Overview

Introduction to the manual
Issues with international definitions
Data items
Measurement methods
Derived variables and indicators
Introduction to the manual

Requested by the ICLS
Resolution concerning statistics of employment in the informal sector, 15th ICLS, 1993

Collaborative effort
National and international experts
Delhi Group - Expert Group on Informal sector statistics
WEGO - Women in Informal Employment: Globalizing and Organizing

Two concepts
The informal sector - based on economic units
Informal employment - based on jobs held by employed persons


Introduction to the manual
8 chapters

Introduction
International definitions
Measurement methods
  Household-based surveys
  Establishment-based surveys
  Mixed surveys
Tabulation, reporting and dissemination
Use in national accounts
**Introduction to the manual**

**Most important message**

Statistics on informality should be based on surveys that measure the informal sector and informal employment directly.

As opposed to using indirect estimates.

Data collection programme should be coherent and integrated with regular national production and labour statistics.

Few countries carry out regular surveys on informality because:

(a) There is a lack of interest from policy makers and
(b) They are expensive and difficult to carry out.

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**International definitions**

**The informal sector**

Refers to...

Economic units that produce goods or services for sale in the market, whose primary objective is generation of employment and income, rather than maximization of profits or return of investments.

Examples:

Street vending, Shoe shining, Petty trade, Small scale manufacturing, Tailoring, Repair of vehicles, personal and household goods, Transport of passengers and goods, Construction and renovation of dwellings, Money lending and currency exchange.

Adopted by the 15th ICLS in 1993.

Resolution concerning statistics of employment in the informal sector.
Compulsory:
- **Economic unit is not constituted as a separate legal entity**
- **Economic unit produces for sale in the market**
  - Excludes units producing exclusively for own final use
- **Economic unit should not have a complete set of accounts**

Optional, to be determined by national circumstances
- If the owner is an own account worker
  - Economic unit is not registered
- If the owner is an employer
  - Size of the economic unit is below a certain threshold
  - Economic unit is not registered
  - Employees in the economic units are not registered for tax or social security

Registered under specific forms of national legislation
- Factories’/commercial acts,
- Tax/social security laws,
- Professional groups’ regulatory acts, etc.

As distinct from local regulations for issuing trade licenses or business permits
- Because they are governed by administrative regulations that may vary from region to region and in time
- Because they do not affect the way the units operate and behave

Limitation: size of informal sector will depend on changes in regulations or in their application
International definitions

Size

Small size of each establishment within the economic unit in terms of employment

- The number of employees employed on a continuous basis (ideal)
- The total number of employees, including those employed on an occasional basis
- The total number of persons engaged during the specific reference period, including the entrepreneur, the business partners, and the contributing family workers

Limitation: size does not necessarily reflect organization or objectives of the unit

International definitions

Informal sector - Activities excluded

Activities beyond the SNA production boundary

Unpaid production of services for own final use and for the use of other households

Production of goods exclusively for own final use when none of the production is sold or bartered

Subsistence agriculture, construction of own dwellings, manufacture of wearing apparel, furniture, water and fuel collection, etc.

Paid domestic workers

Are excluded because they do not work in market enterprises
Self-employed domestic workers may be included if they satisfy the definition criteria
International definitions

Informal sector - Activities included, if they satisfy the definition criteria

Agricultural and related activities
- Especially when the objective is to measure employment in the informal sector
- But may be excluded from measurement for practical purposes, especially if they can be covered in agricultural surveys

Rural areas
- But may be excluded for practical reasons, especially if carrying out the first informal sector survey

Professional and technical services
Outworkers who are self employed
- Outworkers who are employees are excluded
- Outworkers who are self employed are included if they satisfy the criteria

Production of goods mainly for own final use when some of the production is sold or bartered
- Broader definition of market enterprise than SNA because important to include all market activities into account, even if marginal

Illegal and underground activities

Informal employment

Refers to ...
- Employed persons who by law or in practice, hold jobs that are not protected by labour legislation, are not subject to income tax or entitled to social protection and employment benefits.

It includes:
- Informal employment within the informal sector
  - Most employed persons who work in the informal sector (except employees covered by labour laws)
- Informal employment outside the informal sector
  - Informal employment in the formal sector
  - Informal employment in households

Adopted by the 17th ICLS in 2003
- Guidelines concerning a statistical definition of informal employment
- Following recommendations of the Delhi Group in 2001
The informal sector and informal employment are related concepts.

International definitions

**Informal employment groups**

**Entrepreneurs (own account workers or employers):**
All those working in informal sector production units

**Workers who produce exclusively for own final use**
All (if considered employed)

**Contributing family workers:**
All

**Employees:**
All those working with "informal employment relationships":
Not covered by social security system (if not universal)
No entitlement or no possibility to benefit from
Paid annual or sick leave, maternity leave
Compensation in case of dismissal
Risk of dismissal without advance notice
Other criteria (not sufficient)
Lack of written contract, casual/temporary nature of job

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**De jure informal jobs:** employees are not covered by national legislation

**De facto informal jobs:** employees are covered by national legislation, etc., but not in practice.
**Issues with international definitions**

Lack of international comparability

**Definition set of criteria allow different national definitions**

- **For informal sector**
  - The compulsory criteria (e.g., bookkeeping, legal organization) are not always used
  - Different cut-off points for size, when used

- **For informal employment**

**Differences in coverage**

- Exclusion of agriculture
- Exclusion of secondary jobs
- Inclusion of paid domestic employees in informal sector
- Exclusion of professionals and technicians from informal sector
- Exclusion of rural areas
Measurement methods
Data items

Persons employed in the informal sector and in informal employment
  - Number of persons
  - Demographic and labour characteristics

Informal sector units
  -Numbers
  - Characteristics (such as size, industry, etc.)
  - Production, sales and costs

Informal sector entrepreneurs
  - Number
  - Demographic and labour characteristics of entrepreneurs
  - Demographic and labour characteristics of their households

Characteristics of persons
  - Sex, age group, level of educational attainment, urban/rural location

Characteristics of jobs (held by persons)
  - Status in employment, occupation, hours of work, type of contract, income related to employment

Characteristics of units (where persons work)
  - Kind of economic activity (industry), institutional sector, size of unit, type of workplace (with premises, household-based, itinerary), type of production unit (formal, informal own account enterprise, enterprise of informal employers, households)
Measurement methods

Recommended frequency of data collection

**Employment in the informal sector**
- Once a year

**Number and characteristics of informal sector units**
- Every five years

**Informal employment**
- Can be the same as for employment and unemployment statistics
  
  However, in order to capture seasonal and sporadic activities, measurement should cover the whole year

Measurement methods

**Types**

**Direct estimation**
- Labour force surveys (household-based surveys with a labour force component)
- Establishment-based surveys
- Mixed household and enterprise surveys

**Indirect estimation**
- Macro-economic estimation
- Comparative analysis of statistics from different sources

Methods are not mutually exclusive
- Each has strengths and limitations
- Can be combined to improve coverage

Choice of survey method depends on
(a) The data items that need to be measured;
(b) The existing surveys and sample frames in the country;
(c) Financial and human resources
Measurement methods

Measurement methods

Minimum requirements

Sound sample design
- Sample frame should be comprehensive
- Sample size should be adequate for required detail in statistics
- Informality should be a basic objective of sample design
  - Selection of PSUs based on density of informal sector enterprises/entrepreneurs
  - There should be enough observation units in all industries and areas

Inclusion of relevant questions in standard questionnaire
- Registration of unit, book-keeping practices
- Size of enterprise
- Social security coverage, payment of taxes, entitlement to holidays

Coverage of all jobs and economic units
- Main and secondary jobs, household-based and itinerant economic units, all kinds of economic activities
- Coverage of all seasons and sporadic activities

Labour force surveys

What they do:
- Collect detailed information about labour force characteristics of persons
- Using a standard questionnaire

Data items
- Number of persons in the informal sector
  - and characteristics relating to their work, their person and their households
- Number of informal sector entrepreneurs
  - and characteristics relating to their work, their person and their households
- Number of persons in informal employment
  - and the characteristics related to their work, person and households
Measurement methods
Labour force surveys - Advantages

Existing survey infrastructure
- Low cost of adding a set of questions on informality

Coverage
- Of all jobs, all branches of economic activity, all informal workers (including employees & unpaid family workers)

Coherence
- Data on informal sector and informal employment can be related at micro-level to other information collected in the same survey
- Informal employment and working conditions measured at macro-level along with employment in other sectors and unemployment

Measurement methods
Labour force surveys - Limitations

Limited data items
- Do not cover informal sector enterprises nor their characteristics

Response errors
- Proxy respondents may not know enough about the employment situation of other household members
- Even employees and contributing family workers may not know enough about the enterprise in which they work to classify in the informal sector

Unreliable estimates
- If sample is not designed to produce informality estimates

Lack of coverage of seasonal and sporadic activities
- If survey is not frequent enough or reference period is not long enough
Measurement methods
Establishment-based surveys

What they do:
Collect detailed information about establishments/enterprises and their economic activities and other characteristics.
Are usually carried out to supplement formal sector surveys, i.e., target all units excluded from list-based register.

Data items:
Number of (informal sector) establishments
And characteristics of units, such as organization & functioning, constraints & potentials.
Production, income generated, costs, etc.
Number of (informal sector) entrepreneurs
And characteristics relating to their work, their person and their households.
Number of jobs in (informal sector) establishments
And characteristics relating to these jobs.
Number of informal jobs in all establishments
And characteristics relating to these jobs.

Establishment surveys
Surveys that cover the informal sector

Need to use an area-based sample frame
Same principle that area-based sample frame for household surveys.
Because they do not need to be updated to be useful - we assume that the density of units within areas remains stable.

Can cover all economic units in the country: using a dual frame:
- List-based frame for large registered units - clearly defined.
- Area-based frame for all other units (a subset will be in the informal sector).

To construct the frame it is necessary:
To carry out an Economic Census that covers all economic units:
Fixed premises
Household-based activities
Itinerant activities.
**Establishment surveys using dual sample frames**

Economic units in a country

<table>
<thead>
<tr>
<th>Economic units covered in the list-based sample frame</th>
<th>Other economic units (with fixed premises or household-based): covered by area-based frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large economic units</td>
<td>Area-based frame is stratified according to geographical location, concentration of small economic units and their predominant industry</td>
</tr>
<tr>
<td>Medium economic units</td>
<td>Stratified random sample of areas (PSUs) is selected</td>
</tr>
<tr>
<td>List-based frame is stratified according to geographical location, industry and size</td>
<td>Within each selected PSU: listing of all economic units; list is stratified according to dominant industry and type of premise (fixed, household-based); list excludes units in the list-based frame</td>
</tr>
<tr>
<td>Stratified random sample of medium economic units is selected</td>
<td>Stratified random sample of economic units within PSUs is selected</td>
</tr>
</tbody>
</table>

**Measurement methods**

**Establishment surveys - Advantages**

**Coverage**

- Of all economic units in a country
  - Including informal sector units
- Of informal sector jobs and working conditions

**No proxy response**

- Information is provided by entrepreneurs

**Coherence**

- Data on informal sector units can be related to economic units outside the informal sector, to obtain coherent data for the whole economy
Measurement methods

**Establishment-based surveys - Limitations**

**Observation unit is not equal to analytical unit**

**Enterprise versus establishment**
- Linkages between different establishments belonging to the same enterprise
- Double counting of enterprises is possible, if no checking is done to identify establishments belonging to the same enterprise

**Worker versus job**
- Requires adjustments to the observations

**Coverage**
- May not cover all kinds of economic activities (e.g., exclude agriculture, industry-specific surveys)
- If not area-based, coverage of informal sector units will be incomplete
- Even if area-based will exclude informal employees in households (will tend to underestimate informal employment outside the informal sector)

**Response errors**
- Detailed information about the production, costs or sales of the unit may not be of good quality because no registers are kept

**Cost**
- Listing operation in area-based surveys is expensive

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Measurement methods

**Mixed surveys**

**What they do**
- Collect detailed information about households and enterprises
- Are carried out in two phases:
  - Household survey phase identifies informal sector entrepreneurs
  - Enterprise survey phase obtains information about enterprises owned by informal sector entrepreneurs

**Data items:**
- Number of workers in the informal sector and in informal employment and characteristics related to their jobs, their person and their household
- Number of informal sector units and their characteristics, including organization & functioning, constraints & potentials
- Production, income generation, costs, etc.
- Number of informal sector entrepreneurs and characteristics related to their person and their household
Mixed surveys

Introduction

Are conducted in 2 phases:

First phase
- A sample of PSUs is selected
- Information is obtained from all or a sample of households about
economic activities of their members
- (Potential) informal sector entrepreneurs are identified -> sample
frame for second phase

Second phase
- All or a sample of (potential) informal sector entrepreneurs are
questioned about their informal sector unit (informal sector
survey)

Underlying principle
- It is easier to identify informal sector units through their
entrepreneurs than through their place where they occur
- Because so many are household-based and itinerant

Mixed surveys

Two broad types

Mixed modular surveys
- Use an existing household survey in the first phase (base
survey)
- Sample of PSUs may or may not be selected considering
density of informal entrepreneurs
- Second phase survey (to informal entrepreneurs) may be
carried simultaneously with first phase survey

Mixed independent surveys
- Listing operation of all households in the first phase
- Sample of PSUs is selected considering density of informal
entrepreneurs
Mixed surveys

Two broad types of mixed surveys

First survey phase

- Sample design: Sample of PSUs and households of base survey (sample design may or may not take into consideration informal sector density)

- Base household survey (e.g., labour force survey, income and expenditure survey, etc.)

- Frame of informal sector entrepreneurs: List of informal sector entrepreneurs in PSUs

- Sample design: Selection of all or a sample of informal sector entrepreneurs in PSUs

- First and second survey phases can be simultaneous operations

Independent survey

- Sample design: Independent sample of PSUs (sample design always takes into consideration informal sector density)

- Listing of all households and household members (within selected PSUs)

- Frame of households with informal sector entrepreneurs: List of households with informal sector entrepreneurs in PSUs

- Sample design: Selection of all or a sample of informal sector entrepreneurs in PSUs

- First and second survey phases are consecutive survey operations

Second survey phase

Dual frames

Two types of economic units

- Fixed premises located away from the household of the owner
- Household-based activities and itinerant activities

Fixed premises ...

- Are fewer in number
- Require higher sampling rates

- Are concentrated in different places than household-based activities
- In non-residential areas

Interviewing at the place of work should be carried out
Measurement methods
Mixed surveys - Advantages

Coverage
Complete coverage of informal sector enterprises, irrespective of size, kind of activity or type of work place

Enterprise data
Different informal sector activities undertaken by same individuals/households can be analysed in conjunction at the enterprise/household level

Coherence
Data on informal sector enterprises can be related to characteristics of the entrepreneurs' households
Data on informal sector activities can be related to data already obtained from the base survey

Measurement methods
Mixed modular surveys - Advantages

Simple
Mixed modular surveys are less complex than mixed independent surveys
Estimation of survey results is facilitated through possibility to use the same sampling weights as the base survey

Trends
Possibility of monitoring evolution of informal sector over time if base survey is conducted regularly and informal sector module attached periodically

Economic
Lower cost than mixed independent survey: identification of sub-sample units on the basis of base survey data, no special listing operation needed
Measurement methods
Mixed modular surveys - Limitations

Unreliability of estimates
In mixed modular surveys, the sample design does not necessarily incorporate informal sector measurement as a core variable.

- The number of informal sector entrepreneurs may be quite small.
- No control over distribution of Informal Sector sample by type of activity and its representativeness.
- No guarantee to obtain reliable separate estimates for each type of Informal Sector activity.

Measurement methods
Mixed independent surveys - Limitations

Complexity of survey operations
Mixed independent surveys are more complex than mixed modular surveys.

Cost
The listing operation is an expensive operation.
Measurement methods
Establishment and Mixed surveys: good practices

Choice of the date, time and place of the interviews
Together with the respondents themselves

Approaching the informal entrepreneur
Advance information regarding the survey and its purpose
Formal assurance of confidentiality of the information provided

Interviewers
Sound training and supervision is essential!!

Questionnaire
Simplify questions!!
Fewer data items
Less detail
Shorter reference periods

This approach is also used also in industrialised countries

Place of interview
Where the business takes place (for units with premises outside the owner’s dwelling)

Time lag between phases
Should be as short as possible

Avoid substitution of entrepreneurs
Introduces bias into the estimates

Reference period
Flexible as much as possible
One month
Measurement methods

Summing up

When the main objective is to measure employment in the informal sector or informal employment
- Labour force survey
- Mixed modular survey

When the main objective is to measure value added of the informal sector
- Establishment survey (when the country has carried out an Economic Census)
- Mixed survey (otherwise)

When the objective is to measure both employment and production with the same source
- Mixed modular survey

When the objective is to obtain statistics of the whole economy
- Establishment survey

When no direct measurement exists
- Indirect methods

Derived variables and indicators

Introduction

End product of any data collection exercise
Directly in contact with users
Derived variables and tabulations must be agreed before data collection stage
Together with users of the statistics

Educate users, including journalists
- Concepts
- What the statistics say and do not say

Important to release statistics
- Formats that are user-friendly for common users
- More detail and complexity for specialised users
- Methodological information
- Micro-data
Derived variables and indicators
Type of production unit and nature of the job: basic table

<table>
<thead>
<tr>
<th>Type of production unit</th>
<th>Nature of the job</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Informal employment</td>
<td>Formal employment</td>
<td>Total employment</td>
<td></td>
</tr>
<tr>
<td>Total employment</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td></td>
</tr>
<tr>
<td>Informal sector</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>Formal sector</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td></td>
</tr>
<tr>
<td>Households</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td>Employment in agriculture</td>
<td>M</td>
<td>N</td>
<td>O</td>
<td></td>
</tr>
</tbody>
</table>

Derived variables and indicators
Main indicators of employment

Informal employment rate
\[ = \frac{A}{C} \times 100 \]

Informal sector employment rate
\[ = \frac{F}{C} \times 100 \]

Informal employment outside the informal sector rate
\[ = \frac{(G + J)}{C} \times 100 \]

Formal employment in the informal sector rate
\[ = \frac{E}{C} \times 100 \]

Ratio of informal sector employment to informal employment
\[ = \frac{F}{A} \times 100 \]

Calculated by sex, kind of economic activity, age groups, urban/rural, etc.
## Derived variables and indicators

### Basic table for selected African countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Non-agricultural employment</th>
<th>Total informal employment</th>
<th>Employment in the informal sector</th>
<th>Informal employment outside the informal sector</th>
<th>Informal employment in the informal sector</th>
<th>Formal employment in the informal sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberia (2010)</td>
<td>573</td>
<td>342</td>
<td>284</td>
<td>61</td>
<td>281</td>
<td>3</td>
</tr>
<tr>
<td>Madagascar (2005)</td>
<td>1727</td>
<td>1271</td>
<td>893</td>
<td>378</td>
<td>893</td>
<td>0</td>
</tr>
<tr>
<td>Mali (2004)</td>
<td>1443</td>
<td>1180</td>
<td>1029</td>
<td>163</td>
<td>1017</td>
<td>12</td>
</tr>
<tr>
<td>South Africa (2010)</td>
<td>12504</td>
<td>4089</td>
<td>2225</td>
<td>1864</td>
<td>2225</td>
<td>0</td>
</tr>
<tr>
<td>Uganda (2010)</td>
<td>3788</td>
<td>2597</td>
<td>2243</td>
<td>512</td>
<td>2085</td>
<td>158</td>
</tr>
<tr>
<td>Zambia (2008)</td>
<td>1324</td>
<td>920</td>
<td>854</td>
<td>155</td>
<td>765</td>
<td>89</td>
</tr>
<tr>
<td>Zimbabwe (2004)*</td>
<td>1760</td>
<td>909</td>
<td>698</td>
<td>211</td>
<td>698</td>
<td>0</td>
</tr>
</tbody>
</table>

### Derived indicators for selected African countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Informal employment rate</th>
<th>Employment in the informal sector rate</th>
<th>Informal employment outside of informal sector rate</th>
<th>Formal employment in the informal sector rate</th>
<th>Ratio of informal sector employment to informal employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho (2008)</td>
<td>0.349</td>
<td>0.491</td>
<td>0.216</td>
<td>0.358</td>
<td>1.4</td>
</tr>
<tr>
<td>Liberia (2010)</td>
<td>0.597</td>
<td>0.496</td>
<td>0.106</td>
<td>0.05</td>
<td>0.8</td>
</tr>
<tr>
<td>Madagascar (2005)</td>
<td>0.736</td>
<td>0.517</td>
<td>0.219</td>
<td>0.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Mali (2004)</td>
<td>0.818</td>
<td>0.713</td>
<td>0.113</td>
<td>0.8</td>
<td>0.9</td>
</tr>
<tr>
<td>South Africa (2010)</td>
<td>0.327</td>
<td>0.178</td>
<td>0.149</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Uganda (2010)</td>
<td>0.686</td>
<td>0.592</td>
<td>0.135</td>
<td>0.4</td>
<td>0.9</td>
</tr>
<tr>
<td>Zambia (2008)</td>
<td>0.695</td>
<td>0.645</td>
<td>0.117</td>
<td>0.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Zimbabwe (2004)*</td>
<td>0.516</td>
<td>0.397</td>
<td>0.120</td>
<td>0.0</td>
<td>0.8</td>
</tr>
</tbody>
</table>
Employment in the informal sector by nature of job, selected African countries

- Lesotho (2008)
- Liberia (2010)
- Madagascar (2005)
- South Africa (2010)
- Uganda (2010)
- Zambia (2008)
- Zimbabwe (2004)*

Informal employment in the informal sector

Formal employment in the informal sector