

Surveys on Informal Sector: Objectives, Method of Data Collection, Adequacy of the Procedure and Survey Findings

1. Introduction

1.1 The term ‘informal sector’ has been debated much in the recent past at national and international forums for want of a universally acceptable definition. In India, the term ‘informal sector’ has not been used in the official statistics or in the National Accounts Statistics (NAS) till recently. The terms used in the Indian NAS are ‘organised’ and ‘unorganised’ sectors. The *organised sector* comprises enterprises for which the statistics are available regularly from the budget documents or reports, annual reports in the case of Public Sector and through Annual Survey of Industries in case of registered manufacturing. On the other hand, the *unorganised sector* refers to those enterprises whose activities or collection of data is not regulated under any legal provision. Non-availability of regular information has been the main criterion for treating such enterprises as unorganised.

1.2 The term ‘informal sector’ has been used for the first time in the Indian National Sample Survey (NSS) in its 55th Round (1999-2000). In this survey, *informal enterprises* were defined as the units or enterprises (other than those covered under the Annual Survey of Industries) having type of ownership as either proprietary or partnership. The partnership could be within the same household or from different households. The definition adopted in the survey is broadly consistent with that recommended by the Fifteenth ICLS¹. Thus the informal sector, as defined in the NSS 55th Round, is really a sub-set of the so-called unorganised sector as described in the official statistics or in the NAS.

2. Objectives of the Surveys

2.1 The main aim of the surveys on informal sector or unorganised sector is to estimate total number of enterprises, number of workers with break-up for male and female, gross value added per worker, value of fixed assets, etc. and other related characteristics of enterprises at the national and State levels. Most of these statistics are required for the national accounting purposes, including assessment of the shares of various non-agricultural sectors in the country’s GDP. Apart from national accounting, data from the periodic enterprise surveys are required by the planners and policy makers, researchers, and various other data users for assessing the sizes of different sectors and their growth over time.

3. Surveys on Informal Sector

NSS 55th Round

3.1 The National Sample Survey Organisation (NSSO) conducted an integrated survey of households and informal enterprises in its 55th round during July 1999 to June 2000. The subjects covered were household consumer expenditure, employment-unemployment and non-

¹ According to the Fifteenth ICLS, the informal sector is regarded as a group of production units which, according to the definitions and classifications provided in the UN System of National Accounts (Rev. 4), form part of the household sector as household enterprises or, equivalently, unincorporated enterprises owned by households.

agricultural enterprises in the informal sector. The unique feature of the NSS 55th Round was that this survey aimed to provide estimate of number of workers in the informal sector through two different approaches, one based on the household approach and the other based on the enterprise approach.

3.2 In the household approach, through the schedule on employment-unemployment, certain particulars about enterprises where the household members of the sample households had been working were collected². This facilitated in obtaining an estimate of number of workers in the informal sector based on the data collected through the household schedule on employment-unemployment.

3.3 In the enterprise approach, ultimate sampling units were the informal non-agricultural enterprises. The non-agricultural enterprises covered in the NSS 55th Round belonged to manufacturing; construction; trading and repair services; hotels and restaurants; transport, storage and communications; financial intermediation; real estate, renting and business activities; education, health and social work; and other community, social and personal service activities (excluding domestic services). Information on characteristics of the enterprises, fixed assets, employment, operating expenses and receipts, value added, etc. were collected from the enterprises surveyed. Thus it was possible to obtain an alternative estimate of number of workers in the informal sector based on enterprise approach.

Surveys Conducted Prior to NSS 55th Round

3.4 Though the NSS 55th Round Survey (1999-2000) was a comprehensive survey on the informal sector, collection of data pertaining to the units in this sector is, however, not a new feature of the Indian data-collection system. In fact, all the enterprise surveys carried out by the NSSO and the Central Statistical Organisation (CSO) in the past since 1978-79, as the follow-up surveys of Economic Census covered the units in the entire unorganised sector. Thus all such surveys had a wider coverage. Apart from covering the informal i.e. proprietary and partnership enterprises, all the previous follow-up enterprise surveys also covered other non-Government enterprises with type of ownership as co-operative, trust, public limited company, private limited company and others. It may be stated that, since 1986-87, unit-level data for the NSSO surveys are available for sale on compact disk (CD). Data for all the four such enterprise surveys (conducted prior to NSS 55th Round)³ are available on CD. As there was a provision to record the actual type of ownership of each sample enterprise in the schedule (including separate codes for *proprietary and partnership i.e. informal enterprises*), it is possible to generate estimates for informal sector enterprises based on these surveys.

² The particulars collected were: location of workplace; enterprise type; whether keeps written accounts; number of workers (code); and whether uses electricity (for manufacturing enterprises only). In addition, for self-employed persons, details collected were: whether worked under given specifications; who provided credit/ raw material/ equipments; number of outlets of disposal (code); basis of payment; and type of specifications.

³ Surveys are (i) NSS 45th Round (1989-90): Unorganised Manufacture; (ii) NSS 46th Round (1990-91): Unorganised Trade; (iii) NSS 51st Round (1994-95): Unorganised Manufacture; and (iv) NSS 53rd Round (1997): Unorganised Trade.

Surveys Conducted After NSS 55th Round

3.5 In the NSS 56th Round (2000-01) and NSS 57th Round (2001-02: survey under progress) also, devoted to the surveys on unorganised manufacture and unorganised services (excluding trade and finance) respectively, provision has been made to record type of ownership of each sample enterprise - including separate codes for proprietary and partnership i.e. informal enterprises. Thus one can obtain the required estimates for the informal sector as well based on these surveys. In fact, the tabulation plan of NSS 57th Round has provision for estimation of the following:

- Per thousand distribution of enterprises as well as workers by type of ownership and activity at all-India level
- Per thousand distribution of enterprises as well as workers (all activities combined) by type of ownership at State level
- Per thousand distribution of enterprises by social group of owner at State level (*for proprietary and partnership i.e. informal enterprises*)
- Annual gross value added per worker by activity at State level (*for proprietary and partnership i.e. informal enterprises*).

4. Sample Design

4.1 Generally, a stratified two or three-stage sampling design is adopted for the enterprise surveys in India. The first-stage units (FSUs) are the villages and urban blocks. The ultimate-stage sampling units are the enterprises. If the sample FSUs are large in size (in terms of population and/or number of non-agricultural enterprises), they are segmented into a certain number of segments⁴. Total number of segments formed in the sample FSU depends on the size of the FSU – the larger the size, larger is the value of total number of segments formed in the FSU. From the segments formed in the sample FSU, a sample of segments is selected for listing of enterprises. Thus, for larger FSUs, the sampling design becomes three-stage with sampling units in the second and third (i.e. ultimate) stages being the segments and enterprises respectively.

4.2 For selection of the FSUs in the enterprise surveys, generally Economic Census (EC) frame giving count of enterprises and workers at the FSU level is used as the sampling frame. However, if it becomes difficult to identify the urban blocks as per the EC frame based on the available maps, the NSSO's list of Urban Frame Survey Blocks⁵ is used as the sampling frame for selection of urban blocks.

⁴ Segments are known as hamlet-groups in case of rural samples (villages) and sub-blocks in case of urban samples (urban blocks).

⁵ The UFS gives information on approximate number of households and approximate population with respect to each urban block. This apart, information on type of area (i.e. residential area, slum area, hospital area, industrial area, bazaar area, etc.) to which each UFS block belongs is also available in the UFS frame. Population in each of the UFS blocks normally varies between 600 and 800. The entire UFS frame of the country is updated once in every five years.

4.3 For the purpose of sampling of enterprises, a list of enterprises is prepared within each selected FSU (or sample segments in case of large FSU). For listing of enterprises, a combination of household cum site approach is adopted in the surveys. The enterprises having fixed premises are listed at their sites. But the entrepreneurial activities carried out without fixed premises or within the premises of the households are listed as enterprises against the households of the owners. From the frame of enterprises so prepared, a sample of enterprises is selected circular systematically after grouping the enterprises into a few strata to ensure representation of different types of units in the sample.

4.4 In the NSS 55th Round, all the eligible enterprises⁶ listed in the sample FSU/ segments were grouped into 12 strata by jointly considering their broad industry group (BIG) and enterprise class. Within each of the 6 BIGs⁷, 2 enterprise classes⁸ were formed enabling to form 6 x 2 i.e. 12 strata within each FSU. From each of the 12 strata, a sample of 2 enterprises (subject to availability) was selected for survey. Suitable rule was provided for compensation for shortfall of requisite number of enterprises in a stratum by increasing the quota of other strata. In case total number of eligible enterprises in an FSU was less than 24, all were surveyed. Total number of FSUs selected for survey by the NSSO in the NSS 55th Round was 10,400. An additional set of 11,880 FSUs was also selected for survey by the State and Union Territory Governments.

5. Method of Data Collection

5.1 At present, a team of two or three investigators along with one supervisor is deployed for fieldwork in each FSU. Data are collected by interviewing the owners of the enterprises or any other suitable respondents able to furnish the information. For enterprises run without fixed premises or within the household premises, data are collected by visiting the households of the owners of the enterprises. However, for enterprises run within fixed premises, data are collected from the site where the enterprise is located. If the enterprises maintain accounts (such cases being much less in number), data are collected as per the available accounts. Otherwise, information furnished by owners is recorded after proper probing in case figures furnished by the respondents appear doubtful.

5.2 To capture the seasonal variation, entire survey period of one-year duration is divided into four sub-rounds of three months' duration each. Equal number of sample villages and blocks is allocated to each sub-round. Each FSU is surveyed during the sub-round period to which it is allocated. Within a particular sub-round, the fieldwork is spread out uniformly over different months to the extent possible.

⁶ By eligible enterprises, it is meant the enterprises pursuing any non-agricultural activity under the survey coverage and operating for at least 30 days in case of perennial or casual enterprises and at least 15 days in case of seasonal enterprises

⁷ Broad industry groups were: manufacturing; construction; trade and services; hotels and restaurants; transport, storage and communication; and other service sector.

⁸ Enterprise classes were: *own-account enterprises* (i.e. enterprises running without any hired worker on a fairly regular basis); and *establishments* (i.e. enterprises running with the help of at least one hired worker on a fairly regular basis).

6. Netting Employment in the Informal Sector: Adequacy of the Procedure

6.1 In the enterprise surveys, field investigators take adequate care to list enterprises those are run without fixed premises or within the inside of a room of a house not visible from outside. This has enabled netting more such enterprises in the enterprise surveys as compared to the Economic Census (EC). As a result, estimated number of own account enterprises⁹ and number of workers engaged therein based on the enterprise surveys are found to be much higher than those based on the EC.

6.2 In the NSS 55th Round, to doubly ensure listing of such enterprises, two special items were included in the listing schedule. The items included were number of self-employed members (home-based and those working without fixed premises) in the household with break-up for female and male, and number of distinct enterprises owned by such members. The practice has been repeated in the NSS 57th Round but not in the NSS 56th Round. To what extent inclusion of the above two additional items has been effective in netting more invisible enterprises could probably be assessed if one compares the alternative survey results for unorganised manufacturing enterprises based on NSS 55th Round vis-à-vis NSS 56th Round as and when the results based on the latter survey become available.

7. Key Results of NSS 55th Round (1999-2000)

Distribution of enterprises by type of ownership

7.1 Statement 1 in the Annex gives the percentage of enterprises by type of ownership of the enterprises separately for rural, urban and combined. Male and female proprietors respectively run 86% and 12% of the estimated total non-agricultural enterprises. However, females run only 5% of the establishments. Only 2% of the enterprises are operated on partnership basis.

Location of the enterprises

7.2 Statement 2 gives distribution of enterprises by location. Out of the total enterprises, 78% are run at fixed premises either within the household premises or outside. The proportion of the enterprises run in the household premises is higher (39%) in the case of own account enterprises (OAEs) as compared to the establishments (13%). Further, higher proportion of enterprises is run from the household premises in the rural areas as compared to the urban areas.

Maintenance of accounts

7.3 Statement 3 gives percentage of enterprises maintaining accounts. An enterprise has been considered to maintain accounts if it has maintained usable books of accounts and made them available to the interviewer. The percentage of enterprises maintaining accounts has been estimated to be 5% only. As expected, the maintenance of accounts is higher (21%) in the case of establishments and quite low (about 3%) in the case of OAEs. The proportion of enterprises maintaining accounts is higher in urban areas as compared to the rural areas.

⁹ For own account enterprises, prevalence of the activity being carried out without fixed premises or within the household premises is higher as compared to the establishments.

Working on contract

7.4 Statement 4 gives distribution of enterprises by status of working on contract. About 11% of the total enterprises have been estimated to be undertaking at least some work on contract basis. The proportion of enterprises working on contract is slightly higher in rural areas as compared to the urban areas. Of the enterprises working on contract, 82% received the raw material from the master enterprise/contractor. The contractor in 87% of the enterprises also specified the design.

Number of workers

7.5 Statement 5 compares estimated number of workers at all-India level for different activities as per the alternative approaches. It may be seen that estimates based on the two approaches are broadly comparable except in case of (i) Construction, (ii) Transport, storage and communication; and (iii) Other community, social and personal services, for which estimates based on household approach are much higher. This could partially be due to the difficulties in classifying the activities of casual labourers and certain other categories of persons as enterprises. Moreover, the individuals serving as housemaids, cooks, gardeners, governess, baby sitters, watchmen, etc. without their own assets were outside the coverage of enterprise survey. This difference in coverage between the two approaches could also partially explain the divergence between the two sets of estimates.

Value added per worker

7.6 The activity-wise value added per worker by enterprise type separately for rural, urban and combined at the all-India level is given in Statement 6. For all activities combined, the value added per worker in the rural areas is 45% of the value added per worker in the urban areas.

Key Results, NSS 55th Round (1999-2000)Statement 1: Distribution of enterprises by type of ownership
(combined for all activities)

Type of ownership	percentage of enterprises by type of ownership								
	rural			urban			combined		
	OAE	Establish-ments	all	OAE	Establish-ments	all	OAE	Establish-ments	all
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. proprietary male	85.8	90.4	86.0	86.7	84.9	86.3	86.2	86.3	86.2
2. proprietary female	13.5	4.1	13.0	12.0	5.1	10.5	12.9	4.9	11.9
3. partership between member of same household	0.5	2.0	0.6	0.8	6.4	2.0	0.6	5.3	1.2
4. partership between member of different household	0.2	3.5	0.4	0.5	3.6	1.2	0.3	3.5	0.7
all	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Statement 2: Distribution of enterprises by location (combined for all activities)

location of enterprise	percentage of enterprises by location								
	rural			urban			combined		
	OAE	Establish-ments	all	OAE	Establish-ments	all	OAE	Establish-ments	all
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. with in household premises	46.2	21.6	44.8	28.1	10.4	24.4	39.1	13.2	35.9
2. outside household premises and with fixed location									
a) with permanent structure	23.5	59.5	25.6	40.7	83.8	50.0	30.1	77.6	36.2
b) with temporary structure	2.8	2.4	2.8	3.8	1.5	3.3	3.2	1.7	3.0
c) without any structure	3.1	2.7	3.1	3.6	0.6	2.9	3.3	1.1	3.0
3. outside household premises but without fixed location									
a) mobile market	7.1	4.0	6.9	6.9	0.6	5.5	7.0	1.5	6.3
b) street vendor	11.8	3.6	11.3	12.7	0.8	10.1	12.2	1.5	10.8
c) construction site	5.4	6.1	5.4	4.2	2.3	3.8	5.0	3.3	4.7
4. not reported	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.1
all	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Statement 3: Distribution of enterprises by maintenance of accounts
(combined for all activities)

maintenance of accounts	percentage of enterprises by maintenance of accounts								
	rural			urban			combined		
	OAE	Establish-ments	all	OAE	Establish-ments	all	OAE	Establish-ments	all
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. yes	1.8	9.3	2.2	4.4	25.5	9.0	2.8	21.4	5.2
2. no	98.2	90.7	97.8	95.6	74.5	91.0	97.2	78.6	94.8
all	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Statement 4: Distribution of enterprises by status of working on contract
(combined for all activities)

working on contract	distribution of enterprises by status of working on contract								
	rural			urban			combined		
	OAE	Establish-ments	all	OAE	Establish-ments	all	OAE	Establish-ments	all
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. yes	12.1	12.6	12.1	9.1	10.5	9.4	10.9	11.0	10.9
2. no	87.9	87.4	87.9	90.9	89.5	90.6	89.1	89.0	89.1
all	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Statement 5: Alternative Estimates of Number of Workers based on Enterprise Survey Approach (Schedule 2.0) and Household Survey Approach (Schedule 10)

Activity	Estimated number of workers ('000)					
	Rural India		Urban India		India	
	Sch. 2.0	Sch. 10	Sch. 2.0	Sch. 10	Sch. 2.0	Sch. 10
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Manufacturing	17692	17379	11969	13086	29661	30465
2. Construction	1522	6352	1148	4635	2669	10987
3. Trading & repair services	11995	11489	16408	16755	28403	28244
4. Hotels & restaurants	1661	1485	2630	2081	4291	3566
5. Transport, storage and communications	2527	4241	2700	4436	5226	8677
6. Financial intermediation	66	112	266	309	333	421
7. Real estate, renting and business services	313	377	1215	1391	1528	1767
8. Education	587	786	1152	1291	1739	2077
9. Health and social work	536	408	667	620	1203	1029
10. Other community, social and personal services	2909	4059	1820	2564	4729	6623
All activities	39808	46688	39975	47168	79783	93856

Note: Estimates based on Schedule 10 give total number of usual status workers considering both principal and subsidiary statuses.

Statement 6: Activity-wise annual value added per worker

Activity	annual value added per worker (Rs.)								
	rural			urban			combined		
	OAE	Establish-ments	all	OAE	Establish-ments	all	OAE	Establish-ments	all
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. manufacturing	8963	22699	11157	15585	35225	26088	10768	31389	17182
2. construction	22694	24918	23183	31515	36984	33699	25935	31888	27704
3. trading and repair services	17475	28690	18298	29608	59434	40598	23329	55530	31180
4. hotels and restaurants	14799	25190	17170	20700	35141	29077	17530	33161	24468
5. transport, storage and communication	21313	39026	24803	27740	47803	33522	24439	44379	29307
6. financial intermediation	27105	28428	27590	49417	39236	43874	43666	37683	40622
7. real estate, renting and business activities	21880	17863	20841	31871	41504	37088	28935	38915	33763
8. education	11020	12802	12176	19192	22746	21823	15857	19674	18565
9. health and social work	22676	31087	24031	41712	51642	48058	29314	48180	37354
10. other community, social and personal service activities (excluding domestic services)	8651	11882	8847	18426	27478	21256	11721	23787	13623
all activities	13443	24442	15008	25054	43819	33437	18007	39153	24242