Preliminary Report of

the 2009 Construction Industry Survey: Central Region

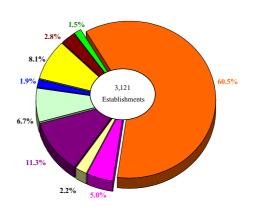
The National Statistical Office (NSO) carried out the 2009 Construction Industry Survey, which is the 3rd survey and the NSO planed for conducting this survey every 5 years. The main objective of the survey is to collect information basic data construction on establishment. Data is vital to economic 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 **Central region** 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 3,121 establishments in the Central region, it was found that most of them (about 60.5 percent) were engaged in *construction* of buildings. Followed by those engaged in *site* preparation, building completion and finishing and electrical installation of about 11.3, 8.1 and 6.7 percent respectively. The other class of rather low proportion, each had less than 6.0 percent of the total.

Figure 1 Percentage of construction establishments by class of construction industry



- Class 4100 Construction of buildings
- 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 demolition and class 4329 other construction installation

2. Size of establishment (number of persons engaged)

Most of them were about 51.1 percent of establishments with 1 - 5 persons. The establishment with 6 - 10 persons was about 26.2 percent. For the establishment with more than 10 persons was 22.7 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 other civil engineering projects, other construction installation and other specialized construction activities.

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

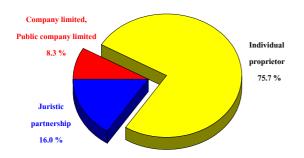
(Unit: Persons)

Class of construction industry	Total	1-5	6 - 10	11 - 15	16-20	> 20
Total	100.0	51.1	26.2	9.5	2.9	10.3
4100 Construction of buildings	100.0	44.6	33.6	11.5	2.2	8.1
4210 Construction of roads and railways	100.0	12.8	17.3	17.3	15.4	37.2
4220 Construction of utility projects	100.0	49.3	14.5	11.6	1.4	23.2
4290 Construction of other civil engineering projects	100.0	40.0	40.0	-	-	20.0
4311 Demolition	100.0	50.0	50.0	-	-	-
4312 Site preparation	100.0	79.4	13.0	4.2	0.6	2.8
4321 Electrical installation	100.0	67.9	12.9	6.2	2.9	10.1
4322 Plumbing, heat and air- conditioning installation	100.0	56.9	17.3	3.4	3.4	19.0
4329 Other construction installation	100.0	28.2	2.6	10.3	17.9	41.0
4330 Building completion and finishing	100.0	77.0	18.2	1.6	1.2	2.0
4390 Other specialized construction activities	100.0	39.7	14.8	5.7	5.7	34.1

3. Form of legal organization

Most of construction establishments (about 75.7 percent) were individual proprietor. The establishments, which were in the form of juristic partnership was about 16.0 percent. Establishment, which were company limited and public company limited was about 8.3 percent.

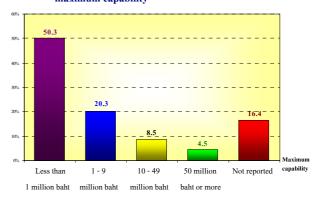
Figure 2 Percentage of construction establishments by form of organization



4. Maximum capability

The majority of construction establishments in Central region (about 50.3) 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 4.5 percent.

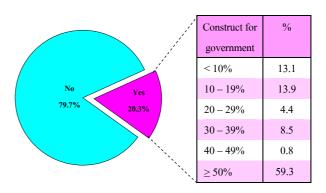
Figure 3 Percentage of construction establishments by maximum capability



5. Construct for government

The construction establishment in the Central region, about 20.3 percent, constructed for government. Out of these, about 59.3 percent of establishments did the construction business with the government 50% or more. There were about 13.9 and 13.1 percent of establishments did the construction business with governments between 10 - 19% and less than 10% respectively.

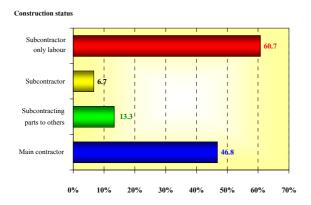
Figure 4 Percentage of construction establishments by construct of governments.



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 60.7 percent) was subcontractor only labour. The following was main contractor of about 46.8 percent. For the establishment subcontracting parts to others and subcontractor were about 13.3 and 6.7 percent respectively.

Figure 5 Percentage of construction establishments by



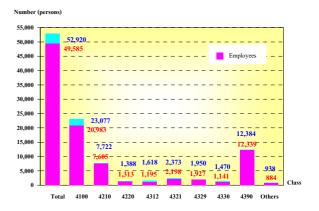
Note: More than one characteristic can be done by an establishment.

7. Number of persons engaged and employees

In 2008, the workers of the construction establishments in the Central region were totally 52,920 persons. In term of employment, the number of employees totalled 49,585 persons.

Considering by class of construction industry, it was found that most of them worked in *construction of buildings*, of about 20,983 persons or 42.3 percent. Followed by those worked in *other specialized construction activities* about 12,339 persons or 24.9 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 4329 Other construction installation

Class 4330 Other specialized construction activities

Class 4390 Other specialized construction activities

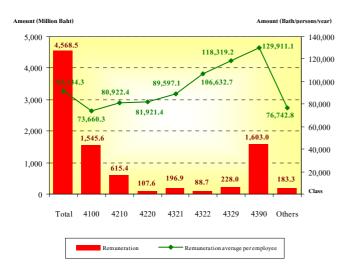
Other class i.e. class 4290 construction of other civil engineering projects, class 4311 demolitions and class 4322 Plumbing, heat and

air-conditioning installation

8. Remuneration

In 2008, the employees working in construction establishment in the Central region received the total remuneration about 4,568.5 million baht or about 92,134 baht per persons annually. The employees engaged in *other specialized construction activities* received the highest annual remuneration of about 129,911 baht per person. Followed by those engaged in *other construction installation* and *plumbing, heat and air-conditioning installation* receive the annual remuneration, of about 118,319 and 106,633 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 46,092.6 million baht. The intermediate consumption and value added were totally 33,234.3 million baht and 12,858.3 million baht respectively. Comparing the value added to value of gross output or receive was about 27.9 percent.

For the average value of gross output had about 14.8 million baht per establishment and 870,987 baht per persons. In terms of the average value added, they were about 4.1 million baht per establishment and 242,977 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 33.9 percent). The following was from *construction of roads and*

railways, about 31.6 percent and other specialized construction activities, about 17.7 percent. The other class of construction industry had rather low proportion less than 7.0 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 4321 Electrical installation

Class 4322 Plumbing, heat and air-conditioning installation

Class 4329 Other construction installation

Class 4390 Other specialized construction activities

Other class i.e. class 4290 construction of other civil engineering projects, class 4311 demolitions, class 4312 site preparation and class 4330 other specialized construction activities.

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 25.4 percent, as well as number of persons engaged increased by 76.0 percent.

In terms of employment, number of employees increased by 83.4 percent. The remuneration increased by 37.3 percent.

The value of gross output, intermediate consumption and value added of construction establishment increased by 20.7, 22.8 and 15.4 percent respectively.

Table 2 Principal data of construction establishments in year 2003 and 2008 Class 4312 Site preparation

Data items	2003 ¹	2008 ²	Percent change
Number of establishments (Establishments)	2,489	3,121	25.4
Number of persons engaged (Persons)	30,060	52,920	76.0
Average per establishment (Persons)	12.1	17.0	40.5
Number of employees (Persons)	27,036	49,585	83.4
Average per establishment (Persons)	10.9	15.9	45.9
Remuneration (Million Baht)	1,813.7	4,568.5	151.9
Average annual per employee (Baht)	67,084.6	92,134.3	37.3
Value of gross output (Million Baht)	38,195.5	46,092.6	20.7
Average per establishment (Thousand Baht)	15,345.7	14,768.5	-3.8
Average per persons engaged (Thousand Baht)	1,270.6	871.0	-31.4
Intermediate consumption (Million Baht)	27,053.4	33,234.3	22.8
Average per establishment (Thousand Baht)	10,869.2	10,648.6	-2.0
Average per persons engaged (Thousand Baht)	900.0	628.0	-30.2
Value added (Million Baht)	11,142.1	12,858.4	15.4
Average per establishment (Thousand Baht)	4,476.5	4,120.0	-8.0
Average per persons engaged (Thousand Baht)	370.7	243.0	-34.4

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

^{2/} 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 77.3 percent. The highlight industry was *construction of buildings* which had the highest proportion, of about 60.5 percent. The persons engaged in the establishments, there was totally 52,920 persons. Out of these, about 49,585 persons were employees. They received the annual remuneration, of about 92,134 baht per person. Moreover, the construction of Central region establishments contributed value of gross output or receipts, intermediate consumption and value added, of about 46,092.6 million baht, 33,234.3 million baht and 12,858.3 million baht respectively.

The survey also incorporated questions concerning the business performance to prospect for the years 2008. The establishments about 42.5 percent report that their performance remain the same in 2007.

For government measurement needed; the establishment reported that reducing operation cost such as materials, equipment etc. and reducing corruption were about 63.8 and 29.5 percent respectively.