



SURVEY OF CONSTRUCTION INDUSTRIES



Final Report



2015

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2015

DEPARTMENT OF CENSUS AND STATISTICS

MINISTRY OF NATIONAL POLICIES AND ECONOMIC AFFAIRS

PREFACE

In 1993, the Department of Census and Statistics (DCS) conducted its first Survey on Construction Industries at the request of Institute for Construction Training and Development (ICTAD). The output of the survey revealed that this survey to be continued for important economic and labour related indicators of construction sector in the country. Therefore, it became a regular a survey in the Department.

DCS has been conducting this survey annually with some exception where this was conducted biennially. This report is based on the 17th survey of construction industries and it gives data on input, output, labour engaged in the sector etc.; which are very important for economic policy makers as well as the construction industries itself.

Suggestions for improvement of this survey are most welcome.



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ACKNOWLEDGEMENT

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Data collection was done by the District Statistical Officers/ Statistical Assistants under the supervision of District Statisticians/ Deputy Directors. Follow up data collection was carried out by the staff of Industry, Construction, Trade and Services Division under the supervision of Senior Statisticians and Statisticians of the Division.

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Construction Industry: *Sector of national economy engaged in preparation of land and construction, alteration and repair of buildings, structures and other real property.*

www.businessdictionary.com

1. INTRODUCTION

BACKGROUND

Survey of Construction Industries was conducted in 1993 for the first time in Sri Lanka by the Department of Census and Statistics (DCS) at the request of the Institute for Construction Training and Development (ICTAD, presently Construction Industry Development Authority (CIDA)) with the objective of furnishing data regarding input, output and their trends of the construction sector in the country. DCS has continued conducting this survey to compile statistics related to the construction sector.

This Construction Survey (2015) is the 17th in the series of surveys the Department has conducted so far. But remarkable improvements have been made in this survey for example the construction activities listed at the listing stage of the Economic Census 2013/14 were also covered by a representative sample.

SCOPE AND COVERAGE

Scope of the survey is the economic activities on Construction sector which includes, construction of buildings, construction of roads and railways, construction of utility projects, dredging of waterways, demolition and site preparation, electrical, plumbing and other construction installation activities.

Along with the registered contractors in CIDA, the informal sector contractors also covered in the survey. The economic activities done by international contractors are not covered in this survey.

Until 2013, construction activities had been categorized according to the CIDA classification. But, in this survey the International Standards of Industrial Classifications (ISIC) Rev. 4 are used to classify the industries.

According to ISIC Rev.4, information related to the following types of the construction industries is collected.

1. General Construction
 - 1.1 Construction of residential buildings
 - 1.2 Construction of non-residential buildings

- 1.3 Construction of roads, railways, tunnels, air field runner ways, bridges etc.
- 1.4 Construction of utility projects
- 1.5 Construction of other civil engineering projects
- 2. Specialized Construction Activities
 - 2.1 Electrical wiring, plumbing, computer networks etc.
 - 2.2 Building completion & finishing
 - 2.3 Other constructions

METHODOLOGY

A total 573 establishments from the registered list of CIDA and 503 establishments from the new frame based on the Economic Census has been selected to represent the construction industries of the country. This survey of construction industries covered construction activities carried out in all the provinces during the reference year 2014.

According to the International Recommendation for Industrial Statistics (IRIS) 2008, National Account Value Added methodology has been used for this survey instead of the Census Value Added which was the practice in the past. Hence the questionnaire also was redesigned to collect the required data for the improvements.

Data related to the following are collected through the questionnaire.

- Value of contract
- Value of work done
- Value of raw materials consumed
- Salaries
- Fixed Capital Assets
- Expenditure for other Services
- Receipts for industrial and other services

For collecting data the questionnaires were sent to the establishments selected by post. Most of the construction industries had not responded to the postal request. At the second stage officers of DCS including the field staff were sent to the establishments directly to collect the information from contractors. Several visits had to be made for collecting data from the non-responding contractors.

FRAME

The industries which carried out construction activities in the year 2014 were taken from the list of contractors registered with the CIDA and the construction industries listed at the listing stage of the Economic Census 2013/14 were considered to prepare the frame of construction industries for this survey.

CONCEPTS AND DEFINITIONS

Reference period: Data collected for this survey is related to the construction activities carried out during the calendar year 2014 or financial year 2014 April to 2015 March.

Employment: This refers to the average number of persons engaged in construction activities during the reference period, including Working Proprietors/ Active Partners, Unpaid family workers, Skilled & Unskilled operatives, Administration/ Managerial, Technical/ Supervisory, Clerical and Related and all other paid workers.

Salaries & Wages: Amounts paid as Salaries, wages or sub-contract for the work done during the period.

Output: Value of the work done during the year 2014 (14/ 15 if financial year is given)

$$\text{Output} = \text{Value of work done}$$

Intermediate Consumption: Expenditure on goods (raw materials), other services and value of given sub-contract.

$$\text{Intermediate Consumption} = \text{Value of raw materials} + \text{Value of given sub-contract} + \text{Expenditure for other services}$$

Value Added: Value Added has been defined as the difference between the value of output and value of inputs.

$$\text{Value Added} = \text{Output} - \text{Intermediate Consumption}$$

Note: As new improvements were made in this round of survey, the findings may not be comparable with the those of previous rounds.

3. SURVEY RESULTS

The Survey of Construction Industries – 2014 reveals the following

- Total estimated value of work done by all type of construction activities in Sri Lanka was Rs. 397,770 million.
- The highest contribution to this value has been made by the Roads & Railways construction sector which is Rs. 192,559 million.
- This contributed to nearly half (48.4%) of the total value of work done during 2014.
- Building (Residential) construction sector was the second highest contributor to the total value of work done which is Rs. 52,078 million.

Table 3.1: Distribution of value of work done by type of construction activity -2015

Type of Construction Activity	Value of work done (Rs. Mn)	%
Buildings (Residential)	52,078	13.1
Non-residential Buildings	51,930	13.1
Roads & Railways	192,559	48.4
Utility Projects	37,049	9.3
Other Civil Engineering Projects	16,364	4.1
Electrical, Plumbing and Other Construction Installation Activities	20,667	5.2
Building Completion & Finishing	1,278	0.3
Other Construction	25,845	6.5
Total	397,770	100.0

Figure 3.1: Distribution of value of work done by type of construction activity -2015

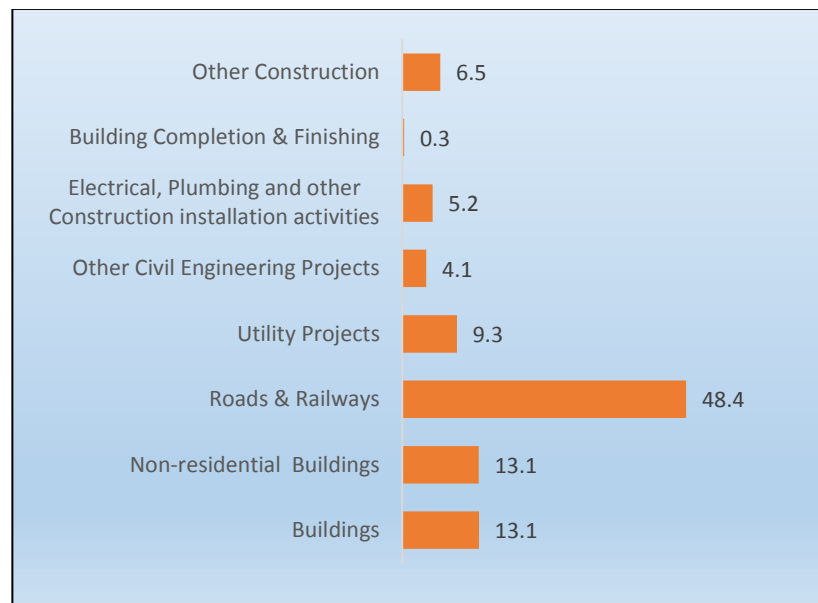


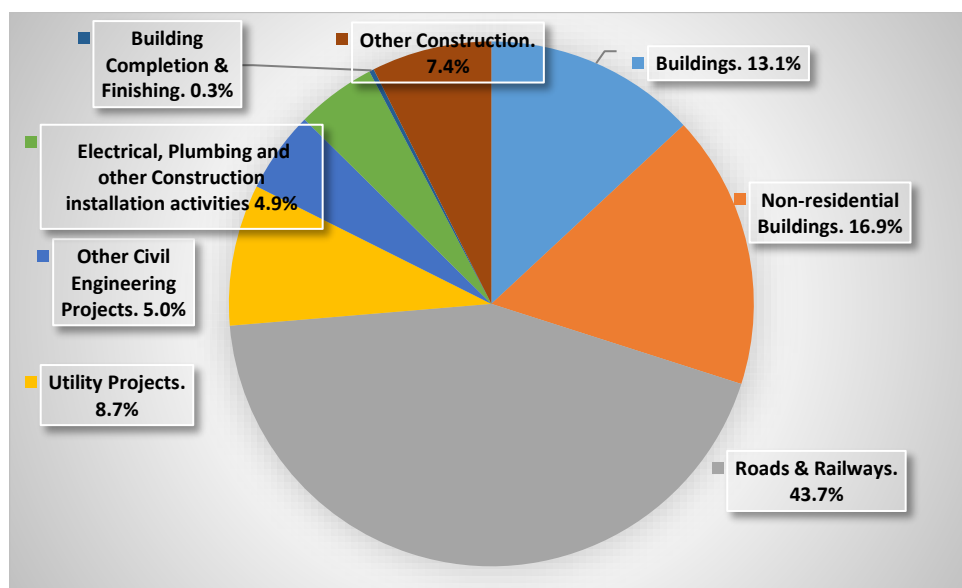
Figure 3.1 depicts that in 2014 the highest value of work done was recorded from Roads & Railways constructions. Non-residential building construction and Building construction activities have recorded 13.1%, 13.1% of the total work done during 2014.

Table 3.2: Distribution of raw materials consumed by type of construction activity - 2015

Type of Construction Activity	Value of Raw Materials Consumed (Rs. Mn)	%
Buildings (Residential)	28,880	13.1
Non-residential Buildings	37,234	16.9
Roads & Railways	96,579	43.7
Utility Projects	19,246	8.7
Other Civil Engineering Projects	11,069	5.0
Electrical, Plumbing and Other Construction Installation Activities	10,843	4.9
Building Completion & Finishing	643	0.3
Other Construction	16,342	7.4
Total	220,836	100.0

Total value of raw materials consumed by all type of construction activities in 2014, was Rs. 220,836 million.

Figure 3.2: Distribution of raw materials consumed by type of construction activity - 2015



If the consumption of raw materials by activity is considered the highest percentage (43.7%) of the raw materials consumed by Roads & Railways constructions activities in 2014.

Table 3.3: Distribution of some selected indicators of all construction activities and Roads & Railways construction - 2015

Indicator	All construction activities (Rs.Mn)	Roads & Railways Construction	Share of Roads & Railways constructions out of all activities (%)
Value of Contract	527,429	265,730	50.4
Value of Work Done	397,770	192,560	48.4
Value of Intermediate Consumption	260,154	114,024	43.8
Value Added	137,617	78,535	57.1
Raw Materials	220,836	96,579	43.7
Sub-contract	35,523	22,616	63.7
Salaries	27,250	4,131	15.2

Figure 3.3: Distribution of some selected indicators of all construction activities and Roads & Railways construction – 2015

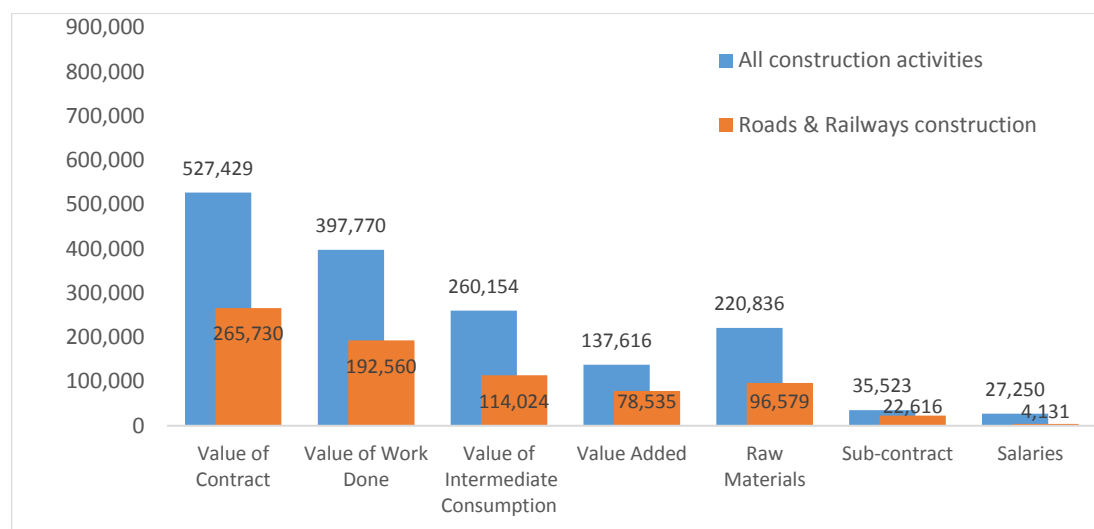


Figure 3.3 reveals that the share of indicators of Value of contract, Value Added, Sub-contract on Roads & Railways constructions were more than 50 percent out of the all activities.

Table 3.4: Distribution of value of sub-contracts by type of construction activity - 2015

Type of Construction Activity	Value of sub-contract (Rs. Mn)	%
Buildings (Residential)	6,781	19.1
Non-residential Buildings	3,370	9.5
Roads & Railways	22,616	63.7
Utility Projects	1,689	4.8
Other Civil Engineering Projects	233	0.7
Electrical, Plumbing and Other Construction Installation Activities	157	0.4
Building Completion & Finishing	13	0.0
Other Construction	664	1.9
Total	35,523	100.0

Figure 3.4: Distribution of value of sub-contracts by type of construction activity – 2015

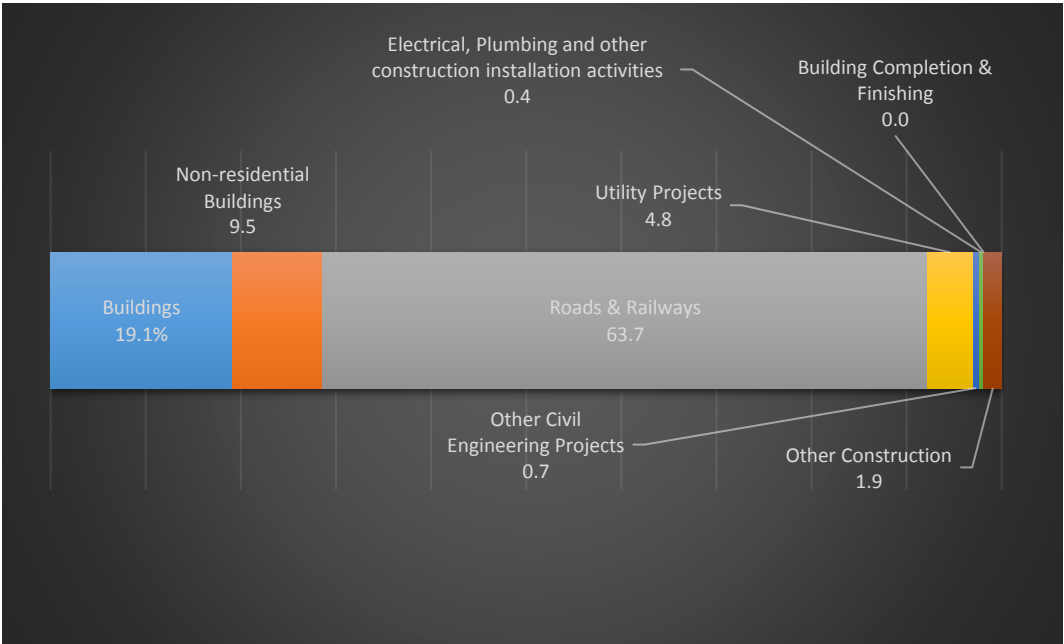


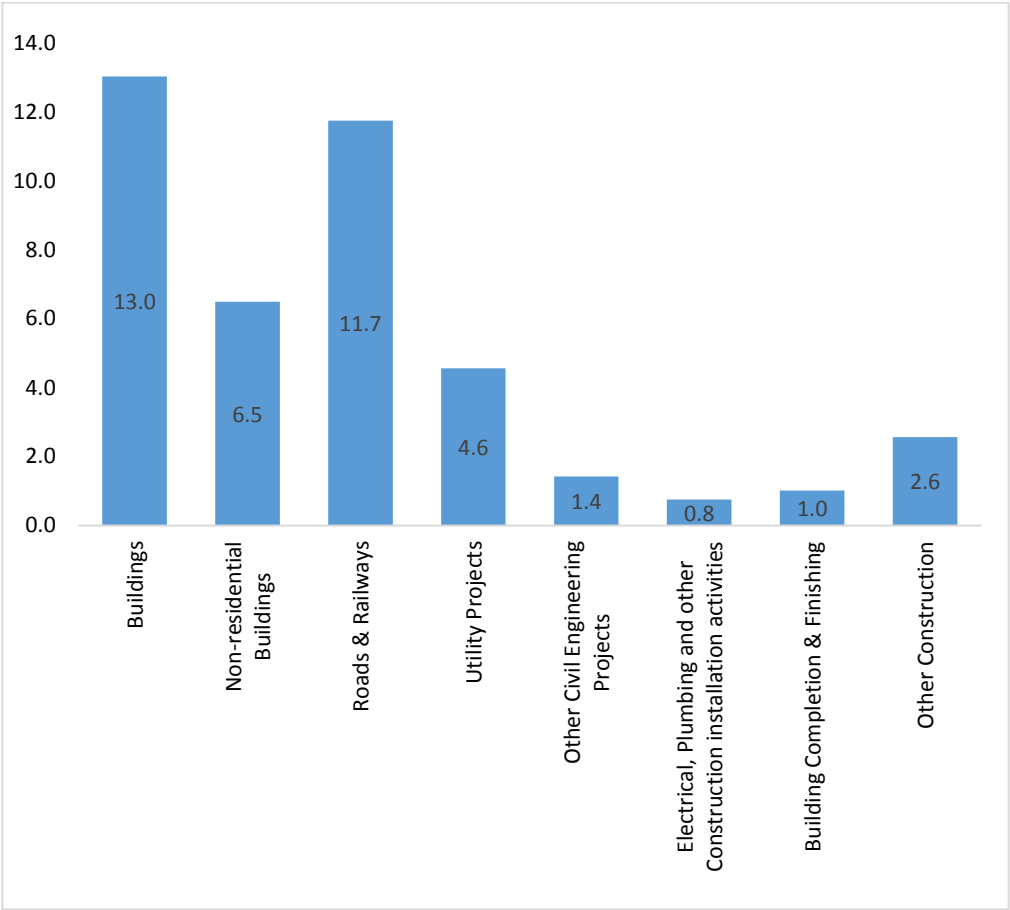
Figure 3.4 share that out of all the construction activities, Roads & Railways construction is the largest type with respect to the values of sub-contracts. It was 63.7 percent. The lowest share was recorded from the Building completion & finishing sector.

Table 3.5: Share of sub-contracts for the total work done by type of construction activity – 2015

Type of Construction Activity	Value of work done (Rs. Mn)	Value of sub-contract (Rs. Mn)	%
Buildings (Residential)	52,078	6,781	13.0
Non-residential Buildings	51,930	3,370	6.5
Roads & Railways	192,559	22,616	11.7
Utility Projects	37,049	1,689	4.6
Other Civil Engineering Projects	16,364	233	1.4
Electrical, Plumbing and Other Construction Installation Activities	20,667	157	0.8
Building Completion & Finishing	1,278	13	1.0
Other Construction	25,845	664	2.6
Total	397,770	35,523	8.9

Table 3.5 depicts that the share of sub-contracts for the value of work done for all the types of construction activities was 8.9 percent.

Figure 3.5: Share of sub-contracts for the total work done by type of construction activity – 2015



Considering the figure 3.5, it can be seen in the Building (Residential) construction sector reported the highest value of the share of sub-contracts out of value of work done. It was 13 percent. The lowest percentage was recorded from Electrical, Plumbing and Other construction Installation Activities, which is 0.8 percent.

4. STATISTICAL APPENDIX

Table 4.1: Some Selected Indicators of Construction Activities Classified by Type of Construction Activity - 2015

Type of Construction Activity	No. of Activities	Total Value of Contract (Rs.)	Value of Work Done (Rs.)	Intermediate Consumption (Rs.)	Value Added (Rs.)	Raw Materials Consumed (Rs.)	Value of sub-contract (Rs.)	Average No. of Employees	Wages & Salaries for Employees (Rs.)
Buildings (Residential)	955	57,289,833,886	52,078,209,741	36,474,705,445	15,603,504,296	28,879,577,497	6,781,347,678	17,290	4,636,664,921
Non-residential Buildings	2,006	89,261,750,456	51,930,085,502	41,902,535,210	10,027,550,292	37,234,300,285	3,369,579,812	99,348	6,931,412,049
Roads & Railways	560	265,730,375,937	192,559,517,604	114,024,443,410	78,535,074,194	96,578,833,142	22,615,712,631	16,862	4,131,309,964
Utility Projects	229	39,822,462,217	37,048,520,253	23,257,302,310	13,791,217,943	19,245,769,677	1,688,995,280	19,610	2,454,861,480
Other Civil Engineering Projects	395	10,976,341,487	16,364,309,254	13,923,318,892	2,440,990,362	11,068,533,990	232,625,028	10,853	1,975,421,928
Electrical, Plumbing and Other Construction Installation Activities	188	22,947,992,353	20,666,776,728	11,628,951,214	9,037,825,514	10,843,311,211	157,156,665	7,117	1,788,162,734
Building Completion & Finishing	461	1,337,024,291	1,277,874,605	753,780,646	524,093,959	643,519,392	13,499,520	2,168	229,616,022
Other Construction	316	40,063,555,940	25,845,154,767	18,188,638,270	7,656,516,497	16,342,001,835	664,046,214	15,630	5,102,613,834
Total	5,110	527,429,336,567	397,770,448,454	260,153,675,397	137,616,773,057	220,835,847,029	35,522,962,828	188,877	27,250,062,932

Table 4.2: Raw Materials Consumed Classified by Type of Construction Activity - 2015

Type of Construction Activity	Raw Materials Consumed (Rs.)								Total
	Cement	Sand	Rubble & Metal	Bricks	Timber	Iron & Steel	Roofing Materials	Other	
Buildings (Residential)	6,469,778,165	3,603,179,794	3,035,235,352	2,748,833,351	1,931,810,545	5,420,975,652	2,190,993,787	3,478,770,851	28,879,577,497
Non-residential Buildings	7,746,609,395	3,813,106,795	7,507,521,985	2,775,451,945	2,545,574,277	6,047,500,299	2,755,638,095	4,042,897,494	37,234,300,285
Roads & Railways	11,312,448,411	4,965,131,970	42,972,680,909	268,342,700	466,031,827	14,805,204,512	186,167,140	21,602,825,673	96,578,833,142
Utility Projects	4,611,158,696	767,548,496	4,136,000,935	211,771,188	799,405,138	5,069,416,300	31,798,858	3,618,670,066	19,245,769,677
Other Civil Engineering Projects	2,361,011,963	385,074,261	946,283,679	22,032,078	110,533,000	860,058,431	49,333,634	6,334,206,944	11,068,533,990
Electrical, Plumbing and Other Construction Installation Activities	88,530,416	45,098,583	26,751,724	24,575,438	8,079,228	44,149,048	60,789,136	10,545,337,638	10,843,311,211
Building Completion & Finishing	35,968,872	9,774,546	4,471,360	8,301,920	41,020,600	339,280,598	6,663,715	198,037,781	643,519,392
Other Construction	1,177,542,540	670,698,297	1,119,439,458	32,118,150	156,546,993	2,192,809,372	14,310,525	10,978,536,500	16,342,001,835
Total	33,803,048,458	14,259,612,742	59,748,385,402	6,091,426,770	6,059,001,608	34,779,394,212	5,295,694,890	60,799,282,947	220,835,847,029

Table 4.3: Average No. of Employees and Salaries Classified by Type of Construction Activity - 2015

Type of Construction Activity	Average No. of Employees			Wages & Salaries for Employees (Rs.)
	Male	Female	Total	
Buildings (Residential)	15,044	2,246	17,290	4,636,664,921
Non-residential Buildings	95,998	3,350	99,348	6,931,412,049
Roads & Railways	15,626	1,236	16,862	4,131,309,964
Utility Projects	19,260	350	19,610	2,454,861,480
Other Civil Engineering Projects	10,553	300	10,853	1,975,421,928
Electrical, Plumbing and Other Construction Installation Activities	6,412	704	7,117	1,788,162,734
Building Completion & Finishing	2,116	51	2,168	229,616,022
Other Construction	15,319	311	15,630	5,102,613,834
Total	180,328	8,549	188,877	27,250,062,932

Table 4.4: Some Selected Indicators of Construction Activities Classified by Value of Work Done Size Category - 2015

Value of Work Done Size Category (Rs.)	No. of Activities	Total Value of Contract (Rs.)	Value of Work Done (Rs.)	Intermediate Consumption (Rs.)	Value Added (Rs.)	Raw Materials Consumed (Rs.)	Value of sub-contract (Rs.)	Average No. of Employees	Wages & Salaries for Employees (Rs.)
Less than 100,000	91	6,427,445	4,861,045	2,965,190	1,895,855	2,795,908	908,200	90	438,571
100,000 - 999,999	722	533,791,090	405,434,084	307,577,990	97,856,094	234,713,950	19,876,459	7,526	128,861,171
1,000,000 - 9,999,999	2,475	12,894,565,449	9,987,918,740	7,371,403,278	2,616,515,462	6,423,794,032	212,358,290	20,760	2,231,688,535
10,000,000 - 99,999,999	1,409	65,154,835,356	47,284,772,841	38,041,118,576	9,243,654,265	32,127,435,575	1,161,712,330	101,316	7,200,728,809
100,000,000 - 499,000,000	293	113,258,981,020	54,533,918,195	39,368,787,808	15,165,130,387	33,295,995,882	3,079,224,270	20,109	5,704,459,612
500,000,000 & above	120	335,580,736,207	285,553,543,549	175,061,822,555	110,491,720,994	148,751,111,682	31,048,883,279	39,076	11,983,886,234
Total	5,110	527,429,336,567	397,770,448,454	260,153,675,397	137,616,773,057	220,835,847,029	35,522,962,828	188,877	27,250,062,932

Table 4.5: Raw Materials Consumed Classified by Value of Work Done Size Category - 2015

Value of Work Done Size Category (Rs.)	Raw Materials Consumed (Rs.)								Total
	Cement	Sand	Rubble & Metal	Bricks	Timber	Iron & Steel	Roofing Materials	Other	
Less than 100,000	230,160	215,775	167,825	0	768,960	358,848	0	1,054,340	2,795,908
100,000 - 999,999	54,826,627	41,040,533	35,020,364	24,937,380	15,390,136	12,112,287	14,421,573	36,965,050	234,713,950
1,000,000 - 9,999,999	1,459,817,390	780,927,746	1,013,087,380	506,424,245	528,494,114	735,031,843	585,722,001	814,289,313	6,423,794,032
10,000,000 - 99,999,999	7,102,127,223	3,685,626,829	5,709,816,660	2,218,482,985	2,156,217,835	4,565,846,901	2,221,254,074	4,468,063,068	32,127,435,575
100,000,000 - 499,000,000	5,084,502,274	2,547,964,093	10,136,126,292	1,264,199,868	1,750,884,999	4,168,322,893	1,408,267,605	6,935,727,858	33,295,995,882
500,000,000 & above	20,101,544,783	7,203,837,764	42,854,166,881	2,077,382,292	1,607,245,562	25,297,721,442	1,066,029,638	48,543,183,320	148,751,111,682
Total	33,803,048,457	14,259,612,740	59,748,385,402	6,091,426,770	6,059,001,606	34,779,394,214	5,295,694,891	60,799,282,949	220,835,847,029

Table 4.6: Number of Establishments by Type of Legal Organization - 2015

Type of Legal organization	No. of Establishments
Sole Ownership	2,984
Partnership	170
Private Limited Liability Co.	282
Public Limited Liability Co.	2
Semi Government	39
NPISH*	13
Total	3,490

* - Non profit institutes for serving household (ex: Welfare organizations of the community, NGOS)

Table 4.8: Average number of employees by Persons engaged size category - 2015

Persons engaged size category	Average No. of Employees		
	Male	Female	Total
Less than 10	11,334	281	11,615
10 - 19	15,682	1,038	16,719
20 - 49	20,301	1,711	22,011
50 - 99	6,937	2,021	8,958
100 & above	126,075	3,498	129,573
Total	180,328	8,549	188,877

Table 4.7: Number of Establishments by Persons engaged size category - 2015

Persons engaged size category	No. of establishments
Less than 10	1,625
10 - 19	1,292
20 - 49	303
50 - 99	95
100 & above	175
Total	3,490