## **Preliminary Report of**

## the 2009 Construction Industry Survey : Vicinity

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 Vicinity** 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 2,494 establishments in the Vicinity, it was found that most of them (about 47.5 percent) were engaged in *construction of buildings*. Followed by those engaged in *building completion and finishing* and *electrical installation* of about 17.6 and 13.3 percent respectively. The other class of construction industry not mentioned above had rather low proportion each had less than 6.0 percent of the total.

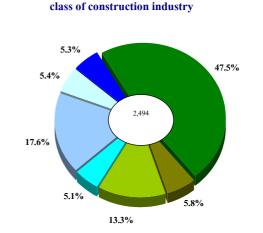


Figure A Percentage of construction establishments by

| Class 4100 Construction of buildings                            |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| 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 4210 construction of roads and railways, |  |  |  |  |  |  |  |
| class 4220 construction of utility projects, 4290               |  |  |  |  |  |  |  |
| construction of other civil engineering projects, class         |  |  |  |  |  |  |  |
| 4311 demolition and class 4329 other construction               |  |  |  |  |  |  |  |
| installation  |  |  |  |  |  |  |  |

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

Most of them were about 53.3 percent of establishments with 1 - 5 persons. The establishment with 6 - 10 persons was about 22.1 percent. For the establishment with more than 10 persons was 24.6 percent.

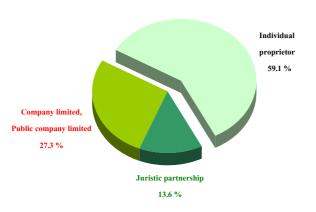
Considering by class of construction industry, it was found that most establishment (more than 40.0 percent) was small size with 1 - 5 persons. Except for those engaged in *construction of roads and railways, construction of utility projects, construction of other civil engineering projects* and *demolition*. (II ) D

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

|                                |  |       |      |        | (U      | nit : Po | ersons) |
|--------------------------------|--|-------|------|--------|---------|----------|---------|
| Class of construction industry |  | Total | 1-5  | 6 - 10 | 11 - 15 | 16 - 20  | > 20    |
| Total                          |  | 100.0 | 53.3 | 22.1   | 8.0     | 4.1      | 12.5    |
| 4100                           | Construction of buildings                            | 100.0 | 49.6 | 25.9   | 10.0    | 3.8      | 10.7    |
| 4210                           | Construction of roads<br>and railways                | 100.0 | 6.1  | 18.2   | 3.0     | 9.1      | 63.6    |
| 4220                           | Construction of utility projects                     | 100.0 | 18.2 | 21.2   | 15.1    | 9.1      | 36.4    |
| 4290                           | Construction of other civil engineering projects     | 100.0 | 18.2 | 27.3   | 36.3    | -        | 18.2    |
| 4311                           | Demolition   | 100.0 | -    | 60.0   | -       | -        | 40.0    |
| 4312                           | Site preparation                                     | 100.0 | 70.3 | 18.6   | 0.7     | 2.1      | 8.3     |
| 4321                           | Electrical installation                              | 100.0 | 48.2 | 19.3   | 10.5    | 7.2      | 14.8    |
| 4322                           | Plumbing, heat and air-<br>conditioning installation | 100.0 | 51.6 | 15.1   | 6.3     | 6.3      | 20.7    |
| 4329                           | Other construction installation                      | 100.0 | 42.5 | 31.9   | 4.3     | -        | 21.3    |
| 4330                           | Building completion<br>and finishing                 | 100.0 | 70.6 | 16.9   | 3.4     | 1.6      | 7.5     |
| 4390                           | Other specialized construction activities            | 100.0 | 54.9 | 18.8   | 6.8     | 6.8      | 12.7    |

## 3. Form of legal organization

Most of construction establishments (about 59.1 percent) were individual proprietor. The establishments, which were in the form of company limited or public company limited was about 27.3 percent. Establishment, which were juristic partnership, was about 13.6 percent.

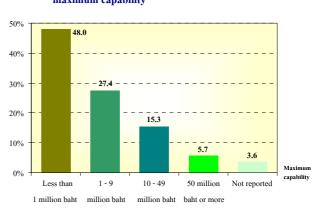


## igure B Percentage of construction establishments by form of legal organization

## 4. Maximum capability

The majority of construction establishments in Vicinity (about 48.0) 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 5.7 percent.

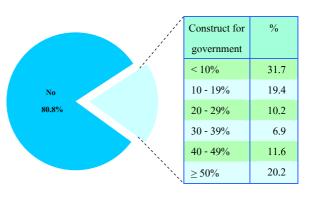




## 5. Construct for government

The construction establishments in the Vicinity, about 19.2 percent, constructed for government. Out of these, about 31.7 percent of establishments did construction business with the government less than 10%. There were about 20.2 and 19.4 percent of establishments did the construction business with the government 50% or more and between 10 - 19% respectively.





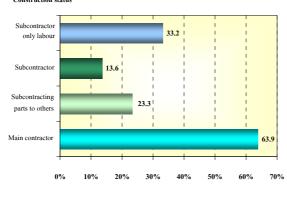
## 6. Construction status

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 63.9 percent) was *main contractor*. The following was *subcontractor only labour* of about 33.2 percent. For the establishment *subcontracting parts to others* and *subcontractor* were about 23.3 and 13.6 percent respectively.

#### Figure E Percentage of construction establishments by







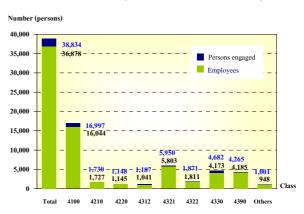
Note : More than one characteristic can be done by an establishment.

## 7. Number of persons engaged and employees

In 2008, the workers of the construction establishments in the Vicinity were totally 38,834 persons. In term of employment, the number of employees totalled 36,878 persons. Considering by class of construction industry, it was found that most of them worked in *construction of buildings*, of about 16,044 persons or 43.5 percent. Followed by those worked in *electrical installation* about 5,803 persons or 15.7 percent. The rest engaged in construction industry not mentioned above.

#### Figure F Number of persons engaged construction





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

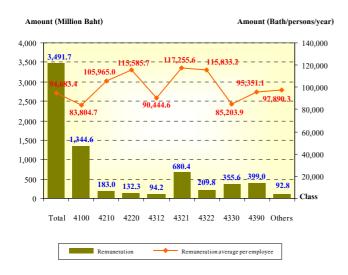
#### **Class of construction industry :**

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 4330 Building completion and finishing Class 4390 Other specialized construction activities Other class i.e. class 4290 construction of other civil engineering projects, class 4311 demolitions and 4329 other construction installation

### 8. Remuneration

In 2008, the employees working in construction establishment in the Vicinity received the total remuneration about 3,491.7 million baht or about 94,683 baht per persons annually. The employees engaged in *electrical installation* the highest annual remuneration of about 117,256 baht per person. Followed by those engaged in *plumbing, heat and air-conditioning installation* and *construction of utility projects* receive the annual remuneration, of about 115,833 and 115,586 baht per persons respectively.

## Figure G Remuneration of construction establishments by class of construction industry



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

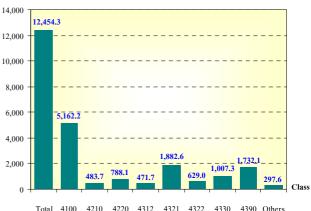
The value of gross output or receipts of construction establishment was totally 38,723.1 million baht. The intermediate consumption and value added were totally 26,268.8 and 12,454.3 million baht respectively. Comparing the value added to value of gross output or receive was about 32.2 percent.

For the average value of gross output had about 15.5 million baht per establishment and 997,100 baht per persons. In terms of the average value added, they were about 5.0 million baht per establishment and 320,700 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 41.4 percent). The following was *electrical installation*, about 15.1 percent and *other specialized construction activities*, about 13.9 percent. The other class of construction industry had rather low proportion less than 9.0 percent.

## Figure H Value added of construction establishments by class of construction industry

Amount (Million Baht)



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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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           engineering projects, class 4311 demolitions and
           class 4329 Other construction 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 34.3 percent, as well as number of persons engaged increased by 41.1 percent. In terms of employment, number of employees increased by 45.1 percent. The remuneration increased by 63.9 percent.

The value of gross output, intermediated consumption and value added of construction establishment increased by 33.3, 30.0 and 40.8 percent respectively.

| Data items                                  | 2003 <sup>1/</sup> | 2008 <sup>2/</sup> | Percent change |
|---|--------------------|--------------------|----------------|
| Number of establishments (Establishments)   | 1,857              | 2,494              | 34.3           |
| Number of persons engaged (Persons)         | 27,532             | 38,834             | 41.1           |
| Average per establishment (Persons)         | 14.8               | 15.6               | 5.4            |
| Number of employees (Persons)               | 25,420             | 36,878             | 45.1           |
| Average per establishment (Persons)         | 13.7               | 14.8               | 8.0            |
| Remuneration (Million Baht)                 | 2,130.9            | 3,491.7            | 63.9           |
| Average annual per employee (Baht)          | 83,827.7           | 94,682.5           | 12.9           |
| Value of gross output (Million Baht)        | 29,056.5           | 38,723.1           | 33.3           |
| Average per establishment (Thousand Baht)   | 15,647.0           | 15,526.5           | -0.8           |
| Average per persons engaged (Thousand Baht) | 1,055.4            | 997.1              | -5.5           |
| Intermediate consumption (Million Baht)     | 20,213.5           | 26,268.8           | 30.0           |
| Average per establishment (Thousand Baht)   | 10,885.0           | 10,532.8           | -3.2           |
| Average per persons engaged (Thousand Baht) | 734.2              | 676.4              | -7.9           |
| Value added (Million Baht)                  | 8,843.0            | 12,454.3           | 40.8           |
| Average per establishment (Thousand Baht)   | 4,762.0            | 4,993.7            | 4.9            |
| Average per persons engaged (Thousand Baht) | 321.2              | 320.7              | -0.2           |

## Table B Principal data of construction establishments in year 2003 and 2008

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

<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 75.4 percent. The highlight industry was *construction of buildings* which had the highest proportion, of about 47.5 percent. The persons engaged in the establishments, there was totally 38,834 persons. Out of these, about 36,878 persons were employees. They received the annual remuneration, of about 94,683 baht per person. Moreover, the construction of Vicinity establishments contributed value of gross output or receipts, intermediate consumption and value added, of about 38,723.1, 26,268.8 and 12,454.3 million baht respectively.

The survey also incorporated questions concerning the business performance to prospect for the years 2008. The establishments about 54.6 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 increase government budget on construction were about 57.6 and 35.2 percent respectively.