## Preliminary Report of

## the 2009 Construction Industry Survey: Bangkok

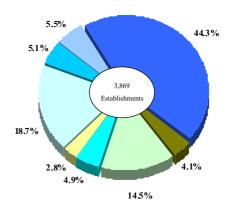
The National Statistical Office (NSO) carried out the 2009 Construction Industry Survey, which is the 3<sup>rd</sup> survey and the NSO planed for conducting this survey every 5 years. The main objective of the survey is to collect basic information data on construction establishment. Data is vital to economic development planning of the country and to private employment planning as well, the survey covered all construction establishment in the Whole Kingdom, which engaged in construction industry (Categories F of the International Standard Industrial Classical of All Economic Activities, ISIC: Rev.4). There are totally 3 division i.e. construction of buildings, civil engineering and specialized construction activities.

The field work was conducted during June 1 to September 30, 2009. The data presented in this report was the operation of the construction establishments located in **the Bangkok** during January 1 to December 31, 2008. The major findings are as follows:

### 1. Number of establishments

The results of the 2009 Construction Industry Survey of 3,869 establishments in the Bangkok, it was found that most of them (about 44.3 percent) were engaged in *construction of buildings*. Followed by those engaged in *building completion and finishing* and *electrical installation* of about 18.7 and 14.5 percent respectively. The other class of construction industry not mentioned above had rather low proportion each had less than 9.0 percent of the total.

Figure 1 Percentage of construction establishments by class of construction industry



- Class 4100 Construction of buildings
- Class 4220 Construction of utility projects
- Class 4321 Electrical installation
- Class 4322 Plumbing, heat and air-conditioning installation
- Class 4329 Construction of other civil engineering projects
- Class 4330 Building completion and finishing
- Class 4390 Other specialized construction activities
- Other class i.e. class 4210 construction of roads and railways, class 4290 construction of other civil engineering projects, class 4311 demolition and class 4312 site preparation

# 2. Size of establishment (number of persons engaged)

Most of them were about 40.4 percent of establishments with 1 - 5 persons. The establishment with 6 - 10 persons was about 23.1 percent. For the establishment with more than 10 persons was 36.5 percent.

Considering by class of construction industry, it was found that most establishment (more than 33.0 percent) was small size with 1 - 5 persons. Except for those engaged in *construction* of roads and railways, construction of utility projects, construction of other civil engineering projects and demolition.

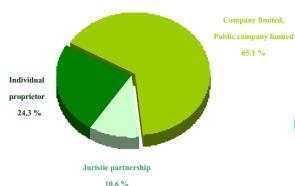
Table 1 Percentage of construction establishments by size of establishment (number of person engaged) and class of construction industry

Class of construction	n industry Total	l – 5	6-10	11-15 Persons	16-20 Persons	> 20 Persons
Total	100.0	40.4	23.1	11,2	6.5	18.8
4100 Construction of	buildings 100.0	39.6	24.6	11.4	6.7	17.7
4210 Construction of and railways	of roads 100.0	11.6	9.5	10.5	7.4	61.0
4220 Construction of projects	of utility 100.0	16.2	14.4	13.8	7.5	48.1
4290 Construction of civil engineerin	100.0	7.1	28.6	7.1	14.3	42.9
4311 Demolition	100.0	27.3	27.3	18.1	9.2	18.1
4312 Site preparation	on 100.0	39.0	30.5	8.4	6.3	15.8
4321 Electrical insta	allation 100.0	33.3	24.5	14.6	6.6	21.0
4322 Plumbing, hea	100.0	35.6	21.8	11.2	11.2	20.2
4329 Other construction	100.0	43.9	17.8	13.1	9.3	15.9
4330 Building comp and finishing	pletion 100.0	57.9	21.1	8.6	3.3	9.1
4390 Other specialis		42.4	27.3	8.6	7.6	14.1

## 3. Form of legal organization

Most of construction establishments (about 65.1 percent) were company limited or public company limited. The establishments, which were in the form of individual proprietor was about 24.3 percent. Establishment, which were juristic partnership, was about 10.6 percent.

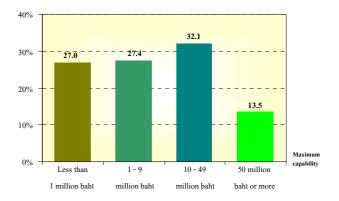
Figure 2 Percentage of construction establishments by form of legal organization



## 4. Maximum capability

The majority of construction establishments in Bangkok (about 32.1) had less than 10 - 49 million baht of maximum capability. For the establishments with 50 million baht or more of maximum capability had the least proportion of about 13.5 percent.

Figure 3 Percentage of construction establishments by maximum capability



### 5. Construct for government

The construction establishments in the Bangkok, about 16.5 percent, constructed for government. Out of these, about 44.5 percent of establishments did construction business with the government 50% or more. There were about 13.7 percent of establishments did the construction business with the government 10 - 19%. Establishments did the construction business with the government less than 10% 20 - 29% 30 - 39% and 40 - 49% were about 10 - 11 percent.

Figure 4 Percentage of construction establishments by construct for governments

	Construct for government	%
No Yes	< 10%	10.2
83.5%	10 - 19%	13.7
	20 - 29%	11.0
	30 - 39%	9.5
	40 - 49%	11.1
``	``. ≥ 50%	44.5

### 6. Construction status

For the construction status of the establishments, which more than one characteristic can be done by an establishment, it was found that most establishments (about 62.0 percent) was *main* contractor. The following was subcontracting parts to others of about 46.4 percent. For the establishment subcontractor only labour and subcontractor were about 25.8 and 17.6 percent respectively.

Figure 5 Percentage of construction establishments by construction status

Subcontractor only labour

Subcontractor

Subcontractor

17.6

Subcontractor

17.6

Subcontractor

17.6

Subcontractor

17.6

17.6

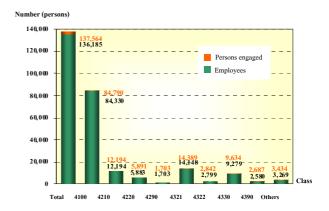
Subcontractor

Note: More than one characteristic can be done by an establishment.

## 7. Number of persons engaged and employees

In 2008, the workers of the construction establishments in the Bangkok were totally 137,564 persons. In term of employment, the number of employees totalled 136,185 persons. Considering by class of construction industry, it was found that most of them worked in construction of buildings, of about 84,330 persons or 61.9 percent. Followed by those worked in electrical installation about 14,148 persons or 10.4 percent. The rest engaged in construction industry not mentioned above.

Figure 6 Number of persons engaged construction establishments by class of construction industry



**Persons engaged** refer to owners or juristic partnerships, unpaid workers and employees.

#### Class of construction industry:

Class 4100 Construction of building

Class 4210 Construction of roads and railways

Class 4220 Construction of utility projects

Class 4290 Construction of other civil engineering projects

Class 4321 Electrical installation

Class 4322 Plumbing, heat and air-conditioning installation

Class 4330 Building completion and finishing

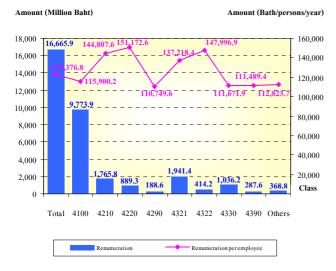
Class 4390 Other specialized construction activities

Other class i.e. class 4311 demolitions, class 4312 site preparation and 4329 other construction installation

## 8. Remuneration

In 2008, the employees working in construction establishment in the Bangkok received the total remuneration about 16,665.9 million baht or about 122,377 baht per persons annually. The employees engaged in *construction of utility projects* the highest annual remuneration of about 151,173 baht per person. Followed by those engaged in *plumbing, heat and air-conditioning installation* and *construction of roads and railways* receive the annual remuneration, of about 147,997 and 144,808 baht per persons respectively.

Figure 7 Remuneration of construction establishments by class of construction industry



# 9. Value of gross output, intermediate consumption and value added

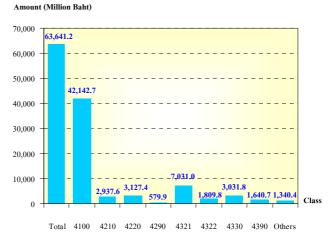
The value of gross output or receipts of construction establishment was totally 227,491.2 million baht. The intermediate consumption and value added were totally 163,850.0 and 63,641.2 million baht respectively. Comparing the value added to value of gross output or receive was about 28.0 percent.

For the average value of gross output had about 58.8 million baht per establishment and 1.7 million baht per persons. In terms of the average value added, they were about 16.4 million baht per establishment and 462,600 baht per persons respectively.

Considering by class of construction industry, it was found that most of value added was from *construction of buildings* with the highest proportion (about 66.2 percent). The following was *electrical installation*, about 11.0

percent. For the establishment construction of utility projects, building completion and finishing and construction of roads and railways about 4.9, 4.8 and 4.6 percent. The other class of construction industry had rather low proportion less than 4.0 percent.

Figure 8 Value added of construction establishments by class of construction industry



Value added value of gross output or receipts – intermediate consumption

Value of gross output or receives refer to receipts of establishment in 2008

**Intermediate consumption** refer to expenditure of construction establishments in 2008

#### Class of construction industry:

Class 4100 Construction of building

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Class 4312 Site preparation

Class 4321 Electrical installation

Class 4322 Plumbing, heat and air-conditioning installation

Class 4330 Building completion and finishing

Class 4390 Other specialized construction activities

Other class i.e. class 4311 demolitions, class 4312 site

preparation and class 4329 other construction installation.

## 10. Data comparison of construction establishments

Comparing the data of construction industry in 2009 and 2004 of which the operation period was of the year in 2008 and 2003, it was found that construction establishments increased by 18.0 percent, as well as number of persons engaged increased by 88.0 percent.

In terms of employment, number of employees increased by 91.7 percent. The remuneration increased by 106.9 percent.

The value of gross output, intermediated consumption and value added of construction establishment increased by 18.0, 16.3 and 22.7 percent respectively.

Table 2 Principal data of construction establishments in year 2003 and 2008

Data items	2003 <sup>1/</sup>	2008 <sup>2/</sup>	Percent change	
Number of establishments (Establishments)	3,280	3,869	18.0	
Number of persons engaged (Persons)	73,164	137,564	88.0	
Average per establishment (Persons)	22.3	35.6	59.6	
Number of employees (Persons)	71,030	136,185	91.7	
Average per establishment (Persons)	21.7	35.2	62.2	
Remuneration (Million Baht)	8,053,354,400	16,665,879,100	106.9	
Average annual per employee (Baht)	113,379.6	122,376.8	7.9	
Value of gross output (Million Baht)	192,710,963,100	227,491,223,800	18.0	
Average per establishment (Thousand Baht)	58,753,342.4	58,798,455.4	0.1	
Average per persons engaged (Thousand Baht)	2,633,958.8	1,653,711.9	-37.2	
Intermediate consumption (Million Baht)	140,859,390,100	163,849,965,500	16.3	
Average per establishment (Thousand Baht)	42,944,936.0	42,349,435.4	-1.4	
Average per persons engaged (Thousand Baht)	1,925,255.4	1,191,081.7	-38.1	
Value added (Million Baht)	51,851,573,000	63,641,258,300	22.7	
Average per establishment (Thousand Baht)	15,808,406.4	16,449,020.0	4.1	
Average per persons engaged (Thousand Baht)	708,703.4	462,630.2	-34.7	

Note: 1/2 The classification of activity were based upon the International Standard Industrial Classification of All Economic Activities; ISIC: Rev.3

<sup>&</sup>lt;sup>2/</sup> The classification of activity were based upon the International Standard Industrial Classification of All Economic Activities; ISIC: Rev.4

## 11. Data summary and recommendation

The results of the 2009 construction industry survey, show that most establishments was small scale with 1 - 10 persons, of about 63.5 percent. The highlight industry was *construction of buildings* which had the highest proportion, of about 44.3 percent. The persons engaged in the establishments, there was totally 137,564 persons. Out of these, about 136,185 persons were employees. They received the annual remuneration, of about 122,377 baht per person. Moreover, the construction of in the Bangkok establishments contributed value of gross output or receipts, intermediate consumption and value added, of about 227,491.2, 163,850.0 and 63,641.2 million baht respectively.

The survey also incorporated questions concerning the business performance to prospect for the years 2008. The establishments about 56.1 percent reported that their performance decrease from the year 2007.

For government measurement needed; the establishment reported that reducing operation cost such as materials, equipment etc. and reduce corruption.