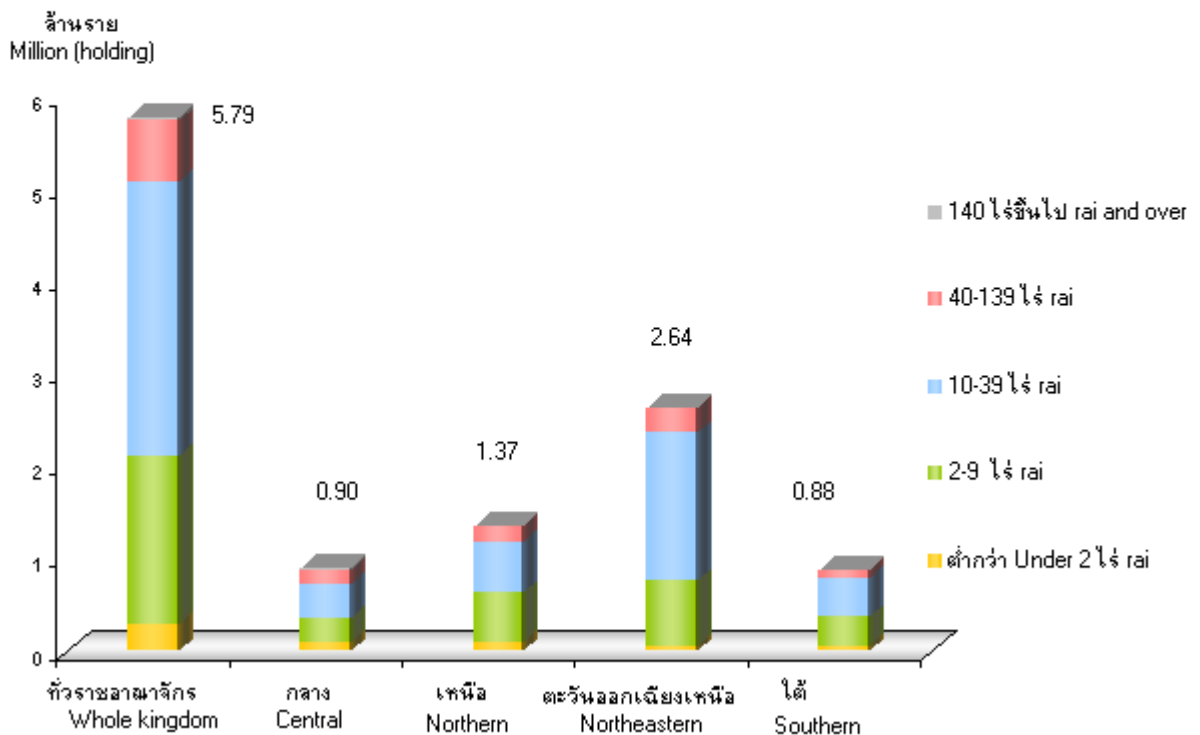


PREFACE

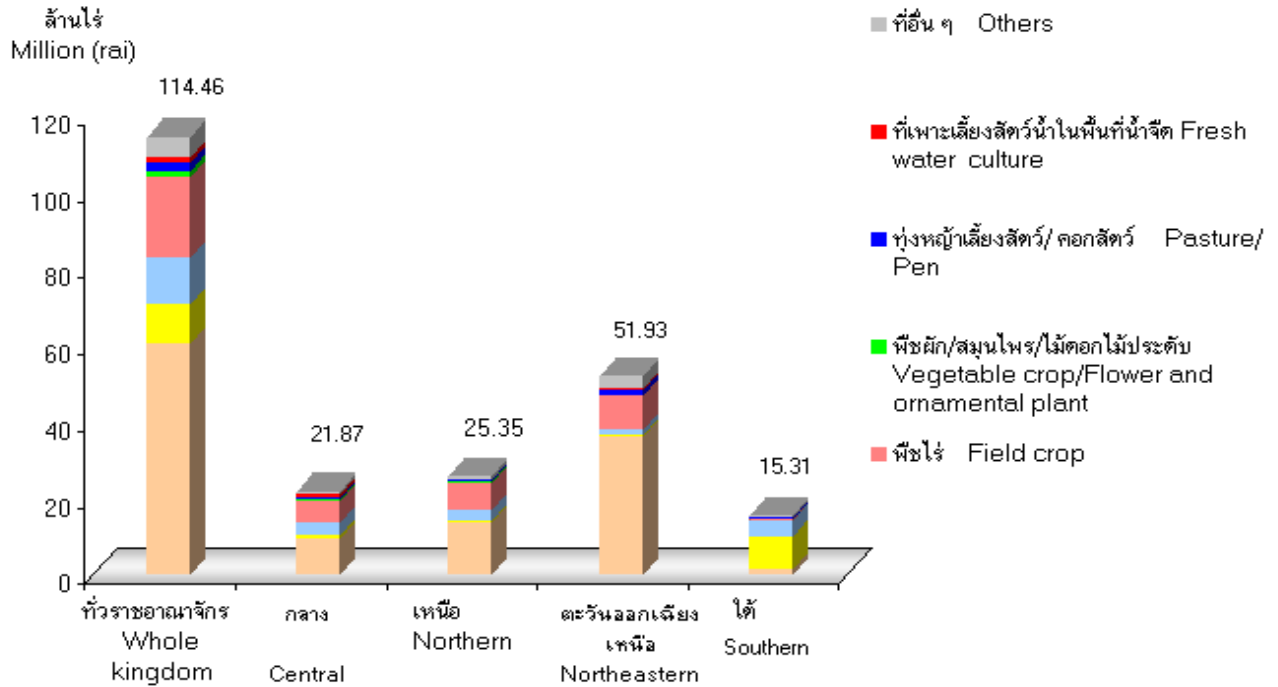
The National Statistical Office conducted the Fifth Agricultural Census in 2003 in order to collect the data on structure of agriculture obtained from the agricultural holdings throughout the country. The processing of the large volume of census data will take about 10-12 months. The NSO has thus published this advanced report to present the census result for some major characteristics based on one percent sample of agricultural holdings by region and the whole kingdom. It is expected that this report would serve the needs of various users before the completion of the final report which will present the census result from all agricultural holdings.

แผนภูมิ 1 จำนวนผู้ถือครองทำการเกษตร จำแนกตามขนาดเนื้อที่ถือครองทั้งสิ้น รายภาค  
 Figure 1 Number of holdings by size of total area of holding and region



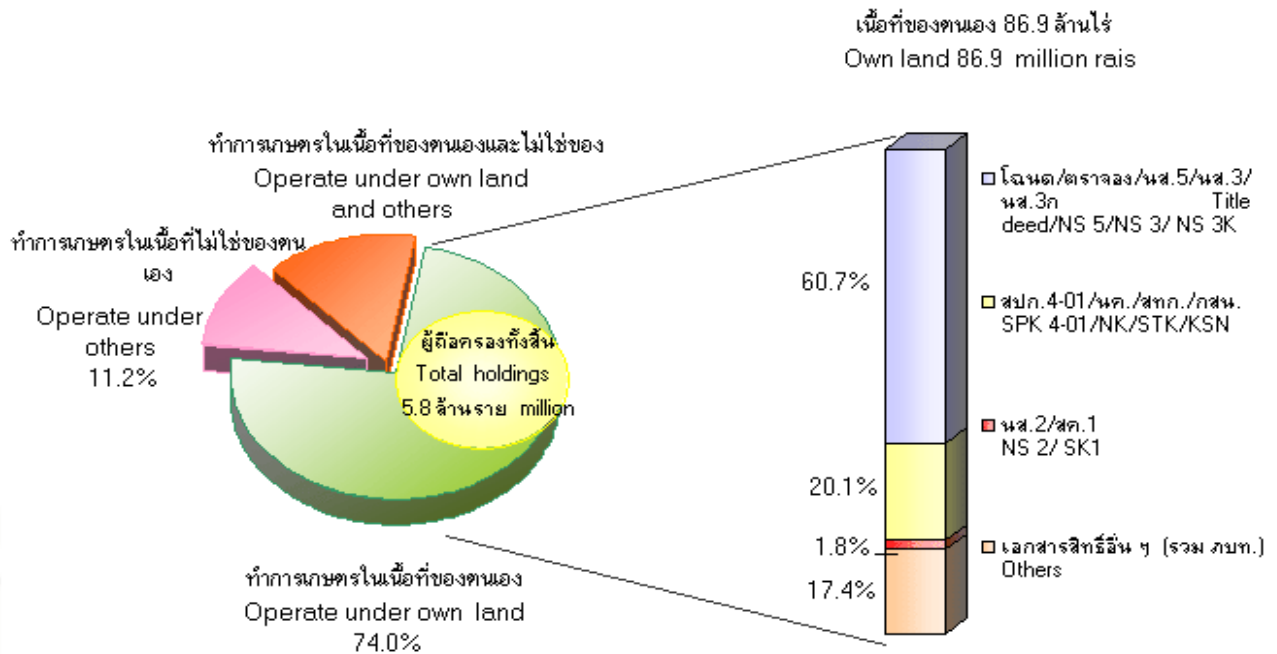
**แผนภูมิ 2** เนื้อที่ถือครองทำการเกษตร จำแนกตามการใช้ประโยชน์ที่ดิน ภูมิภาค

**Figure 2** Area of holding by land use and region



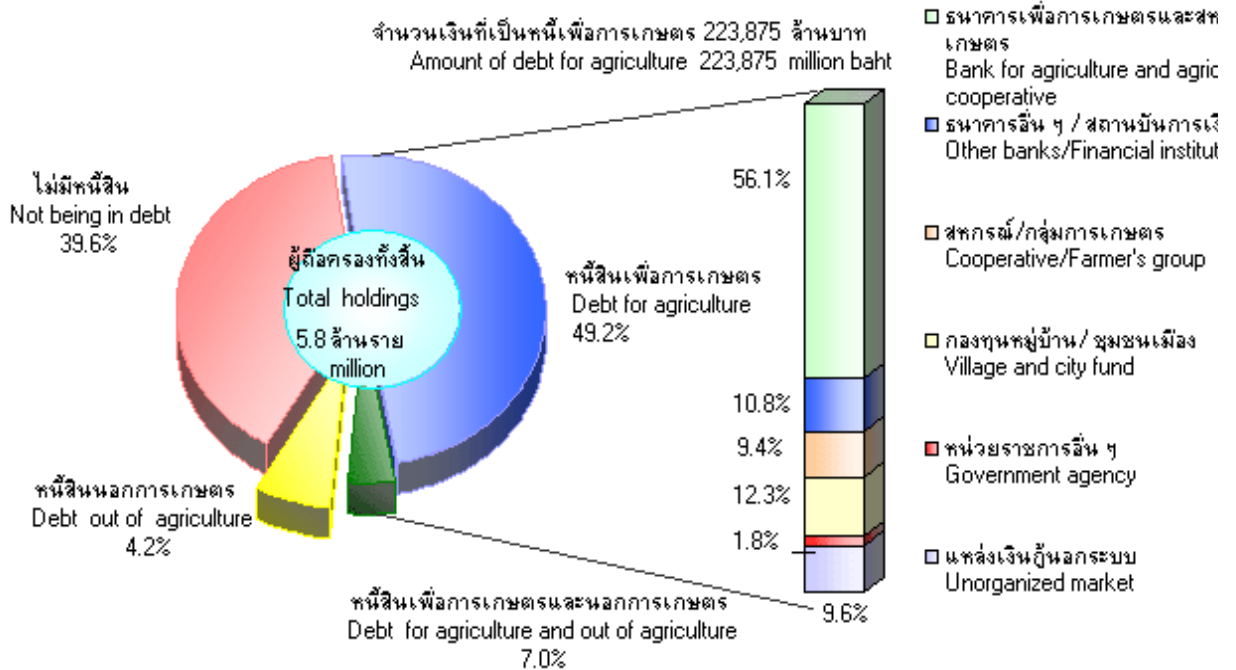
**แผนภูมิ 3** จำนวนผู้ถือครองทำการเกษตร จำแนกตามลักษณะการถือครองที่ดิน และเนื้อที่ถือครองของตนเอง จำแนกตามเอกสารสิทธิ์

**Figure 3** Number of holdings by land tenure and area owned by documentary of right



**แผนภูมิ 4 จำนวนผู้ถือครองทำการเกษตร จำแนกตามการมีหนี้สินของครัวเรือน และจำนวนเงินที่เป็นหนี้เพื่อการเกษตร จำแนกตามแหล่งเงินทุน**

**Figure 4 Number of holding being in debt of household and amount of debt for agriculture**



## INTRODUCTION

### 1.1 Background

The National Statistical Office conducted the First Agricultural Census in 1950, the Second in 1963, the Third in 1978 and the Fourth in 1993. To obtain timely statistics of agricultural structure data for policy-making, monitoring and evaluation of the agricultural development projects and in accordance with the recommendations of the Food and Agriculture Organization of the United Nations (FAO), the Fifth Agricultural Census was thus conducted in 2003.

### 1.2 Objective

The objectives of the agricultural census were as follows:

1. To collect data on agricultural structures such as number and area of holdings, land use, land tenure, planted area of crops, number of inland fishery establishments, water area under fresh water culture, number of livestock, the use of fertilizer and pesticide, machinery and equipment,

etc.

2. To provide data for small administrative units.
3. To provide a frame for other agricultural surveys.
4. To study changes of agricultural structures in 10 years.

### **1.3 Coverage**

The 2003 Agricultural Census covered all holdings which their agricultural activities were cultivating crops, rearing livestock and culturing fresh water.

### **1.4 Data Collection**

The face to face interview was the method of data collection for the 2003 Agricultural Census. The field work was carried out during May 13 to June 10, 2003. Around 2,500 enumerators were recruited from village health volunteers and 5,000 supervisors were recruited from local officer of Department of Agricultural Extension. The enumerators were sent out to interview all heads of household using listing form to find out agricultural holders. Approximately 5.8 million agricultural holders were interviewed for detailed information using enumeration form subsequently.

### **1.5 Definitions**

1. Holding A holding is an economic unit of agricultural production (cultivating crops, rearing livestock and culturing fresh water) under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title or legal form. The holding's land may consist of one or more parcels, located in one or more separate areas of the same province.
2. Holder A holder refers to a civil or juridical person who exercises management control and takes major decisions over the agricultural holding operation. The holder has technical and economic responsibility for the holding and may undertake all responsibilities directly, or delegate responsibilities to a hired manager. A hired manager participating in economic and financial responsibilities in addition to managing the holding is considered a holder.
3. Area of Holding Area of holding is the combined area of all the holding's parcels in the province, including land owned by the holder, rented from others and land under other tenure forms. (Land owned by the holder but rented to others are excluded).  
The holding area includes farmyard, land occupied by farm buildings and holder's house located on the holding.
4. The Census Day This refers to May 1, 2003.

## METHODOLOGY

### 2.1 Sample Design

A Stratified Two - Stage Sampling was adopted for the advanced report. Regions were constituted strata. The primary and secondary sampling units were enumeration districts and holdings respectively.

- 1) Stratification: Group of provinces in each region were constituted strata. There were altogether 4 strata, i.e., Central, North, Northeast and South.
- 2) Selection of Primary Sampling Unit: A number of sample enumeration districts were selected systematically in each stratum with a sampling fraction of 1 in 5. The total number of sample enumeration districts was 4,581 from 22,950
- 3) Selection of Secondary Sampling Unit:
  - a) Holdings were ultimate sampling units. Data of every holdings enumerated with the long form in every sample enumeration district were proceeded. Then these sample holdings were selected systematically with a sampling fraction of 1 in 5.
  - b) The overall sampling fraction was 1 in 100.

### 2.2 Method of Estimation

The results were presented separately for region, i.e., Central, North, Northeast and South .

Let  $i = 1, 2, 3, \dots, m_h$  ( serial number of sample enumeration district )  
 $h = 1, 2, 3, 4$  ( region )

#### 1) Estimate of the Total Number of Characteristic X

1.1 Adjusted estimate of the total number of characteristic X for the  $h^{th}$  region was base on the formula :

$$\hat{X}_h = \frac{\sum_{i=1}^{m_h} x_{hi}}{\sum_{i=1}^{m_h} y_{hi}} Y_h = \frac{x_h}{y_h} Y_h = r_h Y_h \quad \dots \dots \dots (1)$$

where  $x_{hi}$  is the total number of characteristic  $X$  in the every sample holding for the  $i^{th}$  sample enumeration district,  $h^{th}$  region.

$y_{hi}$  is the total number of sample holdings enumerated for the  $i^{th}$  sample enumeration district,  $h^{th}$  region.

$m_h$  is the total number of sample enumeration districts for the  $h^{th}$  region.

$Y_h$  is the total number of holdings.

$x_h$  is the total number of characteristic  $X$  in the every sample holding for the  $h^{th}$  region.

$y_h$  is the total number of sample holdings enumerated for the  $h^{th}$  region.

$r_h$  is the ratio of the total number of characteristic  $X$  to the total number of the sample holdings enumerated for the  $h^{th}$  region.

1.2 Adjusted estimate of the total number of characteristic  $X$  for the whole kingdom was base on the formula :

$$\hat{X} = \sum_{h=1}^4 \hat{X}_h \dots\dots\dots (2)$$

## SUMMARY OF FINDINGS

### 1. Number and Area of Holdings

Based on the 1% sample holdings of the 2003 Agricultural Census, the total number of holdings in Thailand was estimated at 5.8 million. The Northeastern Region occupied the largest number of holdings with 2.6 million (45.6%). It was followed by the Northern, Central and Southern Region with 23.6, 15.6 and 15.2% respectively.

With the total area of holding of around 114.5 million rais,<sup>1/</sup> or about 35.7% of the total area of the country.<sup>2/</sup> For the regional area, the Northeastern Region occupied the largest area of holding with 51.9 million rais (45.4%), followed by the Northern, Central and Southern Region with 22.1, 19.1 and

13.4% respectively. The average area per holding of the Whole Kingdom was 19.8 rais, it showed a gradual decrease from 21 and 20 rais in 1993 and 1998 respectively.<sup>3/</sup> The holding in the Central Region had the largest average area of 24.3 rais, and the smallest average area was in the Southern Region with 17.3 rais. (Table 1)

Table 1 Number and Area of Holdings by Region

Region	Number of holding		Area of holding (rai)		Average area per holding (rai)
	Number	Percent	Area (rai)	Percent	
Total	5,792,519	100.0	114,460,932	100.0	19.8
Central	901,027	15.6	21,869,432	19.1	24.3
Northern	1,367,702	23.6	25,346,792	22.1	18.5
Northeastern	2,640,866	45.6	51,935,157	45.4	19.7
Southern	882,924	15.2	15,309,551	13.4	17.3

<sup>1/</sup> 1 rai = 1,600 square meters.

<sup>2/</sup> Total are of Thailand 320.7 million rais. (Royal Thai Survey Department)

<sup>3/</sup> The 1993 Agricultural Census, the 1998 Intercensal Survey of Agriculture. (National Statistical Office)

## 2. Some Characteristics of Holdings

### 2.1 Holding's Activity and Size of Total Area of Holding

Table 2 indicates that the major portion (96.4%) of the holding's activity was cultivating crops, such as cultivating crops only (54.2%), cultivating crops and rearing livestock (35.4%), etc. Considering the size of total area of holding, the number of holdings having an area under 40 rais constituted 88.1%, of which 51.5% were the holdings with area under 10 - 39 rais, while the largest size (140 rais and over) had only 0.5%. (Table 2)

Table 2 Percentage Distribution of Holdings by Holding's Activity, Size of Total Area of Holding and Region

Item	Total	Central	Northern	Northeastern	Southern
Holding's activity	100.0	100.0	100.0	100.0	100.0
Cultivating crops	54.2	64.9	65.2	43.7	57.7
Rearing livestock	2.6	5.8	2.5	1.6	2.7
Culturing in fresh water	0.7	3.6	0.3	0.1	0.3
Cultivating crops and rearing livestock	35.4	17.6	24.6	47.1	35.4
Cultivating crops and culturing in fresh water	3.0	4.7	3.4	2.6	1.5
Rearing livestock and culturing in fresh water	0.3	0.8	0.3	0.1	0.1
Cultivating crops, rearing livestock and culturing in fresh water	3.8	2.6	3.7	4.8	2.3
Size of total area of holding (rai)	100.0	100.0	100.0	100.0	100.0
Under 2	5.2	10.3	7.1	2.1	6.5
2 – 5	17.5	19.8	24.3	12.3	20.1
6 – 9	13.9	9.7	14.8	14.4	15.2
10 – 19	27.9	19.9	23.0	32.9	28.6
20 – 39	23.6	22.0	18.1	28.1	20.6
40 – 59	7.2	10.0	7.0	7.0	5.3
60 – 139	4.2	6.9	5.1	3.0	3.3
140 and over	0.5	1.4	0.6	0.2	0.4

## 2.2 Land Tenure and Documentary of Right

As regards the land tenure, it was found that the majority of holdings operated under own land only (74.0%), 14.8% of the holdings operated not only under own land but also under other land and 11.2% of the holdings operated under other land. For the documentary of right, the data show that most of the holdings with own land had Title deed, NS5, NS3, NS3k (73.6%). (Table 3)



Table 3 Percentage Distribution of Holdings by Land Tenure, Documentary of Right and Region

Item	Total	Central	Northern	Northeastern	Southern
<b>Land tenure</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Own land	74.0	59.5	63.2	78.6	91.5
Owner only	71.7	57.9	61.5	76.6	86.9
Mortgagor / Sale - redeem	1.1	1.0	0.9	0.8	2.0
More than one kind	1.2	0.6	0.8	1.2	2.6
Others	11.2	22.6	16.1	7.5	3.1
Rent only	7.8	18.5	11.7	4.5	1.2
Free only	2.9	3.6	3.7	2.6	1.7
Mortgagee / Sale - redeemer	0.1	0.0	0.1	0.1	0.1
More than one kind	0.4	0.5	0.6	0.3	0.1
Own land and others	14.8	17.9	20.7	13.9	5.4
<b>Documentary of right<sup>1/</sup> (ownland only)</b>					
Title deed/ NS5/ NS3/ NS3k	73.6	79.9	67.1	75.2	72.5
SPK4-01/NK/STK/KSN	17.9	9.6	19.8	21.1	13.1
NS2/SK1	2.3	0.9	1.6	2.6	3.5
Others	18.8	12.7	26.5	14.6	25.5

<sup>1/</sup> One holding may report more than one type of documentary of right

### 3. Area of Holding by Land Use and Land Tenure

The total area of holding in the Whole Kingdom was 114.5 million rais. Of these, the major portion (52.9%) was the area under rice, followed by field crop (18.5%), permanent crop (10.5%) and para rubber (8.9%) respectively. According to the distribution by region, the pattern were almost the same in every region except for the Southern Region where area under para rubber and permanent crop occupied most of the land (57.0 and 27.4% respectively). Considering Land tenure, it was found that the major portion (75.9%) was the area owned by the holder, of which the area owned by the holder of the Southern Region was the highest portion (95.5%). (Table 4)

Table 4 Percentage Distribution of Area of Holding by Land Use, Land Tenure and Region

Item	Total	Central	Northern	Northeastern	Southern
<b>Land use</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Rice	52.9	42.8	53.5	69.6	9.9
Para rubber	8.9	4.3	0.1	1.1	57.0
Permanent crop	10.5	15.7	11.7	2.7	27.4
Field crop	18.5	25.0	27.6	16.7	0.2
Vegetable crop, herb, flower and ornamental plant	1.4	3.0	2.1	0.6	0.4
Forest (Planted)	0.6	0.7	0.7	0.6	0.1
Pasture	1.0	0.8	0.9	1.3	0.3
Pen	0.9	1.0	0.8	1.1	0.6
Fresh water culture	1.1	3.5	0.5	0.6	0.2
Others	4.2	3.2	2.1	5.7	3.9
<b>Land tenure</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Own land	75.9	56.2	64.1	84.3	95.5
Others	24.1	43.8	35.9	15.7	4.5

#### 4. Fertilizer and Pesticide

Out of a total 5.6 million holdings with crops in the country, 91.9% used fertilizers. Most of them (89.4%) using inorganic fertilizers, of which the holdings using inorganic fertilizers only was 57.5%, while 31.9% of holdings used inorganic and organic fertilizers. There was very small number of holdings using only organic fertilizers (2.5%). It was found that the highest percentage of holding using fertilizers was in the Northeastern Region (97%). Among these 95.5% used inorganic fertilizers. The average inorganic fertilizer per rai of the Central Region was the highest which was 58.3 kg./rai.

Considering the use of pesticides, 54.4% of holding reported of using pesticides, of which 45.9% used chemical. The majority of holdings using pesticides was in the Central and Northern Region (76.5 and 73.3% respectively), while the holdings in the Northeastern and Southern Region used pesticides 44.9 and 32.9% only. (Table 5)

Table 5 Percentage Distribution of Holdings with Crops by Using Fertilizer and Pesticide and Area Treated and Quantity Used Inorganic Fertilizer by Region

Item	Total	Central	Northern	Northeastern	Southern
<b>1. Number of holdings with crops</b>	<b>5,563,057</b>	<b>805,424</b>	<b>1,320,544</b>	<b>2,585,476</b>	<b>851,613</b>
	(100.0)	(14.5)	(23.7)	(46.5)	(15.3)
<b>By using fertilizer</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Not use fertilizer	8.1	10.5	10.6	3.0	17.7
Use fertilizer	91.9	89.5	89.4	97.0	82.3
Inorganic	57.5	55.0	60.2	56.5	58.8
Organic	2.5	4.6	2.9	1.5	2.7
Inorganic and organic	31.9	29.9	26.3	39.0	20.8
<b>By using pesticide</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Not use pesticide	45.6	23.5	26.7	55.1	67.1
Use pesticide <sup>1/</sup>	54.4	76.5	73.3	44.9	32.9
Chemical	45.9	72.7	69.8	31.7	27.0
Organic	3.4	5.2	3.9	2.9	2.5
Natural-enemies	1.1	1.3	1.1	1.2	0.9
Others	10.8	5.9	5.6	16.4	6.3
<b>2. Area treated inorganic fertilizer (rai)</b>	<b>101,734,6</b>	<b>23,066,34</b>	<b>23,843,42</b>	<b>43,619,85</b>	<b>11,204,96</b>
	(100.0)	(22.7)	(23.4)	(42.9)	(11.0)
3. Quantity used inorganic fertilizer (1,000 kg.)				<b>1,414,125</b>	<b>554,628</b>
	(100.0)	(30.9)	(23.9)	(32.5)	(12.7)
Average per rai (kg.)	42.8	58.3	43.7	32.4	49.5

<sup>1/</sup> One holding may report more than one method of using pesticide.

## 5. Demographic Characteristics and Activity Status

Table 6 indicates that 72.6% of holders were male and only 27.4% were female. Most of them (88%) in the age group of 35 years and over. Out of this, 74.7% in the age group 35 - 64 years and 13.3% in the age group 65 years and over.

Table 6 Percentage Distribution of Holders by Sex, Age Group and Region

Item	Total	Central	Northern	Northeastern	Southern
Total number of holders (Excluding corporation)	5,787,774 (100.0)	899,076 (15.5)	1,366,897 (23.6)	2,639,508 (45.6)	882,293 (15.3)
By sex	100.0	100.0	100.0	100.0	100.0
Male	72.6	67.4	78.6	72.1	69.9
Female	27.4	32.6	21.4	27.9	30.1
By age group	100.0	100.0	100.0	100.0	100.0
15 – 19	0.1	0.1	0.1	0.1	0.2
20 – 24	0.8	0.6	1.0	0.6	1.0
25 – 34	11.1	9.1	10.6	11.6	12.5
35 – 44	26.9	24.4	28.6	27.4	25.4
45 – 54	28.9	28.2	31.1	29.2	25.1
55 – 64	18.9	20.8	17.2	19.3	18.1
65 – 69	6.2	7.9	5.7	5.6	7.3
70 and over	7.1	8.9	5.7	6.2	10.4

There were 22.2 million holder's household members or 34.7% of total population, of which 50.1% were male and 49.9% were female. The average number of members was 3.8 persons, it was observed a gradual decrease from 4.3 and 4.1 in 1993 and 1998 respectively. The dependency ratio<sup>2/</sup> was 43.6%.

Regarding the activity status of holder's household members aged 10 years and over, it was found that 76.1% engaged in agricultural work on the holding, among these 36.8% engaged in agricultural work only on the holding and 39.3% engaged both in agricultural on the holding and other works. While 6.8% of members did not engage in agricultural work on the holding. (Table 7)

<sup>1/</sup> The 1993 Agricultural Census, the 1998 Intercensal Survey of Agriculture. (National Statistical Office)

<sup>2/</sup> Dependency ratio =  $\frac{\text{Number of population aged under 15 years and 60 years and over}}{\text{Number of population aged 15 – 59 years}} \times 100$

Table 7 Percentage Distribution of Holder's Household Members by Sex, Age Group, Activity Status and Region

Item	Total	Central	Northern	Northeastern	Southern
1. Total Number of holder's household members (Excluding corporation)	22,192,938 (100.0)	3,382,488 (15.2)	4,897,295 (22.1)	10,766,106 (48.5)	3,147,049 (14.2)
Average per household	3.8	3.8	3.6	4.1	3.6
By sex	100.0	100.0	100.0	100.0	100.0
Male	50.1	50.0	50.1	50.2	49.9
Female	49.9	50.0	49.9	49.8	50.1
By age group	100.0	100.0	100.0	100.0	100.0
Under 15	19.1	16.7	17.6	20.6	18.7
15 – 24	15.4	14.8	14.5	15.6	16.9
25 – 34	17.6	17.6	16.2	18.5	16.9
35 – 44	17.3	17.2	19.1	16.8	16.6
45 – 54	14.5	14.6	16.5	13.9	13.2
55 – 64	8.8	9.9	8.7	8.5	8.7
65 – 69	3.0	3.8	3.1	2.5	3.6
70 and over	4.3	5.4	4.3	3.6	5.4
2. Number of holder's household members 10 years of age and over	19,794,969 (100.0)	3,061,705 (15.4)	4,407,539 (22.3)	9,496,225 (48.0)	2,830,500 (14.3)
By activity status	100.0	100.0	100.0	100.0	100.0
Economically active	82.9	81.8	82.0	84.7	79.7
Engaged in agricultural work on the holding only	36.8	37.8	33.3	38.6	35.7
Engaged in agricultural work on the holding and other works	39.3	32.3	42.5	40.5	37.5
Mainly engaged in agricultural work on the holding	24.9	18.3	26.2	28.8	16.8
Mainly engaged in agricultural work on other holdings	3.4	3.0	4.3	2.8	4.5
Mainly engaged in other works	11.0	11.0	12.0	8.9	16.2
Not engaged in agricultural work on the holding	6.8	11.7	6.2	5.6	6.5
Mainly engaged in agricultural work on other holdings	0.7	0.9	0.6	0.6	0.8
Mainly engaged in other works	6.1	10.8	5.6	5.0	5.7
Not economically active	17.1	18.2	18.0	15.3	20.3

## 6. Income and Debt of Holder's Household

There were 20.7% of holder's household income from agriculture only, while 79.3% from agriculture and other sources. This indicates that most of the holder's household did not rely only on income from agriculture but also on income from other sources. Regarding income from agricultural product of holding. It was found that the holders 33.8% have income from agricultural product in 20,001 - 50,000 baht, followed by income in 10,001 - 20,000 and 50,001 - 100,000 baht with 18.9 and 17.4% respectively, and 10.1% had income with 100,000 baht and over. (Table 8)

Table 8 Percentage Distribution of Holders by Household Income and Region

Item	Total	Central	Northern	Northeastern	Southern
Total number of holders (Excluding corporation)	5,787,774	899,076	1,366,897	2,639,508	882,293
By source of household income	100.0	100.0	100.0	100.0	100.0
Agriculture only	20.7	26.2	21.8	16.9	24.7
Agriculture and other sources	79.3	73.8	78.2	83.1	75.3
Mainly from agriculture	40.4	38.6	42.7	42.1	33.3
Mainly from being agricultural worker	4.0	3.1	4.5	3.5	5.8
Mainly from other sources	22.1	23.8	21.4	21.3	24.1
Equally from agriculture and other sources	12.8	8.3	9.6	16.2	12.1
By income from agricultural product <sup>1/</sup>	100.0	100.0	100.0	100.0	100.0
Not having agricultural product	2.5	3.4	3.0	1.3	4.5
Income from agricultural product (baht)	97.5	96.6	97.0	98.7	95.5
Under 5,001	5.9	5.6	7.2	5.1	6.4
5,001 - 10,000	11.4	8.1	12.3	11.9	11.6
10,001 - 20,000	18.9	12.7	18.2	22.1	16.9
20,001 - 50,000	33.8	28.3	30.7	37.7	32.5
50,001 - 100,000	17.4	20.1	17.3	15.8	19.5
100,001 and over	10.1	21.8	11.3	6.1	8.6

<sup>1/</sup> Value of agricultural product

According to debt of household, there were 60.4% of the holders being in debt, in which 56.2% were debt for agriculture. Northeastern and Northern Region had the largest proportion of holders being in debt for agriculture with 62.6 and 62.3% respectively, while Southern Region had the least proportion with 34.0%. The amount of debt for agriculture of the Whole Kingdom was 223,875 million baht. The average per household in debt was 68,767 baht. The holder in the Central Region had the largest average debt for agriculture with 132,569 baht, the least in the Northeastern Region with 44,749 baht per household in debt. (Table 9)

Table 9 Percentage Distribution of Holders by Source of Debt of Household and Amount of Debt for Agriculture by Region

Item	Total	Central	Northern	Northeastern	Southern
1. Total number of holders	5,787,774	899,076	1,366,897	2,639,508	882,293
(Excluding corporation)					
By being in debt of household	100.0	100.0	100.0	100.0	100.0
Not being in debt	39.6	46.2	35.2	32.8	59.8
Being in debt	60.4	53.8	64.8	67.2	40.2
For agriculture	49.2	45.0	56.3	53.2	30.5
For out of agriculture	4.2	3.5	2.5	4.6	6.2
For agriculture and out of agriculture	7.0	5.3	6.0	9.4	3.5
2. Amount of debt for agriculture (million baht)	223,875	59,978	63,105	73,929	26,863
	(100.0)	(26.8)	(28.2)	(33.0)	(12.0)
Average per household in debt (baht)	68,767	132,569	74,192	44,749	89,402

## 7. Employment on Agricultural Workers

In the Whole Kingdom, there were 58.6% of the total holdings employed agricultural workers, of which most of them employed workers on an occasional basis. The data show that only 3% of the total holdings employed permanent agricultural workers with 704,959 persons, among these 8% were the foreigner workers. (Table 10)

Table 10 Percentage Distribution of Holdings by Employment and Number of Permanent Workers by Region

Item	Total	Central	Northern	Northeastern	Southern
1. Total number of holdings	100.0	100.0	100.0	100.0	100.0
Not employ agricultural workers	41.4	44.8	39.1	31.8	70.1
Employ agricultural workers	58.6	55.2	60.9	68.2	29.9
Permanent workers	1.4	2.0	0.5	0.2	6.2
Occasional workers	56.6	50.6	59.3	67.5	19.5
Permanent and occasional workers	1.6	2.6	1.1	0.5	4.2
2. Number of permanent workers	704,959	168,844	137,361	155,127	243,627
	(100.0)	(23.9)	(19.5)	(22.0)	(34.6)
By sex	100.0	100.0	100.0	100.0	100.0
Male	55.8	59.7	54.7	47.7	58.8
Female	44.2	40.3	45.3	52.3	41.2
By source of workers	100.0	100.0	100.0	100.0	100.0
Thai	92.0	90.6	84.8	99.1	92.4
Foreigner	8.0	9.4	15.2	0.9	7.6