### **EXECUTIVE SUMMARY**

The National Statistical Office carried out the third Industrial Census in 2007, after having conducted the first one in 1964 and the second in 1997. The main objective of the census is to collect basic information on the structure, the distribution and the operation of manufacturing establishments.

For the basic information on the structure and the distribution of establishments engaged in all economic activities located in municipal areas and non-municipal areas was presented in the reports which were the results of the listing stage.

The data presented in the publication was of the year 2006, which manufacturing establishments, located in the **Northern region.**The main findings are as follows:

## 1. Number of establishments by division of industry

The results of the 2007 Industrial Census, show that there were totally 92,210 manufacturing establishments, with one person engaged or more in the Northern region. The major industries in this region were manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials, manufacture of food products and beverages and manufacture of wearing apparel; dressing and dyeing of fur, which had the proportion, of about 24.6, 21.8 and 21.0 percent respectively. Moreover, the following industries were manufacture of textiles (11.2 percent), manufacture of furniture (7.8 percent) and manufacture of fabricated metal product (5.8 percent).

Figure 1 Percentage of manufacturing establishments by division of industry



- Division 15 Manufacture of food products and beverages
- Division 17 Manufacture of textiles
- Division 18 Manufacture of wearing apparel; dressing and

  dyeing of fur
- Division 20 Manufacture of wood and of products of wood
- Division 26 Manufacture of non-metallic mineral products
- Division 28 Manufacture of fabricated metal product
- Division 29, 31 33 Manufacture of machinery and equipment,

accounting, electrical machinery and apparatus, radio,

- television, medical, precision and optical instruments, etc.
- Division 36 Manufacture of furniture
- Other divisions, i.e. 16, 19, 21-25, 27, 30, 34-35 and 37

### 2. Size of establishment

The majority of establishments or 97.1 percent were small scale establishments, with 1-15 persons. The establishments with more than 15 persons engaged were 2,632 establishments or about 2.9 percent. Out of these, about 1,154 establishments engage in establishments with 16-25 persons. For those with more than 200 persons were about 189 establishments.

Figure 2 Number of manufacturing establishment by size of establishment (number of person engaged)

Number (establishments)



# 3. Form of legal organization

Most establishments (about 93.6 percent) were individual proprietor. The establishments, which were government, state enterprise cooperatives and others had the proportion, of about 4.2 percent. For those, which were in the form of company limited, public company limited and juristic partnership had the same proportion of about 1.1 percent.

Figure 3 Percentage of manufacturing establishments by form of legal organization

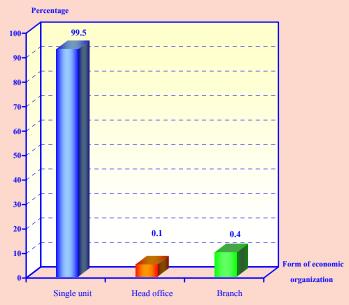


### 4. Form of economic organization

The results of the census show that the establishments about 99.5 percent were single unit, which were not a branch of any establishments or which had no branch or subsidiary. While those were in branch and head office had about 0.4 and 0.1 percent respectively.

Figure 4 Percentage of manufacturing establishments

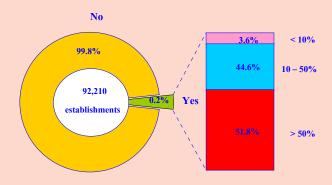
By form of economic organization



## 5. Foreign investment or share holding

The majority of establishments engaged in manufacturing in the Northern region or 99.8 percent had no foreign investment or share holding, while the rest of about 139 establishments or about 0.2 percent did. Out of these, about 51.8 percent was over fifty percent of share holding; and about 44.6 percent was 10-50 percent of share holding. Those having less than ten percent of share holding were 3.6 percent.

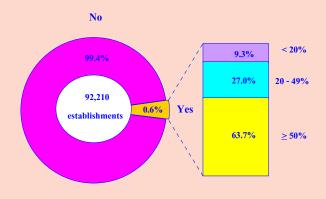
Figure 5 Percentage of manufacturing establishments by foreign investment or share holding



## 6. Export

For export of goods of establishments, there were only 567 establishments or 0.6 percent. Out of these, 63.7 percent exported with 50% or more of the total product, and 27.0 percent of establishments exported between 20% and 49%. The rest of about 9.3 percent exported less than 20% of the total product.

Figure 6 Percentage of manufacturing establishments by export

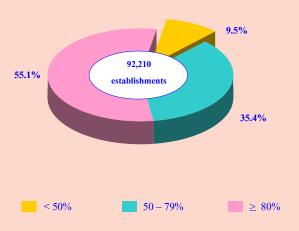


# 7. Capacity Utilization

On average, the capacity utilization in 2006 of manufacturing establishments in the Northern region, was about 74.8 percent. It was

found that, more than half of establishments or 55.1 percent had capacity utilization with 80 % or more. The establishments having the capacity utilization between 50% and 79% were 35.4 percent, while those having less than 50% were about 9.5 percent.

Figure 7 Percentage of manufacturing establishments by capacity utilization

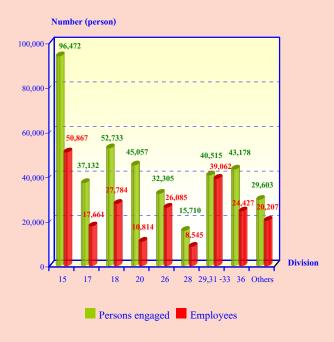


## 8. Number of persons engaged and employees

In 2006, there were totally 392,704 persons engaged working in the manufacturing establishments in the Northern region. In terms of employees, there were totally 225,452 persons. For the distribution of employees by industry, it was found that most of them or 22.6 percent worked in manufacture of food products and beverages. Followed by those engaged in manufacture of machinery, and equipment, electrical machinery, manufacture of radio, television and communication, manufacture of medical, precision, etc., of about 17.3 percent. Manufacture of wearing apparel; dressing and

dyeing of fur, manufacture of other non-metallic mineral products and manufacture of furniture; manufacturing n.e.c. had the proportion of employees, of about 12.3, 11.6 and 10.8 percent respectively. While those working in other divisions of industry not mentioned above, each division had less than 8.0 percent.

Figure 8 Number of persons engaged and employees of manufacturing establishments by division of industry



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

Division 15 Manufacture of food products and beverages

Division 17 Manufacture of textiles

Division 18 Manufacture of wearing apparel; dressing and dyeing of fur

Division 20 Manufacture of wood and of products of wood

Division 26 Manufacture of non-metallic mineral products

Division 28 Manufacture of fabricated metal product

Division 29, 31 – 33 Manufacture of machinery and equipment,

accounting, electrical machinery and apparatus, radio,

television, medical, precision and optical instruments, etc.

Division 36 Manufacture of furniture

Other divisions, i.e. 16, 19, 21-25, 27, 30, 34-35 and 37

### 9. Remuneration

In 2006, the employees engaged in manufacturing industry in the Northern region received the total remuneration about 16,807.3 million baht or about 74,549 baht per person annually. The employees engaged in manufacture of machinery and equipment, accounting electrical machinery and apparatus, radio, television, medical, precision and optical instruments etc. received the highest annual remuneration of about 134,748 baht per person. Followed by those engaged in manufacture of food products and beverages, which were about 68,625 and 66,553 baht per person respectively.

Figure 9 Annual remuneration per employee by division of industry



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

The operation of manufacturing establishments in the Northern region in 2006, it reveals that those provided the total of value of gross output, intermediate consumption and value

added, of about 216,357.4 million baht, 174,303.4 million baht and 42,054.0 million baht respectively. The proportion of value added per value of gross output was about 19.4 percent.

For the average value of gross output per establishment and per person engaged were about 2.3 million baht and 550,943 baht respectively. In terms of average value added per establishment and per person engaged were about 456,068 baht and 107,088 baht respectively.

As for the value added by division of industry, it was found that most of establishment

Figure 10 Value added of manufacturing establishments by division of industry



Note: Value added = Value of gross output minus intermediate consumption

Division 15 Manufacture of food products and beverages

Division 17 Manufacture of textiles

Division 18 Manufacture of wearing apparel; dressing and dyeing of fur

Division 20 Manufacture of wood and of products of wood

Division 26 Manufacture of non-metallic mineral products

Division 28 Manufacture of fabricated metal product

Division 29, 31–33 Manufacture of machinery and equipment, accounting electrical machinery and apparatus, radio, television, medical, precision and optical instruments, etc.

Division 36 Manufacture of furniture

Other divisions, i.e. 16, 19, 21-25, 27, 30, 34-35 and 37

were form manufacture of food products and beverages provided the highest value added, of about 13,929.1 million baht. The following was manufacture of machinery and equipment, accounting, electrical machinery and apparatus, radio, television, medical, precision and optical instruments etc, of about 10,522.1 million baht. The other divisions of industry not mentioned above, each division had the value added about 1,300 - 3,600 million baht.

# 11. Data comparison of manufacturing establishments during 10 years

Comparing the information of the industrial census in year 2007 to year 1997, which the period of operation was in the previous census year. It appeared that number of manufacturing establishments with 11 persons engaged or more increased with high growth by 85.9%, as well as number of persons engaged increased by 69.6%. However, average number of employees per establishment decreased by 8.6%. In terms of employment, the number of employees increased by 40.6%. It is noticeable that the average number of employees per establishment decreased by 24.3% due to the establishments using the technology in their businesses. However, the annual remuneration during 10 years increased by 82.9%.

For the value of gross output and the intermediate consumption grew by 76.1% and 142.2% respectively, but while the value added of manufacturing industry in the Northern region during 10 years increased by 23.8%.

Table 1 Principal data of manufacturing establishments in year 1996 and 2006

Data items	1996 <sup>1</sup> /	2006 2/	% Change
Number of establishments (Establishments)	2,124	3,949	85.9
Number of persons engaged (Person)	134,532	228,186	69.6
Average per establishment (Person)	63.3	57.8	-8.6
Number of employees (Person)	131,888	185,521	40.6
Average per establishment (Person)	62.1	47.0	-24.3
Remuneration (Million baht)	8,238.3	15,073.6	82.9
Average annual per employee (Baht)	62,464.3	81,250.1	30.0
Value of gross output (Million baht)	111,039.2	195,575.9	76.1
Average per establishment (Thousand baht)	52,278.3	49,525.4	-5.2
Average per persons engaged (Thousand baht)	825.3	857.1	3.8
Intermediate consumption (Million baht)	66,840.8	161,933.1	142.2
Average per establishment (Thousand baht)	31,469.3	41,006.1	30.3
Average per persons engaged (Thousand baht)	496.8	709.7	42.8
Value added (Million baht)	44,198.4	33,642.8	-23.8
Average per establishment(Thousand baht)	20,809.0	8,519.3	-59.0
Average per persons engaged (Thousand baht)	328.5	147.4	-55.1

Note: 14 The 1997 industrial census; Northern region, Coverage: manufacturing establishments with 10 persons engaged or more.

## 12. Data summary and recommendation

The results of the 2007 Industrial Census, show that there were totally 92,210 manufacturing establishments, with one person engaged or more in the Northern region. Most of them (about 97.1 percent) were small scale establishments with 1 - 15 persons. The Major industries were in manufacture of wood and of products of wood and cork, except furniture; manufacture of food products and beverages and manufacture of wearing apparel; dressing and dyeing of fur, which had the proportion, of about 24.6, 21.8 and 21.0 percent respectively. In 2006, there were totally 392,704 persons engaged working in establishment. In terms of employment, there were totally 225,452 employees, who received the annual remuneration, of about 74,549 baht per person.

The manufacturing establishments in the Northern region provided the value of gross output, intermediate consumption and value added, of about 216,357.4 million baht, 174,303.4 million baht and 42,054.0 million baht respectively.

Comparing the information of the industrial census in year 2007 to year 1997, as a result, the economy in the Northern region during 10 years favorably growth. This resulted from the increase in the number of establishments, as well as the employment and the value of gross output increasing, which effected in favorable overall of economic conditions. Moreover, the Thai economy continue to increase depending on the manufacturing development, investment promotion, increasing productivity and employment and goods and services promotion; that is in order to support the demand in the country and abroad.

The 2007 industrial census: Northern region, Only manufacturing establishments with 11 persons engaged or more.