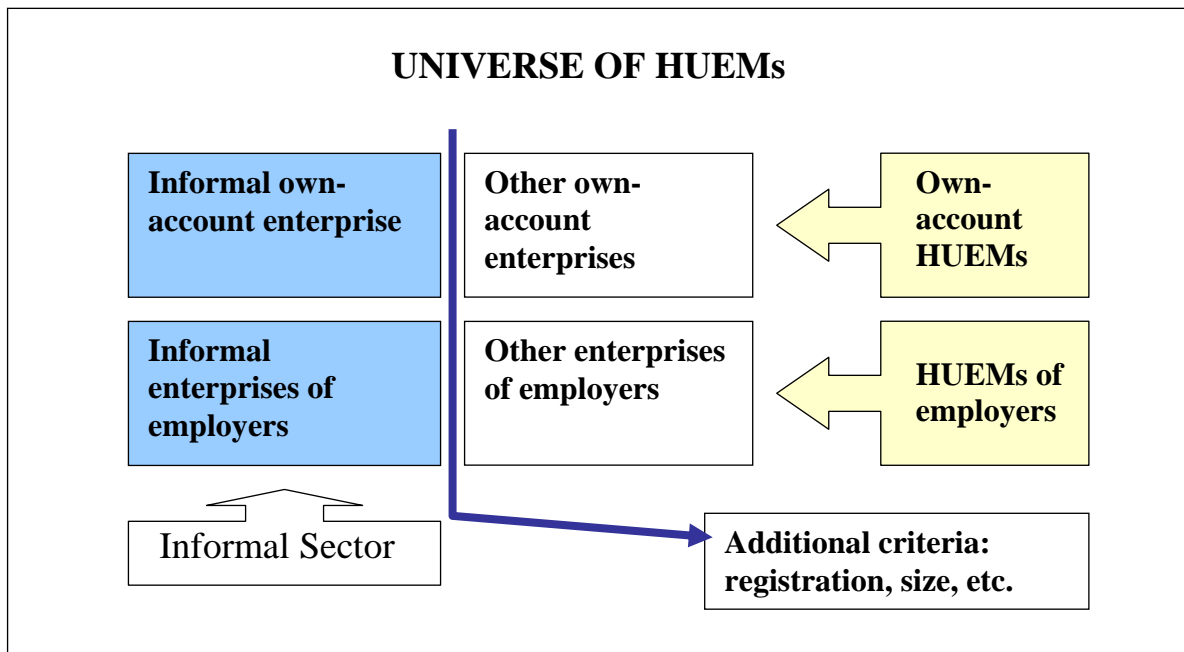
A HUEM does not keep a full set of accounts for the enterprise including a balance sheet of assets and liabilities. Since it is not a separate entity from its owner (the household), it is difficult to differentiate expenditure for production from household expenditure. In addition, capital assets, such as buildings or vehicles, are indistinguishably used for business and household purposes. Thus, there is no practical need for maintaining balance sheets of assets and liabilities of the business.

(iii) Product destination

A HUEM is different from other household enterprises in that it sells (or barter) at least part of its production on the market. This implies that household unincorporated enterprises engaged *exclusively* in production of goods or services for own final use, are not HUEMs. These include households unincorporated enterprises exclusively engaged in subsistence production, production of paid domestic services or owner-occupied dwelling services.

In the 15th ICLS definition, household unincorporated enterprises that employ at least one paid employee on a continuous basis (enterprises of employers) are separated from those that employ paid employees on an occasional basis or contributing family workers (own-account enterprises). As illustrated in Figure 3, the informal sector subset of HUEMs in both groups is determined through the application of additional national criteria related to registration, size, etc., based on national considerations and circumstances.

Figure 3: Additional Criteria for Identifying Informal Sector Enterprises



According to the 15th ICLS definition, the non-registration criterion can refer to the registration of the employees in a given enterprise or to the registration of the enterprise itself. Registration requirements vary widely across countries and may even change over time within the same country. Contracts that bind the employer to pay certain taxes or contributions to the social security of the employees and types of employment that are subject to labour legislation could indicate employee registration. Often, businesses have to register with multiple entities—e.g., Ministry of Industry or Commerce or as defined by factory or commercial Acts; tax authorities; social security funds; industry-specific regulatory agencies, etc. This leaves the question as to which registration is relevant for identifying the informal sector. In addition, there is flexibility for countries in terms of whether to choose to apply the non-registration criterion to all types of enterprises.

In terms of employment size it could refer to the number of employees on a continuous basis *or* the total number of employees *or* the total number engaged in the business during the reference period. Hence, the first factor that may undermine comparability of informal sector enterprises identified based on employment size is the scope of this criterion. Another way in which countries set the cut-off size for the employment size criterion is by relating it to the cut-offs used for establishments included in the list frames. For instance, if the establishment survey covers all establishments with employment size of ten or above, then the size criterion for informal sector establishments is less than ten workers. These cut-off thresholds may differ by industry and survey period. The Delhi Group recommended that for purposes of international reporting, five should be adopted as the cut-off size.³

There are also other flexibilities and considerations that hinder the development of a harmonized definition of the informal sector. The 15th ICLS leaves the inclusion of agricultural production units in the scope of informal sector data collection as optional. The exclusion of agricultural enterprises will result in an incomplete measure of the informal sector enterprises across industries and geographical areas, if not complemented by other

³ http://mospi.gov.in/manual_10th_meeting.htm

survey information. Also, there are some discrepancies in the use of terminology and concepts such as sector, households and enterprise between the 15th ICLS and the 2008 System of National Accounts (SNA), which contribute to the ambiguity of an informal sector definition.

5. The Refined Definition of HUEMs

In the implementation of this project, extensive discussions have taken place on using the concept of HUEMs to facilitate the study of the informal sector, including the need to refine the definition of HUEMs and to outline a set of standard criteria to identify HUEMs across countries, given the difficulties in harmonizing the definition of the informal sector across countries.

Deliberations as part of this project have led to the recognition of the need for an international definition of households as production units. It has been agreed that the current working definition of a HUEM should be the basis for that definition, and that the concept of HUEMs should be recommended as an international standard to facilitate the study of the informal sector, given that the informal sector itself may be defined by countries based on national considerations and circumstances.

In refining the definition of HUEMs, focus is narrowed to activities that constitute regular 'business' activities reflecting 'entrepreneurial spirit'. This therefore, refers to units selling or bartering a 'significant part' of their produce on a 'regular' basis, and excludes subsistence farmers as well as non-agricultural households with incidental sales only. However, it is recognized that the terms 'significant part' and 'regular' need to be operationalized.

Project countries have agreed that the criteria to select household unincorporated enterprises for interviewing during Phase 2 of the 1-2 Survey should be:

- a. Employer or own-account worker
- b. Legal status: unincorporated
- c. At least selling or bartering some goods and services in the market

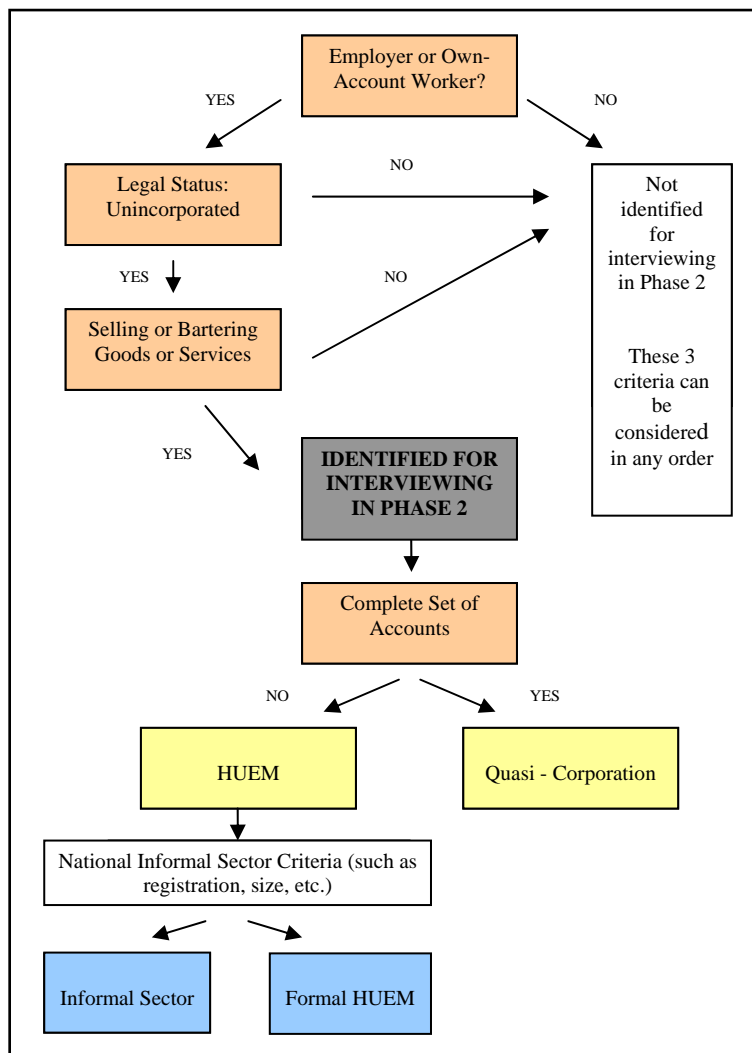
Based on these criteria, it is recognized that the coverage of Phase 2, in addition to HUEMs, should be broadened to include quasi-corporations. Given that the statistical unit of both a quasi-corporation and that of a HUEM is a household unincorporated enterprise, and since none of the project countries have a data collection instrument in place that captures the output and value added of quasi-corporations, the 1-2 Survey is considered a suitable instrument to collect this information for both HUEMs and quasi-corporations. However, it is recognized that countries should, in principle, as in line with 2008 SNA, allocate the output and value added of quasi-corporations to the corporate sector, if possible.

Project countries agree that agriculture should be a part of the HUEM sector, even though it may be excluded by definition from the informal sector in some countries. Countries should, therefore, collect information on the output and value added of agricultural HUEMs for national accounts to be exhaustive. However, whether this information should be collected through the 1-2 Survey depends on other data collection instruments countries have in place for this purpose.

Countries may have their own national definitions of the informal sector (based on national regulations/practices on registration, size criteria, etc.) and informal employment (based on national regulations/practices on pay slip, type of contracts, benefits, etc.), and it is up to countries to decide if they want to separate HUEMs into informal HUEMs (i.e. the informal sector) and formal HUEMs.

Figure 4 summarizes the selection of units for interviewing in Phase 2 and the criteria to identify HUEMs.

**Figure 4: Refined Definition of HUEMs:
Household units identified for Phase 2 and agreed Criteria to identify HUEMs**



Thus, in order to facilitate international comparison, by the creation of a broader grouping in the household sector, HUEMs are defined at a level higher than the informal sector. The refined definition of HUEMs forms the basis for more systematic and exhaustive collection of data for national accounting purposes.

Regarding the periodicity of the cycles of the 1-2 Survey, it is essential that Phase 1 is implemented every time the LFS is conducted. Phase 2 should be implemented in at least three year cycles. Regular data collection through the enhanced LFS can be used to update

the data for the interim years, when Phase 2 is not implemented, for extrapolation of GDP estimates for national accounts compilation.

6. Conclusions

The Development Account Project “Interregional Cooperation on the Measurement of the Informal Sector and Informal Employment” is piloting the 1-2 Survey methodology as a tool to implement a data collection strategy to measure the informal sector and informal employment while seeking an exhaustive measure of the household production account. The 1-2 Survey methodology builds on an existing quarterly LFS which serves as the first phase to collect information on informal employment and employment in the informal sector as part of labour statistics as well as gathers information to construct the sample frame for the Enterprise (HUEM) Survey in the second phase. The second phase collects information to estimate the output and value added of HUEMs and the informal sector to GDP. The integrated 1-2 Survey methodology is less resource-intensive and can ensure the sustainability of data collection operations.

7. References

- 1) This paper is compiled on the basis of the following project resources:
 - a) The 1-2 Survey: A data collection strategy for informal sector and informal employment statistics, ESCAP and UNSD (*work-in-progress*)
 - b) Report of ESCAP Workshops: Workshop on Estimating HUEM and Informal Sector Value Added using 1-2 Survey Data, 25-27 May 2009; and Workshop on Informal Employment and Informal Sector Data Analysis, Tabulations and Report Writing, 28-29 May 2009
- 2) Resolution Concerning Statistics of Employment in the Informal Sector, adopted by the Fifteenth International Conference of Labour Statisticians (January 2003)