Overview

Identification

ID NUMBER
LKA-DCS-CI2L-2004-v1.0

Version

VERSION DESCRIPTION
Version 1.0 : Full edited dataset, for internal DPD use

PRODUCTION DATE
2004

Overview

ABSTRACT
The Census of Industry 2004 covered establishments engaged in the economic activities of

1. Mining & quarrying
2. Manufacturing
3. Generation and Distribution of Electricity, Gas and Water

Three questionnaires Long Form, Short Form and M&Q Form were used to canvass Large and Medium scale industrial establishments, Small scale establishments and Mining and Quarrying establishments respectively.

The final Census was conducted during October - November 2004 by posting the questionnaires to approximately 9000 large and medium scale industrial (person engaged 10 and more) establishments and by personally visiting approximately 21000 establishments which is a representative sample of small scale industries (persons engaged less than 10).

The Department of Census and Statistics (DCS) usually conducts Census of Industry once in ten years in order to have a full coverage of industrial establishments within the territorial boundary of Sri Lanka. The earliest attempt made at seeking information from the industrial sector was in the "Census of Agriculture and Industries", which was conducted in conjunction with the Population Census in 1946. With the steady increase in industrial activities in Sri Lanka and the growing recognition of the importance of industrial statistics for the purposes of planning, a systematic attempt was made to collect data on industrial production through the Census of Industry in 1952.

This covered Mining and Quarrying, Manufacturing, Electricity and Gas and also Construction. The Census of Industry, 1952 was confined only to the factory type of establishments, i.e. industrial establishments which had not less than 5 paid employees and which had employed a capital of not less than Rs. 3,000 and used mechanical power in any of its production processes. Among the major agro-based export industries, coconut and oil milling were covered in the 1952 census, while tea factories and rubber mills were excluded, and brought instead within the scope of the Census of Agriculture.

The next Census of Industry was conducted in 1964, the scope and coverage of which was similar to that of the 1952 census. The frame for this census was based on a list of buildings prepared for the Census of Population 1963. However, there was considerable difficulty in identifying the buildings in which industrial activities were carried out. As a result the list of industrial establishments compiled on this basis did not provide a satisfactory frame to determine the overall magnitude of "factory establishments" in the industrial sector. The results as analyzed from the limited number of census returns received, could thus prove to be inadequate for depicting a sufficiently realistic picture of the level and structure of industrial activity in the country.

The Census of Industry conducted by the Department of Census & Statistics in 1983 in accordance with the United Nations program was the last Census of Industry. The 1983 Census of Industry, consisted of two stages and in the first stage, information relating to industries included in the pre-listing schedule F1, in which all buildings were listed in the Census of Population and Housing in 1981, was copied into a separate form and updated depending on the nature of Industry and the number of employees engaged.
In 1983 Sri Lanka participated in the 1983 world programmed Industrial Statistics by carrying out a Census of Industry, on a nation-wide scale. The DCS was supposed to have undertaken the Census of Industry in 1993, but had to postpone until 2003 due to the prolonged unrest prevailed in certain areas of the country.

The Census of Industry held in 2004 is the sixth of its kind in a series of Industrial Censuses conducted by the Department of Census and Statistics for over nearly six decades. It covers establishments engaged in the activities of Mining and Quarrying, Manufacturing and the Generation and Distribution of Electricity, Gas and Water according to the International Standard Industrial Classification (ISIC) Revision - 3 of the United Nations (UN).

**KIND OF DATA**
Sample survey data [ssd]

**UNITS OF ANALYSIS**
A questionnaire has to be completed for each establishment (plant, factory, mill, mine, workshop etc.) or jointly for a group of establishments on one site or several sites in the same Grama Niladhari division or ward under one accounting system.

A qualified establishment has

- its own manufacturing facility
- its own accounting and
- a distinct management and location

Ancillary units including administrative offices, warehouses, such as garages, repair shops (which primarily serve the production units) should be treated as part of the establishment.

Industrial establishments - Defined as the unit directed by a single owning or controlling entity that is engaged in the production of the most homogeneous group of goods and services, usually at one location but sometimes over a wider area, for which separate records are available (eg. plant, factory, mill, mine, workshop etc)

In cases where industrial enterprises were engaged in the production of more than one homogeneous group of goods and services in different locations, separate returns were generally obtained for each such product group and location. In cases where establishments operated by a single owner or enterprise was located within the area of one GS Division or Ward, these several units could furnish a single return and this would be reckoned as one establishment.

Ancillary units including warehouses, garages repair shops electric plants which primarily served the needs of a single establishment, if they were in the same site within the same GS division, or Ward were treated as part of the main establishment. Otherwise these were treated as separate establishments but classified to the same industry as the parent establishment.

**Scope**

**NOTES**
The scope of the census includes:-

1. Identification Information of Establishment

1.1 Geographical Location

1.2 General Information about the Establishment

1.3 Details of Industrial Activity

2. Employment, Wages and salaries 2003

2.1 Persons Engaged (Annual Average) - 2003

2.2 Persons engaged (Quarterly average) - 2003
Industrial censuses are infrequent inquiries conducted in many countries once every five or ten years and are usually aimed at a full coverage of industrial establishments within the territorial boundaries of the country.

The broad objectives of the 2003/2004 Census of Industry were

(a) to provide measures of the principal indicators of economic activity for the census reference year 2003

(b) to provide measures that would serve as a “bench-mark” (defined as a complete count or record of objects of statistical interest, at a specific date), for other surveys and for the construction of indices of production etc.

(c) to develop a comprehensive register of industrial establishments which would serve as an efficient frame for annual, quarterly and monthly inquiries into the structure of activities in the industrial sector,

(d) to ensure that the concepts and standards of industrial statistics compilation in Sri Lanka fall in line with international recommendations and standards.

The census covered the industrial sector of Sri Lanka, comprising establishments engaged primarily in the activities of Mining and Quarrying, Manufacturing, and of the Generation and Distribution of Electricity, Gas and Water. A complete coverage of all identifiable industrial establishments in the country was not considered feasible due to financial and operational constraints. Hence the enumeration plan called for coverage of all establishments above a designated employment cut-off point and a sample of smaller establishments. It was decided to enumerate all establishments engaging 10 or more persons engaged, to enable estimates to be prepared that would be as close to the universe as was possible.

**TOPICS**

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<th>Topic</th>
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<th>URI</th>
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**KEYWORDS**

Shipments and Other Receipts, Gross Output at Producer's Prices, Estimates of Value Added, Employment, Wages and
Salaries, Supplements to Wages and salaries, Input Costs, Stocks, Gross Fixed Capital Formation

Coverage

GEOGRAPHIC COVERAGE
National Coverage.

The target population for this questionnaire was all establishments (those with 10 or more persons engaged) in Sri Lanka that are engaged in the production of one class of homogeneous goods in the field of

(a) Mining and Quarrying
(b) Manufacturing
(c) The generation and distribution of electricity and water

UNIVERSE
The census covered establishments engaged primarily in the activities of Mining and Quarrying, Manufacturing and the production and distribution of Electricity, Gas and water which correspond to major divisions 2, 3 and 4 respectively of the UN classification of ISIC and represented the industrial sector specified for census coverage.

The questionnaire (called Long Form) to which this data set belongs was administered to all establishments having 10 or more persons employed.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

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FUNDING

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Metadata Production

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DATE OF METADATA PRODUCTION
2009-04-21

DDI DOCUMENT VERSION
Version 1.0 (April 2009)

DDI DOCUMENT ID
DDI-LKA-DCS-CI2L-2004-v1.0
Sampling

Sampling Procedure

In October-November 2003, DCS conducted a listing operation of Census of Industry prior to the canvass of detailed information on establishments. The census registry was based mainly on notations made during door-to-door canvassing in mid 2000 for the Census of Population and Housing. List of Establishments by Grama Niladhari Divisions were sent in latter part of 2003 to each Grama Niladhari with a request to be updated for industrial establishments (mostly newer ones) that were lacking in 2001, the closures of older ones and for some changes on establishments. The updated list of all industrial establishments was employed as the sampling frame. The whole frame was divided into two groups as establishments with less than 10 persons engaged (Small establishments) and establishments with 10 and more persons engaged (Medium and Large establishments). The small establishments that had less than 10 persons engaged was further divided into two groups as establishments with less than 30 same type of industries (ISIC 4 digits level) and establishments with 30 and more same type of industries (ISIC 4 digits level) in each district.

A total of 30,913 establishments were selected. Those 9,950 establishments that have 10 and more persons engaged were selected with certainty. The small establishments with less than 30 same kind of industries were selected with certainty totaling 9089 while others (i.e. establishment with 30 and more same kind of industries) were selected by using the stratified simple random sample design. In general, strata were defined by the kind of industries at ISIC 4 digits level and district groups. In absence of any other auxiliary variables in the list frame that could be used in the sample allocation and selection, sample sizes across strata were determined using proportional allocation. That is, if Nh is the population size in stratum h and N is the population size, the first iteration sample size nh in stratum h is derived by

\[ Nh = Nh \times \frac{11874}{N} \]

Deviations from Sample Design

The non-response weight is the ratio the sample size to the total respondents. The establishments that were considered as non-respondents are those who refused to participate in the Census. The following are considered with frame problems: those establishments that cannot be located, those that were closed (they should not be included in the sampling frame), those that are out-of-scope (the ISIC classification was not specified correctly) and those that were duplicates and mergers.

Of the small establishments with 30 and more same kind of industries in the sampling frame, 10.9% should not have been included. This is rather a big percentage of the such small establishments and therefore, requires an adjustment factor to be incorporated in the weight. To illustrate, if Nh is the population size for stratum h and nh is the corresponding sample size, then the corresponding selection probability Ph is

\[ Ph = \frac{nh}{Nh} \]

If given the stratum h, q1h is the proportion of establishments with frame problems (proportion of those that should not be included in the frame) and q2h is the proportion of establishments that were missed in the frame (those that should be listed but were not included), then the true population size of stratum h should be

\[ Nh = Nh \times (1 - q1h + q2h) \]

and the frame adjustment rate, W3hk

\[ W3hk = (1 - q1h + q2h) \]

In the case of this census, we do not have a measure for q2h. Please note that we could only assume that q2h is almost 0 because list was updated recently.

Response Rate

| TABLE 1 - RESPONSE RATES BY SIZE CLASS OF ESTABLISHMENT |
Sri Lanka - Census of Industry - 2004 [Medium & Large Scale Establishments]

(1) Number of units on Prelisting frame

(x) LT 10 persons engaged = 121,482
(y) >= 10 persons engaged = 9,950
(z) Total = 131,432

(2) Number selected or canvass at final census

(x) LT 10 persons engaged = 20,963
(y) >= 10 persons engaged = 9,950
(z) Total = 30,913

(3) Number reported at final census

(x) LT 10 persons engaged = 19,974
(y) >= 10 persons engaged = 8,312
(z) Total = 28,286

(4) Number of schedules (units) reckoned for tabulation of preliminary results

(x) LT 10 persons engaged = 17,382
(y) >= 10 persons engaged = 7,320
(z) Total = 24,702

(5) Response rates 82.9% 73.6% 80.0%

(x) LT 10 persons engaged = 82.9%
(y) >= 10 persons engaged = 73.6%
(z) Total = 80.0%

A total of 24,702 establishments furnished satisfactory returns (i.e. returns reckoned for tabulation of preliminary results) and this yielded an overall all-island response rate of 80.00/0 with the corresponding rates for “10 & more persons engaged” category and for the “less than 10 persons” category being 83.4% and 93.5% respectively.

Weighting

The final weight for respondent k in stratum h -- Whk, is a composite of the base weight, W1hk the non-response adjustment, W 2hk , and the factor to compensate for coverage errors, W3hk , such that:

\[ Whk = W1hk \times W2hk \times W3hk \]

Base weight ( W 1hk ) The base weight is the inverse of the probability of selection.
Questionnaires

Overview

After careful field study of the manner in which some large and small scale industrial undertakings maintained their business records, it was decided to use the following three types of census questionnaires for the canvassing of data at the final enumeration.

(a) Questionnaire CI-2L - The form for enumeration of medium and large scale establishments where detailed information was sought on the full range of items recommended by the UN.
(b) Questionnaire CI-2S - The form for enumeration of the selected sample - scale establishments.
(c) Questionnaire CI-MQ - The form for enumeration of Mining and Quarrying establishments.
Data Collection

Data Collection Dates

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<th>End</th>
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Data Collection Mode

Face-to-face [f2f]

DATA COLLECTION NOTES

Planning and Procedures
This Census was carried out in two stages. The Industrial Registry was updated across the country as the first step. Forms CIL-SNH and CIL-L were used to collect the information in relation to "small" and "medium & large", establishments respectively. A special Form (Form CIL-NE) had to be used to list establishments in Northern & Eastern Provinces where information in some parts of those provinces was not collected through F1 forms during the operation of the Census of Population & Housing - 2001. The second stage was the administration of different types of questionnaires, according to the size categories such as "small" and" medium & large" and sectoral categories such as "Mining & Quarrying", "Manufacturing" and" the Generation and Distribution of Electricity, Gas and Water " etc. defined by the UN. The directory of industrial establishments that was built up on the information compiled from the nation-wide field listing operation indicated that there was a total of approximately 131,432 industrial establishments in the country, of which 9,950 (or 7.6%) were the relatively medium and large scale units (i.e. engaging 10 and more persons). The balance 121,482 were the small scale units (i.e. those engaging less than 10 persons). For the final Census of Industry, it was decided to carry out a complete enumeration of the establishments in the "10 and more persons", category, and a sample enumeration 20,963 establishments of "less than 10" category, which was approximately 16%) of the total listed in this latter group.

SUPERVISION

Census Organization
The Hon. Minister of Interior Affairs has directed to conduct the Census of Industries, Trade & Services during the year 2003, by an extra ordinary Gazette notification published (no. 1290/1 1) on 29th May 2003 as per the power vested by him under section 2 of the Census Ordinance (chapter 143) Act, No. 55 of 2000. The Director General of Census and Statistics functioned as Superintendent of Census and was responsible for conducting the Census of Industry. District Secretariats and Mayor of Municipal Councils officiated as Commissioners of census and were responsible for the conduct of census operations within their respective areas of authority. They were assisted in their tasks by Assistant Commissioners who were generally Divisional Secretariats of the divisions in the rural areas, and Secretaries of the local bodies in urban areas. The Directors and Deputy Directors of Census functioned as Deputy Superintendents of Census, while the Deputy Directors, Senior Statisticians, (who performed duties as Coordinators in selected districts) and district Deputy Directors, Senior Statisticians/ Statisticians/ Statistical Officers functioned as Assistant Commissioners of Census. These officers provided the necessary technical and supervisory guidance in all census field operations. In the pre-listing of industrial establishments which was the first stage of the taking of the census (conducted on an all island basis from October to November 2003), the Grama Niladharies functioned as the enumerators in the rural areas, while in the case of urban areas, the local bodies appointed their own field officers as the enumerators. In the final census enumeration Statisticians, Statistical officers of this Department and Data Entry Operator / Coding Clerk / Clerk functioned as the enumerators.
Data Processing

No content available
Data Appraisal

No content available