



Government of India  
Ministry of Statistics and  
Programme Implementation



**75** National  
Sample  
Survey  
Celebrating 75 years of NSS

# हीरक जयंती प्रकाशन एन. एस. एस. के उद्यम सर्वेक्षण

75 साल की यात्रा

## DIAMOND JUBILEE PUBLICATION ENTERPRISE SURVEYS OF NSS

A JOURNEY OF 75 YEARS



राव इन्द्रजीत सिंह  
RAO INDERJIT SINGH



राज्य मंत्री (स्वतंत्र प्रभार)  
सांख्यिकी और कार्यक्रम कार्यान्वयन मंत्रालय;  
राज्य मंत्री (स्वतंत्र प्रभार) योजना मंत्रालय तथा  
राज्य मंत्री संस्कृति मंत्रालय  
भारत सरकार

Minister of State (Independent Charge) of the  
Ministry of Statistics and Programme Implementation;  
MOS (I/C) of the Ministry of Planning and  
MOS in the Ministry of Culture  
Government of India

## Message

It is with great pride and a deep sense of commitment to statistical excellence that we present this Diamond Jubilee publication on '*Enterprise Surveys of NSS: Journey of 75 Years*', commemorating 75 years of National Sample Survey (NSS). This document serves as a testament to India's longstanding tradition of data-driven policymaking and its continuous evolution in capturing the dynamics of the enterprise sector.


Since its inception in 1950, NSS has played an important role in shaping economic policies by providing reliable, comprehensive, and timely data on various socio-economic aspects of the country. The enterprise surveys, in particular, have been instrumental in assessing the structure, growth, and financial health of India's industrial and unincorporated sectors.

The Indian economy has undergone significant transformations over the past 75 years—moving from a predominantly agrarian economy to a global industrial and service powerhouse. Enterprise surveys have been invaluable in tracking these changes, offering data-backed evidence to support policy decisions on employment generation, investment patterns, industrial growth, and sectoral contributions to GDP.

As we celebrate this milestone, this diamond Jubilee publication prepared by team of MoSPI serves not only as a reflection on the rich legacy of enterprise surveys but also as a guiding beacon for the future. The increasing integration of technology, automation, and digital transformation in data collection ensures that NSS surveys remain at the forefront of statistical innovation, adapting to the evolving needs of a rapidly changing economy. As we aim for Viksit Bharat by 2047, the Ministry remains committed to strengthening these surveys, ensuring they capture emerging trends and contribute to the formulation of policies that support the sustainable development of India's diverse enterprise sector.

I am confident that Enterprise Surveys of NSS will continue to provide crucial insights as we work together towards realizing a developed India in the coming decades.

4<sup>th</sup> February 2025  
New Delhi

  
(Inderjit Singh)



## **FOREWORD**

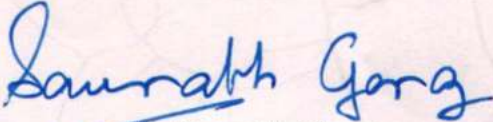
As we celebrate the 75th anniversary of the National Sample Survey (NSS), it is my honour to present the Diamond Jubilee Publication on '*Enterprise Surveys of NSS: Journey of 75 Years*', a landmark publication that chronicles the evolution of enterprise surveys under the National Sample Survey (NSS). This publication is an invaluable resource providing knowledge about the journey of enterprise surveys of NSS. It highlights different initiatives undertaken along with key methodological and technological advancements over the decades.

The NSS has been at the forefront of conducting enterprise surveys at all-India level, offering critical insights into the structure, growth, and challenges of India's business ecosystem. As we look ahead, we reaffirm our commitment to strengthening India's statistical framework and ensuring that enterprise surveys continue to provide valuable insights for evidence-based decision-making.

I congratulate the team of dedicated officers of NSS whose unwavering commitment has made these surveys a cornerstone of India's statistical system. I also extend my sincere appreciation to the officers of Enterprise Survey Division (EnSD) for their diligent efforts in compiling this comprehensive document.

With best wishes,

New Delhi  
February 04, 2025

  
(Dr Saurabh Garg)  
Secretary, MoSPI

## *Preface*



As we mark 75 years of the National Sample Survey (NSS), it is a moment of immense pride and reflection on the transformative role the National Statistics Office (NSO) has played in shaping India's socio-economic understanding. Since its establishment in 1950, the NSS has stood as a pillar of statistical excellence, generating data that has guided policy formulation, academic research, and public discourse. This diamond Jubilee publication on *Enterprise Surveys of NSS: Journey of 75 Years*, focusing on the Annual Survey of Unincorporated Sector Enterprises (ASUSE) and the Annual Survey of Industries (ASI), celebrates the enduring legacy of enterprise surveys as well as highlighting the new initiatives of NSS like the Forward-looking Survey on Capital Expenditure (CAPEX).

The enterprise surveys highlighted in this compendium have been instrumental in identifying challenges, uncovering opportunities, and guiding interventions across various sect of the economy. They have provided a robust foundation for understanding the intricacies of India's economic landscape and have been a vital tool in the nation's development agenda.

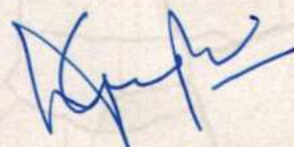
This compendium is designed to serve as a valuable resource, offering a comprehensive overview of the methodologies, sampling designs, concepts and definitions used in enterprise surveys.

On this milestone occasion, I extend my heartfelt gratitude to all those who have contributed to the success of the enterprise surveys of NSS.

Their unwavering commitment has ensured that the NSS remains a symbol of accuracy and reliability in the world of statistics. I extend my heartfelt appreciation to officers of Enterprise Survey Division (EnSD) for their efforts and hard work in compiling this valuable resource. I hope that this publication will not only honour the legacy of NSS but also inspire future generations to continue the pursuit of excellence in the field of official statistics.

With best wishes,

New Delhi  
February, 2025

  
(Geeta Singh Rathore)  
Director General  
National Sample Survey (NSS)

# Table of Contents

## 1 Introduction

## 2 Historical Development of Enterprise Surveys of NSSO

- 2.1 Phase 1: Annual Survey of Industries
- 2.2 Phase 2: NSS Non-agriculture Enterprise Survey Rounds
- 2.3 Phase 3: Annual Non-agricultural Enterprise Surveys
- 2.4 Survey of Corporate Service Sector
- 2.5 Coverages of Non-agricultural Enterprise Surveys of NSSO

## 3 Current Annual Surveys of NSSO on Enterprises

- 3.1 Annual Survey of Industries (ASI)
- 3.2 Annual Survey of Unincorporated Sector Enterprise (ASUSE)

## 4 Evolution of Data Collection and Processing Technology in NSSO

- 4.1 Introduction
- 4.2 Data Processing in Initial Years
- 4.3 Development of In-house Software
- 4.4 Era of E-schedule
- 4.5 Offline CAPI
- 4.6 Development of Full-fledged CAPI
- 4.7 Continuous Improvement in CAPI



## **5 Recent Initiatives of Enterprise Survey Division**

- 5.1 Annual Series of Data for the Unincorporated Sector Enterprises
- 5.2 CAPEX Survey
- 5.3 Digital Platform for Conducting Surveys
- 5.4 Reduction of Time Lag for Release of Results
- 5.5 Interface with Users

## **6 NSS Enterprise Surveys - A Living Chronicle**

- 6.1 Evolution of Enterprise Surveys in India
- 6.2 Annual Survey of Industries
- 6.3 NSS Enterprise Surveys for Unorganised/Unincorporated Sector

**Annexure I: Concepts and Definitions in Enterprise Surveys (Unorganised/ Unincorporated/ Informal Enterprises)**

**Annexure II: Concepts, Definitions and Procedures in ASI**

**Annexure III: Subjects Covered in Different NSS Enterprise Survey Rounds**

# CHAPTER - 1

## Introduction



## Introduction

At quarter century past second millennium, India is set to join the league of developed nations with a vision of Viksit Bharat 2047 nations. Economically, it is labelled as the fifth largest economy in the world. An economy is characterised by enterprises operating in different sectors and segments of the economy. Health of the enterprises and workers operating them are the real concerns of the government and policymakers. A real-time streaming of data on socio-economic conditions of people and of enterprises is, therefore, a top priority for managers of the economy. It was realised soon after the independence of the country. The National Income Committee (1949) recommended Sample Survey of Manufacturing Industries (SSMI) along with Census of Manufacturing Industries (CMI) that was in place since 1946. This framework continued annually till 1958. Annual Survey of Industries (ASI), a comprehensive survey of manufacturing factories replacing both CMI and SSMI, was started from 1960 with NSSO having assigned the job of collecting data from the factories. NSSO, since its inception in 1950, has played a major role in providing the socio-economic data needed to formulate a vibrant plan for social and economic development. But enterprise survey was not part of NSSO till the commencement of ASI in 1960. From then, NSSO became a participant of enterprise sector with the responsibility of collecting information from the factories.



The National Income Committee (1949) recommended sample survey of manufacturing industries (SSMI) along with Census of Manufacturing Industries (CMI) that was in place since 1946. This framework continued annually till 1958. After that Annual Survey of Industries (ASI), a comprehensive survey of manufacturing factories replacing both CMI and SSMI, was started from 1960.



Although information from the factories could be collected through ASI, a large part of the non-agricultural sector was still outside the coverage of any survey. Subsequently, the need for segmentation of non-agriculture sector into (i) organised part, for which some records are available to get information and (ii) unorganised part, for which no recorded information is available, became pronounced. Also, requirement of information on the sectors of economic activities such as manufacturing, trade, and other services of different kinds was felt necessary. Household enterprise surveys were conducted to meet the data requirement on unorganised sector in 1968 (NSS 23rd Round) and 1974 (NSS 29th Round). First Economic Census was conducted in 1977 which provided the basic information on non-factory sector of enterprises and enabled planning of a much more reliable survey. The surveys on unorganised sector enterprises with auxiliary information from EC became integral part of NSSO from the year 1978 (NSS 33rd Round) and 1979 (NSS 34th Round). The surveys were, however, not annually conducted but were of periodic in nature. Finally, Annual Survey of Unincorporated Sector Enterprises (ASUSE) by NSSO started in 2021 to provide the annual series of data on non-agricultural unincorporated sector enterprises.

The developments of enterprise surveys can be separated into three phases: Phase I relates to surveys of organised manufacturing sector (i.e. factory) only and its stabilization as annual survey of factories through ASI; Phase II can be associated with NSSO periodic surveys of unorganised or unincorporated or informal enterprises and its stabilization; and Phase III can be associated with annual NSSO surveys of unincorporated sector (ASUSE) which culminates, together with ASI, in bringing majority number of enterprises and workers under the regular annual data flow. The part remaining is the survey of corporate sector enterprises in service sector, for which a pilot study is undergoing.

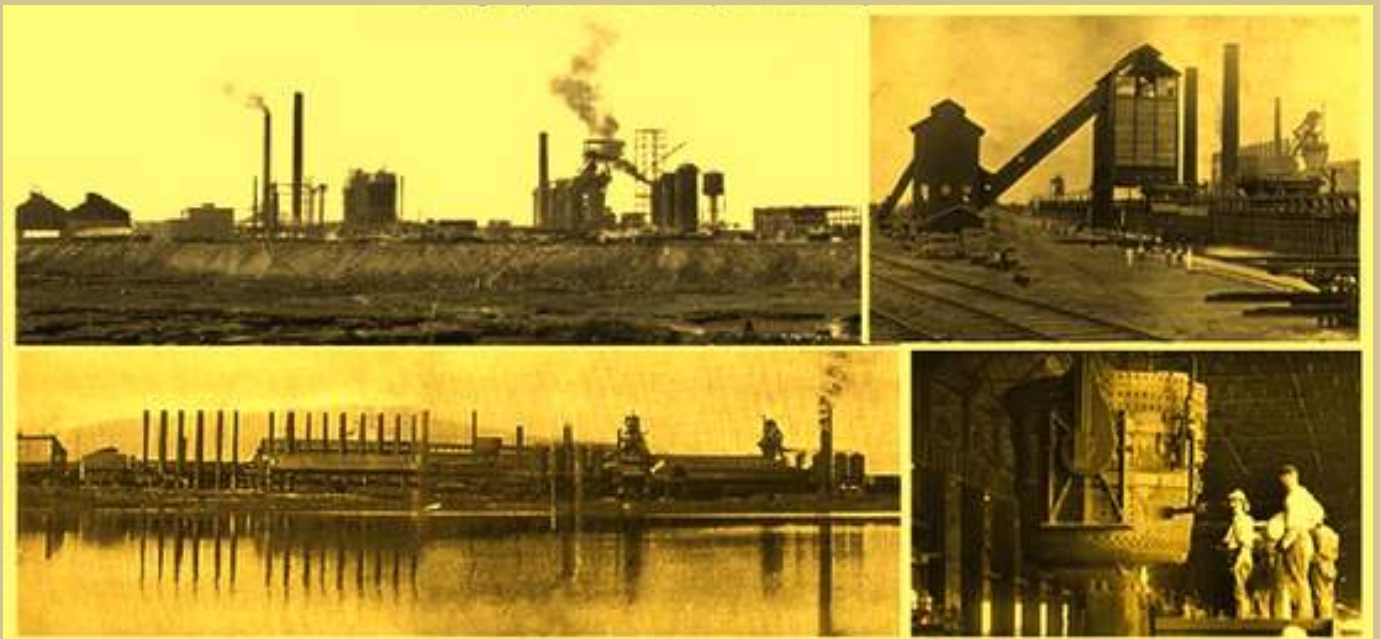
The present document encompasses the development story of enterprise surveys of NSSO from 23rd Round (1968-69) to 74th Round (2016-17) and ASUSE from April, 2021 onwards. It also covers the changes in ASI surveys over the last 20 years.

It is a journey through time which has flourished over the period. This document traces the history and evolution of enterprise surveys by NSSO, the only organization conducting such surveys at a pan-India scale for decades.



# CHAPTER 2

## Historical Development of Enterprise Surveys of NSSO





India's enterprise surveys, initiated by the NSSO, reflect the country's effort to track its dynamic economic landscape.

The Annual Survey of Industries (ASI) began in 1960, evolving from earlier efforts like the Census of Manufacturing Industries (CMI) and the Sample Survey of Manufacturing Industries (SSMI). While ASI focused on organised industries, periodic surveys for unorganised sectors started in the late 1970s, culminating in the Annual Survey of Unincorporated Sector Enterprises (ASUSE) in 2021. ASUSE provides focused data on unincorporated enterprises and operates separately from traditional NSS survey Rounds, complementing ASI as part of India's current enterprise survey framework.

India's enterprise surveys stand as a testament to the country's commitment to capturing the pulse of its dynamic and diverse economic landscape. The history of enterprise surveys of NSSO dates back to 1960 when the Annual Survey of Industries (ASI) was launched in 1960 with 1959 as its reference year. While ASI broadly covered the organised manufacturing sector of the economy, the non-household-based units in the unorganised sector remained outside the coverage, primarily due to non-availability of a better frame and background information needed for formulating an efficient sampling design. Enterprise surveys for unincorporated/unorganised sector can be traced back to the late seventies. From that point onward, enterprise surveys of NSSO flourished in two distinct streams - the ASI for organised enterprises and the surveys for unorganised/unincorporated ones. Over time, these surveys have progressively adapted to the changing socio-economic landscape and the emerging policy priorities of the nation. The development of enterprise surveys of NSSO may be distinguished by three phases as outlined below.



# THE NATIONAL SAMPLE SURVEY

GENERAL REPORT NO. 1

ON

THE FIRST ROUND

OCTOBER 1950—MARCH 1951



Issued by

The Department of Economic Affairs  
Ministry of Finance : Government of India

December 1952

Image 2.1 : Cover page of NSS first Round report

## 2.1 PHASE - I



**Annual Survey of Industries:** The Directorate of Industrial Statistics launched the Census of Manufacturing Industries (CMI) in 1946 with the objective of studying the structure of the Indian industry and estimating its contribution to national income. CMI could cover only 29 of the 63 industry groups specified in the Industrial Statistics Act. It was conducted annually up to 1958.

Following the recommendation of the National Income Committee (1949), the Directorate of Industrial Statistics conducted the first Sample Survey of Manufacturing Industries (SSMI) in 1949 for collecting data from the factories falling under the 34 industry groups left out by the CMI and included under the Factories Act 1934. The SSMI was conducted annually till the year 1958. Later, both CMI and SSMI were replaced by a comprehensive Annual Survey of Industries launched in 1960 with 1959 as the reference year and has been continuing since then.

## 2.2 PHASE - II



**NSS Non-agricultural Enterprise Survey Rounds:** Non-agricultural enterprise surveys were carried out periodically before the introduction of Annual Survey of Unincorporated Sector Enterprises (ASUSE). The relevant Rounds are the 23rd, 29th, 33rd, 34th, 35th, 40th, 41st, 45th, 46th, 51st, 53rd, 55th, 56th, 57th, 62nd, 63rd, 67th, 73rd and 74th Rounds. In some of these Rounds, only enterprise surveys were taken up while in other Rounds, household surveys and enterprise surveys were integrated in the Round.

## 2.3 PHASE - III



**Annual Non-agricultural Enterprise Surveys:** As the development of the economy accelerated in the initial decades of the twenty-first century, demand for data at short intervals gathered steam. Later, separate focused annual survey was introduced on unincorporated sector enterprises named as ASUSE from April 2021.

## Development of Enterprise Surveys

### PHASE - I

*Annual  
Survey of  
Industries*

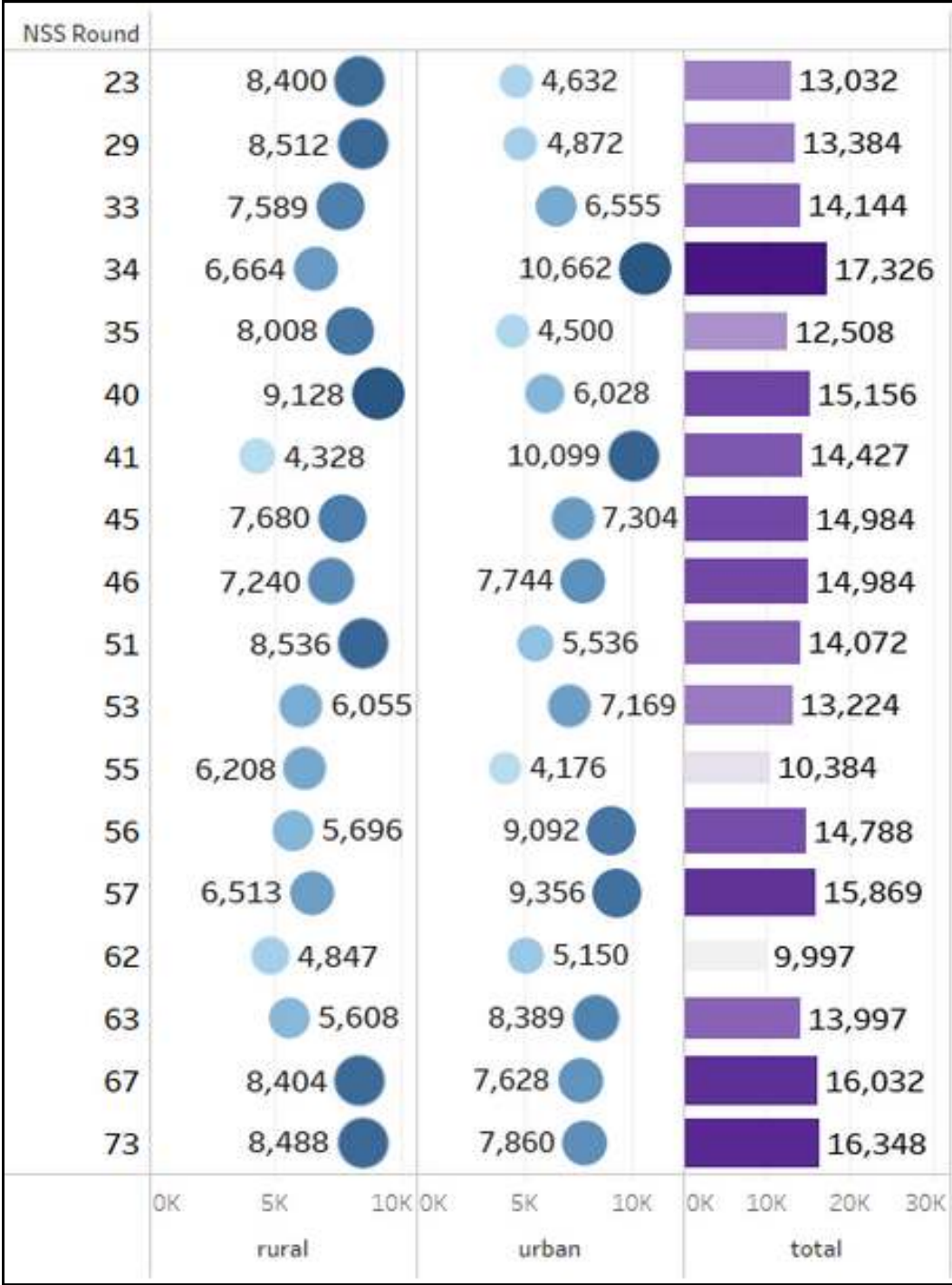
### PHASE - II

*NSS Non-  
agricultural  
Enterprise  
Survey Rounds*

### PHASE - III

*Annual Non-  
agricultural  
Enterprise  
Surveys*

## Figure 2.1: Round-wise Sample Sizes in Enterprise Surveys

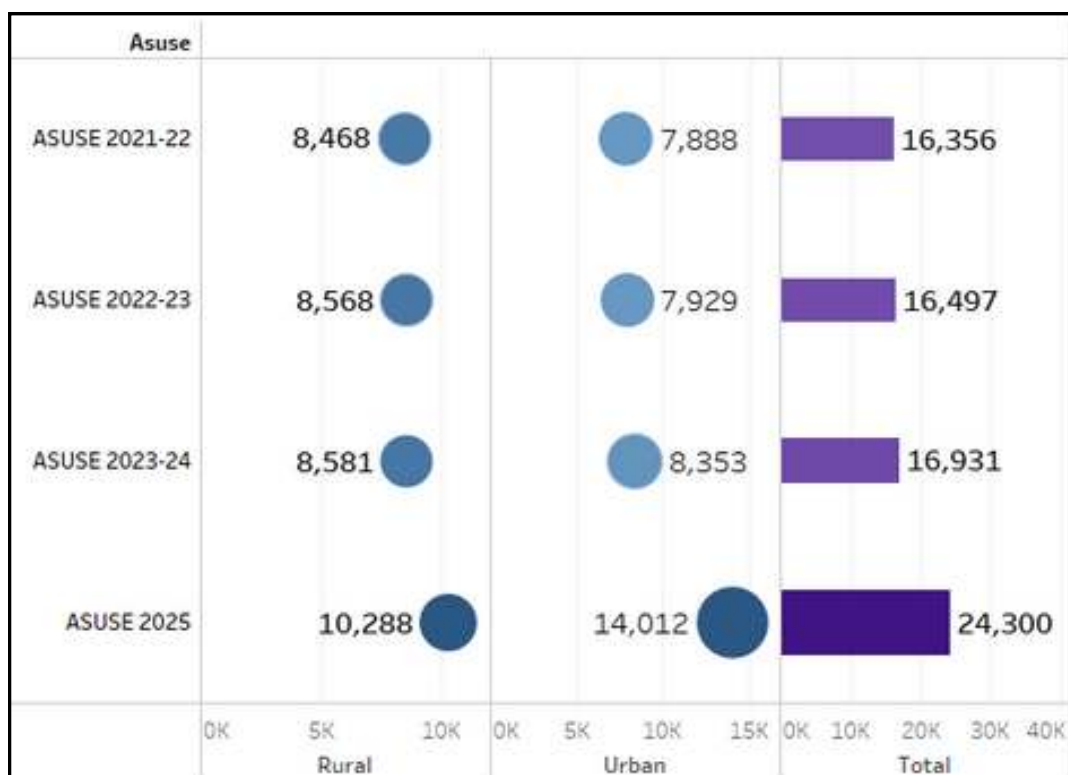




## Table 2.1: Sample Size of 74th Round of Enterprise Survey

| NSS Rounds | Survey Periods        | Sample Establishments number  |
|------------|-----------------------|---|
| 74         | July 2016 - June 2017 | MCA frame-35453<br>Construction Companies-200<br>EC frame - 93841<br>BR frame-50874 |

## Figure 2.2 Sample Size of ASUSE Surveys



# NSS Round

55th Round

July' 1999 - June' 2000

| Survey Undertaken  | Sampling Methodology  | First Stage Unit   |
|--|---|--|
| <p>Informal non-agricultural enterprises Survey was carried out in 55th Round. The non-agricultural enterprises engaged in the activities of 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, other community, social and personal service activities (excluding domestic services) were covered in this survey.</p> | <p>A stratified sampling design was adopted for selection of the sample first-stage units (FSUs). In rural area two special strata were formed at State/UT level. Stratum 1 was formed with all those FSUs where population was 100 or less and stratum 2 was formed with FSUs with population more than 15000. These two strata were formed if at least 50 such FSUs were available in each stratum. Otherwise, this stratum was merged with general stratum. While forming general strata (consisting of FSUs other than those covered under strata 1 &amp; 2), efforts were made to treat each district as a separate stratum. Some cases where sample sizes were not adequate, smaller districts within a particular NSS region were merged to form a stratum. Each district with rural population of 2 million or more as per 1991 Census (1.8 million or more as per 1981 Census in case of Jammu &amp; Kashmir) is split into a number of strata. In urban area stratum were formed within NSS region based on area type and population of town. Second stage stratification were done based on broad industry group and enterprise class.</p> | <p>The FSUs were villages (panchayat wards for Kerala) for rural areas and Urban Frame Survey (UFS) blocks for urban areas. Large FSUs were subdivided into hamlet groups (rural) / sub-blocks (urban) that were grouped into two segments, and USUs were selected independently from each of these segments. The hg/ sb having maximum concentration of non-agricultural enterprises was selected with certainty for listing of households/ enterprises. This hg/ sb was referred to as segment 1. From the remaining (D-1) hg's/ sb's of the FSU, two more hg's/ sb's were selected circular systematically and these two selected hg's/ sb's together were referred to as segment 2 for a combined listing of households/ enterprises</p> |

| Ultimate Stage Unit  | Frame Used   | FSU Selection Method   | USU Selection Method   |
|--|--|--|--|
| <p>The Ultimate stage units (USUs) were enterprises for canvassing informal sector enterprise schedule (schedule 2.0).</p> | <p>List of villages (panchayat wards for Kerala) as per 1991 Census and latest lists of UFS blocks were respectively used for selection of rural and urban sample FSUs. For selection of sample villages from the State of Jammu &amp; Kashmir, list of villages as per 1981 Census were used as the sampling frame. All the uninhabited villages of the country as per 1991 Census, interior villages of Nagaland situated beyond 5 kms. of a bus route and inaccessible villages of Andaman &amp; Nicobar Islands are left out of the survey coverage of the NSS 55th Round.</p> | <p>Sample FSUs from each stratum were selected in the form of 2 independent sub-samples by circular systematic sampling with (a) probability proportional to population for all rural strata other than stratum 1, and (b) equal probability for rural stratum 1 as well as all urban strata</p> <p>For sub-stratum 1 (FSUs with no unorganised manufacturing enterprises) in rural/urban sector of each State/UT</p> <p>FSUs were selected with equal probability and without replacement (SRSWOR). For all other sub-strata in both rural and urban sectors, FSUs were selected circular systematically with PPS, size being the number of manufacturing workers in the unorganised sector as per EC '98. Samples were selected in the form of independent sub-sample.</p> | <p>Sample enterprises were selected from the respective frames by circular systematic sampling with equal probability.</p> |

# NSS Round

*56th Round*

*July' 2000 - June' 2001*

| Survey Undertaken   | Sampling Methodology  | First Stage Unit  |
|---|---|---|
| <p>Survey on unorganised Manufacturing Enterprises. The fifty-sixth Round of NSS has covered broadly all unorganised manufacturing enterprises under the two-digit codes, 15 to 37 (Tabulation category 'D') of NIC '98 and non-ASI enterprises under cotton ginning, cleaning and baling (NIC '98 code 01405).</p> | <p>A stratified two-stage sample design was adopted. District was considered as basic stratum for rural sector and NSS region was considered as basic stratum for urban sector. Sub-stratification was done within each stratum. Second stage stratification was done within each FSU based on broad manufacturing group (BMG).</p> | <p>Villages (Panchayat wards in case of Kerala) for rural as per Census 1991 and UFS blocks were used as the first stage units (FSUs). For larger FSUs, Hamlet groups / sub-blocks (hgs/sbs) were formed considering population and enterprise criteria. Three hgs/sbs were selected from each rural/urban FSUs. one with the maximum number of DMEs (or with maximum number of NDMEs if there was no DME or with maximum number of OAMEs if there was no DME / NDME in the FSU) or with maximum percentage share of population if there was no manufacturing enterprise in the entire FSU, was always selected and termed as Segment 1; other two were selected circular systematically with equal probability and combined to form Segment 2.</p> |

| Ultimate Stage Unit   | Frame Used   | FSU Selection Method   | USU Selection Method  |
|---|--|--|---|
| <p>Manufacturing enterprises in the unorganised sector (OAME/ NDME/ DMEs). A directory establishment is an establishment which has employed six or more workers (household and hired workers taken together). If such an establishment is engaged in manufacturing activities, it is termed Directory Manufacturing Establishment (DME). If such establishment has less than six workers then termed as NDME. A manufacturing enterprise, which is run without any hired worker employed on a fairly regular basis, is termed an own account enterprise (OAME).</p> | <p>EC '98 with enterprise/ establishment level data was taken as the frame for the survey for the whole of India except Orissa (EC '98 work not completed) &amp; 66 towns of Karnataka (EC-98 work not done using UFS blocks). For Orissa, Population Census 1991 was taken as frame. Sampling frame for 66 towns of Karnataka and all towns of Orissa was the UFS blocks.</p> | <p>For sub-stratum 1 (FSUs with no unorganised manufacturing enterprises) in rural/urban sector of each State/UT FSUs were selected with equal probability and without replacement (SRSWOR). For all other sub-strata in both rural and urban sectors, FSUs were selected circular systematically with PPS, size being the number of manufacturing workers in the unorganised sector as per EC '98. Samples were selected in the form of independent sub-sample.</p> | <p>Sample enterprises were selected by circular systematic sampling with equal probability.</p> |

# NSS Round

57th Round

July' 2001 - June' 2002

| Survey Undertaken  | Sampling Methodology   | First Stage Unit  |
|--|--|---|
| <p>The 57th Round covered broadly all unorganised service sector enterprises engaged in the activities of hotels and restaurants; transport, storage and communication (I); real estate, renting and business activities (K); education (M); health and social work (N) and other community, social and personal service activities (O).</p> <p>The survey did not cover the service sector enterprises pursuing the activities of wholesale and retail trade, repair of motor vehicles, motorcycles and personal and household goods (G); financial intermediation (J); public administration and defence (L); private households with employed persons (P) and extra-territorial organisations and bodies (Q).</p> | <p>A stratified sampling design was adopted for unorganised service sector enterprise survey. One special stratum for Rural and Urban sector each was formed at the State / UT level consisting of all the FSUs of the State / UT (i) having at least one big unit of an activity under coverage on the basis of its number of workers or (ii) having large number of workers engaged in the same activity as in (i). Apart from special stratum at State/UT level, general strata were formed. In case of general strata, NSS Region was the basic stratum for rural and urban sector and Sub-stratification was done within each stratum. Second stage stratification was done within each FSU based on broad activity group.</p> <p>In case of big FSUs hamlet groups were formed based on population and enterprise criteria and 3 hamlet groups were selected. All the big enterprises having 200 or more workers and within survey coverage were constituted as segment 9 establishments. All the eligible segment 9 establishments were surveyed. Apart from segment 9, segment 1 and 2 were formed within each FSU. hg/sb having maximum number of establishments or OAEs in the FSU was selected with certainty (i.e. with probability 1) and designated as segment 1.</p> <p>Two more hg's/sb's were to be selected for survey from the remaining (D-1) hg's/sb's of the sample FSU with equal probability following the method of circular systematic sampling. These two hg's/sb's together constituted segment 2.</p> <p>Sub-sampling technique was also used in this Round for selection of sample FSUs.</p> | <p>The first stage units (FSUs) were villages (Panchayat wards for Kerala) / UFS blocks (wards for 61 towns of Karnataka where UFS blocks were not used during EC '98 work). For larger FSUs, they were again sub-divided into Hamlet groups / sub-blocks (hgs/sbs) by more or less equalizing population or number of non-agricultural establishments of each hg/sb. Three hgs/sbs were selected from each rural/urban FSUs.</p> |

| Ultimate Stage Unit   | Frame Used  | FSU Selection Method  | USU Selection Method                                   |
|---|---|---|--|
| <p>Ultimate stage units (USUs) were enterprises and households.</p> | <p>List of Economic Census 1998 (EC '98) villages (Panchayat wards for Kerala) / UFS blocks (wards for 61 towns of Karnataka) was taken as the sampling frame for FSUs.</p> | <p>For each sub-Round, sample FSUs from each stratum were selected in the form of two independent sub-samples by circular systematic sampling (CSS) with probability proportional to size (PPS), size being the number of workers in the FSU for sub-strata 1-10. For sub-stratum 11, FSUs were selected by CSS with equal probability.</p> | <p>Households/Enterprises were selected by SRSWOR.</p> |

# NSS Round

62nd Round

July' 2005 - June' 2006

| Survey Undertaken  | Sampling Methodology  | First Stage Unit  |
|--|---|---|
| <p>The 62nd Round (July 2005 - June 2006) of NSS was earmarked for survey on unorganised manufacturing enterprises under the two-digit codes 15 to 37 (Section 'D') of NIC-2004 and enterprises under cotton ginning, cleaning and baling (NIC-2004, code 01405); and annual survey of consumer expenditure and survey on employment - unemployment.</p> | <p>A stratified multi-stage design was adopted for the 62nd Round survey. District was considered as the basic stratum for both rural &amp; urban sector. However, if there were one or more towns with population 10 lakhs or more as per population census 2001 in a district, each of them would also form a separate basic stratum and the remaining urban areas of the district would be considered as another basic stratum. There were 27 towns with population 10 lakhs or more at all-India level as per census 2001.</p> <p>Segment 9 was formed in the selected sample FSUs of rural sub-strata 1 &amp; 2 of each stratum. It comprised only the big non-ASI registered SSI manufacturing unit(s) in the village as per DCSSI census on the basis of which the villages had been identified. The names of such units in the selected sample FSUs were supplied to field offices. If any such unit is found to be eligible for ASI, it was not be covered under segment 9. Only top 10 eligible enterprises in terms of number of workers were constitute segment 9.</p> <p>Second stage stratification was done within each FSU. Sub-sampling technique was also used in this Round.</p> | <p>1. Rural Sector: List of Census 2001 villages (panchayat wards for Kerala) was used as FSUs.</p> <p>2. Urban Sector: List of latest available Urban Frame Survey (UFS) blocks was used as FSUs.</p> <p>In case of large FSUs, one intermediate stage of sampling was adopted i.e, selection of two hamlet-groups (hgs)/ sub-blocks (sbs) from each rural/ urban FSU.</p> |



| Ultimate Stage Unit  | Frame Used   | FSU Selection Method  | USU Selection Method  |
|--|--|---|---|
| <p>The ultimate stage units (USU) were households/unorganised-manufacturing enterprises.</p> | <p>Two frames were used for the 62nd Round survey viz. List frame and Area frame.</p> <p>List Frame: This was used only for urban sector and that too for selection of manufacturing enterprises only. For unorganised manufacturing enterprises, a list of about 8000 big non-ASI manufacturing units in the urban sector prepared on the basis of the data of the census of manufacturing enterprises conducted by Development Commissioners of Small-Scale Industries (DCSSI) in 2003 was used as list frame.</p> <p>Area frame: This was adopted for both rural and urban sectors. The list of villages as per census 2001 (for Manipur, 1991 census, if 2001 census list was not available) was used as frame for the rural sector and in the urban sector latest UFS blocks were used as frame. However, EC-98 was used as frame for the 27 towns with population 10 lakhs or more (as per Census 2001).</p> | <p>Rural:(a) sub-stratum 1: All 462 FSUs were surveyed.<br/>(b) sub-stratum 2: FSUs selected with PPSWR where size was number of non-ASI registered SSI DME units in the village.<br/>(c) sub-stratum 3, 4, 5, ....: FSUs selected by PPSWR with size as population as per census 2001.</p> <p>Urban: (a) For 27 million plus cities: FSUs selected by PPSWR with the number of manufacturing workers in the unorganised sector as per EC '98 as size<br/>(b) For other cities/ towns: FSUs selected by SRSWOR.</p> <p>Within each stratum, samples were drawn in the form of two independent sub-samples in both the rural and urban sectors.</p> <p>All these units in the list frame were to be surveyed and there was no sampling. To avoid duplication, those duplicate units were excluded from the list of enterprises prepared in the selected urban blocks/villages drawn from the area frame.</p> | <p>The sample households were selected by SRSWOR from each SSS.</p> |

# NSS Round

63rd Round

July' 2006 - June' 2007

| Survey Undertaken   | Sampling Methodology   | First Stage Unit   |
|---|--|--|
| <p>Survey on service sector enterprises (excluding Trade). All service sector enterprises, which were not covered under the Annual Survey of Industries (ASI), will be under coverage of the survey. Government and public sector undertakings will not be under survey coverage.</p> | <p>A stratified multi-stage design was adopted for the 63rd Round survey. District was considered as the basic strata for both rural &amp; urban sector. However, if there were one or more towns with population 10 lakhs or more as per population census 2001 in a district, each of them was also form a separate basic stratum and the remaining urban areas of the district were considered as another basic stratum. There were 27 towns with population 10 lakhs or more at all-India level as per census 2001. Second stage stratification was done within each FSU. Sub-sampling technique was also used in this Round.</p> <p>Having determined the boundaries of the sample FSU, all non-agricultural enterprises having 50 or more workers in the entire FSU and having operated at least one day during last 365 days preceding the day of survey will be listed and all the eligible units under coverage will be surveyed. All the listed big units (whether under coverage or not) were constitute segment 9. All eligible enterprises under coverage were surveyed in segment 9.</p> | <p>1. Rural Sector: List of Census 2001 villages (panchayat wards for Kerala) was used as FSUs</p> <p>2. Urban Sector: List of latest available Urban Frame Survey (UFS) blocks was used as FSUs.</p> <p>In case of large FSUs, one intermediate stage of sampling was adopted i.e, selection of three hamlet-groups (hgs)/ sub-blocks (sbs) from each rural/ urban FSU.</p> <p>Hamlet group having maximum number of service sector enterprises was formed segment 1 and two more HGs were selected from remaining HGs by SRSWOR.</p> |

| Ultimate Stage Unit                       | Frame Used  | FSU Selection Method  | USU Selection Method   |
|---|---|---|--|
| Households/<br>Service sector enterprises | <p>Two frames were used for the 63rd Round survey viz. List frame and Area frame.</p> <p>List frame: A list of about 1000 service sector companies distributed all over India used as list frame.</p> <p>Area frame: The list of villages as per census 2001 was used as frame for the rural sector and in the urban sector latest UFS blocks was used as frame.</p> <p>In the urban sector, three kinds of frames were used:</p> <p>For the 27 towns with population 10 lakhs or more (as per Census 2001), EC-98 were used as frame.</p> <p>For other UFS towns, the latest available list of UFS blocks were used as frame.</p> <p>For non-UFS towns list of such towns/OGs were used as frame.</p> <p>All these companies in the list frame were surveyed. However, these companies and their branch offices were excluded from the coverage of the area frame survey to avoid duplication.</p> | <p>Rural sector: (a) FSUs selected by PPSWR with size as 'other workers' (i.e. total workers - household industry workers - agricultural labourers - cultivators) as per census 2001.</p> <p>Urban sector: (b) For 27 million plus cities: FSUs were selected by PPSWR with the number of workers as size.</p> <p>(c) For other cities/towns: FSUs were selected by SRSWOR.</p> | The sample households were selected by SRSWOR from each SSS. |

# NSS Round

67th Round

July' 2010 - June' 2011

| Survey Undertaken  | Sampling Methodology  | First Stage Unit   |
|--|---|--|
| Survey on unincorporated non-agricultural enterprises in manufacturing, trade and other service sector (excluding construction). | <p>A stratified multi-stage design was adopted for the 67th Round survey. District was considered as the basic strata for both rural &amp; urban sector. In case of urban, each city with population of 1 million or more as per Census 2001 will form a separate stratum. Second stage stratification was done within each FSU.</p> <p>Having determined the boundaries of the sample FSU, all non-agricultural enterprises having 20 or more workers in the entire FSU and having operated at least one day during last 365 days preceding the day of survey (hereinafter to be called as 'big enterprises') were listed and all the eligible units under coverage were surveyed. All the listed big units (whether under coverage or not) were constitute segment 9. All eligible enterprises under coverage were surveyed in segment 9.</p> | <p>1. Rural Sector: List of Census 2001 villages (panchayat wards for Kerala) was used as FSUs</p> <p>2. Urban Sector: List of latest available Urban Frame Survey (UFS) blocks was used as FSUs.</p> <p>In case of large FSUs, one intermediate stage of sampling were the selection of three hamlet-groups (hgs)/ sub-blocks (sbs) from each large rural/ urban FSU. Hamlet groups (hgs)/sub-blocks (sbs) were formed based on population and enterprise criteria. Two segments were constituted in a large FSU. Segment 1 was the hg/sb having maximum number of establishments under the coverage and two more hg's/sb's were chosen by SRSWOR and combined to form Segment 2.</p> |

| Ultimate Stage Unit              | Frame Used  | FSU Selection Method  | USU Selection Method                                     |
|----------------------------------|---|---|--|
| Enterprises in both the sectors. | <p>Rural: Census 2001 list of villages was used as the sampling frame.</p> <p>Urban: EC-2005 frame was used for 26 cities with population more than a million as per census 2001. For other cities/towns (UFS frame (2002-07 phase or latest available phase prior to 2002-07 if it is not available) was used.</p> | <p>(a) Rural &amp; million plus cities: From each sub-stratum, required number of sample villages/blocks were selected by probability proportional to size with replacement (PPSWR), size being the number of total non-agricultural workers under coverage in the village/block as per EC-2005.</p> <p>(b) Urban (other than million plus cities): From each sub-stratum FSUs were selected by using Simple Random Sampling Without Replacement (SRSWOR).</p> <p>Within each stratum, samples were drawn in the form of two independent sub-samples in both the rural and urban sectors.</p> | Sample enterprises from each SSS were selected by SRSWOR |

# NSS Round

73rd Round

July' 2015 - June' 2016

| Survey Undertaken  | Sampling Methodology   | First Stage Unit   |
|--|--|--|
| <p>The coverage of NSS 73rd Round was unincorporated non-agricultural enterprises belonging to Manufacturing, Trade and Other Services (excluding construction).</p> | <p>A stratified multi-stage design was adopted for the 73rd Round survey. Districts were considered as basic stratum in both rural and urban sector. In urban area in a particular district if there were towns with population 15 lakhs or more as per census 2011 then each of them was considered as basic stratum and remaining area of the districts were considered as another stratum. In case of rural area of Nagaland one separate special stratum was formed within the State/UT consisting of all the interior and inaccessible villages. Second stage stratification was done within each FSU.</p> <p>Having determined the boundaries of the sample FSU, all non-agricultural enterprises having 20 or more workers in the entire FSU and having operated at least one day during last 365 days preceding the day of survey (hereinafter to be called as 'big enterprises') were listed and all the eligible units under coverage were surveyed. All the listed big units (whether under coverage or not) constituted segment 9. All eligible enterprises under coverage were surveyed in segment 9.</p> | <p>The first stage units (FSU) were the 2011 Population Census villages in the rural sector. For rural part of Kerala, 2011 Population Census Enumeration Blocks (EBs) were taken as FSUs. The first stage units (FSU) were the 2011 Population Census EBs in the urban sector. For those urban areas where Sixth EC data were not used latest updated UFS (Urban Frame Survey) blocks were the FSUs. In the case of large FSUs, one intermediate stage of sampling was the selection of three hamlet-groups (hg's)/sub-blocks (sb's) from each large FSU.</p> |

| Ultimate Stage Unit | Frame Used  | FSU Selection Method  | USU Selection Method  |
|---------------------|---|---|---|
| Enterprises         | <p>Census 2011 list of villages were used as the sampling frame for rural areas. Auxiliary information such as number of enterprises, number of workers, type of enterprises, activities of enterprises, etc. available from Sixth EC frame was used for stratification, sub-stratification and selection of FSUs. For other rural areas where EC data were not used, the auxiliary information on non-agricultural workers based on Primary Census Abstract (PCA) 2011 were utilised for stratification, sub-stratification and selection of FSUs. In rural areas of Kerala, list of EBs as per Census 2011 was used as sampling frame. In urban area UFS blocks were used as frame.</p> | <p>FSUs were selected by PPSWR in rural area. Total numbers of non-agricultural workers under coverage in the village were considered as size. In urban area FSUs were selected by SRSWOR scheme. Both rural and urban samples were drawn in the form of two independent sub-samples.</p> | <p>Sample establishment from each SSS were selected by SRSWOR</p> |

# NSS Round

74th Round

July' 2016 - June' 2017

| Survey Undertaken                | Sampling Methodology   | First Stage Unit   |
|----------------------------------|--|--|
| <p>Survey on service sector.</p> | <p>The survey was conceptualized to be conducted in two phases:</p> <p>Phase I: Collection of Statistics Act, 2008 and rules framed there-under in 2011 were used for data collection in this Round. Accordingly, notices were to be issued under Collection of Statistics Act to all the eligible establishments selected from EC and BR list frames for the purposes of the survey. Thus, correct and complete postal addresses of the establishments were required for this purpose.</p> <p>Phase-I of the survey was meant for verifying and updating details of the selected establishments of EC and BR list through field visits. Information relating to duplication of the establishments (within EC or BR list or between these two lists) and availability of audited/auditable accounts were also collected.</p> <p>A list of eligible enterprises (i.e., existing enterprises working as single entities or headquarters maintaining audited/auditable accounts) to be covered in the survey was prepared during this phase from the list frame of establishments of only EC and BR. Sample enterprises from EC and BR frame for canvassing detailed schedule in Phase II were selected from the list of eligible enterprises of phase I (prepared by Field Operations Division of NSSO).</p> <p>Phase II: The detailed schedule (Schedule 2.35) was canvassed in Phase II in the sample enterprises of services sector selected from EC, BR and MCA frame. The detailed schedule was also canvassed in some big construction enterprises found eligible for survey from EC and BR frames as also from MCA frame for use of NAD, CSO.</p> <p>For list frame (EC, BR &amp; MCA) USUs were selected through circular systematic sampling scheme.</p> <p>Stratification of the establishments were done using broad activity category.</p> | <p>List frame was used and establishments were selected directly</p> |



| Ultimate Stage Unit | Frame Used   | FSU Selection Method | USU Selection Method  |
|---------------------|--|----------------------|---|
| Establishments      | <p>Three types of frames were used for data collection in 74th Round. They were as follows: (i) EC frame, (ii) BR frames for 11 States and (iii) MCA frame. The list frame for the survey was prepared from the list of establishments available from sixth Economic Census (EC), Business Register (BR) of 11 States and the list of active private non-financial companies of 2013-14 as obtained from NAD, CSO, which NAD had sourced from the MCA database available with them. Some additional companies based on a list of active non-financial companies in 2014-15 MCA database were also added to the list.</p> <p>EC and BR frames: The list of establishments as available from the Sixth Economic Census (EC) and Business Registers (BR) maintained by State Governments contained name, address and other valuable information. Business registers were available for 11 States viz., Himachal Pradesh, Punjab, Uttarakhand, Rajasthan, Uttar Pradesh, Arunachal Pradesh, Nagaland, Manipur, Andhra Pradesh, Tamil Nadu and Telangana.</p> <p>MCA frame:<br/>List of active private non-financial companies of 2013-14, as available from National Accounts Division (NAD), CSO, along with data for some additional companies based on such a list for 2014-15 was used as an additional frame to augment EC/ BR frame. For these companies, worker information was not available, but auxiliary information such as industry group, revenue, GVA, etc. were available in addition to name. Postal addresses of the companies of the MCA database as available from the website of the Ministry of Corporate Affairs were used through matching of Company Identification Number. Companies for which addresses were not available were removed from the frame.</p> | Not applicable       | <p>i) EC &amp; BR frame: In each stratum units were arranged by number of workers and required number of units were selected by Circular Systematic Sampling technique both from updated frame of eligible enterprises of Group 1 and from unverified establishments of Group 2 for central sample. The residual enterprises of Group 1 and establishments of Group 2 were arranged afresh and state samples were selected by Circular Systematic Sampling technique.</p> <p>ii) MCA frame: Within each stratum/sub-stratum companies were arranged in order of their revenues and samples were drawn following Circular Systematic Scheme first for central sample and then from the residual frame for state samples with fresh arrangement of companies by revenues.</p> |

| Survey Undertaken  | Sampling Methodology   | First Stage Unit  |
|--|--|---|
| <p>Annual Survey of Unincorporated Sector Enterprises.</p> | <p>A stratified multi-stage design was adopted for ASUSE 2021-22. A special stratum, in the <i>rural areas</i> only, was formed <i>at State/UT</i> level for each State/UT where there were at least 50 such villages where no worker was found under survey coverage. In the remaining part of rural areas , NSS region was considered as basic stratum and in urban area different town classes as per census 2011 population within each NSS region, constitute separate stratum. Each million plus city as per census 2011 formed separate basic stratum. In rural and urban areas within each stratum, sub-strata were formed. In urban area two sub-strata were formed based on area types. In each selected FSUs All non-agricultural establishments having 10 or more workers in the entire FSU and having operated at least one day during last 365 days preceding the day of survey (herein after to be called as 'big establishments') were listed and all the <i>eligible units under coverage</i> were surveyed. These big establishments (10 workers or more) were constituting segment 9 establishment.</p> | <p>The First Stage Units (FSU) were census 2011 villages in the rural sector. For rural part of Kerala, Panchayat wards were considered as FSUs. In urban area latest available UFS blocks were considered as FSU. In the case of large FSUs, one intermediate stage of sampling was the selection of three hamlet-groups (hg's)/sub-blocks (sb's) from each large FSU. Hamlet groups were formed either more or less equalizing population or by equalizing number of non-agricultural establishments. Two segments were selected from a large FSU wherever hamlet-groups/sub-blocks had been formed. Segment 1 was the hg/sb having maximum number of hired worker establishments (HWE) under the coverage. Two more hg's/sb's were selected from the remaining hg's/sb's of the sample FSU with equal probability following the method of SRSWOR and combined to form Segment 2.</p> |

| Ultimate Stage Unit | Frame Used  | FSU Selection Method   | USU Selection Method   |
|---------------------|---|--|--|
| Establishments      | <p>Census 2011 list of villages were used as rural frame (except Kerala). In rural part of Kerala, panchayat wards were used as rural frame. In urban areas, latest available UFS blocks were used as sampling frame. Auxiliary information such as number of establishments, number of workers, type of establishments, activities of establishments, etc. available from Sixth EC frame were used for sub-stratification purposes in rural areas.</p> | <p>From each stratum/sub-stratum, required number of sample FSUs were selected by SRSWOR scheme. Sample FSUs were selected annually. Sub-sampling methodology was not used for sample selection.</p> | <p>Sample establishment from each SSS were selected by SRSWOR.</p> |

| Survey Undertaken  | Sampling Methodology   | First Stage Unit   |
|--|--|--|
| <p>Annual Survey of Unincorporated Sector enterprises.</p> | <p>Multistage Stratified random sampling was adopted in ASUSE 2022-23. Stratification criteria was exactly same as ASUSE 2021-22. NSS regions were considered as basic strata in rural area. Different Town class as per census 2011 population within each NSS region were considered as basic stratum in urban areas. Each million plus cities as per census 2011 within each NSS regions were considered as basic stratum. In ASUSE 2022-23, sub-strata were formed based on coefficient of variation of worker parameter in rural areas. In urban areas sub-strata were formed within each stratum based on area type. Within each selected FSUs, second stage strata were formed based on BAC (Broad activity codes), NIC codes and worker type. Total 18 SSS were formed in each FSUs. Segment 9 establishments was formed in selected FSUs as before and all eligible segment 9 establishments were surveyed.</p> | <p>The first stage units (FSU) were census 2011 villages in the rural sector. For rural part of Kerala, Panchayat wards were considered as FSUs. In urban area latest available UFS blocks were considered as FSU. In case of large FSU, one intermediate stage of sampling was the selection of three hamlet-groups (hg's)/sub-blocks (sb's) from each large FSU. Hamlet groups were formed either more or less equalizing population or by equalizing number of non-agricultural establishments. Two segments were selected from a large FSU wherever hamlet-groups/sub-blocks were formed. Segment 1 was the hg/sb having maximum number of hired worker establishments (HWE) under the coverage. Two more hg's/sb's were selected from the remaining hg's/sb's of the sample FSU with equal probability following the method of SRSWOR and combined to form Segment 2.</p> |

| Ultimate Stage Unit | Frame Used   | FSU Selection Method   | USU Selection Method   |
|---------------------|--|--|--|
| Establishments      | <p>Census 2011 list of villages were considered as rural frame and in rural part of Kerala, Panchayat wards were considered as rural frame. In urban area latest available UFS blocks were considered as urban frame.</p> <p>Auxiliary information such as number of establishments, number of workers, type of establishments, activities of establishments, etc. available from Sixth EC frame were used for sub-stratification purposes in rural areas.</p> | <p>Sample FSUs were selected by SRSWOR from each stratum × sub-stratum. FSUs were selected annual basis and sub-sampling methodology was not used for sample FSUs selection.</p> | <p>Sample establishment from each SSS were selected by SRSWOR.</p> |

**ASUSE 2023-24 (October 2023- September 2024) sampling design was exactly same as ASUSE 2022-23.**

# ASUSE

Jan' 2025 - Dec' 2025

| Survey Undertaken                                   | Sampling Methodology   | First Stage Unit  |
|---|--|---|
| Annual Survey of Unincorporated Sector enterprises. | Multistage stratified random sampling is adopted in ASUSE 2025. In this Round of ASUSE, district is considered as basic stratum in rural and urban areas. In urban areas, each million plus cities as per census 2011 population constitute separate basic stratum. In rural areas, a special stratum has been formed at State/UT level comprising of zero worker as per EC6 and census 2011. In rural areas, within each stratum, sub-strata are formed based on coefficient of variation of worker parameter in rural areas and in urban areas sub-strata are formed based on area types. Within each selected FSUs, second stage strata are formed based on BAC (Broad activity codes), NIC codes and worker type. Total 18 SSS are formed in each FSUs. Segment 9 also formed in ASUSE 2025. All the eligible segment 9 establishments are surveyed in ASUSE 2025. | The first stage units (FSU) are census 2011 villages in the rural sector. For rural part of Kerala, Panchayat wards are considered as FSUs. In urban area latest available UFS blocks (2017-22 & 2022-27 mainly) are considered as FSU. In case of large FSU, hamlet-groups (hg's)/sub-blocks (sb's) are formed. Hamlet groups are formed either more or less equalizing population or by equalizing number of non-agricultural establishments. Formation of segment 1 and 2 are same as earlier Rounds of ASUSE. |

| Ultimate Stage Unit | Frame Used  | FSU Selection Method   | USU Selection Method   |
|---------------------|---|--|--|
| Establishments      | Census 2011 list of villages are considered as rural frame and latest available UFS blocks (2017-22 & 2022-27 mainly) are formed urban frame. In rural areas of Kerala, panchayat wards are considered as rural frame. Auxiliary information from 6th economic census are used for sub-stratification purpose in rural areas. | FSUs are selected by SRSWOR. In this Round of ASUSE, FSUs are selected independently on quarterly basis. Sub-sampling method is not adopted for sample selection in this Round of ASUSE. | From each SSS (second stage stratum), establishments are selected by SRSWOR. |

## 2.4 Survey of Corporate Service Sector

**2.4.1** Service sector in India is growing rapidly and its contribution to the Gross Domestic Product of the country is the largest in recent years. But there is no comprehensive database of the entire sector. Unincorporated service sector enterprises have been traditionally covered in NSS enterprise surveys and now in ASUSE, but similar information is not available for the corporate part of the service sector. There is a strong demand from different quarters to have a comprehensive source of data on a regular basis of the service sector. The experimentation in the following surveys have been made by NSO to understand the operational and economic characteristics of the service sector:



**2.4.2** The list frame-based survey of NSS 74th Round was conducted with the objective of measuring various operational and economic characteristics of service sector enterprises (excluding financial sector). The survey was conceived as a prelude to the proposed Annual Survey on Services Sector. It aimed at developing/ proposing a suitable list frame for the survey and also gaining experience in difficulties in survey of such enterprises. The experiences were brought out in the form of a Technical Report for the consumption of all the stakeholders.





## 2.5 Coverages of Non-agriculture Enterprise Surveys of NSSO

### 2.5.1 Coverages of ASI and unorganised sector enterprises in manufacturing

**2.5.1.1** ASI covers the enterprises in the organised sector. organised manufacturing sector comprises activities related to manufacturing processes, repair services, gas and water supply and cold storage. It encompasses the factories registered under the sections 2m(i) and 2m(ii) of Factories Act 1948. The survey also covers bidi and cigar manufacturing establishments registered under the Bidi and Cigar Workers (Conditions of Employment) Act 1966. All electricity undertakings engaged in generation, transmission and distribution of electricity, not registered with the Central Electricity Authority (CEA), are also covered under ASI. In a recent development, decision has been taken to extend ASI coverage to the units with 100 or more employees registered under any of the seven Acts / Board / Authority viz., Companies Act. 2013, Factories Act 1948, Shops and Commercial Establishment Act, Societies Registration Act, Cooperative Societies Act, Khadi and Village Industries Board, Directorate of Industries (District Industries Center) in the Business Register of Establishments (BRE) and verified by Field Operations Division (FOD).



However, defence establishments, oil storage and distribution depots, departmental units such as railway workshops, RTC workshops, Govt. mints, sanitary, water supply, gas storage etc. are excluded from the purview of the survey.

**2.5.1.2** NSS 29th Round to NSS 63rd Round surveys have been referred to as unorganised sector surveys of NSSO. The enterprises covered are generally those which, by and large, do not maintain proper records of accounts. Information is provided by the respondents from their memory. Public sector enterprises are usually not under coverage as they have recorded accounts which can be collected from the documents maintained by them mandatorily.

**2.5.1.3** However, there is some difference in the connotation of unorganised part in the case manufacturing sector surveys. The coverage of unorganised enterprise surveys of NSSO is non-ASI enterprises of manufacturing sector. ASI covers enterprises under sections 2m(i) and 2m(ii) of Factories act 1948. Enterprises registered under Section 85 of Factories Act, 1948 were, however, covered in unorganised sector surveys. In most of the NSSO unorganised manufacturing sector surveys till the 56th Round, public sector units, not covered by ASI, were explicitly or implicitly included in unorganised manufacturing sector surveys. But later public sector units were excluded completely from all NSSO surveys of unorganised sector.

**2.5.1.4** All enterprises engaged in the activity of cotton ginning, cleaning and baling (NIC code 01405) are also included.

## **2.5.2 Unorganised sector in trade and service sector surveys of NSSO**

All enterprises except those run by Public Sector institutions/organisations fall under the ambit of unorganised service sector surveys of NSSO.

Among the service sector units registered under the Factories Act, 1948, units appearing in the latest Annual Survey of Industries (ASI) frame are excluded.

### 2.5.3 Coverage of unincorporated sector enterprises

The enterprise surveys of unorganised sector were consolidated from NSS 67th Round. Different sectors (manufacturing, trade and other services) which used to be surveyed separately so far, were integrated in a single survey in 67th Round.



**Table 2.2: Coverage of Enterprises: by Ownership and Type**

| Round | Ownerships covered   | Enterprise types covered                  |
|-------|--|---|
| 23    | 1. Self-employed household members owning proprietary and partnership enterprises<br>2. Non-household enterprise units | No restriction on number of hired workers |

| Round | Ownerships covered  | Enterprise types covered  |
|-------|---|---|
| 29    | <ol style="list-style-type: none"> <li>1. Self-employed household members owning proprietary and partnership enterprises</li> <li>2. Non-household enterprise units</li> </ol>  | Enterprises with 6 or more employees or those registered under Factories Act were not surveyed  |
| 33    | <ol style="list-style-type: none"> <li>1. Proprietary</li> <li>2. Partnership with members of same household</li> <li>3. Partnership with members of different households</li> <li>4. Co-operative society</li> <li>5. Other institutional units</li> </ol>   | <ol style="list-style-type: none"> <li>1. OAME (no hired worker)</li> <li>2. NDME (hired workers but number less than six)</li> </ol>   |
| 34    | <ol style="list-style-type: none"> <li>1. Proprietary</li> <li>2. Partnership</li> <li>3. Private Limited</li> <li>4. Public Limited</li> <li>5. Co-operative Society</li> <li>6. Institution registration under public trust or society Act</li> <li>7. Un-registered institution</li> <li>8. Others</li> </ol>                      | <ol style="list-style-type: none"> <li>1. OAE</li> <li>2. NDE [those establishments whose total number of workers (including household worker, if any) is less than 6 and annual output/turnover/receipt less than Rs. 1,00,000]</li> </ol> |
| 40    | <ol style="list-style-type: none"> <li>1. Proprietary</li> <li>2. Partnership</li> <li>3. Cooperative societies</li> <li>4. Public sector</li> <li>5. Public and private limited company outside the public sector</li> <li>6. Other institutional enterprises managed by public trust or societies, training school, etc.</li> </ol> | <ol style="list-style-type: none"> <li>1. OAME</li> <li>2. NDME</li> </ol>  |

| Round | Ownerships covered   | Enterprise types covered   |
|-------|--|--|
| 41    | <ol style="list-style-type: none"> <li>1. Proprietary</li> <li>2. Partnership</li> <li>3. Co-operative society</li> <li>4. Public and private limited industry outside the public sector</li> <li>5. Trust</li> <li>6. Others</li> </ol>   | <ol style="list-style-type: none"> <li>1. OATE</li> <li>2. NDTE</li> </ol> |
| 45    | <ol style="list-style-type: none"> <li>1. Proprietary</li> <li>2. Partnership with members of the household</li> <li>3. Partnership between members not all from the same household</li> <li>4. Co-operative Society</li> <li>5. Public Sector</li> <li>6. Public/Private Limited Company</li> <li>7. Others</li> </ol>                            | <ol style="list-style-type: none"> <li>1. OAME</li> <li>2. NDME</li> </ol> |
| 46    | <ol style="list-style-type: none"> <li>1. Proprietary</li> <li>2. Partnership between members of the same household</li> <li>3. Partnership between members not all from same household</li> <li>4. Co-operative society</li> <li>5. Public and private limited industry outside the public sector</li> <li>6. Trust</li> <li>7. Others</li> </ol> | <ol style="list-style-type: none"> <li>1. OATE</li> <li>2. NDTE</li> </ol> |

| Round | Ownerships covered  | Enterprise types covered   |
|-------|---|--|
| 51    | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Partnership with members of the same household</li> <li>4. Partnership between members not all from the same household</li> <li>5. Co-operative society</li> <li>6. Public sector</li> <li>7. Limited company (outside public sector)</li> <li>8. Others</li> </ol> | <ol style="list-style-type: none"> <li>1. OAME</li> <li>2. NDME</li> <li>3. DME</li> </ol> |
| 53    | <ol style="list-style-type: none"> <li>1. Proprietary</li> <li>2. Partnership</li> <li>3. Others excluding public sector</li> </ol>   | <ol style="list-style-type: none"> <li>1. OATE</li> <li>2. NDTE</li> </ol>                 |
| 55    | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Partnership with members of the same household</li> <li>4. Partnership between members not all from the same household</li> </ol>   | No criteria such as OAE or NDE for classification of enterprises.                          |
| 56    | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Partnership with members of the same household</li> <li>4. Partnership between members not all from the same household</li> <li>5. Co-operative society</li> <li>6. Limited company (outside public sector)</li> <li>7. Others</li> </ol>                           | <ol style="list-style-type: none"> <li>1. OAME</li> <li>2. NDME</li> <li>3. DME</li> </ol> |

| Round | Ownerships covered   | Enterprise types covered   |
|-------|--|--|
| 57    | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Partnership with members of the same household</li> <li>4. Partnership between members not all from the same household</li> <li>5. Co-operative society</li> <li>6. Limited company (outside public sector)</li> <li>7. Others (excluding public sector units)</li> </ol>  | <ol style="list-style-type: none"> <li>1. OAEs</li> <li>2. Establishments (enterprises with at least one hired worker on a fairly regular basis.)</li> </ol> |
| 62    | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Partnership with members of the same household</li> <li>4. Partnership between members not all from the same household</li> <li>5. Co-operative society</li> <li>6. Limited Company (outside public sector)</li> <li>7. Others (excluding public sector)</li> </ol>  | <ol style="list-style-type: none"> <li>1. OAME</li> <li>2. NDME</li> <li>3. DME</li> </ol>   |
| 63    | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Partnership with members of the same household</li> <li>4. Partnership between members not all from the same household</li> <li>5. co-operative society / self help group</li> <li>6. Private limited company (outside public sector)</li> <li>7. Public limited company (outside public sector)</li> <li>8. Others (excluding public sector)</li> </ol> | <ol style="list-style-type: none"> <li>1. OAEs</li> <li>2. Establishments</li> </ol>   |

| Round | Ownerships covered  | Enterprise types covered   |
|-------|---|--|
| 67    | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Proprietary (transgender)</li> <li>4. Partnership with members of the same household</li> <li>5. Partnership between members not all from the same household</li> <li>6. Self help group</li> <li>7. Trusts</li> <li>8. Others [excluding electricity units registered with the Central Electricity Authority, corporate sector, govt, public sector, co-operatives and public sector]</li> </ol> | <ol style="list-style-type: none"> <li>1. OAEs</li> <li>2. Establishments</li> </ol> |
| 73    | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Proprietary (transgender)</li> <li>4. Partnership with members of the same household</li> <li>5. Partnership between members not all from the same household</li> <li>6. Self help group</li> <li>7. Trusts</li> <li>8. Others [excluding electricity units registered with the Central Electricity Authority, corporate sector, govt, public sector, co-operatives and public sector]</li> </ol> | <ol style="list-style-type: none"> <li>1. OAEs</li> <li>2. Establishments</li> </ol> |



| Round | Ownerships covered  | Enterprise types covered   |
|-------|---|--|
| ASUSE | <ol style="list-style-type: none"> <li>1. Proprietary (male)</li> <li>2. Proprietary (female)</li> <li>3. Proprietary (transgender)</li> <li>4. Partnership with members of the same household</li> <li>5. Partnership between members not all from the same household</li> <li>6. Self help group</li> <li>7. Society/ Trust/ Club/ Association/ Body of individuals/ membership organisation</li> <li>8. Co-operatives</li> <li>9. Others (excluding electricity units registered with the Central Electricity Authority, corporate sector, govt, public sector)</li> </ol> | <ol style="list-style-type: none"> <li>1. OAEs</li> <li>2. Establishments</li> </ol> |

# **CHAPTER- 3**

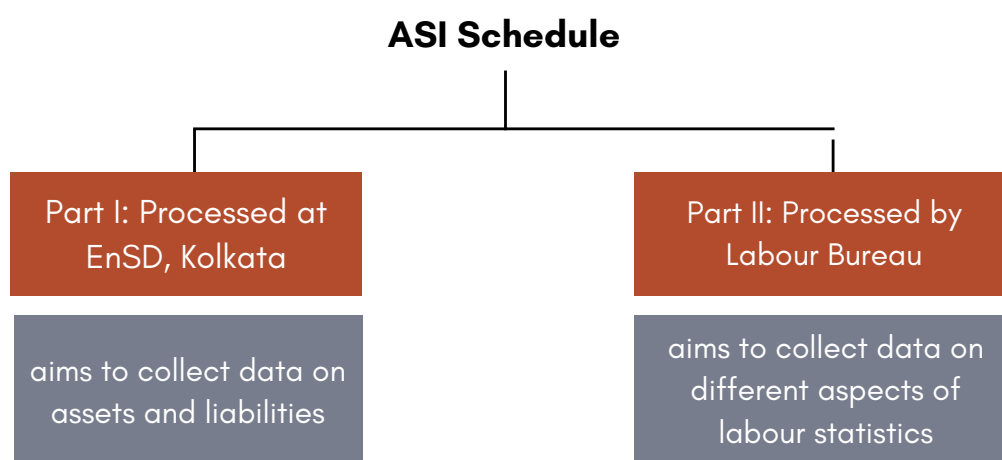
## **Current Annual Surveys of NSSO on Enterprises**



## 3.1 Annual Survey of Industries (ASI)

### 3.1.1 Introduction, Scope, Coverage and Sample Design

**3.1.1.1 Introduction:** Annual Survey of Industries (ASI) is the principal source of industrial statistics in India. It provides statistical information to assess and evaluate, objectively and realistically, the changes in the growth, composition and structure of organised manufacturing sector comprising activities related to manufacturing processes, repair services, gas and water supply and cold storage. The survey has so far been conducted annually under the statutory provisions of the Collection of Statistics (COS) Act, 1953 and the rules framed there-under in 1959 except in the State of Jammu & Kashmir where it is conducted under the J&K Collection of Statistics Act, 1961 and rules framed there under in 1964. From ASI 2010-11 onwards, the survey is being conducted annually under the statutory provisions of the Collection of Statistics (COS) Act, 2008 (as amended in 2017) and the rules framed there-under in 2011.



**3.1.1.2 ASI Schedule:** ASI schedule is the basic tool to collect required data from the units selected for the survey. The schedule for ASI, at present, has two parts. Part-I of ASI schedule, processed at the EnSD, Kolkata, aims to collect data on assets and liabilities, employment and labour cost, receipts, expenses, input items: indigenous and imported, products and by-products manufactured, distributive expenses, etc. Part-II of ASI schedule is processed by the Labour Bureau. It aims to collect data on different aspects of labour statistics, namely, working days, man-days worked, absenteeism, labour turnover, man-hours worked etc.

**3.1.1.3 Geographical Coverage:** The ASI extends its coverage to the entire country.

**3.1.1.4 Reference Period:** The reference period (year) for ASI is the financial year (April-March) for all items of Part - I & II. For example, reference period for ASI 2023-24 is the financial year 1st April 2023 - 31st March 2024.

**3.1.1.5 Survey Period:** The actual survey period for ASI is generally from the month of November to July in the subsequent year following the reference period, but may vary from one year to another.

**3.1.1.6 Coverage of Units:** It covers all factories registered under Sections 2(m)(i) and 2(m)(ii) of the Factories Act, 1948, where the manufacturing process is defined under Section 2(k) of the said Act. The survey also covers bidi and cigar manufacturing establishments registered under the Bidi and Cigar Workers (Conditions of Employment) Act 1966. All electricity undertakings engaged in generation, transmission and distribution of electricity, **not registered with the Central Electricity Authority (CEA)** are also covered under ASI.



However, defence establishments, oil storage and distribution depots, departmental units such as railway workshops, RTC workshops, Govt. Mints, sanitary, water supply, gas storage etc. are excluded from the purview of the survey.

It was decided that the coverage of ASI may be extended **beyond the purview of the Section 2m (i) and 2m (ii) of the Factories Act, 1948 and the Bidi & Cigar Workers (Conditions of Employment) Act, 1966**. To start with, the units with 100 or more employees, not registered under Section 2m (i) and 2m (ii) of the Factories Act, 1948 but registered under any of the seven Acts / Board / Authority viz., Companies Act. 2013, Factories Act. 1948, Shops and Commercial Establishment Act, Societies Registration Act, Cooperative Societies Act, Khadi and Village Industries Board, Directorate of Industries (District Industries Center) in the Business Register of Establishments (BRE) and verified by Field Operations Division (FOD), are also considered for selection.

**3.1.1.7 Establishment approach:** For data collection in ASI, an establishment approach (and not enterprise approach) is followed.

**3.1.1.8 Unit of enumeration:** The primary unit of enumeration in the survey is a factory in the case of manufacturing industries, a workshop in the case of repair services, an undertaking or a licensee in the case of electricity, gas and water supply undertakings and an establishment in the case of bidi and cigar industries. The owner of two or more establishments located in the same state, same sector (bidi, factory or electricity) and pertaining to the same industry group (3-digit industry code) falling under the census scheme is, however, permitted to furnish a single consolidated return, termed as 'Joint Return (JR)'. Such consolidated returns are a common feature in the case of bidi and cigar establishments & electricity undertakings.



**3.1.1.9 Data Collection:** As per the Collection of Statistics Rules, 2011 under the Collection of Statistics Act, 2008, the consultation of Nodal Officer of Central Government is mandatory for conducting any Survey (Section 5[2]). The Nodal Officer is a designated Officer, not below the rank of Joint Secretary, Government of India of nodal department dealing with statistical matters, for exercising powers and performing duties under these rules (Section 3[1]). Now under the rule (Rule 7), a Statistics Officer for a specified period and specified territory is required to be appointed (Section 4 of the Act 2008) to conduct the Survey. The Statistics Officer is empowered by the Act (Sub-section 4 or 6 of Section 4 of the Act) to collect or authorise officials to collect information from any industrial and commercial unit concerned.

**3.1.1.10 ASI Frame:** Availability of a complete and up-to-date frame of all the eligible units is an essential pre-requisite for any large-scale survey. In fact, availability of proper frame is one of the most critical requirements for working out correct multiplier to arrive at valid estimate.

The ASI frame is based on the lists of units mentioned in para 3.1.1.6 and its sub-sections. The frame is being revised / updated every year before selection of the units by the Field Operations Division (FOD) of NSO in consultation with the Chief Inspector of Factories (CIF) in the state.

At the time of revision, the names of the de-registered factories are removed from the ASI frame and those of the newly registered factories are added. The latest updated ASI frame is also available in ASI Web Portal. In case the State Government is conducting the survey on the state sample, FOD office concerned should also collect the feedback from the respective state governments while updating the Frame.

**3.1.1.11 ASI Sampling Design:** The sampling design adopted in ASI has undergone considerable changes from time to time, considering the technical and other requirements. From ASI 2015-16, a new sampling design is adopted.

According to the existing sampling design, all the units in the updated frame are divided into two parts - Central Sample and State Sample. The Central Sample consists of two schemes: Census and Sample. Under Census scheme, all the units are surveyed.

### **1. Census Scheme**

(i) All industrial units belonging to the nine less industrially developed States/ UTs viz. Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura, Ladakh and Andaman & Nicobar Islands.

(ii) All industrial units with Frame NIC = 0893(Salt Extraction).

(iii) For the States/ UTs other than those mentioned in (i),

- a. units having 75 or more employees from six States/UTs, namely, Jammu & Kashmir, Himachal Pradesh, Rajasthan, Bihar, Chhattisgarh and Kerala;
- b. units having 50 or more employees from three States/UTs, namely, Chandigarh, Delhi and Puducherry;
- c. units having 100 or more employees for rest of the States/UTs, not mentioned in (a) and (b) above and;
- d. all factories covered under 'Joint Return' (JR), where JR should be allowed when the two or more units located in the same State/UT, same sector and belong to the same industry (3-digit level of NIC-2008) under the same management.





(iv) After excluding the Census Scheme units in the above manner, all units belonging to the strata (State x District x Sector x 3 digit NIC-2008) having less than or equal to 4 units are also considered under Census Scheme. It may be noted that strata are separately formed under three sectors considered as Bidi, Manufacturing and Electricity.

## **2. Sample Scheme:**

All the remaining units in the frame are considered under Sample Scheme. For all the states, each stratum is formed on the basis of State x District x Sector x 3-digit NIC-2008. The units are arranged in descending order of their total number of employees. Samples are drawn using Circular Systematic Sampling technique for this scheme. An even number of units with a minimum of 4 units are selected and distributed in four sub-samples. It may be noted that in certain cases each of 4 sub-samples from a particular stratum may not have equal number of units.

**3.** Out of these 4 sub-samples, two pre-assigned sub-samples (1 & 3) are given to NSO (FOD) and the other two-subsamples (2 & 4) are given to concerned State/UT for data collection.

**4.** All census units plus all the units belonging to the two sub-samples given to NSO (FOD) are treated as the Central Sample.

**5.** All census units plus all the units belonging to the two sub-samples given to State/UT are treated as the State Sample. Hence, State/UT has to use Census Units (collected by NSO (FOD) and processed by EnSD (erstwhile IS Wing), along with their sub-samples while deriving the state level estimates for their respective State/UT based on State Sample.

**6.** All census units plus all the units belonging to the two sub-samples given to NSO (FOD) plus all the units belonging to the two sub-samples given to State/UT are required for obtaining pooled estimates based on Central Sample and State Sample with increased sample size.

**3.1.1.12 Industrial Classification:** From 1959 onwards, an industrial classification named 'Classification of Indian Industries' was adopted in ASI. With effect from ASI 1973-74, the National Industrial Classification (NIC) 1970 developed subsequently on the basis of UNISIC 1968 (Rev.2) was used. The NIC 1987 that followed UNISIC 1968 was adapted from ASI 1989-90 to ASI 1997-98. The NIC 1998, developed on the basis of UNISIC, 1990 (Rev. 3) was used from ASI 1998-99 to ASI 2003-04. NIC 2004, developed on the basis of UNISIC 2002 (Rev. 3.1) had been used from ASI 2004-05 to 2007-08. NIC 2008 developed on the basis of UNISIC Rev 4 is being adopted from ASI 2008-09 onwards.

**3.1.1.13 National Product Classification for Manufacturing Sector (NPCMS):**

Central Product Classification (CPC) serves as the reference classification for all product classifications within the international system of economic classifications put in place by the United Nations. It is a complete product classification covering all goods and services that follows the definition of products within the SNA framework. Goods and services are understood as coming from a production process. The scope of the CPC covers (a) physical goods (which include transportable and non-transportable physical goods), (b) intangible goods and (c) services.

The National Product Classification for Manufacturing Sector (NPCMS), 2011 was prepared based on Sections 0 to 4 of CPC, Ver. 2.0 that relate to products of manufacturing sector. The NPCMS, 2011 is a 7-digit classification and the structure is 5-digit CPC Code + 2-digit Indian requirement and has 5 Sections, 39 Divisions, 192 Groups, 786 Classes and 1503 Sub-Classes with ultimate 7-digit products. From ASI 2010-2011 onwards, the 7-digit code and its description as per NPCMS, 2011 are being used for collecting and recording of all input and output items in ASI schedule. From ASI 2015-16 onwards, revised version of NPCMS, 2011 is used to classify the input and output items collected in ASI schedule.

▶ **3.1.2 New Initiatives in Annual Survey of Industries (ASI)**

Various new initiatives have been taken to improve the coverage and quality of ASI data.

### **3.1.2.1 Issue of coverage of frame of Annual Survey of Industries (ASI):**

The coverage of ASI has been extended beyond the purview of the sections 2m (i) and 2m (ii) of the Factories Act, 1948 and the Bidi & Cigar Workers (Conditions of Employment) Act, 1966 as recommended by the Sub-Group on Sampling Design of ASI. For this purpose, Business Register of Enterprises (BRE) prepared by the respective states would be used.

To start with the implementation of the augmented frame, units with 100 or more employees not registered under Sections 2m (i) and 2m (ii) of the Factories Act, 1948 but included in the BRE of the respective states would be included in ASI frame. This is a significant departure from past practices and it is an improvement in coverage of registered manufacturing sector.

### **3.1.2.2 Modifications made in ASI schedule from ASI 2015-16**

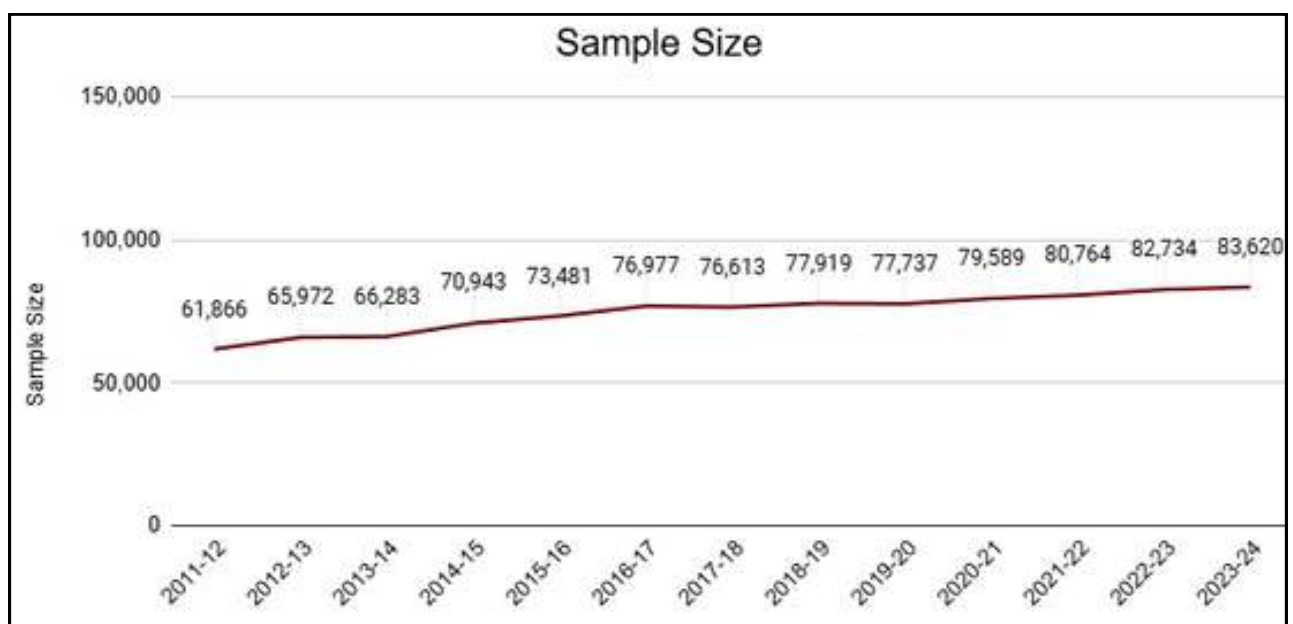
Various new items have been introduced to enhance the perspective of ASI, which are given below:

- Corporate Identification Number (CIN), a 21 digit alphanumeric code, provided by the M/o Corporate Affairs on the basis of the registration of unit under the Companies Act.
- Rationalization of "Type of organisation" code structure in consonance with the concepts used under Companies Act.
- Information about the share of foreign entities in the share capital of the unit.
- Information about existence of registered Research & Development (R&D) unit in the factory.
- Recording Expenses on Research & Development (R&D).
- Information on formal training from ASI by incorporating one question **"Whether the unit offered any formal training"**.
- Information on Pollution control equipment/environment improvement equipment: This refers to machinery installed for pollution control as well as environment improvement.
- Convertible debentures were included as part of 'Outstanding Loan'.

- Rationalization of reporting of “Value of Own Construction”.
- Information on logistic expenditure from ASI by incorporating two items viz. (i) Inward transportation cost and (ii) Outward transportation cost.
- Specific Reporting of Sale value in Output Block.
- Receipts from manufacturing services (including work done for others on materials supplied by them and sale value of waste left by the party) as well as non-manufacturing services (including non-industrial services).
- Inclusion of information related to Subsidy/Rebate under Distributive Expenses.
- Reframing the existing questions Information and Communication Technology (ICT) block as per UN guidelines.



**Figure 3.1: ASI Sample Size During ASI 2011-12 to ASI 2023-24**



**Table 3.1: Evolution of sample design over the past 20 years in ASI**

| Sampling Design   | Census Criteria  | Sample Criteria   |
|---|--|---|
| <p><b>Sr. No. 1   ASI Year: 2015-16 to till date</b></p> <p>Stratified<br/>Circular<br/>Systematic<br/>Sampling<br/>technique</p> | <p>(i) All industrial units belonging to the ten less industrially developed States/ UTs viz. Arunachal Pradesh, Manipur, Meghalaya, Mizoram[1], Nagaland, Sikkim, Tripura, Ladakh[2], Lakshadweep[3] and Andaman &amp; Nicobar Islands.</p> <p>(ii) All industrial units with Frame NIC = 0893(Salt Extraction).</p> <p>(iii) For the States/ UTs other than those mentioned in (i),</p> <ul style="list-style-type: none"> <li>a. units having 75 or more employees from six States/UTs, namely, Jammu &amp; Kashmir, Himachal Pradesh, Rajasthan, Bihar, Chhattisgarh and Kerala;</li> <li>b. units having 50 or more employees from three States/UTs, namely, Chandigarh, Delhi and Puducherry;</li> <li>c. units having 100 or more employees for rest of the States/UTs, not mentioned in (a) and (b) above and;</li> <li>d. all factories covered under 'Joint Return' (JR), where JR should be allowed when the two or more units located in the same State/UT, same sector and belong to the same industry (3-digit level of NIC-2008) under the same management.</li> </ul> <p>(iv) After excluding the Census Scheme units in the above manner, all units belonging to the strata (State x District x Sector x 3 digit NIC-2008) having less than or equal to 4 units are also considered under Census Scheme. It may be noted that strata are separately formed under three sectors considered as Bidi, Manufacturing and Electricity.</p> | <p>For all the states, each stratum is formed on the basis of State x District x Sector x 3-digit NIC-2008.</p> |

**Sr. No. 2 | ASI Year: 2012-13 to 2014-15**

Stratified  
Circular  
Systematic  
Sampling  
technique

a. All industrial units belonging to the six less industrially developed states/ UT's viz. Manipur, Meghalaya, Nagaland, Tripura, Sikkim and Andaman & Nicobar Islands;

b. For the rest of the twenty-nine states/ UT's., (i) units having 100 or more employees, and (ii) all factories covered under Joint Returns.

c. After excluding the Census Sector units as defined above, all units belonging to the strata (District × 4-digit of NIC-08) having less than or equal to 4 units are also considered as Census Sector units.

Selection Procedure of Sample Sector units: Remaining units, excluding those of Census Sector, called the sample sector, are arranged in order of their number of employees and samples are then drawn circular systematically considering sampling fraction, say 20%, within each stratum (District X Sector X 4-digit NIC) in the form of 4 independent subsamples. This will be done for each district and thus, for each State/UT. An even number of units with a minimum of 4 are selected from each stratum and evenly distributed in four subsamples. The sectors considered here are 'Bidi', 'Manufacturing' and 'Electricity'.

**Sr. No. 3 | ASI Year: 2007-08 to 2011-12**

Stratified  
Circular  
Systematic  
Sampling  
technique

a. All industrial units belonging to the six less industrially developed states/ UT's viz. Manipur, Meghalaya, Nagaland, Tripura, Sikkim and Andaman & Nicobar Islands.

b. For the rest of the twenty-five states/ UT's., (i) units having 100 or more workers, and (ii) all factories covered under Joint Returns.

c. After excluding the Census Sector units as defined above, all units belonging to the strata (State by 4-digit of NIC-08) having less than or equal to 4 units are also considered as Census Sector units.

Selection Procedure of Sample Sector units: Remaining units, excluding those of Census Sector, called the sample sector, are arranged in order of their number of employees and samples are then drawn circular systematically considering sampling fraction, say 20%, within each stratum (State X Sector X 4-digit NIC) for all the states. An even for all the states. An even number of units with a minimum of 4 are selected and evenly distributed in two sub-samples. The sectors considered here are Biri, Manufacturing and Electricity.

## Sampling Design

## Census criteria

## Sample Criteria

### Sr. No. 4 | ASI Year: 2004-05 to 2006-07

i) Units with 100 or more workers will be categorised as census sector and the rest of the units will be treated as sample sector, without any change in the existing criteria;

ii) In the sample sector, the units will be stratified at 4 digit level of NIC-04 in each State separately and 1/5th of the units in each strata will be selected circular systematically for coverage in each ASI subject to a minimum sample size of 6 units in each stratum;

iii) This design will ensure that the whole universe of units is covered in five years;

iv) The classification of the units in the frame into census and sample sectors should be done in the beginning of the 5-year cycle and it should not be disturbed during the course of the cycle;

v) At the end of the cycle when the data on the all the units in the frame become available the frame should be updated and then the composition of census and sample sector should be re-drafted;

vi) In respect of the new units getting registered each year of the last 4 years in the 5-year cycle, a supplementary frame has to be prepared for each year and units for coverage from this supplementary frame of each year may be selected using the same criteria as was applied to the main frame.

i) Units with 100 or more workers will be categorised as census sector and the rest of the units will be treated as sample sector, without any change in the existing criteria;

In the sample sector, the units will be stratified at 4-digit level of NIC-04 in each State separately and 1/5th of the units in each strata will be selected circular systematically for coverage in each ASI subject to a minimum sample size of 6 units in each stratum.

### ▶ 3.1.3 ASI Web Portal Data Processing

**3.1.3.1** The Enterprise Survey Division of the Ministry of Statistics and Programme Implementation (MoSPI) has the overall responsibility for planning, designing, processing and publishing of ASI results. The office is also responsible for dissemination of data to different departments/agencies and for carrying out policy research with respect to industrial issues based on ASI and other related data. Field offices of the Field Operations Division (FOD) of the National Statistics Office (NSO) of MoSPI located in different parts of the country are entrusted with collection of ASI data from the individual establishments/ factories. Starting from ASI 2012-13, the survey is being conducted through ASI web-portal.

Annual Survey of Industries is conducted through a dedicated web-portal. The main objective of the portal is collection of ASI data digitally from the selected factories with built-in validation which leads to data accuracy and time saving.

#### **3.1.3.2 Features of the Web-portal:**

- ASI Web Portal allowed complete doing away with roughly 65,000 paper schedules each having a number of data blocks 2012-13. Now aRound 85000 There were significant saving of time and resources.
- ASI Web portal provides the facility of single centralised database. This ensures a significant difference in storage of such voluminous data, as the earlier practice of storing data was non-standard and mostly manual in nature.
- The ASI Web Portal has the facility of built-in validations.
- There has been a marked difference in the schedule referral system with the introduction of ASI Web Portal. In the web portal it is possible to scrutinise a schedule at a single go and accordingly refer back once, if required, with all the observations.



- It is possible to scrutinise a schedule with a number of inter-block and intra-block checks, most of which are system-built. On violation of these scrutiny points, schedules can be referred back at FOD level, where the comments of the referred points are very lucid and auto-generated. This helps the FOD compilers to understand the crux of the referral easily and reply accordingly.
- Monitoring the progress of ASI, which generally extends over a number of months, over the whole country is an important task. The system for this was mostly manual for this as well before the web portal. But the automated nature of real time dashboard, reports etc. available in the portal helps greatly to track the survey easily in real time.
- The functionality of unit level data download end also provides a new dimension of data processing.
- There is a dynamic frame updation process that update the ASI Frame from relevant fields of latest ASI schedule data. The automated nature of this process has made the ASI Frame more accurate.
- The sample selection process has also been automated in the web portal. The system for this is built in such a way that one can flexibly adjust sampling fraction not only at all-India level but also at State, District or even at stratum (State x District x 3-digit Frame NIC) level.
- Factory level compilation of ASI return has been one of the major improvements of ASI Web Portal. Provision has been made to provide certain target date to each of the factories, selected in ASI sample, for enabling them for self-compilation.

## 3.2 Annual Surveys of Unincorporated Sector Enterprise (ASUSE)

### ▶ 3.2.1 ASUSE:

3.2.1.1 NSSO conducted the first full-fledged survey of ASUSE i.e. ASUSE 2021-22 during April, 2021- March, 2022.

In Indian economy, unincorporated sector is important because of the large number of establishments in this sector and the magnitude of employment it provides to unskilled/ semi-skilled/ skilled persons, besides its contribution to Gross Domestic Product of the country. Broadly, this unincorporated sector also covers the informal sector enterprises.

The necessity of comprehensive data pertaining to unincorporated sector including informal sector for planning and policy formulations thus needs no emphasis.

ASUSE is devoted exclusively to economic and operational characteristics of unincorporated non-agricultural establishments in manufacturing, trade and other services sectors. This helps National Accounts Division (NAD) of MoSPI to compute important components of national accounts. The data collected in this survey helps in meeting the requirements of different Ministries, organisations and users in general.

ASUSE includes (a) Proprietary and partnership establishments [excluding Limited Liability Partnership (LLP) establishments] and (b) Society/trust/association/club/body of individuals etc., Co-operatives, Self-Help Groups (SHGs), Non-Profit Institutions (NPI/NPISH). The ownership category of establishments excluded are (a) Establishments registered under Companies Act, 1956/ Companies Act, 2013; (b) Manufacturing establishments and other non-manufacturing establishments covered under Annual Survey of Industries (ASI); (c) The electricity units registered with the Central Electricity Authority (CEA) ; (d) Government Department/Government Company/Government Society/ Public Sector Unit. Thus, it expanded the coverage of ownership types of enterprises of NSS 73rd Round by inclusion of cooperatives, societies, associations, etc.

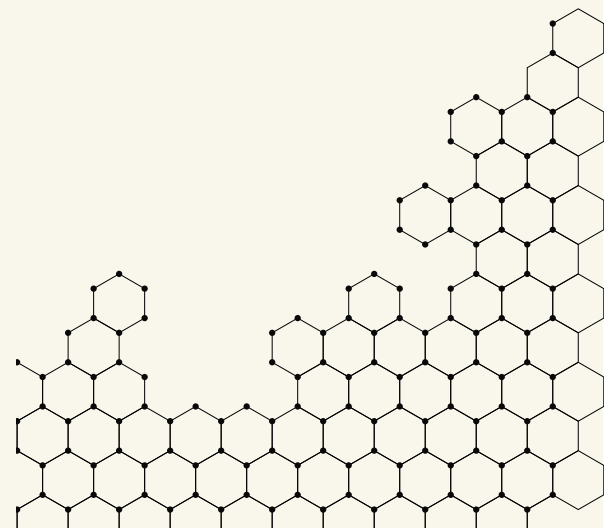
**3.2.1.2 Sampling frame for FSUs:** ASUSE follows the usual stratified multi-stage design of NSS with Establishment as the unit of enquiry. First stage units are census villages in rural sector and UFS blocks in the urban sector. Decennial list of census villages (panchayat wards for Kerala) and latest phase of UFS blocks are used for drawing sample FSUs.



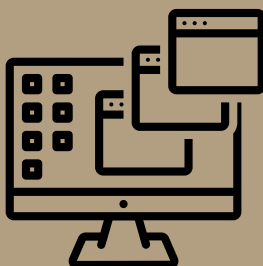


# **CHAPTER - 4**

## **Evolution of Data Collection and Processing Technology in NSSO**



## 4.1 Introduction



The National Sample Survey Office (NSSO) was set up in 1950, with the idea of having a permanent survey organisation to collect data on various facets of the economy. In order to assist in socio-economic planning and policymaking, NSSO conducts nationwide sample surveys known as National Sample Survey (NSS).

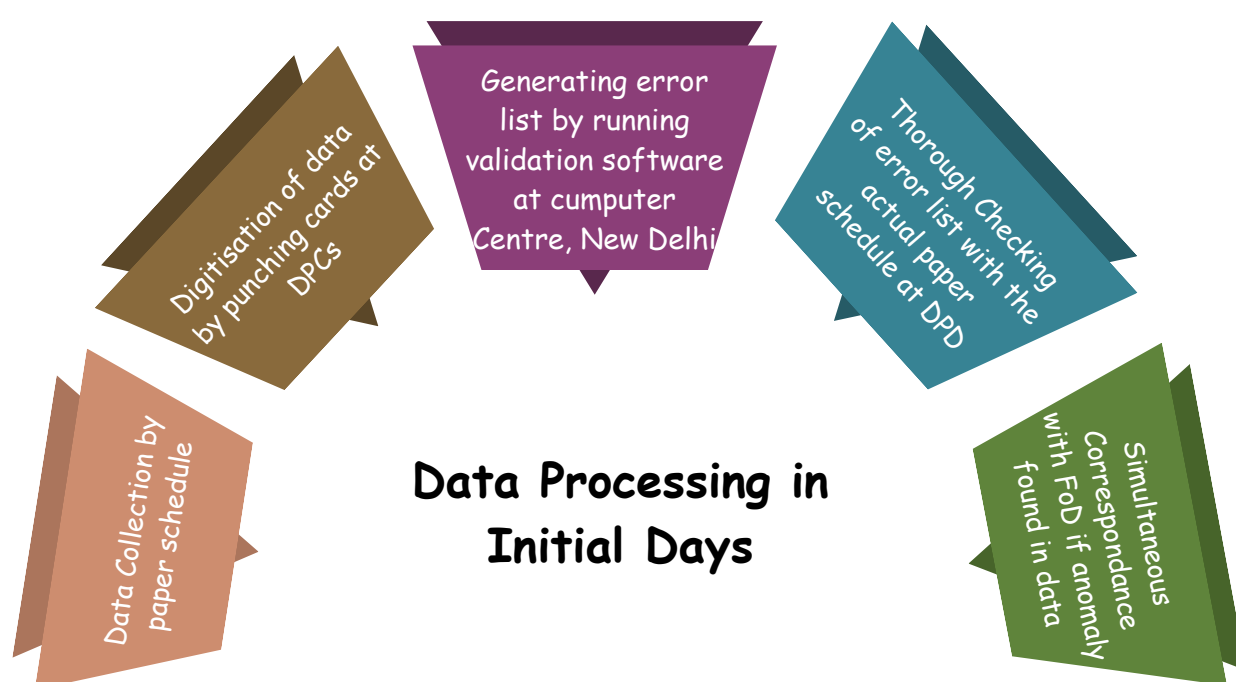
Data collection and data processing are those indispensable steps of sample survey which essentially make ways for release of survey data and results. With the advent of new technologies and gadgets, data collection and processing methodologies in NSS have evolved over the years with gradual reduction in time lag between conception of new surveys and release of results. For a long period of time NSS had been collecting data through paper schedule in which the field investigators carry around hard copies of the schedule in different households and fill them up by interviewing the household members. These information captured in paper schedule would be digitized through data entry module by another group of officials posted at Data Processing Centres (DPC) located at different places in India.

## 4.2 Data Processing in Initial Years

### *Initial days ....*

In the initial days of NSS, till around forty years back, data transcription used to be carried out in Data Processing Centres (DPC) by card punching method. The output of data transcription was collected from a different place in specific storage device. At that time all software development related to data validation, multiplier generation and tabulation were entrusted with Computer Centre (CC), New Delhi. Data collected in the field by paper schedule and digitized at DPCs by card punching were sent to CC wherein validation software was run on it to generate error list. The error list, again, was sent back to Data Processing Division (DPD) for thorough checking with the actual paper schedule. Correspondence with FOD was made side by side as and when any anomaly in the data was found. This process had to be run a few times to arrive at a reliable and viable data which were used further for table generation. Generation of multipliers and tables were also carried out in CC and the output was again shared with DPD and Survey Design & Research Division (SDRD) for further checking. Correspondence with FOD would generally continue until both data and tables were finalised. Finally, the unit level data were brought out in public domain following which multiple reports were prepared for the policy makers and researchers.

**Fig. 4.1: Data Processing in Initial Days**



### Arrival of D20 machine...



With the arrival of D20 machines in around 1986-87, the data transcription work mechanism was gradually switched to those new gadgets. The new purchase of PC machines also prompted the competent authority to shift the software generation work to Data Processing Division, NSSO with the intention to save some time wasted in the back and forth movement of different software outputs. COBOL (Common Business-Oriented Language), a high-level programming language was brought in for development of different software required for data transcription, data validation and tabulation. This process continued till 1995-96 when a more comprehensive data transcription software was developed by DPD officers in C language. Other software like data validation and tabulation, however, continued to run in COBOL platform. The UNIX operating system was also made operational for faster processing on which most of the software was run for quick yet reliable output.

## 4.3 Development of In-house Software

### *Development of DPDSYS and DOSTAB*

In 2002 another Round of evolution came in the data collection and processing mechanism. A new data entry and verification software in the name of DPDSYS was developed in-house by DPD officers in Visual Basic.

This software turned out to be pretty user friendly and generic as it could be easily modified to develop data entry package for any NSS schedule. This software was used for several Rounds of surveys on various subjects in NSS after necessary tinkering. Data validation, multiplier generation and other intermediate software leading to tabulation were also re-developed in C language keeping necessary provision for customisation as per new survey and schedule. A generic tabulation software was designed in the name of DOSTAB on which all tables of NSS could be generated by providing necessary structural inputs. Both the DPDSYS and DOSTAB turned out to be outstanding achievements of NSS by which all surveys year after year could be accomplished with ease maintaining maximum accuracy and reliability. Majority of these software were run in UNIX platform to generate quick output on large volume of data. These software were also shared with states in DOS platform for their data entry, processing and tabulation as per state samples. Apart from those software some database software like Visual Fox Pro were also used in DPD as per the requirement.

Development of these new software indeed made the survey and processing more seamless and bug free, yet it could not address the problem of huge time lag to satisfaction. Actually, a few unwarranted steps and movements of the schedule right from data collection to data finalization were primarily responsible to make this entire process so prolonged. Data collection was still carried out by FOD in paper schedule and those filled in schedules were dispatched to different DPCs for data transcription. Apart from some bare minimum essential checks the data entry software had to be kept totally check-free to ensure smooth completion of entry job within time by the operators located at a completely different place. Consequently, the data scrutiny job used to be voluminous and more time consuming in which many basic mistakes also had to be rectified besides addressing the conceptual issues.

## 4.4 Era of E-schedule

In an endeavour to reduce time lag to a certain extent, e-schedule was developed in-house in NSS 76th Round to replace DPDSYS in which necessary validations checks were incorporated upfront to prevent basic mistakes in the data at the entry stage itself. It was also decided that paper schedules canvassed in the field will be data entered in that place by investigators themselves using this application and the digitized data would be sent to DPCs for further validation. This process somehow cut down the time wasted in dispatching the physical schedules from field offices to DPCs. It also managed to reduce the processing time since basic errors could be eliminated at the entry stage itself through those embedded validation checks in the entry module.

The time consumed in data collection in paper schedule and further it's transcription in digital mode was a common point of contention in different meetings and a feasible solution to address this problem was felt imperative. It was also emphasized to eliminate most of the inconsistencies in the data at the collection stage itself so as to reduce the data processing time required further. One more demand was that data validation should be accomplished on real time basis so that enumerators could be provided feedback on data quality at the earliest. After much deliberations a consensus was reached that data collection should be initiated through CAPI which will have inherent validation checks to be fired at the time of data collection. In NSS 77th Round Indian Statistical Institute (ISI) was entrusted with the job of developing such a module leveraging latest technologies by which field enumerators will be able to capture data from the respondent in digital mode. A browser based offline Computer Assisted Personal Interview (CAPI) was developed by them and field enumerators would go to the field with data collection module uploaded in their tablets. This process indeed brought in a paradigm shift in data collection methodology by which a considerable period of data transcription and processing in between could be saved. But this process was also mired with a few major bugs for which further improvement in this process was necessitated.



## 4.5 Offline CAPI

Meanwhile, a web based CAPI was developed in 2017 on experimental basis leveraging the available World Bank solution and the schedule of Periodic Labour Force Survey (PLFS) was used in this exercise. Although it was not an exhaustive CAPI encompassing both the listing and detailed schedule in totality, yet it was deployed in the field offices for PLFS data collection. Due to intermittent version change of World Bank solutions, NSS started facing some serious issues to cope up with those changes and many problems in data capturing and storage started building up. Because of this, World Bank CAPI had to be discontinued after some time and NSS again, albeit for a short period, relegated to paper based data collection.

Again in NSS 78 Round, CAPI software with embedded validation checks was developed in-house in offline mode by NSS officers in which the collected data were stored in tablets and dispatched to DPCs through email. These data files were further extracted and combined into a bigger data file using another software. The combined data file was eventually subjected to further validation as per the usual process of data finalization. Thus, it is evident that several experiments with different software options were carried out in the quest of a consistent and viable CAPI which would ensure seamless data collection, storage and processing through server doing away with all unnecessary time consuming steps in between. The objective was to build up a platform in which all necessary processes right from data collection to data validation could be encapsulated and which could handle several NSS surveys simultaneously.

## 4.6 Development of Full-fledged CAPI



It was finally decided in 2019 to outsource the work of developing such an integrated platform and in this process eSIGMA was conceptualized. The application was developed with the idea of integrating several modules which were to be customised for each and every survey. Online server based CAPI for Periodic Labour Force Survey (PLFS), Household Consumption Expenditure Survey (HCES) and Annual Survey of Unincorporated Sector Enterprises (ASUSE) was developed one by one and the surveys ran

successfully in the field. All validation checks were embedded in that CAPI and numerous additional features were instilled so that unwanted anomaly could be prevented to creep in at the time of data collection. Survey enumerators were made to give suitable explanation to any apparent aberration in the data figures at the time of data collection itself and in this process number of future correspondences could also be minimised. Data once captured were put through two layers of online concurrent checking before they were accepted and stored in the server. Any discrepancy found before acceptance could be communicated to the enumerator through server so that immediate action could be taken. Hence, near real time data validation, which used to be a demand before that period, was made possible to a great extent through eSIGMA application. Apart from CAPI, one more essential module in eSIGMA was the “Dashboard” module through which progress of any survey could be monitored at different layers and options. The others modules of eSIGMA included enabling the users to create login id for themselves, to upload sample list in the system to be used in the CAPI or to make available the repository related to Concept and Definitions of different survey schedule.

## 4.7 Continuous Improvement in CAPI

At present NSS is gearing up to launch number of parallel household and enterprise surveys. Some of the surveys are also continuing in the field. Survey solution for all those surveys are being developed or fine-tuned in eSIGMA and some new features are also being introduced. Some modernised application related to Artificial Intelligence (AI) are also being incorporated in the CAPI for different surveys and other modules of eSIGMA are also being updated for those surveys to make it an complete and exhaustive application for any sample survey. Work is also going on to make the CAPI agile and more user-friendly for all the users at different level. Data processing and tabulation are, at present, being done using a number of software options like Python, R, Visual Fox Pro or C as per the requirement and operational convenience. A plan is also afoot to make the system more technology driven and server oriented so that processing time could be reduced further and data could be released within shorter period of time.



## Fig 4.2: Evolution of Data Collection and Processing



### Data Processing in the Initial Years

In the initial years of NSS, data processing evolved from manual card punching and centralised software development at the Computer Centre to in-house software development using COBOL and UNIX systems.



### Development of in-house software

In 2002, the NSS advanced its data collection and processing with in-house software like DPDSYS for data entry and DOSTAB for tabulation, enhancing efficiency and accuracy.

### Offline CAPI

In its quest for a seamless and robust data collection system, NSS experimented with World Bank's web-based CAPI and later developed an in-house offline CAPI in NSS 78th Round, integrating validation checks and centralised data handling to streamline data collection, storage, and processing for multiple surveys.



### Development of in-house software

### Development of full-fledged CAPI

In 2019, NSS launched eSIGMA, an integrated platform with online server-based CAPI and additional modules like real-time data validation, progress monitoring dashboards, and user management, revolutionizing survey data collection and processing with enhanced accuracy and efficiency.



### Continuous Improvement in CAPI

NSS is enhancing eSIGMA with new features, AI integration, and user-friendly updates for simultaneous household and enterprise surveys, while adopting advanced technologies and server-based solutions to streamline data processing, tabulation, and timely data release.

# CHAPTER -5

## Recent Initiatives of Enterprise Survey Division



## **Introduction:**

In recent years, EnSD, NSO has taken a number of new initiatives ranging from launching of new surveys to a paradigm shift in data collection and processing eco-system, which culminated in record reduction in time lag in release of data after completion of the survey. Some of the new initiatives and success of EnSD in recent years are documented below.

## **5.1 Annual Series of Data for the Unincorporated Sector Enterprises:**

In order to capture the fast-changing dynamics of the unincorporated sector, the Annual Survey of Unincorporated Sector Enterprises (ASUSE) was launched by NSO during 2021-22 to provide annual estimates of various economic and operational characteristics of the unincorporated non-agricultural sector of the economy.

## **5.2 CAPEX Survey:**

Ministry of Statistics and Programme Implementation (MoSPI) has launched Forward-Looking Survey on Private Corporate Sector CAPEX Investment Intention in October 2024. This is the first survey being conducted by NSO to collect data on Private Corporate Sector CAPEX Investment Intentions. Main objective of the survey is to measure capital investment intentions of private corporate sector covering non-financial and financial corporation through collection of information from major resident enterprises on:

- Capital Expenditure incurred during last three financial years,
- Capital Expenditure incurred or to be incurred during the current and forthcoming financial years on different asset groups and industries,

In accordance with the Collection of Statistics Act, 2008, notices have been issued to selected enterprises drawn from a frame of active resident private enterprises registered under the Companies Act, 2013 with the Ministry of Corporate Affairs. Data collection is carried out via a dedicated web portal.

## **5.3 Digital Platform for Conducting Surveys**

EnSD, NSO is leveraging an integrated digital platform developed by an outsourced agency for data collection and management. This platform consists of several modules, each designed for specific tasks.

One key module focuses on user management, handling tasks such as creating and updating user profiles. The main module, known as CAPI (Computer-Assisted Personal Interviewing), is utilised by field officials to collect data directly from enterprises. For surveys conducted using self-compilation methods, a dedicated web portal allows enterprises to enter their data independently, guided by detailed, embedded instructions.

Both the CAPI system and the web portal incorporate built-in validation checks, significantly reducing errors in the collected data. This feature helps streamline the overall data collection process, minimizing the time required for completion of data processing. Additionally, a dashboard module enables dynamic monitoring of survey activities, providing real-time updates on progress across various levels.

## **5.4 Reduction of Time Lag for Release of Results**

Presently, the results of the enterprise surveys being conducted by NSO, viz., Annual Survey of Industries (ASI), Annual Survey of Unincorporated Survey Sector Enterprises, are being released within a period of three months after completion of the Field Work.

## **5.5 Interface with Users**

NSO has been releasing reports with tables in printed form its first-Round report and disseminating unit level data also for a long period. Over the years demand is growing to make the dissemination and data handling more user friendly. Now NSO reports, tables and data can be downloaded from the website of MOSPI very easily. Users also have queries regarding technical issues of surveys. There have been seminars, workshops to interact with the users and get feedback from them. In addition to these, NSO is arranging Users' Conference regularly in recent times after release of reports and unit level data. These measures have made the NSO significantly more visible and acceptable to users.

# CHAPTER 6

## NSS Enterprise Surveys - A Living Chronicle



## 6.1 Evolution of Enterprise Surveys in India

From its humble beginnings to the sophisticated annual surveys of today, India's enterprise surveys have grown into a robust system of data collection, illuminating the vast and varied sectors - organised as well as unorganised. They are not merely statistical exercises but also chronicles of a nation's entrepreneurial spirit, resilience, and economic vibrancy. This journey of evolution mirrors India's growth, offering invaluable insights into the sectors that sustain its economy.

India's enterprise surveys stand as a testament to the country's commitment to capturing the pulse of its dynamic and diverse economic landscape. The history of enterprise survey in India dates back to 1960 when the Annual Survey of Industries (ASI) was launched in 1960 with 1959 as its reference year. While ASI broadly covered the organised manufacturing sector of the economy, enterprise surveys for unincorporated/unorganised sector can be traced back to the late seventies. From that point onward, India's enterprise surveys flourished in two distinct streams - the ASI for organised enterprises and the NSS surveys for unorganised/unincorporated ones. With time, these surveys have progressively adapted to reflect the changing socio-economic landscape and the emerging policy priorities of the nation.

## 6.2 Annual Survey of Industries

The Directorate of Industrial Statistics launched the Census of Manufacturing Industries (CMI) in 1946 with the objective of studying the structure of the Indian industry and estimating its contribution to national income. CMI could cover only 29 of the 63 industry groups specified in the Industrial Statistics Act. It was conducted annually up to 1958.

Following the recommendation of the National Income Committee (1949), the Directorate of Industrial Statistics conducted the first Sample Survey of Manufacturing Industries (SSMI) in 1949 for collecting data from factories falling under the 34 industry groups left out by the CMI and defined under the Factories Act 1934. The SSMI was conducted annually up to 1958. Later, both CMI and SSMI were replaced by a comprehensive Annual Survey of Industries launched in 1960 with 1959 as the reference year. From then, the survey has been continued with 1972 being the sole exception.



## 6.3 NSS Enterprise Surveys for Unorganised / Unincorporated Sector

The enterprise surveys for unorganised sector started as follow-up surveys of Economic Census. Thus after the first Economic Census (EC) of India carried out in 1977, the erstwhile National Sample Survey organisation (NSSO) initiated pan-India enterprise surveys during NSS 33rd Round (July, 1978 - June, 1979) on unorganised manufacturing and during NSS 34th Round (July, 1979 - June, 1980) on unorganised Service and Trading Enterprises. Here, the unorganised sector included the own account enterprises and non-directory establishments as per EC frame.

Similar surveys were conducted after the second Economic Census (1980) in NSS 40th Round (July, 1984 - June, 1985): Survey on Unorganised manufacture: Non-Directory Establishments and Own Account Enterprises; NSS 41st Round (July, 1985 - June, 1986): Survey on Own Account Trading Enterprises and Non-Directory Trading Establishments; NSS 45th Round (July, 1989 - June, 1990): Survey on Unorganised manufacture: Non-Directory Establishments and Own Account Enterprises and NSS 46th Round (July, 1990 - June, 1991): Survey on Unorganised manufacture: Non-Directory Establishments and Own Account Enterprises.

The same trend followed after the third Economic Census (1990) with the first integrated survey on unorganised manufacture covering own account, Non-Directory and Directory manufacturing and repairing establishments being undertaken during the 51st Round (July 1994-June 1995) and survey on unorganised trading units (own account + non directory) during 53rd Round (July 1997-December 1997).

In between, in NSS 35th Round, (July 1980 to June 1981) an exploratory survey on construction was carried out. A major shift in the NSS enterprise surveys occurred during the 55th Round (July 1999 - June 2000), with the launch of the first nationwide survey of non-agricultural enterprises in the informal sector. For the purpose of this survey, informal sector was defined as unincorporated (not registered with Companies Act) proprietary and partnership enterprises.

Again, as a follow-up of fourth Economic Census (1998), Survey on unorganised Manufacturing Sector in India and Survey on Unorganised Service Sector in India were carried out during NSS 56th Round (July, 2000 – June, 2001) and NSS 57th Round (July, 2001 – June, 2001) respectively.

The next enterprise survey was conducted in the 62nd Round (2005–06), adopting for the first time a dual-frame approach, combining area and list frames for enhanced accuracy. The 63rd Round (2006–07) refined the scope of services sector surveys, incorporating financial intermediation and excluding certain non-mechanised transport activities.

The 67th Round (2010–11) marked a significant milestone by integrating the survey framework to capture all unincorporated entities, including manufacturing, trade, and service enterprises. This comprehensive approach continued in the 73rd Round (2015–16), which further expanded coverage to include cooperatives.

Recognizing the need for more frequent and dynamic data, the NSS enterprise survey has been made an annual exercise, beginning with the 2021–22 with the launch of the Annual Survey of Unincorporated Sector Enterprises (ASUSE). With its coverage akin to the 73rd Round, ASUSE provides a consistent and timely lens on India’s rapidly evolving unorganised sector. The most recent cycles—2022–23 and 2023–24—capture the ongoing transformations of this vital segment of the economy.

# **ANNEXURE - I**

## **Concepts and Definitions in Enterprise Surveys (Unorganised / Unincorporated / Informal Enterprises)**



## Concepts and Definitions in Enterprise Surveys (Unorganised / Unincorporated / Informal Enterprises)

1. **Urban:** Constituents of urban area are Statutory Towns, Census Towns and Outgrowths.

**Statutory Town (ST):** All places with a municipality, corporation, cantonment board or notified towns area committee, etc.

**Census Town (CT):** Places that satisfy the following criteria are termed as Census Towns (CTs).

- a. A minimum population of 5000
- b. At least 75% of the male main working population engaged in non-agricultural pursuits.
- c. A density of population of at least 400 per sq.km.

**Out Growth (OG):** Out Growth should be a viable unit such as a village or part of a village contiguous to a statutory town and possess the urban features in terms of infrastructure and amenities such as pucca roads, electricity, taps, drainage system, education institutions, post offices, medical facilities, banks, etc. Examples of OGs are Railway colonies, University campuses, Port areas, that may come up near a CT or statutory towns outside its statutory limits but within the revenue limit of a village or villages contiguous to the town or city.

**Urban Agglomeration (UA):** It is a continuous urban spread constituting a town and its adjoining urban outgrowths (OGs) or two or more physically contiguous towns together and any adjoining urban outgrowth of such towns.

2. **Rural:** All area other than urban are rural. The basic unit for rural area is the revenue village.

**3. House:** Every structure, tent, shelter, etc. is a house irrespective of its use. It may be used for residential or non-residential purpose or both or even may be vacant.

**4. Household:** A group of persons normally living together and taking food from a common kitchen constitutes a household. It includes temporary stay-away (those whose total period of absence from the household is expected to be less than 6 months during the survey period) but exclude temporary visitors and guests (expected total period of stay less than 6 months during the survey period). Even though the determination of the actual composition of a household is left to the judgment of the head of the household, the following procedures may be adopted as guidelines.

a. Each inmate (including residential staff) of a hostel, mess, hotel, boarding and lodging house, etc., constitutes a single-member household. If, however, a group of persons among them normally pool their income for spending, they are treated together as forming a single household. For example, a family living in a hotel is treated as a single household.

b. In deciding the composition of a household, more emphasis is to be placed on 'normally living together' than on 'ordinarily taking food from a common kitchen'. In case the place of residence of a person is different from the place of boarding, he or she is treated as a member of the household with whom he or she resides.

c. A resident employee, or domestic servant, or a paying guest (but not just a tenant in the household) is considered as a member of the household with whom he or she resides even though he or she is not a member of the same family.

d. When a person sleeps in one place (say, in a shop or in a room in another house because of space shortage) but usually takes food with his or her family, he or she should be treated not as a single member household but as a member of the household in which other members of his or her family stay

e. If a member of a family (say, a son or a daughter of the head of the family) stays elsewhere (say, in hostel for studies or for any other reason), he/ she is not considered as a member of his/ her parent's household. However, he/ she is considered as a single member household if the hostel is listed.

**5. Enterprise:** An enterprise is an undertaking, which is engaged in the production and / or distribution of some goods and / or services meant for the purpose of sale, whether fully or partly. An enterprise may be owned and operated by a single household, or by several households jointly, or by an institutional body. Entrepreneurial activity may be carried out in fixed premises or without any fixed premises.

[Up to NSS 73rd Round]

An institutional unit<sup>[1]</sup> in its capacity as a producer of goods and services is known as an enterprise. An enterprise is an economic transactor with autonomy in respect of both financial and investment decision-making, as well as authority and responsibility for allocating resources for the production of goods and services. It may be engaged in one or more economic activities at one or more locations. It may be noted that unincorporated enterprises owned by households, all of whose output is intended for final consumption or gross fixed capital formation by those households are outside the coverage of the definition of enterprises used in this survey.

[NSS 74th Round, ASUSE 2021-22 onwards]

**6. Establishment:** Enterprises which employ at least one hired worker on a fairly regular basis are called “establishments”. Paid or unpaid apprentices paid household member/ servant/ resident worker in an enterprise are considered as hired workers.

[Up to NSS 73rd Round]

---

[1] An institutional unit is an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and in transactions with other entities.

An establishment is an enterprise or part of an enterprise that is situated in a single location and in which either only a single productive activity is carried out or in which the principal productive activity accounts for the most of the value added. The enterprise and the establishment are the same for single establishment firms.

The unit of enquiry of the ASUSE is an Establishment and not the Enterprise.

[ASUSE 2021-22 onwards]

**7. Non-agricultural establishment:** All establishments covered under Sections 'C' to 'U' of NIC-2008 are "non-agricultural establishments". However, for the purpose of enterprise surveys so far, Sections 'C' to 'S' of NIC-2008 have been considered.

**8. Unincorporated non-agricultural establishments:** Non-agricultural establishments which are not incorporated (i.e., neither registered under Companies Act, 1956 nor under Companies Act, 2013).

**9. Manufacturing Establishment:** A manufacturing establishment is a unit engaged in the physical or chemical transformation of materials, substances or components into new products. It covers units working for other concerns on materials supplied by them. Also included are units primarily engaged in maintenance and repair of industrial, commercial and similar machinery & equipment, which are, in general, classified in the same class of manufacturing as those specialising in manufacturing the goods. It is important to note that production of goods for the sole purpose of domestic consumption has not been considered as manufacturing.

**10. Trading Establishment:** A trading establishment is a unit engaged in trade. Trade is defined to be an act of purchase of goods and their disposal by way of sale without any intermediate physical transformation of the goods. The activities of intermediaries who do not actually purchase or sell goods but only arrange their purchase and sale and earn remuneration by way of brokerage and commission will also be treated as trade.

**11. Other Service Establishment:** A servicing enterprise or service sector enterprise is engaged in activities carried out for the benefit of a consuming unit. Such consuming units could be individuals or other institutional units. Activities of service establishments typically consists of changes in the condition of consuming units realised by the activities of servicing unit at the demand of the consuming unit. Some examples of changes that a producer of service brings about in the condition of consumers of service are: a) Changes in the condition of consumer's goods: the producer works directly on goods owned by the consumer by transporting, cleaning, repairing or otherwise transforming them; b) Changes in the physical condition of persons: the producer transports the persons, provides them with accommodation, provides them with medical or surgical treatments, improves their appearance etc; c) Changes in the mental condition of persons: the producer provides education, information, advice, entertainment or similar services; d) Changes in the general economic state of the institutional unit itself: the producer provides insurance, financial intermediation, protection, guarantees, etc.

**12. Financial Establishment:** A financial establishment is a servicing establishment that is principally engaged in financial intermediation or in auxiliary financial activities which are closely related to financial intermediation. Financial intermediation is a productive activity in which an institutional unit incurs liabilities on its own account for the purpose of



acquiring financial assets by engaging in financial transactions on the market. The role of financial intermediaries is to channelise funds from lenders to borrowers by intermediating between them.

**13. Household Establishment:** Household establishment is one which is run by one or more members of a household or run jointly by two or more households on partnership basis irrespective of whether the establishment is located in the premises of the household(s) or not. In other words, all proprietary and partnership establishments are household establishments.

**14. Non-household Establishment:** Non-household establishments are those which are institutional i.e., owned and run by the public sector (Central or State Government, local self-governments, local bodies, government undertakings, etc.), corporate sector, co-operative societies, other type of societies, institutions, associations, trusts, etc.

**15. Own Account Enterprise / Establishment (OAE):** An enterprise / establishment, which is run usually without the help of any hired worker employed on a fairly regular basis, is defined as an Own Account Enterprise/Establishment (OAE).

**16. Hired Worker Establishment (HWE):** An establishment which employs at least one hired worker on a fairly regular basis is termed as hired worker establishment.

**17. Perennial establishment:** Establishments that are run more or less regularly throughout last 365 days are called perennial establishments.

**18. Seasonal establishment:** Seasonal establishments are those which usually run in a particular season or during fixed months of a year.

**19. Casual establishment:** Establishments that are run occasionally, for a total of at least 30 days in the last 365 days, are called casual establishments.

**20. Proprietary Establishment:** When an individual is the sole owner of an enterprise, it is called a proprietary establishment.

**21. Partnership Establishments:** Partnership is defined as the 'relation between persons who have agreed to share the profits of a business carried out by all or any one of them acting for all'. There may be two or more owners, belonging to the same or different households, on a partnership basis, with or without formal agreement (where there is a tacit understanding about the distribution of profits among the so-called partners).

**22. Limited Liability Partnership:** A Limited Liability Partnership (LLP) is a legal entity incorporated under this Limited Liability Partnership Act (2008) where two or more persons may engage together for a work/venture through partnership modalities i.e. with a tacit understanding of share or profit among the partners. However, the partner's liabilities are limited only to the amount they invest into the partnership. Further, the basic nature of LLP provides shield to the partners in the sense that not only no liability is imposed on the other partner(s) in case of independent action of one partner but also it exonerates all the partners from attaching their personal assets in case of liquidation.

**23. Limited Company:** A limited company is a legal entity that is incorporated in Companies Act, 1956 or Companies Act, 2013 and that limits the amount of liability undertaken by the company's shareholders to the tune of their stake in the company by way of investments. Because of this, owners'(including shareholders) potential losses are limited to what they have invested while their personal assets and income are off-limits. The primary benefit of a limited company is the separation of assets and income from the corporation. This means that if a company goes bankrupt, shareholders can

only lose as much as their original investment and no more; creditors or other stakeholders cannot claim owners' personal assets or income. Because of limited liability, investors/shareholders are more eager to risk capital since their losses are limited in that sense. Further, being an entity of limited company, it is mandatory to file their annual accounts to the registered authority.

**24. Private Limited Company:** A private limited company is a limited company where number of shareholders is at least 2 and maximum number of shareholders is 200. Further, the formation of private limited company prevents the general public from subscribing to them.

**25. Public Limited Company:** A Public Limited Company is a limited company where number of shareholders is at least 7 and there is no upper limit for number of shareholders.

**26. Public Sector Undertakings (PSU):** A Public Sector Undertaking (PSU) means an entity, in which not less than fifty- one per cent of the paid-up share capital is held by either the Central Government, or by any State Government (s) or partly by the Central Government and partly by one or more State Governments. Further, a PSU may be a company in which the Central Government or one or more State Government (s) either singly or together, exercise control over management or exercise power to appoint majority of directors.

**27. Unlimited Company:** In Unlimited Companies, the liabilities of the shareholders are unlimited, that is, if the company has to liquidate, then there is no protection for the shareholders, and there is essentially no limit on what they can lose in order to pay back creditors. However, the advantage of being an unlimited company is that, like limited company, it is not mandatory to file annual return with the concerned authority.

**28. Cooperatives:** A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly-owned and democratically-controlled establishment. Examples could be:

- Businesses owned and managed by the people who use their services (a consumer cooperative)
- organisations managed by the people who work there (worker cooperatives)
- Second- and third-tier cooperatives whose members are other cooperative

Only cooperatives registered under the "Cooperative Societies Act" have been considered as eligible cooperatives.

**29. Society:** Any group of persons associated for any literary, scientific or charitable purpose, registered under the Societies Registration Act 1860 or any State specific Societies Act is to be considered as Society.

**30. Trust:** An arrangement through which one set of people, the trustees, are the legal owners of property which is administered in the interest of another set, the beneficiaries. Trusts may be set up to provide support for individuals or families, to provide pensions, to run charities, to liquidate the property of the bankrupts for the benefit of their creditors, or for the safe keeping of securities bought by trusts with their investor's money. The assets, which trusts hold are regulated by law, must be administered in the interests of the beneficiaries, and not for the profit of the trustees. Only trusts registered under the Indian Trust Act 1882 or any State specific Act have been considered as eligible trusts.

**31. Club/Association/Body of individuals:** A club/association/body of individuals is a group of two or more people united by a common interest or goal. They may or may not be registered with any authority.

**32. Non-Profit Institutions (NPI):** Non-profit institutions are legal or social entities created for the purpose of producing goods and services whose status does not permit them to be a source of income, profit or other financial gain for the units that establish, control or finance them. In practice, their productive activities are bound to generate either surpluses or deficits but the units that establish, control or finance them cannot appropriate surpluses. The articles of association by which they are established are drawn up in such a way that the institutional units which control or manage them are not entitled to share any profits or other income which the NPI's receive.

**33. NPISH:** Non-profit institutions serving households (NPISHs) are entities that are principally engaged in the production of non-market services for households or the community at large and whose main resources are voluntary contributions/sponsorship.

**34. Self-help Groups:** A self-help group (SHG) is a financial intermediary usually composed of 10–20 local persons. The members of SHG make small regular savings contributions over a few months until there is enough capital in the group to begin lending. Funds are lent back to the members or at times to others. In India, many SHGs are 'linked' to banks for the hand delivery of microcredit.

**35. Investment Club:** Investment clubs are a group of people who pool their money to make investments. Usually, investment clubs are organised as partnerships where members usually meet on periodic basis and study different investments, to make investment decisions as a group. The decisions on buying and selling (investment) are made through voting process. Club meetings may be educational and each member may actively participate in investment decisions. The income and losses of the club are passed through to its partners and are reported on their individual tax returns.

**36. Worker:** Worker is defined as persons working within the premises of the establishment who are in the payroll of the establishment as well as the working owners and unpaid family members who help in the entrepreneurial activity. The helpers, apprentices, interns engaged by the establishment are also treated as worker. The worker may serve the establishment in any capacity - primary or supervisory. He/she may or may not receive wage/salary in return to his/her work incidental to or connected with the entrepreneurial activity. Sales persons appointed by an establishment for selling its products/services, paid or unpaid, are also treated as workers. A worker need not mean that the same person would be working continuously; it would only refer to a position. i.e., if one person is terminated and another person is appointed in his place, it has been counted as 1 and not 2. A worker engaged for more than half of the normal working hours of the establishment has been treated as full time worker.

**37. Working owner:** In case of proprietary establishments, if the owner himself/ herself works in the establishment on a fairly regular basis, he/she will be a working owner. In fact, in most of the own-account establishments the owner himself/ herself manages all activities of the establishment without help of anybody else (on fairly regular basis). For all such establishments essentially the number of working owner will be 1. In the case of partnership establishments, if only one of the partners or some of the partners or all the partners work in the establishment on a fairly regular basis then number of working owners may be more than 1. In case of SHGs/investment clubs, if any member (including office bearers) performs the activities of the SHG/investment club by drawing remuneration, they will be treated as working owner and entry should be made against this item.

**38. Formal hired worker:** A formal hired worker is one who is eligible for paid leave and also eligible for social security benefits like provident fund, ESIC, health insurance, etc. provided by the employer.

**39. Informal hired worker:** An informal hired worker is not eligible for paid leave and/or not eligible for social security benefits like provident fund, ESIC, health insurance etc. provided by the employer.

**40. Full-Time and Part-Time Workers:** Persons working for more than half of the normal working hours of the enterprise on a fairly regular basis are considered as working full-time. Others are considered as working part-time.

Persons working for 4 hours or more in a day are considered as working full-time and those working for less than 4 hours in a day are considered as working part-time.

[NSS Rounds 33rd, 29th and 23rd]

In the 40th Round, definition of part-time worker was modified to include only those working for less than 4 hours but not less than one hour in a day.

**41. Total persons engaged:** Total persons engaged includes persons directly associated with the production of goods/services, supervisory and managerial staff, persons who are employed through contractors and are on payroll of the enterprise and others such as clerk, accountant, peon, receptionist, administrative staffs, etc. It excludes personnel hired through contractor but not on the payroll of the enterprise.

**42. Wholesale Trade:** Trade in which goods are generally bought from the producer or another wholesaler and sold to the retailer. A wholesaler is generally regarded as an intermediary between the producer and the retailer. A wholesaler sells his goods to other wholesalers or to retailers / users in bulk.

**43. Retail Trade:** Trade in which goods are bought from the wholesalers or dealers and sold to consumers. The retail trader is an intermediary between a wholesaler and consumers or users. The retail traders may purchase goods directly from the producers or manufacturers also. Hawkers and peddlers selling goods are considered as retail traders.

**44. Multiple Activities:** Since many of the entrepreneurs belonging to the unincorporated sector operate at small or marginal levels, the phenomenon of carrying out more than one activity simultaneously or at different points of time is quite prevalent. Carrying out of more than one economic activity by the entrepreneur during the reference year is called multiple activities. If the activities are carried out at the same location and the information is not separately available, then it has been taken as “mixed activity” for ASUSE. If the activities are carried out at the same location and the information is separately available, then it has been taken as “multiple activity”. However, an entrepreneur of a manufacturing establishment manufacturing woollen garments before winter and cotton clothes before summer would not be considered as carrying out multiple activities. Some examples of multiple activities are: i) a person providing computer services during day-time as an own account establishment and also providing tuition in the evening in his own coaching centre, ii) a person carrying out agricultural activity during sowing / harvesting season and doing carpentry at the same time or at other times, etc.

**45. Mixed Activities:** Carrying out of more than one economic activity (different at NIC 2-digit level) by an entrepreneur during the reference period is called carrying out multiple activities. If the information of the activities is separately available, then the activities are considered as “multiple activities”. Otherwise, if information pertaining to different activities are not separately available, then the activities are considered as “mixed activities”. The activities of such establishments are a mixture of NIC’s. The activities may be mixed at any level of NIC, but for the present survey, an establishment has been considered to have done mixed activities if its activities were different at 2 digit level of NIC. The appropriate NIC in such cases has been determined on the basis of major activity. Major activity refers to the activity which yielded maximum income followed by turnover and then by employment.



**46. Fixed Assets:** Fixed assets are assets held for the purpose of producing or providing goods and services such as land, building, plant and machinery, transport equipments, tools and other assets (new or used) that have a normal economic life of more than one year from the date of acquisition through out-right purchase / hire purchase/ loans / mortgage / construction regardless of their use. The value of assets, whether fully paid or not, owned by the enterprise is determined on the basis of present market value. Such assets are not held for resale in the normal course of activities of the enterprise.

[NSS Rounds 56th, 55th, 45th, 40th, 33rd, 29th and 23rd]

Assets held for the purpose of producing or providing goods or services and not for resale in the normal course of entrepreneurial activities were classified as fixed assets. These cover all goods, new or used, that have a normal economic life of more than one year from the date of purchase.

[NSS Rounds 67th, 73rd]

Fixed assets are of a permanent nature having a productive life of more than one year, which is meant for carrying out production activity of the enterprise (and thus either for earning revenue-directly or indirectly- or for providing non-market services to others) and not for the purpose of sale in ordinary course of business. They include assets used for production, transportation, living or recreational facilities, hospital, school, etc. The fixed assets have, at the start of their functions, a definite value, which decreases with wear and tear. The original cost less depreciation indicates that part of value of the fixed assets, which has not yet been consumed in the process of using them for production. This value is called the residual value of the fixed asset.

[NSS 74th Round]

Assets held for the purpose of producing or providing goods or services and not for resale in the normal course of entrepreneurial activities are classified as fixed assets. The distinguishing feature of a fixed asset is not that it is durable in some physical sense, but that it may be used repeatedly or continuously in production over a long period of time, which is taken to be more than one year. These cover all tangible goods, new or used, that have a normal economic life of more than one year from the date of purchase. Fixed assets include not only structures, machinery and equipment but also intellectual property products such as software or artistic originals that are used in production. It may be noted that the assets to be considered here are assets of the establishment. In addition to that, from ASUSE 2025, 'land improvement' has been captured as a separate item as a part of fixed assets.

[ASUSE 2021-22 onwards]

**47. Depreciation:** Depreciation is consumption of fixed capital (CFC) due to wear and tear and obsolescence during the accounting period. It is applicable to all the tangible assets such as land, building, plant & machinery transport equipment, etc.

**48. Amortization:** Amortisation is the systematic allocation of the depreciable amount of an intangible asset over its useful life. Thus, it is similar to depreciation which is used in the context of intangible assets.

**49. Outstanding Loan:** Any borrowing in cash or kind to be repaid in cash or kind is termed as loan. Purpose should be for the use of the enterprise only. Information on amount of loan taken including interest that is outstanding on date of enquiry is to be recorded.

In the NSS 33rd Round, balance due on over-draft accounts or credit limit sanctioned by the bank was considered as loan but in the NSS 45th Round this was modified as balance due on over-draft account only and included in amount payable.

**50. Working Capital:** Working capital refers to the resources used by the enterprise for its day-to-day activity. It has two parts - one physical and the other financial. The physical part of the working capital includes raw materials, stores, fuel, lubricant, semi-finished products, finished products and by-products. Financial part comprises cash in hand and at banks, and net balance of amount receivable (i.e., amount receivable minus amount payable).

**51. Emoluments:** It includes regular payments made by establishments to the individual workers such as salary / wages, bonus etc. either in cash or in kind or both. In addition to social security benefits such as Provident Fund, ESIC, gratuity, etc. emoluments also include other type of payments like canteen facility, health care facility, recreation club facility, etc. which are paid in kind to a group or to all of the persons engaged.

**52. Inward Transport Charges and Purchase Agency Services:** Charges incurred for transportation of materials for bringing them from the source of supply to the site of enterprise and commission to purchasing agents constitute inward transport charges and charges for purchase agency services.

**53. Grant:** Recurring and non-recurring annual aid from the Central, State or local government.

**54. Donation:** Recurring and non-recurring annual cash assistance from individual persons, national and international organisations.

**55. Intermediate Products and Semi-Finished Goods:** Intermediate products are those, which are produced by the manufacturing enterprise and consumed for further processing. Semi-finished products are those which attain the shape of product during manufacturing process but need some more processing for becoming final products. The yarn produced from cotton can be called intermediate product if consumed again for manufacturing cloth by the same enterprise. The difference between intermediate products and semi-finished goods lies in that while intermediate products can be and are made available usually for sale in the market as such semi-finished goods are not usually sold without further processing. Semi-finished goods are valued at purchase prices of the ingredients plus cost of production up to that stage.

**56. Products and By-Products:** Products are those articles manufactured and made ready for sale during the reference period. By-products are articles produced incidentally in the manufacture of the main-products. For example, in the ghani enterprise for crushing oil, oil-cake is the by-product. Products and by-products are evaluated at ex-firm price excluding distribution charges like transportation, commission to selling agents, discount or rebates and excise duties paid or sales tax collected by the manufacturer, etc.

**57. Distributive expense:** Expenses that are realised from the customers as part of the sale price but are not actual receipt of the establishment (trader/service provider). Commission to selling agents, outward freight charge, outward transport charges, etc. are examples of distributive expenses.

**58. Total Input:** Total input comprises of expenses made for procurement of goods and/or services, value of other expenses such as electricity charges, fuel and lubricant, consumables, charges paid for availing different services,

**59. Total Output:** Total output includes gross receipts from production of services, trade margin, change in stock of semi-finished goods, value of own construction, rental received for produced assets such as building, plant & machinery, etc., adjusted to taxes less subsidies on product/services pertaining to the accounting period. It excludes different kind of distributive expenses such as commission paid, outward carriage, outward transports cost.

**60. Gross Value Added:** Gross value added is defined as the difference between the total value of output and total value of input.

**61. Net Value Added:** This is obtained by deducting the depreciation from Gross value Added.

**62. Net Income:** It is obtained by deducting the value of net rent and interest paid from the value of Net Value Added.

# **ANNEXURE - II**

## **Concepts, Definitions and Procedures in ASI**



## Concepts, Definitions and Procedures in ASI

A number of accounting, economic, statistical and other terms related to the factories are used in Annual Survey of Industries. For proper compilation/verification of ASI return, it is essential that the officials engaged in the conduct of ASI properly understand the terminology used in ASI. It is in this context that the concepts and definitions of some of the important terms are given below.

**1. Accounting Year:** For the purpose of ASI, the accounting year is the period for which the factory finalises its books of account. With the enactment of Income Tax Act, by and large, the accounting year of all factories is from 1st April of the preceding year to 31st March of the current year.

**2. Factory (as per the Factories Act 1948):** This is as per Sections 2m(i) and 2m(ii) of the Factories Act, 1948.

**3. Manufacturing Process:** This is as per Section 2(k) of the Factories Act, 1948.

**4. Gross Value of Plant and Machinery:** Gross value of plant and machinery represents the total book value of installed plant and machinery at the end of the accounting year. It includes the book value of own constructed plant and machinery, if installed. Total value of all the plant and machinery acquired on hire-purchase basis is also included. Thus, it represents the gross value of plant and machinery engaged in production process.

**5. Fixed Capital:** Fixed Capital represents the depreciated value of fixed assets owned by the factory as on the closing day of the accounting year. Fixed assets are those, which have normal productive life of more than one year. Fixed capital covers all type of assets, new or used or own constructed, deployed for productions, transportation, living or recreational facilities, hospitals, schools, etc. for factory personnel. It would include land, building,

plant and machinery, transport equipment etc. It includes the fixed assets of the head office allocable to the factory and also the full value of assets taken on hire-purchase basis (whether fully paid or not) excluding interest element. It excludes intangible assets except computer software.

**6. Manufacturing Process:** This is as per Section 2(k) of the Factories Act, 1948.

**7. Gross Value of Plant and Machinery:** Gross value of plant and machinery represents the total book value of installed plant and machinery at the end of the accounting year. It includes the book value of own constructed plant and machinery, if installed. Total value of all the plant and machinery acquired on hire-purchase basis is also included. Thus, it represents the gross value of plant and machinery engaged in production process.

**8. Fixed Capital:** Fixed Capital represents the depreciated value of fixed assets owned by the factory as on the closing day of the accounting year. Fixed assets are those, which have normal productive life of more than one year. Fixed capital covers all type of assets, new or used or own constructed, deployed for productions, transportation, living or recreational facilities, hospitals, schools, etc. for factory personnel. It would include land, building, plant and machinery, transport equipment etc. It includes the fixed assets of the head office allocable to the factory and also the full value of assets taken on hire-purchase basis (whether fully paid or not) excluding interest element. It excludes intangible assets except computer software.

**9. Depreciation:** Depreciation is consumption of fixed capital (CFC) by the factory due to wear and tear and obsolescence during the accounting year and is taken as provided by the factory owner, or if not provided by the factory this is estimated on the basis of cost of installation and working life of the fixed assets.

**10. Gross Value of Additions to Fixed Capital:** It represents the actual (un-depreciated) additions to the fixed capital during the reference year.



**11. Net Fixed Capital Formation (NFCF):** It is defined as the GFCF less depreciation (i.e. consumption of fixed capital).

**12. Finished Goods:** Finished Goods are those, which are manufactured by the factory for sale. Finished goods should conform to a prescribed standard.

**13. Physical Working Capital:** This is defined to include all physical inventories owned, held or controlled by the factory as on the closing day of the accounting year such as the materials, fuels and lubricants, stores, etc. that enter into products manufactured by the factory itself or supplied by the factory to others for processing. Physical working capital also includes the value of stock of materials, fuels and stores etc. purchased expressly for re-sale, semi-finished goods and goods-in-process on account of others and goods made by the factory which are ready for sale at the end of the accounting year. However, it does not include the stock of the materials, fuels, stores, etc. supplied by others to the factory for processing. Finished goods processed by others from raw materials supplied by the factory and held by them are included and finished goods processed by the factory from raw materials supplied by others, are excluded.

**14. Working Capital:** Working Capital is the sum total of the physical working capital as already defined above and the cash deposits in hand and at bank, the net balance of amounts receivable over amounts payable at the end of the accounting year. Amounts receivable include value of credit items on revenue account, such as sums due to the factory for goods sold, amounts advanced in connection with normal factory work, bills of exchange payable to the factory, payments made in advance such as for fire insurance, telephone charges, rates and taxes, call deposits and security deposits having a normal life of less than one year, etc. It excludes unused overdraft facility, advances for acquisition of fixed assets, long-term loans including interest thereon and investment.

**15. Invested Capital:** Invested capital is the total of fixed capital and physical working capital.

**16. Productive Capital:** This is the total of fixed capital and working capital.

**17. Outstanding Loans:** Outstanding loans represent all long-term liabilities of the unit for the purpose of ASI. It includes all long-term loans, whether interest bearing or not, outstanding according to the books of the factory as on the closing day of accounting year. **But, in context of ASI, this represents loans, which have duration of more than one year (i.e. long-term) only.**

**18. Gross Capital Formation (GCF):** Gross capital formation is measured by the total value of the gross fixed capital formation plus changes in inventories and acquisitions less disposals of valuables.

**19. Worker:** Worker includes all persons employed directly, informally or formally or through contractor on payment of wages or salaries and engaged in any manufacturing process or its ancillary activities like cleaning any part of the machinery or any premises used for manufacturing or storing materials or any kind of work incidental to or connected with the manufacturing process.

**20. Contract Worker:** All persons who are not employed directly by a factory owner/employer but engaged through a third party i.e. agency/ contractor, are termed as contract workers. Such agency charges from the factory for this job.

**21. Total Persons Engaged:** It relates to all persons engaged by the factory whether for wages or not, in work connected directly or indirectly with the manufacturing process and include all administrative, technical and clerical staff as also labour in production of capital assets for factory's own use. This is inclusive of persons holding position of supervision or management or engaged in administrative office, store-keeping section and welfare section,

watch and ward staff, sales department as also those engaged in the purchase of raw materials etc. and production of fixed assets for the factory. It also includes all working proprietors and their family members who are actively engaged in the work of the factory even without any pay and the unpaid members of the co-operative societies who work in or for the factory in any direct and productive capacity.

**22. Labour Turnover:** Labour turnover measures the extent of change in the working force due to accession and separation during a given period. The term 'accession' was defined as the total number of workers added to employment during the period, whether new or re-employed or transferred from other establishments or units under the same management. Inter-departmental transfers within the same establishment are, however ignored. The term 'separation' implies termination of employment at the instance of worker or employers. It includes termination of services due to death or retirement. As in the case of accession, transfers to other establishments are included but transfers within the same establishment are ignored. Retrenchment as a result of rationalization or modernization or any other cause, is also treated as separation.

**23. Wages:** Wages are defined to include all remuneration capable of being expressed in monetary terms and also paid more or less regularly in each pay period to workers as compensation for work done during the accounting year. It includes:

- Direct wages and salary (i.e. basic wages/salaries), payment of overtime, dearness, compensatory, house rent and other allowances;
- Remuneration for period not worked (i.e. basic wages), salaries and allowances payable for leave period, paid holidays, lay-off payments and compensation for unemployment (if not paid from source other than employers);
- Bonus and ex-gratia payment paid more or less regularly (i.e., incentive bonuses and good attendance bonuses, production bonuses etc.).

It excludes layoff payments and compensation for unemployment except where such payments are for this purpose, i.e., payments not made by the employer. It excludes employer's contribution to old age benefits and other social security charges, direct expenditure on maternity benefits and crèches and other group benefit in kind and travelling and other expenditure incurred for business purposes and reimbursed by the employer. The wages are expressed in terms of gross value, i.e., before deductions for fines, damages, taxes, provident fund, employee's state insurance contribution etc. Benefits in kind (perquisites) of individual nature are only included.

**24. Bonus:** Profit sharing bonus, festival bonus, year-end bonus, and all other bonuses and ex-gratia payments paid at less frequent intervals are covered by this term.

**25. Workmen and Staff Welfare Expenses:** These include expenditure incurred by the employer on the maternity benefits and crèches and other benefits such as supply of food, beverages, tobacco, clothing and group lodging at concessional rates and educational, cultural and recreational facilities and services and grants to trade unions and cooperative stores meant for employees. All group benefits are included.

**26. Emoluments:** These are defined in the same way as wages but paid to all employees plus imputed value of benefits in kind i.e. the net cost to the employers on those goods and services provided to employees free of charge or at markedly reduced cost which are clearly and primarily of benefit to the employees as consumers. It includes profit sharing, festival and other bonuses and ex-gratia payments paid at less frequent intervals (i.e. other than bonus paid more or less regularly for each period). Benefits in kind include supplies or services rendered such as housing, medical, education and recreation facilities. Personal insurance, income tax, house rent allowance, conveyance etc. for payment by the factory also is included in the emoluments.

**27. Supplements to Emoluments:** These include: (i) Employer's contribution to old age benefits, i.e., provident fund, pension, gratuity, etc.; (ii) Employer's contribution towards other social security charges such as Employees' State Insurance, compensation for work injuries, occupational diseases, maternity benefits, retrenchment and lay-off benefits etc.; and (iii) Group benefits like direct expenditure on maternity, crèches, canteen facilities, educational, cultural and recreational facilities and grant to trade unions, co-operative stores etc. meant for employees.

**28. Compensation of Employees:** Compensation of employees is the total of emoluments and supplement to emoluments.

**29. Mandays Worked:** These are obtained by summing up the number of mandays worked by persons working in each shift over all the shifts on all days, i.e. both manufacturing and non-manufacturing days. This figure excludes persons who are paid but remain on leave, strike, etc. Manufacturing days will mean and include number of days on which actual manufacturing process was carried out by the unit where as Non-manufacturing days will mean and include number of days on which only repair/maintenance and construction work were undertaken.

**30. Working Day:** Working day means the days on which a manufacturing process and/ or repair or maintenance work was carried on.

**31. Non-working Day:** Apart from manufacturing day and repair and maintenance days, there may be some non-working days. Non-working days are those days on which the workers give their attendance but due to non-availability of raw materials, power etc., no effective work is done. As the workers are paid for these days, such days are also taken into account for the purpose of labour statistics.

**32. Basic Materials:** Basic materials are the materials which are important and of key nature to the industry, on which the manufacturing process is based, viz. metal for machine, leather for shoe, wood for furniture.

Such material is not lost through the process of production but only changes its forms.

**33. Consumable Stores:** All such materials which assist in the manufacturing process and lose their identity without entering the products are called consumable stores, e.g., cotton waste.

**34. Fuel Consumed:** Fuel Consumed represent total purchase value of all items of fuels, lubricants, electricity, water (purchased to make steam) etc. consumed by the factory during the accounting year except those which directly enter into products as materials consumed. It excludes that part of fuels, which is produced and consumed by the factory in manufacture i.e., all intermediate products and also fuels consumed by employees as part of amenities. It includes quantities acquired and consumed from allied concerns, their book value being taken as their purchase value and also the quantities consumed in production of machinery or other capital items for factory's own use.

**35. Materials Consumed:** Materials consumed represent the total delivered value of all items of raw materials, components, chemicals, packing materials and stores which actually entered into the production process of the factory during the accounting year. Components and accessories fitted as purchased with the finished product during the accounting year are also to be included. It excludes intermediate products. Intermediate products in the above context mean all those products which are produced by the factory and consumed for further manufacturing process.

**36. Total Input:** This comprises gross value of fuels, materials etc. consumed (as defined above) and also other inputs viz. (a) cost of non-industrial services received from others, (b) cost of materials consumed for repair and maintenance of factory's fixed assets including cost of work done by others to the factory's fixed assets, (c) cost of contract and commission work done by others on materials supplied by the factory, (d) cost of office supplies and

products reported for sale during last year & used for further manufacture during the accounting year and (e) rent paid for buildings and plant & machinery and other fixed assets, (f) expenses on Research & Development (R&D).

**37. Intermediate Product:** Intermediate Product is a product which is obtained and consumed during a manufacturing process, which may or may not be saleable and is not the intended final product.

**38. Net Value of Semi-finished Goods:** It represents the excess/deficit of value of semi-finished goods and/or goods-in-process at the end of the accounting year over that at the beginning of year.

**39. Products:** These are defined to include the ex-factory value (i.e. exclusive of taxes, duties etc. on sale and inclusive of subsidies etc., if any) of all products and by-products, excluding intermediate products, that have been completed during the accounting year for sale whether actually sold during the accounting year or entered into inventory. Products also include fixed assets produced by the factory for its own use.

**40. Gross Output:** Gross output is defined to include the ex-factory value, (i.e., exclusive of taxes, duties, etc. on sale and inclusive of subsidies etc., if any) of products and by-products manufactured during the accounting year, and the net value of the semi-finished goods, value of own construction and also the receipts for industrial and non-industrial services rendered to others, rent received for building, plant & machinery and other fixed assets, net balance of goods sold in the same condition as purchased, value of electricity generated and sold and an amount equal to expenses on research & development (R&D). Value of gross output and total output has been used in the text inter-changeably to mean the same thing.

**41. Industrial Services:** Any services taken or rendered from one to another unit resulting in increase in the value of material during the manufacturing process are industrial services.

**42. Non-industrial Services:** All such services which do not have a direct bearing on the manufacturing process but are needed by any manufacturing unit are called non-industrial services, say, transport services.

**43. Gross Value Added (GVA):** Gross value added is defined as additional value created by the process of production. This is calculated by deducting the value of total input from gross value of output.

**44. Net Value Added (NVA):** This is obtained by deducting the value of total input and depreciation from gross output.

**45. Net Income:** It is obtained by deducting the value of rent paid & interest paid from the combined values of NVA.

**46. Profit:** It is obtained by deducting compensation of employees from net income.



# ANNEXURE - III

## Subjects Covered in different NSS Enterprise Survey Rounds



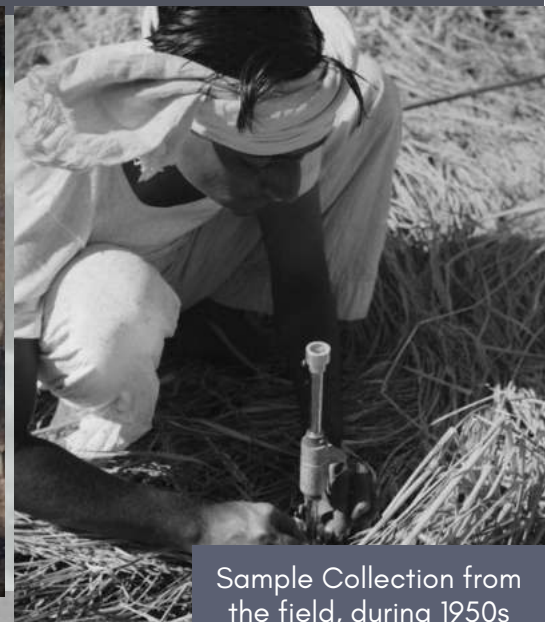
## Subjects Covered in Different NSS Enterprise Survey Rounds

| Rounds | Period                  | Subjects   |
|--------|-------------------------|--|
| 23     | July 1968—June 1969     | Integrated household survey population (including labour force in urban areas), small-scale manufacturing industries (both household and non-household), rural retail prices and crop statistics.  |
| 29     | July 1974—June 1975     | Household-based survey on Unregistered small scale manufacture and repair services (sch 2.2), transport (sch. 2.3) trade, hotels and restaurants (sch. 2.4) services and construction (sch. 2.5) an mining and quarrying (sch. 2.6).   |
| 33     | July 1978 - June 1979   | Unorganised manufacture - Directory establishments (sch 2.2.A; unorganised manufacture -Non-Directory establishments and Own Account Enterprises (sch 2.2.B)   |
| 34     | July 1979 - June 1980   | Trade (sch. 2.41B), Hotels and restaurants (sch. 2.42B), Storage & warehousing (sch. 2.34B), mechanised transport (sch. 2.31B), Non mechanised transport (sch. 2.32B), Services incidental to transport (sch. 2.33B), OAE's in service sector (sch. 2.51), unrecognised educational NDE's (sch. 2.52B), Medical & health NDE's (sch. 2.53B), Community and non-commercial cultural NDE's and OAE's (sch. 2.54B), Other NDE's in service sector (sch.2.55B) |
| 35     | July 1980 - June 1981   | An exploratory survey on Construction Activity (sch 1.4) was carried out   |
| 40     | July, 1984 - June, 1985 | Unorganised Manufacture: Non-Directory Establishments and Own Account Enterprises (sch 2.2B)   |

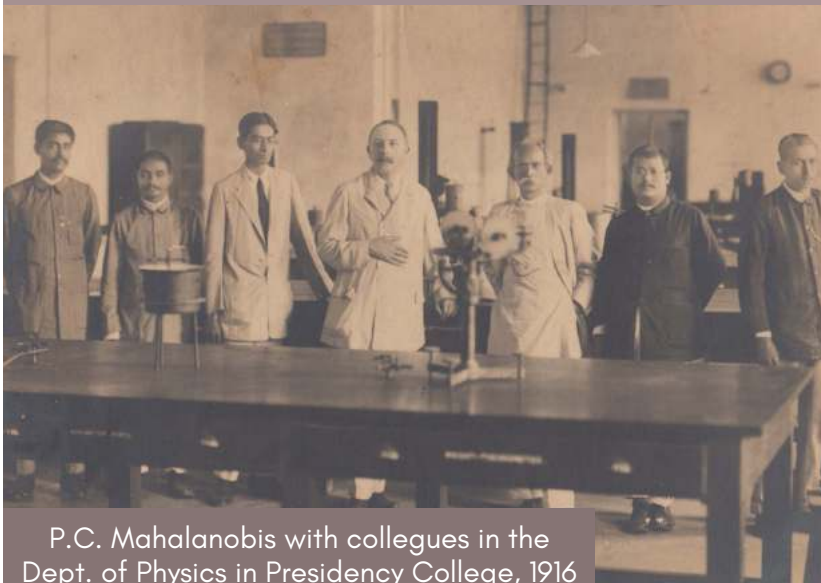
| Rounds | Period                  | Subjects   |
|--------|-------------------------|--|
| 41     | July, 1985 – June, 1986 | Own Account Trading Enterprises and Non-Directory Trading Establishments (sch 2.413)   |
| 45     | July, 1989 – June, 1990 | Unorganised Manufacture: Non-Directory Establishments and Own Account Enterprises (2.2B)   |
| 46     | July, 1990 – June, 1991 | Trade – Non-directory and Own Account enterprises (2.41.2)   |
| 51     | July 1994–June 1995     | Unorganised manufacture – Directory establishments (sch 2.2)   |
| 53     | July 1997–December 1997 | Non-Directory Trading Establishments and Own Account Trading Enterprises (sch 2.41.2)  |
| 55     | July 1999 – June 2000   | Informal Non-agricultural Enterprises (sch 2.0)  |
| 56     | July, 2000 – June, 2001 | Unorganised Manufacturing (sch 2.2)  |
| 57     | July 2001 – June 2002   | Unorganised Services Excluding Trade And Finance (sch 2.345)   |
| 62     | July 2005 – June 2006   | Manufacturing sector enterprises (sch 2.2)   |
| 63     | July 2006 – June 2007   | Service sector enterprises excluding Trade (sch 2.345)   |
| 67     | July 2010 – June 2011   | Unincorporated non-agricultural enterprises in manufacturing, trade and other service sector (excluding Construction) (sch 2.34)             |
| 73     | July 2015– June 2016    | Unincorporated non-agricultural enterprises belonging to Manufacturing, Trade and Other Services (excluding Construction) (sch 2.34)         |
| 74     | July 2016– June 2017    | An exploratory survey on Service Sector as a prelude to the proposed Annual Survey of Service Sector Enterprises (sch. 2.35) was carried out |



Prasanta Chandra Mahalanobis and Smt. Nirmal Kumari Mahalanobis with Rabindra Nath Taigore in 1924



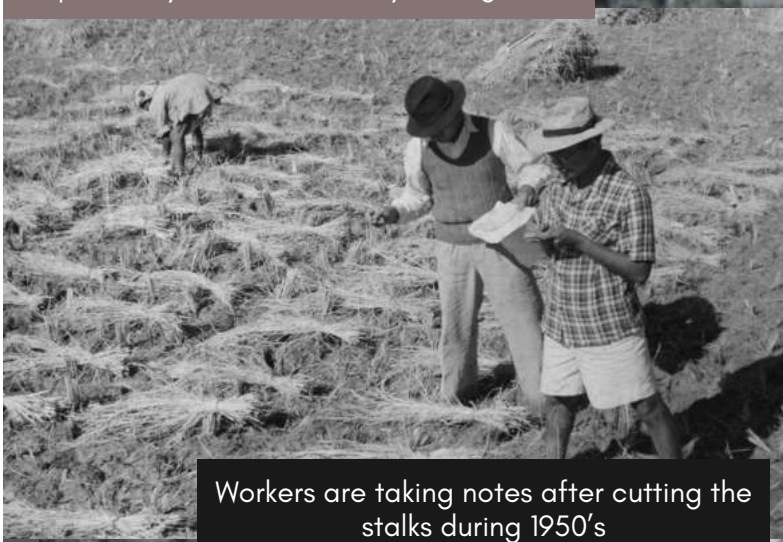
Sample Collection from the field, during 1950s



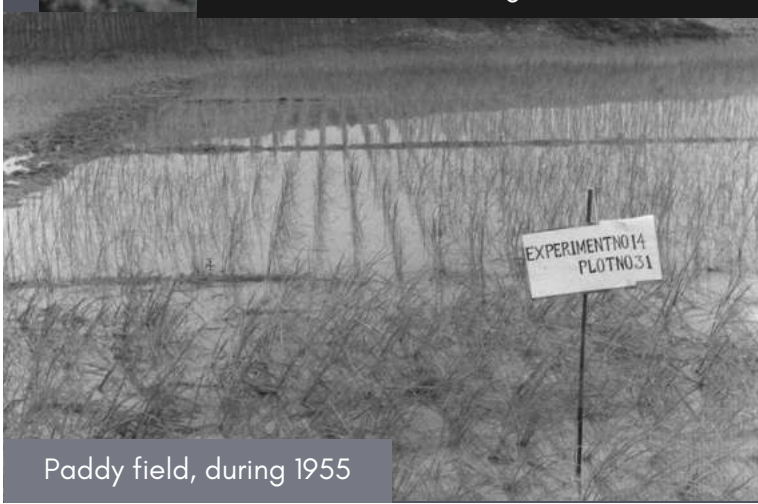
P.C. Mahalanobis with colleagues in the Dept. of Physics in Presidency College, 1916



P.C. Mahalanobis on field with Camera



Workers are taking notes after cutting the stalks during 1950's



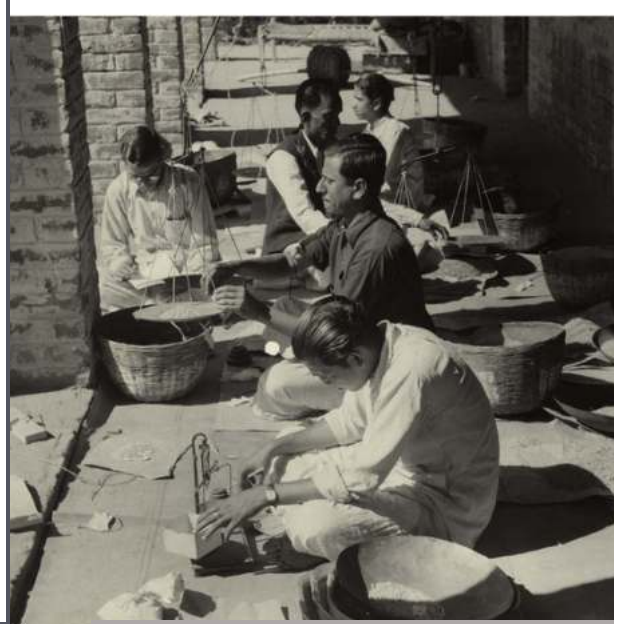
Paddy field, during 1955



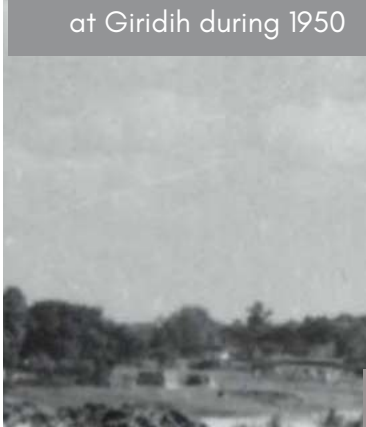
Threshing to separate grains, during 1950's



Visit of Prof. P.C. Mahalanobis with his team at Giridih during 1950



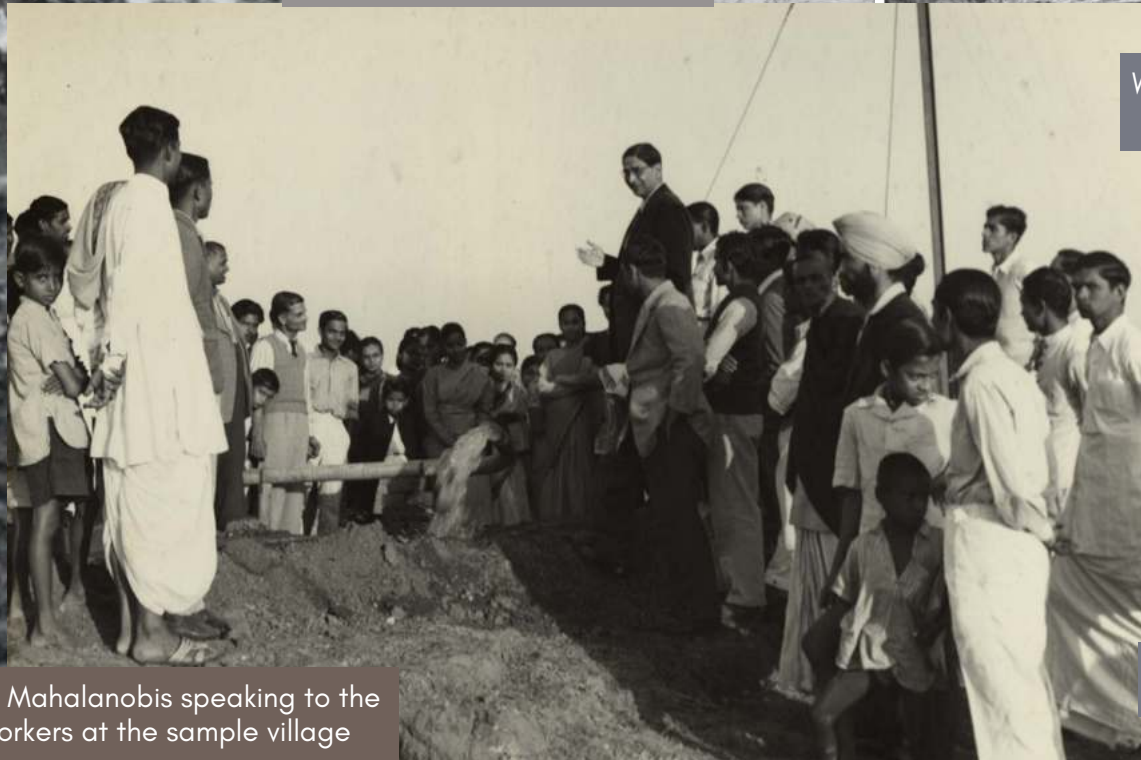
Workers measuring sample at the field



Plantation of rice, during 1955



Women were extracting jute fibers during 1955



P.C. Mahalanobis speaking to the workers at the sample village



Papaya field during 1955



Sampling of Grains during survey, 1950's



ISI team was working at field during 1955



**संपर्क:**

उद्यम सर्वेक्षण प्रभाग  
राष्ट्रीय सांख्यिकी कार्यालय  
सांख्यिकी और कार्यक्रम कार्यान्वयन मंत्रालय  
भारत सरकार  
महलानोबिस भवन  
164, गोपाल लाल ठाकुर रोड  
कोलकाता - 700108

**Contact:**

Enterprise Survey Division  
National Statistics Office  
Ministry of Statistics and Programme Implementation  
Government of India  
Mahalanobis Bhawan  
164, G.L.T. Road, Kolkata - 700108