

# Sri Lanka - Annual Survey of Construction Industries - 2006

**Department of Census and Statistics - Ministry of Finance and Planning**

Report generated on: October 2, 2013

Visit our data catalog at: <http://statistics.sltidc.lk/index.php>

# Overview

## Identification

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### **ID NUMBER**

LKA-DCS-ASCI-2006-v1.0

## Version

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### **VERSION DESCRIPTION**

v1.0: Full edited dataset, for internal use.

### **PRODUCTION DATE**

2009-09-24

## Overview

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### **ABSTRACT**

The Survey of Construction Industry was conducted in 1993 for the first time in Sri Lanka mainly to furnish data regarding input, output and their trends to the Institute for Construction Training and Development (ICTAD). The Department of Census and Statistics continues to conduct the survey annually to cater to the requirements of the data users along with the rapid development of the construction industry in Sri Lanka. However, due to the unsettled conditions, the survey of construction industries could not be fully conducted in Northern and Eastern Provinces. Therefore the data confines to the Provinces where the survey has been conducted.

In this survey, all construction activities undertaken by the private contractors who are registered with ICTAD, government and semi-government agencies are covered. Therefore, construction activities undertaken by the international contractors and the informal construction activities are not presented in this survey. Information is collected relating to the following sectors of the construction industry.

- i. Building construction
- ii. Highway construction
- iii. Bridge construction
- iv. Water supply & drainage
- v. Irrigation & land drainage
- vi. Dredging & Reclamation
- vii. Other constructions

All construction activities, except building construction, mentioned above are categorized under Civil Engineering activities. The survey was aimed to cover 901 sample units in all provinces except some districts in northern and eastern provinces during the reference year 2005. The Department introduced a very simple questionnaire for the survey from the year 2000 considering the difficulties to obtain the information of construction activities.

The questionnaire was posted to selected contractors and followed up by sending reminding letters in order to collect information such as, value of contract, value of work done, value of raw materials used, salaries and other services.

Further employment statistics and value of subcontracts given by the main contractors are also collected. The list of contractors registered with the ICTAD and among those who were engaged in construction activities in the year 2004 have been used as the frame for this survey.

### **KIND OF DATA**

Sample survey data [ssd]

**UNITS OF ANALYSIS**

Contractors registered with the ICTAD and those who were engaged in construction activities.

## Scope

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**NOTES**

This survey covers the following areas of study :

- a. Identification information
- b. Details of all contracts undertaken in the year 2005
- c. Details of all contracts operated in the year 2005
- d. Value of constructions done in the year 2005
- e. Details of the sub-contracts given out in the year 2005

in sectors such as

- i. Building construction
- ii. Highway construction
- iii. Bridge construction
- iv. Water supply & drainage
- v. Irrigation & land drainage
- vi. Dredging & Reclamation
- vii. Other constructions

**TOPICS**

Topic	Vocabulary	URI
TRADE, INDUSTRY AND MARKETS [2]	CESSDA	<a href="http://www.nesstar.org/rdf/common">http://www.nesstar.org/rdf/common</a>
employment [3.1]	CESSDA	<a href="http://www.nesstar.org/rdf/common">http://www.nesstar.org/rdf/common</a>

**KEYWORDS**

Reference Period, Employment, Salaries & Wages, Output, Input, Value Added

## Coverage

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**GEOGRAPHIC COVERAGE**

The Survey of Construction Activities covers all the construction activities carried out during the reference period in the island by the contractors registered with ICTAD (not in all Districts).

**UNIVERSE**

The survey covered all contractors registered with ICTAD.

## Producers and Sponsors

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**PRIMARY INVESTIGATOR(S)**

Name	Affiliation
Department of Census and Statistics	Ministry of Finance and Planning

**FUNDING**

Name	Abbreviation	Role
Department of Census and Statistics	DCS	Source of funds

## Metadata Production

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**METADATA PRODUCED BY**

Name	Abbreviation	Affiliation	Role
Department of Census & Statistics	DCS	Ministry of Finance and Planning	Data Processing

**DATE OF METADATA PRODUCTION**

2009-09-24

**DDI DOCUMENT VERSION**

Version v1.0 (September 2009)

**DDI DOCUMENT ID**

DDI-LKA-DCS-ASCI-2006-v1.0

# Sampling

## Sampling Procedure

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Stratified Systematic Sampling method was used for the survey and the list of contractors registered with the ICTAD was divided into 2 strata according to the grading system which the ICTAD has devised based on the financial terms. Contractors categorized under grade 1 to grade 6 were canvassed 100% and a probability sample was selected from other grades of 7 to 10 as shown below.

Sample Frame Strata Sample fraction Sample size

1. List of contractors registered with grade 1-5 100% 241  
ICTAD grade 6-8 40% 572  
grade 9-10 30% 88

Total 901

# Questionnaires

## Overview

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The Items Covered in the Questionnaire were:

- a. Identification information - Name and address of contractor
- b. Details of all contracts undertaken in the year 2005 - Value of contract, Floor area categorized under construction sectors such as :
  - i. Building construction
  - ii. Highway construction
  - iii. Bridge construction
  - iv. Water supply & drainage
  - v. Irrigation & land drainage
  - vi. Dredging & Reclamation
  - vii. Other constructions
- c. Details of all contracts operated in the year 2005 categorized under construction sectors:
- c. Details of all contracts operated in the year 2005 categorized under construction sectors:
  - i. Building construction (Housing units, Living quarters, Non-housing units, Repairs and maintenance)
  - ii. Highway construction (Maintenance, Reconstruction, New constructions)
  - iii. Bridge construction (Bridges, Culverts, Causeways)
  - iv. Water supply & drainage (Water supply, Drainage, Pump house)
  - v. Irrigation & land drainage (Anicut, Sluice gate, Dam, Spill, Irrigation canal)
  - vi. Dredging & Reclamation (Filling, Rehabilitation of irrigation canals, Removing Salvenia, Retaining wall)
  - vii. Other constructions
- d. Value of constructions done in the year 2005 (separately for Public and Private sector under the above construction sectors) analyzed into Work-site District, Value of contract, Cost of construction, Value of hardware materials and Salaries paid to Skilled, Unskilled, Technical, Professional categories (separately for Public and Private sector under the above construction sectors ).
- e. Details of the sub-contracts given out in the year 2005 - Subcontracts given, Value and the District of operation

## Data Collection

### Data Collection Dates

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<b>Start</b>	<b>End</b>	<b>Cycle</b>
2005	2005	N/A

### Data Collection Mode

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Mail Questionnaire [mail]

#### **DATA COLLECTION NOTES**

The Survey of Construction Industries was aimed to cover 901 sample units in all provinces except some districts in northern and eastern provinces during the reference year 2005. The department introduced a very simple questionnaire for the survey from the year 2000 considering the difficulties to obtain the information of construction activities.

The questionnaire was posted to selected contractors and followed up by sending reminding letters in order to collect information such as, value of contract, value of work done, value of raw materials used, salaries and other services, employment statistics and value of subcontract given by the main contractors.

## **Data Processing**

No content available



## **Data Appraisal**

No content available

## **File Description**

# Variable List

## Contracts

Content	This file contains data pertaining to Sections 2, 3 and 4 of the questionnaire viz:- a. Details of all contracts undertaken in the yera 2004 b. Details of all contracts operated in the year 2004 c. Value of constructions done in the year 2004
Cases	216
Variable(s)	48
Structure	Type: Keys: ()
Version	
Producer	
Missing Data	

## Variables

ID	Name	Label	Type	Format	Question
V755	serno	Serial Number	discrete	numeric	
V756	wei	Inflation factor	discrete	numeric	
V757	bny	Contracts undertook?	discrete	numeric	
V758	nbvc	Value of contract (Rs)	discrete	numeric	
V759	nbfl	Floor area (Ft)	discrete	numeric	
V760	sec	Sector	discrete	numeric	
V761	accode	Activity	discrete	numeric	
V762	dis	District	discrete	numeric	
V763	tvc	Total Value of Contract (Rs.)	discrete	numeric	
V764	wd	Value of Work Done (Rs.)	discrete	numeric	
V765	cement	Expenditure on Cement	discrete	numeric	
V766	sand	Expenditure on Sand	discrete	numeric	
V767	metal	Expenditure on Metal	discrete	numeric	
V768	bricks	Expenditure on Bricks	discrete	numeric	
V769	timber	Expenditure on Timber	discrete	numeric	
V770	steel	Expenditure on Steel	discrete	numeric	
V771	other	Expenditure on Other material	discrete	numeric	
V772	total	Total Expenditure	discrete	numeric	
V773	serv	Expenditure on Other services (Rs.)	discrete	numeric	
V774	smale	Skilled employees - male (No)	discrete	numeric	
V775	sfemale	Skilled employees - female (No)	discrete	numeric	
V776	ssmale	Skilled employees - male (Salary)	discrete	numeric	
V777	ssfemale	Skilled employees - female (Salary)	discrete	numeric	
V778	umale	Unskilled employees - male (No)	discrete	numeric	
V779	ufemale	Unskilled employees - female (No)	discrete	numeric	
V780	usmale	Unskilled employees - male (Salary)	discrete	numeric	
V781	usfemale	Unskilled employees - female (Salary)	discrete	numeric	

ID	Name	Label	Type	Format	Question
V782	tmale	Technical employees - male (No)	discrete	numeric	
V783	tfemale	Technical employees - female (No)	discrete	numeric	
V784	tsmale	Technical employees - male (Salary)	discrete	numeric	
V785	tsfemale	Technical employees - female (Salary)	discrete	numeric	
V786	pmale	Professional employees - male (No)	discrete	numeric	
V787	pfemale	Professional employees - female (No)	discrete	numeric	
V788	psmale	Professional employees - male (Salary)	discrete	numeric	
V789	psfemale	Professional employees - female (Salary)	discrete	numeric	
V863	Province	Province	discrete	numeric	
V791	M_Accode	Construction sector	contin	numeric	
V792	Output	Value of work done (Rs)	contin	numeric	
V793	Raw	Raw Materials consumed (Rs.)	contin	numeric	
V794	Input	Expenditure on goods & services	contin	numeric	
V795	Va	Value Added (Rs.)	contin	numeric	
V796	Male	Male Employees (No.)	contin	numeric	
V797	Female	Female Employees (No.)	contin	numeric	
V798	Emp	Average No.of Employees	contin	numeric	
V799	M_sal	Salaries for Male Employees (Rs.)	contin	numeric	
V800	F_sal	Salaries for Female Employees (Rs.)	contin	numeric	
V801	T_Sal	Salaries for Employees (Rs.)	contin	numeric	
V802	x	No.of Activities	contin	numeric	

## Sub-contracts

Content	This file corresponds to the Section 5 of the questionnaire which is the details about the subcontracts done by the contractor.
Cases	34
Variable(s)	6
Structure	Type: Keys: ()
Version	
Producer	
Missing Data	

## Variables

ID	Name	Label	Type	Format	Question
V864	serno	Serial No	discrete	numeric	
V804	wei	Inflation factor	discrete	numeric	
V865	line	Construction sector	discrete	numeric	
V805	sub	Type of Sub contract	discrete	numeric	
V806	dis	District	discrete	numeric	
V807	sval	Value of Sub contract (Rs)	discrete	numeric	



**Serial Number (serno)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 15	
Decimals: 0	
Range: 161-292904	

**Inflation factor (wei)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	
Decimals: 2	
Range: 6.77-19.74	

**Contracts undertook? (bny)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 24
Format: numeric	Invalid: 192
Width: 6	
Decimals: 0	
Range: 1-2	

**Value of contract (Rs) (nbvc)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 24
Format: numeric	Invalid: 192
Width: 20	
Decimals: 0	
Range: 0-2036652560	

**Floor area (Ft) (nbfl)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 24
Format: numeric	Invalid: 192
Width: 15	
Decimals: 0	
Range: 0-1920487	

**Sector (sec)**

File: Contracts



**Sector (sec)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 4	
Decimals: 0	
Range: 1-2	

**Activity (accode)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 4	
Decimals: 0	
Range: 11-71	

**District (dis)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 4	
Decimals: 0	
Range: 11-92	

**Total Value of Contract (Rs.) (tvc)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-1035210000	

**Value of Work Done (Rs.) (wd)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-464576901	

**Expenditure on Cement (cement)**

File: Contracts

**Expenditure on Cement (cement)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-32352662	

**Expenditure on Sand (sand)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-19958573	

**Expenditure on Metal (metal)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-43000000	

**Expenditure on Bricks (bricks)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-18505723	

**Expenditure on Timber (timber)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-23380190	

**Expenditure on Steel (steel)**

File: Contracts

**Expenditure on Steel (steel)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 21	
Decimals: 0	
Range: 0-48208301	

**Expenditure on Other material (other)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-94317142	

**Total Expenditure (total)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 30	
Decimals: 0	
Range: 0-172547530	

**Expenditure on Other services (Rs.) (serv)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 20	
Decimals: 0	
Range: 0-178226590	

**Skilled employees - male (No) (smale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-1510	

**Skilled employees - female (No) (sfemale)**

File: Contracts

**Skilled employees - female (No) (sfemale)**

File: Contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 10  
 Decimals: 0  
 Range: 0-20

Valid cases: 216  
 Invalid: 0

**Skilled employees - male (Salary) (ssmale)**

File: Contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 10  
 Decimals: 0  
 Range: 0-25900000

Valid cases: 216  
 Invalid: 0

**Skilled employees - female (Salary) (ssfemale)**

File: Contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 10  
 Decimals: 0  
 Range: 0-780000

Valid cases: 216  
 Invalid: 0

**Unskilled employees - male (No) (umale)**

File: Contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 10  
 Decimals: 0  
 Range: 0-4368

Valid cases: 216  
 Invalid: 0

**Unskilled employees - female (No) (ufemale)**

File: Contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 10  
 Decimals: 0  
 Range: 0-75

Valid cases: 216  
 Invalid: 0

**Unskilled employees - male (Salary) (usmale)**

File: Contracts

**Unskilled employees - male (Salary) (usmale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-20900000	

**Unskilled employees - female (Salary) (usfemale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-2604000	

**Technical employees - male (No) (tmale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-175	

**Technical employees - female (No) (tfemale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-20	

**Technical employees - male (Salary) (tsmale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-5256012	

**Technical employees - female (Salary) (tsfemale)**

File: Contracts

**Technical employees - female (Salary) (tsfemale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-3000000	

**Professional employees - male (No) (pmale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-110	

**Professional employees - female (No) (pfemale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-4	

**Professional employees - male (Salary) (psmale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-4000000	

**Professional employees - female (Salary) (psfemale)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 10	
Decimals: 0	
Range: 0-1000000	

**Province (Province)**

File: Contracts

**Province (Province)**

File: Contracts

**Overview**

Type: Discrete	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	
Decimals: 2	

**Construction sector (M\_Accode)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 1
Decimals: 2	Maximum: 7
Range: 1-7	

**Value of work done (Rs) (Output)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 41350
Decimals: 2	Maximum: 969000000
Range: 0-464576901	Mean: 20350559.8
	Standard deviation: 74299948.7

**Raw Materials consumed (Rs.) (Raw)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 0
Decimals: 2	Maximum: 657000000
Range: 0-172547530	Mean: 10527663.1
	Standard deviation: 47086505.5

**Expenditure on goods & services (Input)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 0
Decimals: 2	Maximum: 817000000
Range: 0-350774120	Mean: 12511775.5
	Standard deviation: 59264984.8

**Value Added (Rs.) (Va)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 8300
Decimals: 2	Maximum: 173568695
Range: 0-315200000	Mean: 7838784.3
	Standard deviation: 22308233.9

**Male Employees (No.) (Male)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 0
Decimals: 2	Maximum: 841
Range: 0-5889	Mean: 44
	Standard deviation: 87.8

**Female Employees (No.) (Female)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 0
Decimals: 2	Maximum: 47
Range: 0-75	Mean: 2.1
	Standard deviation: 5.1

**Average No.of Employees (Emp)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 0
Decimals: 2	Maximum: 888
Range: 0-5889	Mean: 46
	Standard deviation: 90.6

**Salaries for Male Employees (Rs.) (M\_sal)**

File: Contracts

**Overview**

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 0
Decimals: 2	Maximum: 137500000
Range: 0-51200000	Mean: 3595589.7
	Standard deviation: 12310953.5



## Salaries for Female Employees (Rs.) (F\_sal)

File: Contracts

### Overview

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 0
Decimals: 2	Maximum: 6600000
Range: 0-3150000	Mean: 114029
	Standard deviation: 491149.6

## Salaries for Employees (Rs.) (T\_Sal)

File: Contracts

### Overview

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 0
Decimals: 2	Maximum: 144100000
Range: 0-52400000	Mean: 3709618.7
	Standard deviation: 12691196.6

## No.of Activities (x)

File: Contracts

### Overview

Type: Continuous	Valid cases: 216
Format: numeric	Invalid: 0
Width: 8	Minimum: 1
Decimals: 2	Maximum: 1
Range: 1-1	Mean: 1
	Standard deviation: 0

**Serial No (serno)**

File: Sub-contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 15  
 Decimals: 0

Valid cases: 34  
 Invalid: 0

**Inflation factor (wei)**

File: Sub-contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 8  
 Decimals: 2  
 Range: 8.14-35.08

Valid cases: 34  
 Invalid: 0

**Construction sector (line)**

File: Sub-contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 4  
 Decimals: 0

Valid cases: 34  
 Invalid: 0

**Type of Sub contract (sub)**

File: Sub-contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 5  
 Decimals: 0  
 Range: 1-99

Valid cases: 34  
 Invalid: 0

**District (dis)**

File: Sub-contracts

**Overview**

Type: Discrete  
 Format: numeric  
 Width: 4  
 Decimals: 0  
 Range: 11-92

Valid cases: 34  
 Invalid: 0

**Value of Sub contract (Rs) (sval)**

File: Sub-contracts

**Overview**

## **Value of Sub contract (Rs) (sval)**

### **File: Sub-contracts**

Type: Discrete  
Format: numeric  
Width: 20  
Decimals: 0  
Range: 13000-15000000

Valid cases: 34  
Invalid: 0

## **Related Materials**

### **Questionnaires**

#### Questionnaire of ASCI06

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Title Questionnaire of ASCI06  
Filename Documentation/Questionnaire of ASCI06.pdf

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### **Reports**

#### Report Extracts

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Title Report Extracts  
Filename Documentation/Report Extracts.doc

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### **Other materials**

#### Study Documentation of ASCI06 Project

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Title Study Documentation of ASCI06 Project  
Filename Documentation/Study Documentation of ASCI06 Project.pdf

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