

Preliminary Report of

The 2009 Construction Industry Survey : Whole Kingdom

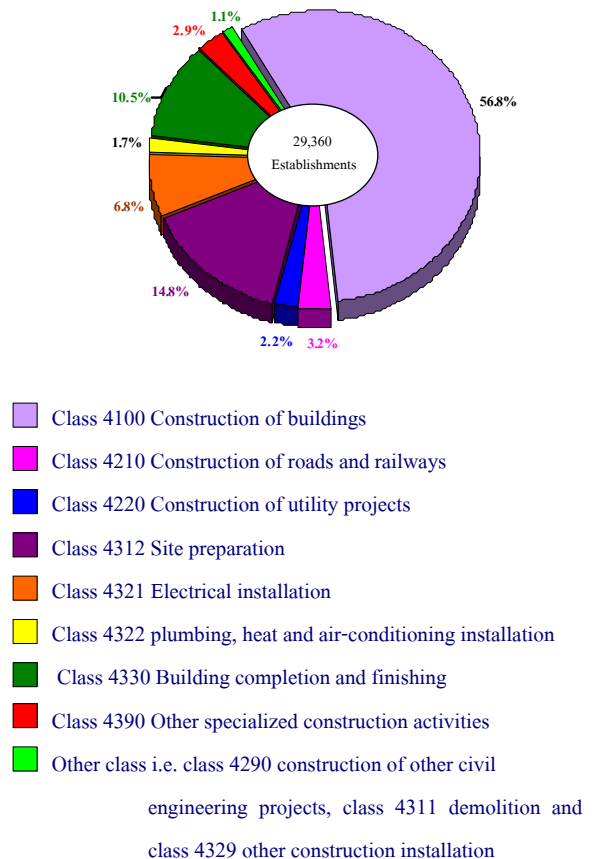
The National Statistical Office (NSO) carried out the 2009 Construction Industry Survey, which is the 3rd survey and the NSO planned for conducting this survey every 5 years. The main objective of the survey is to collect basic information data on construction establishment. Data is vital to economic 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 Classification 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 municipal areas and non-municipal areas in **the Whole Kingdom** 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 29,360 establishments in the Whole Kingdom, it was found that most of them (about 56.8 percent) were engaged in *construction of buildings*. Followed by those engaged in *site preparation* and *building completion and finishing* of about 14.8 and 10.5 percent respectively. The other class of rather low proportion, each had less than 4.0 percent of the total.

Figure 1 Percentage of construction establishments by class of construction industry



2. Size of establishment (number of persons engaged)

Most of them were about 61.4 percent of establishments with 1 - 5 persons. The establishment with 6 - 10 persons was about 21.7 percent. For the establishment with more than 10 persons was 16.9 percent.

Considering by class of construction industry, it was found that most establishment (more than 45.0 percent) was small size with 1 - 5 persons. Except for those engaged in *construction of roads and railways*, *construction of other civil engineering projects* and *demolition*.

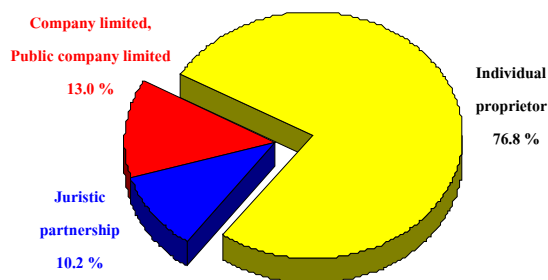
Table 1 Percentage of construction establishments by size of establishment (number of person engaged) and class of construction industry

| Class of construction industry | Total | 1- 5 persons | 6 – 10 persons | 11 – 15 persons | 16 – 20 persons | > 20 persons |
|---|--------------|--------------|----------------|-----------------|-----------------|--------------|
| Total | 100.0 | 61.4 | 21.7 | 7.0 | 2.6 | 7.3 |
| 4100 Construction of buildings | 100.0 | 55.1 | 28.3 | 8.4 | 2.4 | 5.8 |
| 4210 Construction of roads and railways | 100.0 | 10.9 | 20.1 | 17.8 | 9.7 | 41.5 |
| 4220 Construction of utility projects | 100.0 | 54.6 | 13.9 | 7.7 | 4.7 | 19.1 |
| 4290 Construction of other civil engineering projects | 100.0 | 19.1 | 29.4 | 20.6 | 5.9 | 25.0 |
| 4311 Demolition | 100.0 | 30.5 | 34.8 | 8.7 | 4.3 | 21.7 |
| 4312 Site preparation | 100.0 | 89.6 | 7.1 | 1.5 | 0.4 | 1.4 |
| 4321 Electrical installation | 100.0 | 60.9 | 16.6 | 7.9 | 4.2 | 10.4 |
| 4322 Plumbing, heat and air-conditioning installation | 100.0 | 49.2 | 17.0 | 8.1 | 6.7 | 19.0 |
| 4329 Other construction installation | 100.0 | 45.3 | 19.4 | 8.6 | 7.3 | 19.4 |
| 4330 Building completion and finishing | 100.0 | 76.4 | 14.8 | 3.5 | 1.4 | 3.9 |
| 4390 Other specialized construction activities | 100.0 | 66.9 | 13.3 | 5.0 | 3.9 | 10.9 |

3. Form of legal organization

Most of construction establishments (about 76.8 percent) were individual proprietor. The establishments, which were in the form of company limited and public company limited was about 13.0 percent. Establishment, which were juristic partnership was about 10.2 percent.

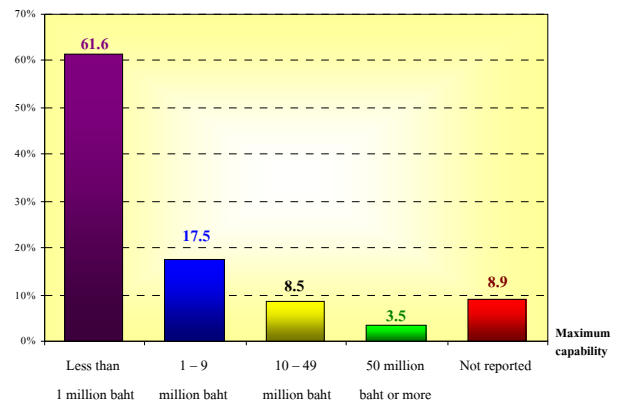
Figure 2 Percentage of construction establishments by form of organization



4. Maximum capability

The majority of construction establishments in the Whole Kingdom (about 61.6) had less than 1 million baht of maximum capability. For the establishments with 50 million baht or more of maximum capability had the least proportion of about 3.5 percent.

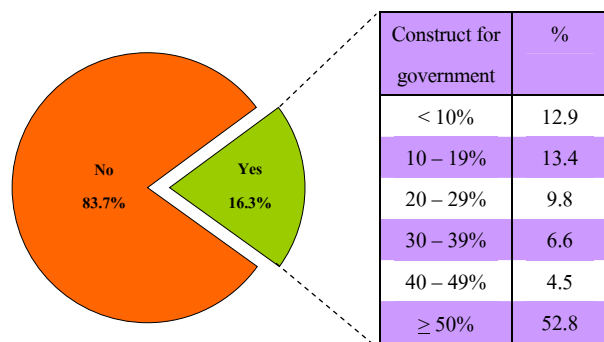
Figure 3 Percentage of construction establishments by maximum capability



5. Construct for government

The construction establishment in the Whole Kingdom, about 16.3 percent, constructed for government. Out of these, about 52.8 percent of establishments did the construction business with the government 50% or more. There were about 13.4 and 12.9 percent of establishments did the construction business with governments between 10 - 19% and less than 10% respectively.

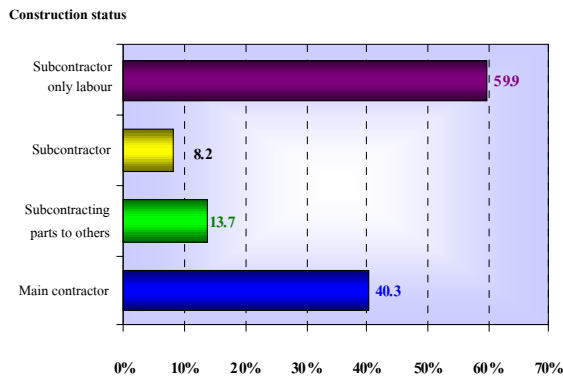
Figure 4 Percentage of construction establishments by construct of governments.



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 59.9 percent) was *subcontractor only labour*. The following was *main contractor* of about 40.3 percent. For the establishment *subcontractor only labour* and *subcontractor* were about 13.7 and 8.2 percent respectively.

Figure 5 Percentage of construction establishments by construction status



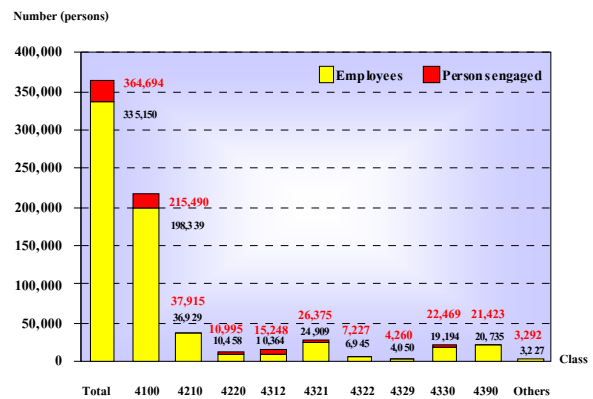
Note : More than one characteristic can be done by an establishment.

7. Number of persons engaged and employees

In 2008, the workers of the construction establishments in the Whole Kingdom were totally 364,694 persons. In term of employment, the number of employees totalled 335,150 persons.

Considering by class of construction industry, it was found that most of them worked in *construction of buildings*, of about 198,339 persons or 59.2 percent. Followed by those worked in *construction of roads and railways* about 36,929 persons or 11.0 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.

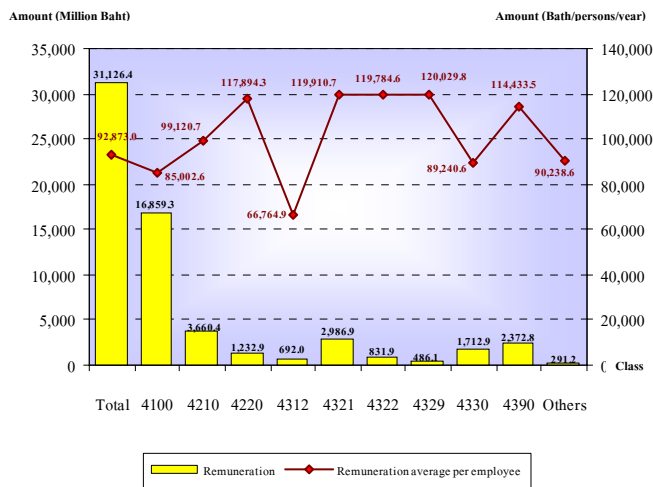
Class of construction industry :

- Class 4100 Construction of building
- Class 4210 Construction of roads and railways
- Class 4220 Construction of utility projects.
- Class 4312 Site preparation
- Class 4321 Electrical installation
- Class 4322 plumbing, heat and air-conditioning installation
- Class 4329 Other construction installation
- Class 4330 Other specialized construction activities
- Class 4390 Other specialized construction activities
- Other class i.e. class 4290 construction of other civil engineering projects and class 4311 demolitions

8. Remuneration

In 2008, the employees working in construction establishment in the Whole Kingdom received the total remuneration about 31,126.4 million baht or about 92,873 baht per persons annually. The employees engaged in *other construction installation* received the highest annual remuneration of about 120,030 baht per person. Followed by those engaged in *electrical installation* and *plumbing, heat and air-conditioning installation* receive the annual remuneration, of about 119,911 and 119,785 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

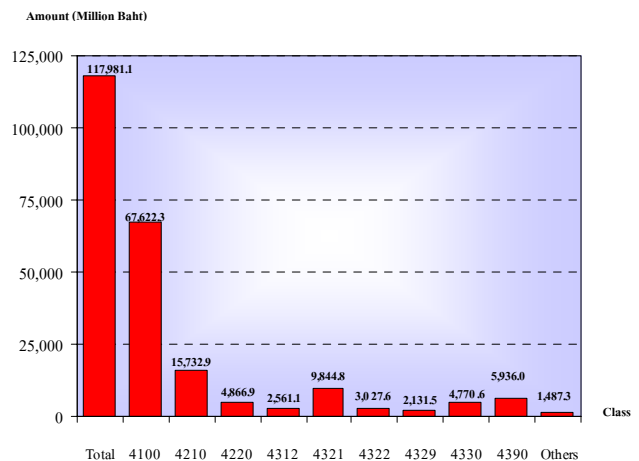
The value of gross output or receipts of construction establishment was totally 394,162.9 million baht. The intermediate consumption and value added were totally 276,181.8 million baht and 117,981.1 million baht respectively. Comparing the value added to value of gross output or receive was about 29.9 percent.

For the average value of gross output had about 13.4 million baht per establishment and 1.1 million baht per persons. In terms of the average value added, they were about 4.0 million baht per establishment and 323,500 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 57.3 percent). The following was from *construction of roads and*

railways, about 13.3 percent. The other class of construction industry had rather low proportion less than 9.0 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
- Class 4210 Construction of roads and railways
- Class 4220 Construction of utility projects
- Class 4312 Site preparation
- Class 4321 Electrical installation
- Class 4322 Plumbing, heat and air-conditioning installation
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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 41.4 percent, as well as number of persons engaged increased by 55.2 percent.

In terms of employment, number of employees increased by 58.7 percent. The remuneration increased by 96.5 percent.

The value of gross output, intermediate consumption and value added of construction establishment increased by 22.5, 21.8 and 24.3 percent respectively.

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

| Data items | 2003 ^{1/} | 2008 ^{2/} | Percent change |
|--|--------------------|--------------------|----------------|
| Number of establishments (Establishments) | 20,766 | 29,360 | 41.4 |
| Number of persons engaged (Persons) | 234,925 | 364,694 | 55.2 |
| <i>Average per establishment (Persons)</i> | <i>11.3</i> | <i>12.4</i> | <i>9.7</i> |
| Number of employees (Persons) | 211,240 | 335,150 | 58.7 |
| <i>Average per establishment (Persons)</i> | <i>10.2</i> | <i>11.4</i> | <i>11.8</i> |
| Remuneration (Million Baht) | 15,843.8 | 31,126.4 | 96.5 |
| <i>Average annual per employee (Baht)</i> | <i>75,003.8</i> | <i>92,873.0</i> | <i>23.8</i> |
| Value of gross output (Million Baht) | 321,647.3 | 394,162.9 | 22.5 |
| <i>Average per establishment (Thousand Baht)</i> | <i>15,489.1</i> | <i>13,425.2</i> | <i>-13.3</i> |
| <i>Average per persons engaged (Thousand Baht)</i> | <i>1,369.1</i> | <i>1,080.8</i> | <i>-21.1</i> |
| Intermediate consumption (Million Baht) | 226,701.4 | 276,181.8 | 21.8 |
| <i>Average per establishment (Thousand Baht)</i> | <i>10,917.0</i> | <i>9,406.7</i> | <i>-13.8</i> |
| <i>Average per persons engaged (Thousand Baht)</i> | <i>965.0</i> | <i>757.3</i> | <i>-21.5</i> |
| Value added (Million Baht) | 94,945.9 | 117,981.1 | 24.3 |
| <i>Average per establishment (Thousand Baht)</i> | <i>4,572.2</i> | <i>4,018.4</i> | <i>-12.1</i> |
| <i>Average per persons engaged (Thousand Baht)</i> | <i>404.2</i> | <i>323.5</i> | <i>-20.0</i> |

Note : 1/ Construction Industry Survey, coverage : All construction establishment with the International Standard Industrial Classification of All Economic Activities; ISIC: Rev.3

2/ Construction Industry Survey, coverage : All construction establishment with 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 83.1 percent. The highlight industry was *construction of buildings* which had the highest proportion, of about 56.8 percent. The persons engaged in the establishments, there was totally 364,694 persons. Out of these, about 335,150 persons were employees. They received the annual remuneration, of about 92,873 baht per person. Moreover, the construction of in the Whole Kingdom establishments contributed value of gross output or receipts, intermediate consumption and value added, of about 394,126.9 million baht, 276,181.8 million baht and 117,981.1 million baht respectively.

The survey also incorporated questions concerning the business performance to prospect for the years 2008. The establishments about 51.2 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 consumption were about 58.6 and 30.7 percent respectively.