

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 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 **Northern region** during January 1 to December 31, 2008.

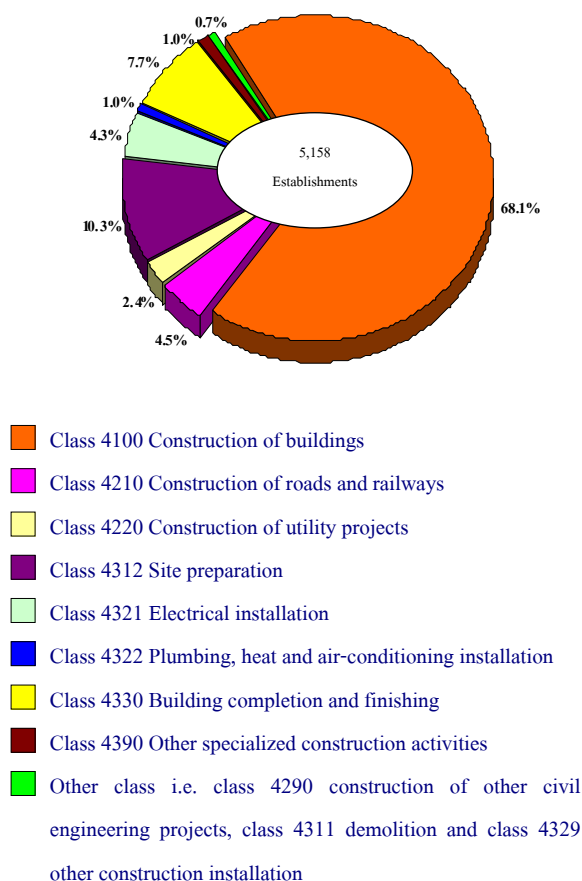
The major findings are as follows:

1. Number of establishments

The results of the 2009 Construction Industry Survey of 5,158 establishments in the Northern region, it was found that most of them (about 68.1 percent) were engaged in *construction of buildings*. Followed by those engaged in *site*

preparation and *building completion and finishing* of about 10.3 and 7.7 percent respectively. The other class of construction industry not mentioned above had rather low proportion each had less than 5.0 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 61.5 percent of establishments with 1 – 5 persons. The establishment with 6 - 10 persons was about 23.5 percent. For the establishment with more than 10 persons was about 15.0 percent.

Considering by class of construction industry, it was found that most the establishment (more than 60.0 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.

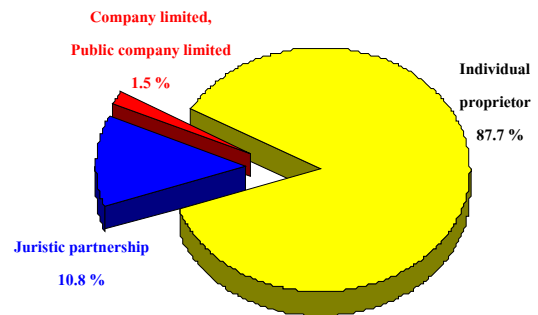
(Unit : Persons)

Class of construction industry	Total	1 – 5	6 – 10	11 – 20	> 20
Total	100.0	61.5	23.5	9.7	5.3
4100 Construction of buildings	100.0	58.1	27.5	10.5	3.9
4210 Construction of roads and railways	100.0	6.9	24.5	27.0	41.6
4220 Construction of utility projects	100.0	62.0	21.5	12.4	4.1
4290 Construction of other civil engineering projects	100.0	10.0	25.0	35.0	30.0
4311 Demolition	100.0	33.3	33.3	-	33.4
4312 Site preparation	100.0	86.6	8.5	2.8	2.1
4321 Electrical installation	100.0	77.3	15.4	5.5	1.8
4322 Plumbing, heat and air-conditioning installation	100.0	69.4	10.2	6.1	14.3
4329 Other construction installation	100.0	66.7	33.3	-	-
4330 Building completion and finishing	100.0	81.4	15.3	2.8	0.5
4390 Other specialized construction activities	100.0	70.4	14.8	9.2	5.6

3. Form of legal organization

Most of construction establishments (about 87.7 percent) were individual proprietor. The establishments, which were in the form of juristic partnership was about 10.8 percent. Establishment, which were company limited and public company limited was about 1.5 percent.

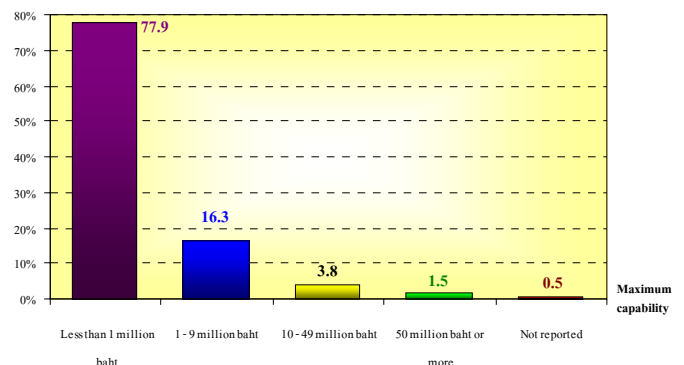
Figure 2 Percentage of construction establishments by form of organization



4. Maximum capability

The majority of construction establishments in Northern region show that most of them (about 77.9) 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 1.5 percent.

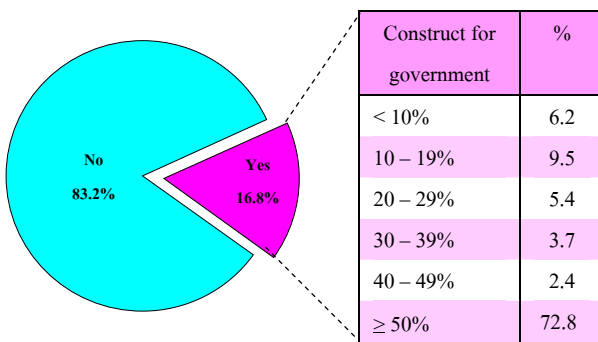
Figure 3 Percentage of construction establishments by maximum capability



5. Construct for government

The construction establishment in the Northern region, about 16.8 percent, constructed for government. Out of these, about 72.8 percent of establishments did the construction business with the government 50% or more. There were about 9.5 and 6.2 percent of establishments did the construction business with governments between 10 – 19% and less than 10% respectively.

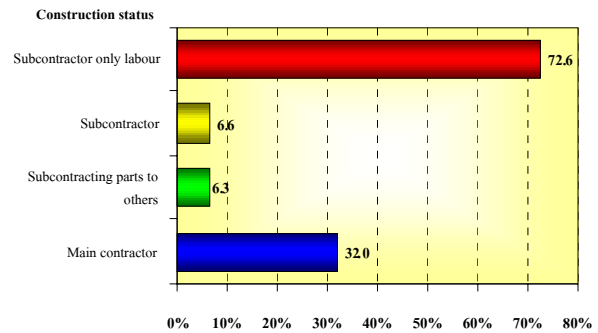
Figure 4 Percentage of construction establishments by construct of governments.



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 72.6 percent) had subcontractor only labour. The followings was main contractor of about 32.0 percent. For the establishment subcontractor and subcontracting parts to other were about 6.6 and 6.3 respectively.

Figure 5 Percentage of construction establishments by construction status

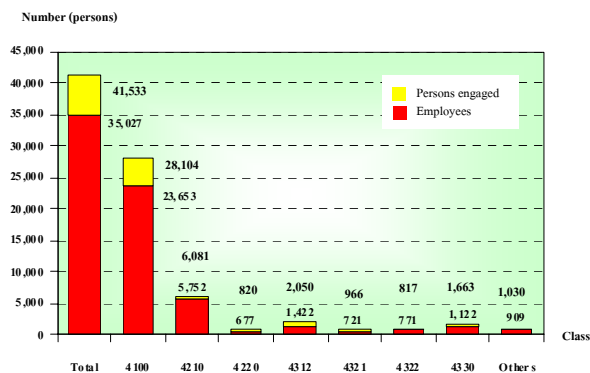


Note : More than one characteristic can be done by an establishment.

7. Number of persons engaged and employees

In 2008, the workers of the construction establishments in the Northern region totally to 41,533 persons. In term of employment, the number of employees totally to 35,027 persons. Considering by class of construction industry, it was found that most of them worked in *construction of buildings*, of about 23,653 persons or 67.5 percent. Followed by those worked in *construction roads and railways* about 5,752 persons or 16.4 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 :

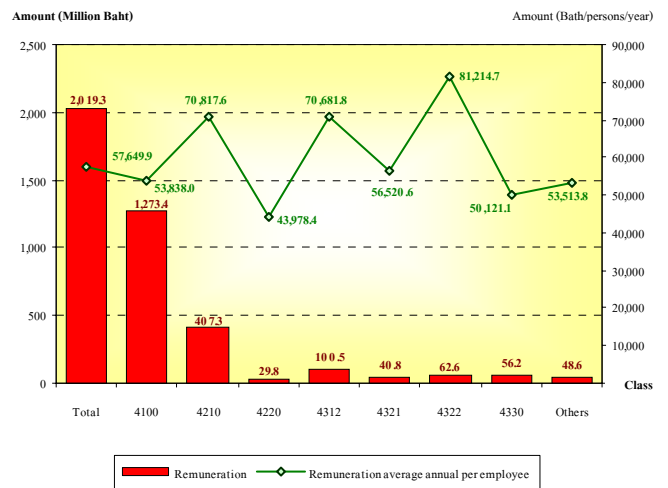
- Class 4100 Construction of building
- Class 4210 Construction of roads and railways
- Class 4220 Construction of utility projects.
- Class 4312 Site preparation
- Class 4321 Electrical installation
- Class 4322 Plumbing, heat and air-conditioning installation
- Class 4330 Other specialized construction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

8. Remuneration

In 2008, the employees working in construction establishment in the Northern region received the total remuneration about 2,019.3 million baht or about 57,650 baht per persons annually. The employees engaged in *plumbing, heat and air-condition installation* received the highest annual remuneration of about 81,215 baht per person. Followed by those engaged in *construction of roads and railways*

and *site preparation* receive the annual remuneration, of about 70,818 and 70,682 baht per persons respectively.

Figure 7 Remuneration of construction establishments by class of construction industry



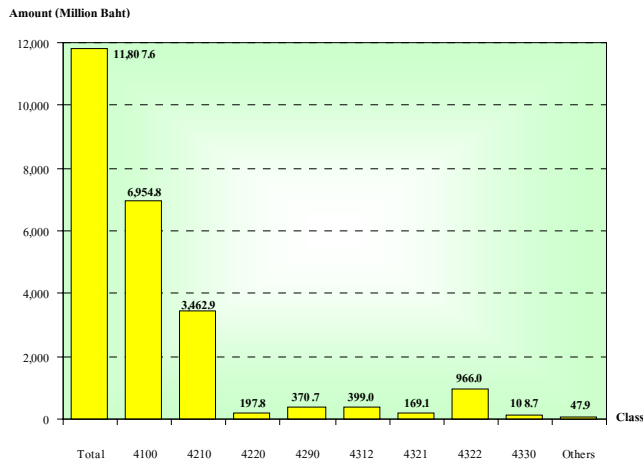
9. Value of gross output, intermediate consumption and value added

The value of gross output or receipts of construction establishment was totally 32,301.2 million baht. The intermediate consumption and value added were totally 20,493.6 million baht and 11,807.6 million baht respectively. Comparing the value added to value of gross output or receive was about 36.6 percent.

For the average value of gross output had about 6.3 million baht per establishment and 922,181 baht per persons. In terms of the average value added, they were about 2.3 million baht per establishment and 337,101 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 6,954.8 million baht or 58.9 percent). The following was from *construction of roads and railways*, (about 3,462.9 million baht or 29.3 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
- Class 4210 Construction of roads and railways
- Class 4220 Construction of utility projects
- Class 4290 construction of other civil engineering projects
- Class 4312 Site preparation
- Class 4321 Electrical 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 establishment increased by 42.6 percent, as well as number of persons engaged increased by 27.1 percent. However, average number of persons engaged per establishment decreased from 9 person to 8 persons or decreased by 10.0 percent.

In terms of employment, number of employees increased by 24.2 percent. It is noticeable that the average number of employees per establishment decreased from 8 persons to 7 persons per establishment or decreased by 12.8 percent due to lacking in labour.

The value of gross output, intermediated consumption and value added of construction establishment increased by 30.7 percent, 40.9 percent and 16.2 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)	3,617	5,158	42.6
Number of persons engaged (Persons)	32,686	41,533	27.1
<i>Average per establishment (Persons)</i>	<i>9.0</i>	<i>8.1</i>	<i>-10.0</i>
Number of employees (Persons)	28,210	35,027	24.2
<i>Average per establishment (Persons)</i>	<i>7.8</i>	<i>6.8</i>	<i>-12.8</i>
Remuneration (Million Baht)	1,235.3	2,019.3	63.3
<i>Average annual per employee (Baht)</i>	<i>43,789.4</i>	<i>57,649.8</i>	<i>31.7</i>
Value of gross output (Million Baht)	24,709.0	32,301.2	30.7
<i>Average per establishment (Thousand Baht)</i>	<i>6,831.4</i>	<i>6,262.3</i>	<i>-8.3</i>
<i>Average per persons engaged (Thousand Baht)</i>	<i>756.0</i>	<i>922.2</i>	<i>22.0</i>
Intermediate consumption (Million Baht)	14,549.6	20,493.6	40.9
<i>Average per establishment (Thousand Baht)</i>	<i>4,022.6</i>	<i>3,973.2</i>	<i>-1.2</i>
<i>Average per persons engaged (Thousand Baht)</i>	<i>445.1</i>	<i>585.1</i>	<i>31.5</i>
Value added (Million Baht)	10,159.5	11,807.6	16.2
<i>Average per establishment (Thousand Baht)</i>	<i>2,808.8</i>	<i>2,289.2</i>	<i>-18.5</i>
<i>Average per persons engaged (Thousand Baht)</i>	<i>310.8</i>	<i>337.1</i>	<i>8.5</i>

Note : 1/ The 2004 Construction Industry Survey, coverage : All construction establishment with the International Standard Industrial Classification of All Economic Activities; ISIC: Rev.3

2/ The 2009 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 were small scale establishments with 1 – 10 persons, of about 85.0 percent. The highlight industry was *construction of building* which had the highest proportion, of about 68.1 percent. For persons engaged in the establishments, there was totally 41,533 persons. Out of these, about 35,027 persons were employees. They received the annual remuneration, of about 57,650 baht per person. Moreover, the establishments contributed value of gross output or receipts,

intermediate consumption and value added, of about 32,301.2 million baht, 20,493.6 million baht and 11,807.6 million baht respectively.

The survey also incorporated questions concerning the business performance to prospect for the years 2008. The establishments about 51.0 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 reducing corruption were about 62.5 and 26.6 percent respectively.