

## **Agriculture Statistics 2007**

This series consists mainly of primary statistics, statistics from statistical accounting systems and results of special censuses and surveys, for reference and documentation purposes. Presentation is basically in the form of tables, figures and necessary information about data, collection and processing methods, and concepts and definitions. In addition, a short overview of the main results is given. The series also includes Statistical Yearbook of Norway.

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## Preface

NOS Agricultural Statistics is issued annually and contains statistics on agricultural properties, agricultural area, livestock, yields, farmer's income and property and local administration of agricultural areas. Statistics from the annual Sample survey of agriculture and forestry are also included.

As from 2006, NOS Agricultural Statistics only contains statistics compiled by Statistics Norway. The purpose of the publication is twofold:

- to present some reference tables for each subject
- to provide information about data sources, concepts and processing methods

All the statistics are previously published in "Today's statistics" and are available on the Internet: <http://www.ssb.no/english/subjects/10/04/>.

In 2008, Statistics Norway published a new publication with the title "Landbruket i Norge 2007" in the series Statistical Analysis. This publication contains a survey on official agricultural statistics, collected by Statistics Norway as well as other institutions. The publication is published in Norwegian and is available on the Internet: [http://www.ssb.no/emner/10/04/sa\\_landbruk/](http://www.ssb.no/emner/10/04/sa_landbruk/).

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Statistisk sentralbyrå  
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## 1. Introduction

This publication is intended to serve reference and documentation purposes for agricultural statistics compiled by Statistics Norway, comprising the following main subjects:

- Agricultural properties
- Structure of agriculture
- Agricultural area and livestock, as of 31 July
- Livestock husbandry, as of 1 January
- Farmers' income and property
- Grain and oil seeds, area and yields
- Production of potatoes and forage plants
- Horticultural production
- Approved carcasses
- Local administration of agricultural areas
- Sample survey of agriculture and forestry 2007

The statistics for Farmer's income and property refer to the year 2006, all the other statistics refer to the year 2007.

## 2. Agricultural properties

### 2.1. Main results, 2007

*One in ten lives on an agricultural property*

A total of 440 000 Norwegians, around 10 per cent of the population, live on an agricultural property. Around 160 000 agricultural properties have one or several dwelling houses. Of these, one in five is uninhabited.

There is a great variety among the counties. In the county of Sogn og Fjordane in the western part of Norway one in four lives on an agricultural property, while the corresponding figure for the more central counties of Oslo and Akershus is 2.3 per cent. About one in five of the agricultural properties with dwelling house do not have people living there permanently.

One in four agricultural properties with buildings had construction activity the last ten years.

*One in four agricultural properties owned by a woman*

For the country as a whole, one in four agricultural properties is owned by a woman. A total of 105 000 properties are owned by a married owner, and 16 300 properties are owned by a married couple. In total, 33 000 properties are owned by more than one owner.

### 2.2. Background and purpose

*Purpose and history*

The statistics describe buildings, habitation and areas on agricultural properties. The statistics also give information about the owners of the properties and their business.

*Users and applications*

Users include the Norwegian Agricultural Economic Research Institute (NILF), Norwegian Institute for Land Inventory (NIJOS), public enterprises at the municipal and county level, the Ministry of Food and Agriculture, the Ministry of Environment, in research and by agricultural organizations.

### 2.3. Statistics production

*Population*

The statistics comprise all properties in the Farm Register of the Norwegian Agricultural Authority with at least 5 decares owned agricultural area and/or at least 25 decares productive forest area.

*Data sources* The Farm Register of the Norwegian Agricultural Authority serves as the backbone of the statistics. The information from the Farm Register is combined with information at property level from different other data sources:

- The Official Ground Property, Address and Building register (GAB)
- The Central Population register
- The Cultural Heritage Register (SEFRAK)
- SSB's population of agricultural holdings
- The Register on Personal Tax Returns
- The Register on Tax Assessment for Personal Taxpayers.

*Collection of data* All data are collected from administrative registers.

*Control and revision* Data are checked by various machine controls. Even though the registers have good quality, some errors could occur due to late or missing updating and classification errors. For instance, an agricultural property may contain a cadastral unit recently transferred to non-agricultural use. For instance, nursing homes and rental housing may be counted together with an agricultural property. In that cases the number of inhabited will be corrected on cadastral level.

*Confidentiality* Figures are not presented if there is a risk of identifying any unit.

## 2.4. Concepts, variables and classifications

*Definition of the main concepts and variables*

*Agricultural and forestry property:*

Property used for or could be used for agriculture and/or forestry and with at least 5 decares owned agricultural area and/or at least 25 decares productive forest area. All agricultural/forestry area belonging to the same owner within a municipality is considered as one property, irrespective of the number of cadastral units.

*Type of building:*

The standard classifies buildings according to the function of the building. Combined buildings, for instance combined dwelling and business buildings and storage and production buildings, are grouped by the function that occupies the main part of the utility floor space. In this statistics dwelling houses include buildings with the following codes in GAB; 111 – 199, excluding code 161, 171, 172, 181, 182 and 183. Agricultural buildings include buildings with the following codes in GAB; 231 – 290 and mountain farm huts, cabins for forest workers, boathouses etc. with codes 171, 172 and 183. Other buildings include the remaining codes and buildings missing code.

*Building activity last 10 years:*

Information is collected from the GAB register. Building activity last 10 years refers to construction of new buildings or extension of existing buildings in the last ten period.

*Inhabitation:*

An agricultural property is inhabited when at least one person has the property as place of residence registered in the Central Population register.

## 2.5. Sources of error and uncertainty

*Measurement and processing errors*  
*Non-response errors*

Errors may arise when data are entered into the various administrative registers.

A concern is the quality of the Farm Register. The productive forest area of the properties is sometimes missing or erroneous. We also believe that some small properties may lack in the register.



## 2.6. Comparability and coherence

Corresponding statistics are worked out for 2000 and 2006, see:

[http://www.ssb.no/english/subjects/10/04/laeiby\\_en/](http://www.ssb.no/english/subjects/10/04/laeiby_en/). When comparing data from 2000 with data from 2006 and later, improved quality of the registers and different demarcation of the population may influence the statistics at municipality level.

Introduction of property tax in some municipalities may cause changes in the classification of buildings by type of building. In special, holiday homes encoded as farmhose or detached house will influence on the share of properties with dwelling house.

At the moment a quality improvement of areas and units in the Farm Register is carried out at municipality level. This quality improvement will be finished in 2010. For some municipalities this will result in considerable changes from one year to another.

As from 2007 information about registered owner of agricultural properties comes from Statistic Norway's statistical copy of the Official Ground Property, Address and Building register (SSB-GAB). More than 30 000 agricultural properties have more than one owner. In those cases, the owner with the largest share is chosen. If the share is equal, the oldest owner is chosen.

Before 2007, information of owners comes from the Farm Register. In some cases a contact person or a management company are registered as the property owner in that register. It is not clear in what way the information about the owner are treated when only a part of the property is sold.

## 2.7. Availability

*Publications and  
Internet address*

The statistics is published on the internet-site of Statistics Norway:  
[Agricultural properties and buildings](#)

*Micro data*

Primary data is stored at Statistics Norway.

**2.1. Buildings on agricultural and forestry properties<sup>1</sup>. 2007**

	Agricultural and forestry properties with buildings	Percentage agricultural and forestry properties with construction activity last ten years	Buildings, total	Percentage buildings with protection status	Dwelling houses, total	Agricultural and forestry buildings	Mountain farm huts, cabins for forest workers, boat-houses etc.	Other buildings
		Per cent		Per cent				
<b>The whole country .....</b>	<b>176 421</b>	<b>24.6</b>	<b>1 020 629</b>	<b>22.5</b>	<b>233 936</b>	<b>462 870</b>	<b>81 996</b>	<b>241 827</b>
<b>County</b>								
Østfold .....	6 443	24.4	35 700	19.8	9 060	19 207	454	6 979
Akershus/Oslo .....	7 347	25.8	45 196	24.7	11 885	19 352	468	13 491
Hedmark .....	16 002	26.8	100 778	26.9	21 966	48 540	7 868	22 404
Oppland .....	14 371	26.1	98 701	24.5	20 485	53 155	7 497	17 564
Buskerud .....	9 263	27.4	72 936	28.9	13 214	36 475	4 581	18 666
Vestfold .....	4 471	28.0	24 201	23.7	5 935	11 267	402	6 597
Telemark .....	7 797	23.3	50 220	25.3	10 827	22 569	2 805	14 019
Aust-Agder .....	5 260	24.9	25 863	31.6	6 189	10 627	1 337	7 710
Vest-Agder .....	6 973	24.6	30 097	27.6	8 259	11 916	1 486	8 436
Rogaland .....	10 380	36.3	60 575	12.3	15 358	28 743	3 135	13 339
Hordaland .....	13 170	25.3	77 787	24.8	16 677	34 397	10 470	16 243
Sogn og Fjordane .....	10 278	23.6	67 156	27.5	14 855	34 017	8 349	9 935
Møre og Romsdal .....	13 861	22.0	76 693	28.0	17 952	31 292	9 833	17 616
Sør-Trøndelag .....	10 810	27.2	67 109	19.1	14 490	32 235	5 579	14 805
Nord-Trøndelag .....	9 323	30.6	52 159	12.8	12 640	25 126	3 861	10 532
Nordland .....	16 815	15.7	74 928	12.1	19 132	23 825	7 435	24 536
Troms Romsa .....	10 451	16.2	46 261	15.9	11 258	15 662	5 731	13 610
Finnmark Finnmarku .....	3 406	15.0	14 269	8.6	3 754	4 465	705	5 345
<b>Inhabitation</b>								
Agricultural and forestry properties with dwelling house and inhabitation .....	125 548	29.2	806 438	21.9	194 780	380 151	57 727	173 780
Other properties .....	50 873	13.2	214 191	24.4	39 156	82 719	24 269	68 047

<sup>1</sup> Including properties with at least 5 decares owned agricultural area and/or at least 25 decares productive forest area.

2.2. Agricultural and forestry properties, buildings and inhabitation<sup>1</sup>. 2007

	Agricultural and forestry properties, total	Agricultural and forestry properties with buildings	Percentage agricultural and forestry properties with buildings	Agricultural and forestry properties with dwelling house	Agricultural and forestry properties with dwelling house and inhabitation	Percentage agricultural and forestry properties with dwelling houses not inhabited	Total persons inhabited on agricultural and forestry properties with dwelling houses	Percentage inhabited on agricultural and forestry properties of all residents in the county
			Per cent			Per cent		Per cent
<b>The whole country</b> .....	<b>189 280</b>	<b>176 421</b>	<b>93.2</b>	<b>159 699</b>	<b>125 548</b>	<b>21.4</b>	<b>440 483</b>	<b>9.4</b>
<b>County</b>								
Østfold .....	7 068	6 443	91.2	6 010	5 200	13.5	19 061	7.3
Akershus/Oslo .....	8 233	7 347	89.2	6 789	6 082	10.4	24 006	2.3
Hedmark .....	17 263	16 002	92.7	14 566	11 745	19.4	38 188	20.2
Oppland .....	15 291	14 371	94.0	13 123	11 064	15.7	39 214	21.4
Buskerud .....	10 052	9 263	92.2	8 291	7 025	15.3	25 485	10.3
Vestfold .....	4 830	4 471	92.6	4 191	3 861	7.9	14 348	6.4
Telemark .....	8 349	7 797	93.4	6 942	5 466	21.3	18 375	11.1
Aust-Agder .....	5 679	5 260	92.6	4 830	3 673	24.0	12 035	11.5
Vest-Agder .....	7 473	6 973	93.3	6 312	4 557	27.8	14 553	8.9
Rogaland .....	11 129	10 380	93.3	9 507	8 030	15.5	33 398	8.3
Hordaland .....	13 739	13 170	95.9	11 847	9 154	22.7	31 841	7.0
Sogn og Fjordane .....	10 568	10 278	97.3	9 715	7 439	23.4	27 393	25.8
Møre og Romsdal .....	14 490	13 861	95.7	12 696	10 147	20.1	35 502	14.5
Sør-Trøndelag .....	11 538	10 810	93.7	9 723	7 787	19.9	29 099	10.4
Nord-Trøndelag .....	10 134	9 323	92.0	8 575	7 219	15.8	28 188	21.8
Nordland .....	18 284	16 815	92.0	14 557	9 016	38.1	26 630	11.3
Troms Romsa .....	11 269	10 451	92.7	9 054	5 974	34.0	16 928	11.0
Finnmark Finnmarku .....	3 891	3 406	87.5	2 971	2 109	29.0	6 239	8.6
<b>Owner</b>								
Male .....	131 420	124 746	94.9	115 146	94 706	17.8	342 883	.
Female .....	46 054	42 808	93.0	38 300	27 542	28.1	86 058	.
Properties of persons deceased/ legal person/unknown .....	11 806	8 867	75.1	6 253	3 300	47.2	11 542	.
<b>Agricultural activity</b>								
Property without agricultural area .....	10 885	6 659	61.2	2 881	1 685	41.5	5 128	.
Property with own agricultural activity .....	48 051	47 829	99.5	47 136	45 048	4.4	199 083	.
Property with agricultural area rented out or out of use .....	130 344	121 933	93.5	109 682	78 815	28.1	236 272	.
<b>Owned agricultural area</b>								
0- 4 decares .....	12 772	8 299	65.0	4 106	2 475	39.7	7 429	.
5- 49 " .....	102 496	95 735	93.4	85 551	60 035	29.8	176 292	.
50- 99 " .....	35 894	34 897	97.2	33 409	28 476	14.8	102 283	.
100-199 " .....	25 552	25 089	98.2	24 489	22 889	6.5	96 889	.
200-299 " .....	7 844	7 750	98.8	7 614	7 304	4.1	34 300	.
300-499 " .....	3 737	3 683	98.6	3 605	3 485	3.3	18 026	.
500- " .....	985	968	98.3	925	884	4.4	5 264	.
<b>Productive forest area</b>								
0- 24 decares .....	68 206	62 604	91.8	56 176	42 071	25.1	133 965	.
25- 99 " .....	37 698	34 683	92.0	31 214	24 161	22.6	80 345	.
100- 249 " .....	33 777	31 769	94.1	29 066	23 068	20.6	83 028	.
250- 499 " .....	22 063	20 945	94.9	19 349	15 876	17.9	60 308	.
500- 999 " .....	15 200	14 566	95.8	13 419	11 365	15.3	44 799	.
1 000- 1 999 " .....	7 729	7 432	96.2	6 777	5 804	14.4	23 728	.
2 000- 4 999 " .....	3 407	3 282	96.3	2 864	2 509	12.4	10 841	.
5 000-19 999 " .....	967	918	94.9	693	599	13.6	2 824	.
20 000- " .....	233	222	95.3	141	95	32.6	645	.

<sup>1</sup> Including properties with at least 5 decares owned agricultural area and/or at least 25 decares productive forest area.

### 3. Structure of agriculture

Separate, complete agricultural censuses were held in 1907, 1918, 1929, 1939, 1949, 1959, 1969 and 1999. In 1979 and 1989 full censuses of agriculture and forestry were held. The results from the full censuses have been important because they provide important input to planning, clarification and decision-making by public authorities and agricultural administration at central and local level. As from 1999, Statistics Norway has established an integrated system for yearly updating the agricultural population of holdings and holders by matching several administrative and statistical registers.

#### 3.1. Main results, 2007

*Fewer than 50 000 farms*

The number of holdings with agricultural activity fell by 1 300 from 2006 to 49 900 in 2007. On average, the number of farms decreased by 2 800 each year from 1999 to 2006, corresponding to a percentage decrease of 3.9 per cent. From 2006 to 2007, the number of farms fell by 2.5 per cent.

The total agricultural area in use was 10.32 million decares in 2007. The average size of farms increased from 202 decares in 2006 to 207 decares in 2007.

In 2007, 46 900 holdings were operated by natural persons, while 3 000 were operated by various legal persons, e.g. joint operations, limited companies and institutions.

*Fewer farms with dairy production*

Holdings can be classified by type of farming and economic size. From 2006 to 2007, the number of farms with dairy production as their main activity dropped by 8 per cent. The number of farms with sheep or grain and oil seed as the main activity fell by 5 and 4 per cent, respectively. These three activities are the dominating types of farming in Norwegian agriculture. One quarter of the farms were classified as holdings with dairy production as the main activity in 2007, while sheep accounted for 18 per cent and grain and oil seed accounted for 17 per cent.

#### 3.2. Background and purpose

*Purpose and history*

The purpose is to obtain information about the resources and production, and provide data on operational and economical conditions within the agricultural industry.

*Users and applications*

The main users of the statistics are the Ministry of Agriculture and Food, the Norwegian Agricultural Economics Research Institute, the Agricultural Budget Commission, the Norwegian Farmers Union, the Norwegian Smallholders Union etc.

#### 3.3. Statistics production

*Population*

The statistics comprise all active farms with production for sale.

*Data sources*

As from 2000, the total population of holdings is established by use of the administrative Farm Register combined with various other administrative data sources and statistical registers:

- Applications for governmental grants
- Approved carcasses
- Deliveries of cereals
- Complete agricultural censuses
- Sample surveys of agriculture
- Business registers

*Control and revision* The statistics are based on collocation of data files that have been separately edited when established.

*Confidentiality* Figures are not presented if there is a risk of identifying any unit.

### 3.4. Concepts, variables and classifications

*Definitions of the main concepts and variables*

*Agricultural holding:*

A single unit both technically and economically, which has single management and which produces agricultural products. The holding is independent of municipality boundaries. The agricultural holdings headquarter must be located on an agricultural property.

*Agricultural area in use:*

Agricultural land that is harvested at least once during a year, including planted areas of permanent crops, where no harvest has been produced so far. Includes also arable land included in the crop rotation system with no intention to produce a harvest during the year, but which will be harvested the next year.

*Type of farming of an agricultural holding:*

The type of farming of a holding is determined by the contribution ratio of the different crop and livestock enterprises to its total agricultural production. The standard gross margin is applied as the common measurement of the various enterprises (crop and livestock).

*Standard gross margin of an agricultural holding:*

The standard gross margin (SGM) is the balance between the standard value of output and the standard value of certain direct costs. SGMs are calculated at regional level per area unit (decare, square metre) and head of livestock for related crops and livestock categories. The SGM for an enterprise within the holding is the SGM per area unit/head of livestock multiplied by the total of the relevant crop/livestock category. The total SGM of the holding is the sum of all enterprises run by the holding.

*Standard classifications* County where the holding is located, size of holding expressed in decares of utilized agricultural area and type of farming of the holding.

### 3.5. Sources of error and uncertainty

*Measurement and processing errors*

The most important source of error is that the holders may fill in incorrect information when they apply for governmental grants. In most cases this will be discovered and corrected by the local agricultural authority. Nevertheless, occasional errors that do not influence on the holders grants can be ignored. Furthermore, errors may also originate during the scanning of the forms despite of the fact that controls are executed.

*Non-response errors*

About 4 per cent of the holders do not apply for governmental grants. Agricultural area in use and livestock of the corresponding holdings are derived from data on deliveries of cereals and oil seed and delivered animals to the slaughterhouses etc.

### 3.6. Comparability and coherence

The statistics are essentially comparable with information from the previous complete censuses. Censuses up to 1979 included all cultivation of crops and all livestock, irrespective of holding size nonetheless. In previous census publications, many tables were limited to comprise holdings operating at least 5 decares of agricultural land. Almost all the agricultural business took place at these holdings, whereas holdings operating less than 5 decares generally represented hobby-type production for own household consumption.

From 1989 to 1999 the number of joint operations with cow/goat milk production increased greatly. These holdings were registered without agricultural area in use. Instead, area used for the production of feed and pasturing was allocated to holdings of those involved in joint operations. If the 1999 Census had included only holdings operating at least 5 decares of agricultural area, a substantial part of cattle rearing would have been excluded as well as some quite substantial horticulture holdings. Most of the tables from the 1999 and later therefore include some holdings operating less than 5 decares of agricultural area.

*Agricultural area and crops*

Two conditions refer to the definition of agricultural area:

As from the 1990's it was possible to receive subsidies for unfertilized fenced-in pasture, so-called infield pasturelands. Previously such areas had to be fertilized and were thus referred to as fertilized pasture. In previous censuses (primarily the 1989 Census), fertilized pasture was lumped together with natural meadows and surface-cultivated meadows. The introduction of infield pasturelands has led to the inclusion of some new areas as agricultural area. From 1989 to 1999 the area of surface-cultivated meadows and infield pasturelands increased with a total of 418 000 decares. One important reason for this relatively great increase is the fact that introduction of area-based subsidies made it more profitable for the farmers to include also marginal agricultural land in their applications.

In previous censuses, lawns and ornamental gardens were included in agricultural area. In the 1989 Agricultural Census, lawns and ornamental gardens constituted 46 000 decares. In the 1999 Agricultural Census and later, agricultural area does not include lawns and ornamental gardens at the holdings.

Furthermore, it should be noted that in 1999 and later, crop areas are given in decares without decimals. In previous censuses, all crop areas were given in decares with one decimal. Thus areas less than 1 decare is scarcely included in 1999. This is largely reflected in the figures for potatoes, field-grown vegetables, fruit and berries, and particularly for the number of holdings growing these crops.

*Livestock*

The livestock figures are as per 31 July, with the exception of sheep for which the census date was 1 June, or the day they were released for grazing. In previous censuses, the census day has been 20 June or 1 June. Postponing the date by 1-2 months hardly affects livestock figures. Adjusting the number of animals in relation to the registration date of application for subsidy is probably of more significance.

### **3.7. Availability**

*Publications and Internet address*

The statistics are released electronically via Today's Statistics on Statistics Norway's web site: [Structure of Agriculture](#)

*Micro data*

A data file with anonymous individual data is stored at Statistics Norway.

## 3.1. Total number of holdings and holdings by type of holder. County

	Number of holdings, total	By type of holder					
		Natural person			Legal person		
		Total	Male holders	Female holders	Total	General partnerships (joint operations)	Joint-stock company, institution etc.
1979 .....	125 302	124 408	115 375	9 033	894	.	.
1989 .....	99 382	98 610	89 267	9 343	772	.	.
1999 .....	70 740	69 959	60 914	9 045	781	462	319
2000 .....	68 539	67 645	58 439	9 205	894	578	316
2001 .....	65 607	64 485	55 503	8 982	1 122	749	373
2002 .....	61 890	60 044	52 182	7 862	1 846	1 398	448
2003 .....	58 231	56 308	48 980	7 328	1 923	1 565	358
2004 .....	55 507	53 376	46 337	7 039	2 131	1 813	318
2005 .....	53 003	50 476	43 751	6 725	2 527	2 184	343
2006 .....	51 218	48 417	41 857	6 560	2 801	2 429	372
2007 .....	49 935	46 939	40 389	6 550	2 996	2 582	414
<b>2007</b>							
<b>County</b>							
Østfold .....	2 677	2 574	2 253	321	103	78	25
Akershus og Oslo .....	2 558	2 469	2 149	320	89	51	38
Hedmark .....	4 059	3 880	3 359	521	179	149	30
Oppland .....	5 477	4 979	4 326	653	498	469	29
Buskerud .....	2 593	2 468	2 099	369	125	87	38
Vestfold .....	1 743	1 668	1 490	178	75	39	36
Telemark .....	1 663	1 607	1 373	234	56	37	19
Aust-Agder .....	742	702	604	98	40	26	14
Vest-Agder .....	1 228	1 158	989	169	70	61	9
Rogaland .....	5 075	4 679	4 030	649	396	349	47
Hordaland .....	3 503	3 317	2 823	494	186	162	24
Sogn og Fjordane .....	3 584	3 394	2 882	512	190	177	13
Møre og Romsdal .....	3 342	3 096	2 614	482	246	226	20
Sør-Trøndelag .....	3 469	3 264	2 868	396	205	182	23
Nord-Trøndelag .....	3 819	3 519	3 080	439	300	278	22
Nordland .....	2 720	2 556	2 143	413	164	149	15
Troms Romsa .....	1 285	1 238	1 015	223	47	38	9
Finnmark Finnmarku .....	398	371	292	79	27	24	3

## 3.2. Agricultural area, by use. 1959, 1969, 1979, 1989, 1999, 2006 and 2007. Decares

Crop	1959 <sup>1</sup>	1969 <sup>1</sup>	1979 <sup>1</sup>	1989 <sup>1</sup>	1999 <sup>2</sup>	2006 <sup>2</sup>	2007 <sup>2</sup>
<b>Agricultural area in use, total</b> .....	<b>9 844 796</b>	<b>9 553 335</b>	<b>9 535 278</b>	<b>9 910 773</b>	<b>10 382 466</b>	<b>10 344 607</b>	<b>10 320 198</b>
Of which							
Fully cultivated land .....	8 095 171	7 967 909	8 303 575	8 817 538	8 871 235	8 627 623	8 574 377
<b>Open fields and gardens</b> .....	<b>3 266 671</b>	<b>3 383 931</b>	<b>4 146 786</b>	<b>4 432 425</b>	<b>3 994 611</b>	<b>3 731 323</b>	<b>3 668 837</b>
Grain and oil seeds .....	2 177 872	2 522 396	3 252 271	3 529 803	3 345 392	3 246 945	3 181 056
Wheat .....	92 435	38 274	170 021	382 484	515 798	857 477	912 150
Rye .....	10 825	13 385	16 855	4 245	14 557		76 302
Triticale .....	-	-	-	-	12 334	60 583	
Barley .....	1 407 006	1 847 131	2 000 838	1 759 910	1 825 917	1 524 260	1 406 749
Oats .....	645 744	541 199	1 006 720	1 321 950	913 130	739 486	723 853
Mixed grain and dry peas .....	21 862	4 763	4 526	-	-	-	-
Oil seeds .....	..	77 645	53 311	61 215	63 656	65 139	62 002
Potato .....	525 595	326 437	214 013	188 910	148 522	140 460	144 658
Roots for feed .....	130 370	69 960	29 499	25 726	3 913		
Crops for green fodder and silage .....	134 490	208 307	290 637	371 611	307 515	149 117	137 325
Vegetables, field grown .....	49 229	51 924	55 218	57 030	60 187	69 774	76 839
Strawberries .....	6 926	12 440	16 439	14 241	16 787	17 894	16 904
Other crops <sup>3</sup> .....	152 636	115 879	182 262	156 089	91 891	97 343	103 470
Fallow land .....	89 553	76 587	106 447	89 015	20 400	9 790	8 585
<b>Meadows for mowing and pastures<sup>4</sup></b> .....	<b>6 578 125</b>	<b>6 169 405</b>	<b>5 388 492</b>	<b>5 478 349</b>	<b>6 387 855</b>	<b>6 613 284</b>	<b>6 651 361</b>
Fully cultivated meadows <sup>4</sup> .....	4 828 500	4 583 978	4 156 789	4 385 114	4 876 624	4 896 300	4 905 540
Not fully cultivated meadows .....	1 749 625	1 585 427	1 231 703	1 093 235	1 511 231	1 716 984	1 745 821
Surface-cultivated meadows .....	..	..	..	..	295 165	261 102	253 754
Infield pastures .....	..	..	..	..	1 216 066	1 455 882	1 492 067

<sup>1</sup> Refers to holdings with at least 5 decares agricultural area in use. <sup>2</sup> Joint operations etc. with less than 5 decares agricultural area in use are included. <sup>3</sup> For 1959, 1969, 1979 and 1989 the areas used for lawns and ornamental gardens are included. As from 1979 the area used for harvesting of meadow seed is included. <sup>4</sup> For 1959 and 1969 the area used for harvesting of meadow seed is included.

**3.3. Agricultural area per holding, by county. 1979, 1989, 1999-2007. Decares**

	1979 <sup>1</sup>	1989 <sup>1</sup>	1999 <sup>2</sup>	2000 <sup>2</sup>	2001 <sup>2</sup>	2002 <sup>2</sup>	2003 <sup>2</sup>	2004 <sup>2</sup>	2005 <sup>2</sup>	2006 <sup>2</sup>	2007 <sup>2</sup>
<b>The whole country .....</b>	<b>76.1</b>	<b>99.7</b>	<b>146.8</b>	<b>152.1</b>	<b>159.5</b>	<b>169.1</b>	<b>178.7</b>	<b>187.3</b>	<b>195.4</b>	<b>202.0</b>	<b>206.7</b>
<b>County</b>											
Østfold .....	139.2	155.1	214.0	221.6	234.1	244.8	257.4	266.0	276.1	280.1	285.4
Akershus og Oslo .....	137.6	160.8	233.7	238.7	251.8	261.9	274.0	283.1	293.5	302.4	311.3
Hedmark .....	92.8	117.5	181.8	188.5	200.9	214.0	226.9	236.1	247.5	255.9	262.7
Oppland .....	81.1	103.0	145.7	150.2	156.4	164.6	171.5	178.6	185.4	188.6	192.7
Buskerud .....	74.4	89.6	136.7	142.4	151.0	158.9	169.0	179.3	188.0	196.7	204.2
Vestfold .....	107.9	123.0	176.9	181.8	190.5	199.6	212.2	219.8	225.0	232.8	240.6
Telemark .....	49.6	60.1	100.1	105.0	112.6	120.4	128.5	136.3	144.2	149.8	154.3
Aust-Agder .....	38.4	53.5	95.7	101.5	108.0	117.4	127.4	137.3	142.4	149.7	152.6
Vest-Agder .....	43.6	59.1	101.7	105.5	112.6	121.3	133.0	143.6	150.5	158.3	158.2
Rogaland .....	85.5	110.7	156.4	161.2	164.6	171.1	177.4	181.3	188.4	195.9	199.9
Hordaland .....	46.2	60.3	84.2	87.2	91.1	95.0	101.4	108.7	114.3	120.6	120.9
Sogn og Fjordane .....	50.5	64.2	90.0	93.7	97.9	103.5	109.9	115.8	120.9	124.7	129.3
Møre og Romsdal .....	56.6	80.0	122.7	127.6	133.4	144.3	151.7	159.4	166.6	171.9	177.4
Sør-Trøndelag .....	87.2	114.9	159.1	163.6	171.8	184.0	193.9	203.3	211.5	216.8	220.9
Nord-Trøndelag .....	107.3	135.7	176.1	181.8	187.7	198.0	208.1	217.1	224.5	231.1	233.8
Nordland .....	58.1	94.1	151.2	159.2	167.2	179.7	190.7	202.2	211.8	218.7	224.1
Troms Romsa .....	49.0	78.2	133.0	139.7	148.7	157.7	169.4	182.2	189.9	199.0	204.4
Finmark Finnmarku .....	56.5	95.1	160.3	169.5	184.1	202.0	218.0	228.1	232.1	244.9	251.0

<sup>1</sup> Refers to holdings with at least 5 decares agricultural area in use. <sup>2</sup> Joint operations etc. with less than 5 decares agricultural area in use are included.

**3.4. Domestic animals. 1959, 1969, 1979, 1989, 1999, 2006 and 2007**

	1959 <sup>1</sup>	1969 <sup>1</sup>	1979 <sup>1</sup>	1989 <sup>1</sup>	1999 <sup>2</sup>	2006 <sup>2</sup>	2007 <sup>2</sup>
Horse .....	115 798	40 635	20 704	17 417	26 959	31 154	32 946
Cattle .....	1 099 350	971 928	968 843	949 369	1 033 070	922 976	905 515
Cow .....	594 432	436 353	372 288	340 469	349 757	318 458	314 309
Dairy cow .....	..	..	..	..	312 948	259 084	253 364
Beef cow .....	..	..	..	..	36 809	59 374	60 945
Sheep .....	1 750 985	1 840 755	1 952 092	2 183 098	2 324 789	2 360 062	2 267 134
Under 1 year .....	916 515	1 002 896	1 089 588	1 284 018	1 369 422	1 431 576	1 372 651
1 year and over .....	834 470	837 859	862 504	899 080	955 367	928 486	894 483
Goat .....	99 163	91 160	80 652	..	78 590	72 207	71 987
Dairy goat .....	<sup>3</sup> 74 754	<sup>3</sup> 71 924	<sup>3</sup> 57 849	<sup>3</sup> 67 691	51 724	42 365	41 161
Pigs .....	435 245	621 317	672 754	656 695	738 372	836 426	837 892
Pig for breeding .....	61 787	78 163	86 340	84 233	100 408	102 483	99 216
Sow for breeding .....	59 172	74 438	81 951	..	97 495	99 744	97 218
Boar for breeding .....	2 615	3 725	4 389	..	2 913	2 739	1 998
Other pig .....	373 458	543 154	586 414	572 462	637 964	733 943	738 676
Hens .....	2 668 394	3 270 423	3 827 799	3 441 719	3 181 174	3 362 969	3 542 094
Chicks bred for laying hens .....	..	..	..	..	1 459 614	1 318 784	1 386 641
Chicks for slaughtering .....	..	..	..	..	4 833 875	10 840 718	12 606 075

<sup>1</sup> Refers to holdings with at least 5 decares agricultural area in use. <sup>2</sup> Joint operations etc. with less than 5 decares agricultural area in use are included.

<sup>3</sup> Including he-goats.



## 3.5. Number of animals per holding keeping various kinds of animal, by county

	Cattle				Sheep 1 year and over	Dairy goat	Pig		Hens
	Total	Cow <sup>1</sup>		Pig for breeding			Pig for slaughtering		
		Total	Dairy cow					Beef cow	
1979 <sup>2</sup> .....	18.0	9.6	..	..	19.4	<sup>3</sup> 33.8	9.7	..	261
1989 <sup>2</sup> .....	25.3	11.7	..	..	31.1	<sup>3</sup> 45.9	16.1	..	580
1999 <sup>4</sup> .....	34.3	13.2	13.8	6.7	42.1	68.9	27.2	72.3	783
2000 <sup>4</sup> .....	34.6	13.5	14.4	7.3	43.4	71.5	30.6	92.2	851
2001 <sup>4</sup> .....	36.4	14.0	14.6	8.0	45.2	73.4	33.3	97.7	958
2002 <sup>4</sup> .....	37.9	14.5	15.2	8.3	46.9	74.7	36.0	107.4	984
2003 <sup>4</sup> .....	39.9	15.2	15.9	9.2	49.6	77.7	39.7	117.0	1 083
2004 <sup>4</sup> .....	41.1	15.6	16.3	9.8	51.9	78.8	43.2	126.9	1 275
2005 <sup>4</sup> .....	42.9	16.1	16.7	10.6	54.9	80.7	47.6	146.5	1 351
2006 <sup>4</sup> .....	44.5	16.8	17.6	10.9	55.8	82.5	53.5	158.2	1 584
2007 <sup>4</sup> .....	46.1	17.6	18.5	11.5	56.0	82.5	56.5	173.8	1 885
<b>2007<sup>4</sup></b>									
<b>County</b>									
Østfold .....	56.0	21.6	25.0	13.7	24.8	-	59.0	217.8	3 261
Akershus og Oslo .....	57.3	21.6	24.4	15.1	36.1	:	52.9	216.1	2 456
Hedmark .....	54.3	20.5	20.1	16.9	61.4	55.6	67.8	207.5	2 580
Oppland .....	49.4	18.1	18.1	13.3	61.6	82.4	53.5	168.4	1 027
Buskerud .....	39.3	16.4	16.5	14.0	57.4	80.0	66.1	93.2	1 461
Vestfold .....	58.9	23.8	27.5	18.8	30.2	-	66.6	258.6	2 832
Telemark .....	33.2	13.4	14.1	11.6	53.8	64.1	47.4	136.2	1 305
Aust-Agder .....	36.3	14.3	16.2	10.0	47.9	-	32.1	108.4	1 750
Vest-Agder .....	37.7	14.3	15.2	10.2	40.3	-	47.7	111.4	967
Rogaland .....	55.8	20.1	22.1	9.1	62.7	78.4	69.3	177.7	3 142
Hordaland .....	27.7	12.2	14.3	6.3	43.8	82.1	31.9	74.8	823
Sogn og Fjordane .....	28.5	12.3	13.3	5.8	44.1	93.0	26.4	85.9	780
Møre og Romsdal .....	43.1	17.0	18.3	9.7	46.8	103.6	35.2	134.8	977
Sør-Trøndelag .....	48.8	18.2	18.9	10.8	72.3	:	36.8	123.2	1 681
Nord-Trøndelag .....	59.3	21.2	21.8	13.5	64.5	64.4	58.4	183.1	3 012
Nordland .....	47.9	17.0	17.5	11.4	72.9	80.6	49.1	155.0	429
Troms Romsa .....	38.6	15.5	16.4	9.8	73.9	81.0	33.1	139.0	549
Finmark Finnmarku .....	43.6	17.9	18.5	5.8	68.7	-	26.1	80.0	1 445

<sup>1</sup> Some holdings have both dairy cow and beef cow. <sup>2</sup> Refers to holdings with at least 5 decares agricultural area in use. <sup>3</sup> Including he-goats. <sup>4</sup> Joint operations etc. with less than 5 decares agricultural area in use are included.

## 3.6. Holdings by type of farming, 2000-2007

	2000	2001	2002	2003	2004	2005	2006	2007
Holdings, total .....	68 539	65 607	61 890	58 231	55 507	53 003	51 218	49 935
<b>Type of farming</b>								
Cereals and oil seeds .....	12 011	11 790	11 145	10 413	10 090	9 579	9 075	8 720
Other filed crops .....	6 232	5 784	4 889	5 241	4 996	5 040	5 419	5 817
Horticulture and permanent crops .....	2 323	2 176	2 212	1 864	1 712	1 693	1 599	1 760
Cattle - dairying .....	18 720	17 652	16 360	15 797	15 108	14 271	13 306	12 288
Cattle - rearing and fattening ...	4 512	4 106	4 059	3 836	3 700	3 678	3 919	3 869
Cattle - mixed .....	977	1 098	1 111	699	640	769	671	646
Sheep .....	12 456	12 491	11 923	11 862	10 699	9 695	9 249	8 812
Various grazing livestock .....	4 491	4 159	3 964	2 613	2 738	2 624	2 468	2 681
Granivores .....	1 740	1 588	1 686	1 420	1 530	1 657	1 653	1 687
Mixed cropping .....	870	831	786	766	724	642	587	534
Mixed livestock .....	1 429	1 308	1 255	1 046	964	962	886	816
Mixed crops - livestock .....	2 778	2 624	2 500	2 674	2 606	2 393	2 386	2 305

## 4. Agricultural area and livestock, as of 31 July

On basis of the administrative record of everyone who applies for governmental subsidies, Statistics Norway provides statistics on agricultural area and livestock per 31 July. Among several others registers, this register is also used when the total population of agricultural holdings is worked out each year. In 2007, the register covered 96 per cent of all holdings and 99 per cent of the total agricultural area in use. 98 per cent of holdings with grain and oil seeds applied for governmental subsidies in 2007, and they operated 99 per cent of the grain area. About 4 per cent of holdings with sheep did not apply for subsidies, while only a very few of holdings with dairy cows did not apply.

	Figures from the total population of agricultural holdings	Figures from holders applying for governmental subsidies	Coverage, holders applying in per cent of the total population
Agricultural holdings .....	49 935	48 165	96.5
Agricultural area in use .....	10 320 198	10 233 107	99.2
Meadows and pasture land .....	6 651 361	6 599 250	99.2
Grain area .....	3 119 054	3 090 910	99.1
Cattle, total .....	905 515	903 228	99.7
Sheep, 1 year and over .....	894 483	887 090	99.2
Breeding pigs .....	99 216	97 985	98.8

### 4.1. Main results, 2007

Figures from applications for governmental subsidies show that the total agricultural area was 10.23 million decares in 2007, of which 8.5 million decares were fully cultivated. The area of meadows for mowing and pastureland covered 6.6 million decares in 2007.

#### *Increasing area of wheat growing*

The total grain area amounted to 3.1 million decares, which is 2 per cent less than in 2006. Barley comprised 45 per cent of the total grain area, while wheat and oats covered 29 and 23 per cent respectively. The area of wheat increased by 56 000 decares to 908 000 decares from 2006 to 2007. At the same time, the area of barley decreased by 114 500 decares to 1.39 million decares.

#### *Fewer sheep*

The number of sheep fell by 33 000 to 887 100 from 2006 to 2007. Since 2001, the number of sheep has been reduced by 10 per cent.

The number of dairy cows fell by 5 700 to 253 400 from 2006 to 2007. During the last ten years, the number of dairy cows has been reduced by almost 20 per cent. In the same period, the number of beef cows has increased by 28 700 to 60 600, an increase of 90 per cent.

The number of dairy goats has been reduced with 23 per cent to a total of 41 000 during the last ten years.

The number of breeding pigs decreased with 3 200 from 2006 to 2007.

#### *Organic farming*

In 2007, the organic farmland covered 385 400 decares of agricultural area in use, or 3.8 per cent of the total area. 23 700 cattle were registered on holdings approved for organic farming in 2007. About 6 500 of these were dairy cows, and 3 400 beef cows.

### 4.2. Background and purpose

#### *Purpose and history*

The purpose is to follow the extent of area use and livestock keeping at the municipal level. Information from administrative records has been used since 1984.

*Users and applications* The statistics are used by the Norwegian Institute for Land Inventory (NIJOS), Norwegian Agricultural Economic Research Institute (NILF), public enterprises at the municipal and county level, the Ministry of Agriculture, Ministry of Environment, in research and by agricultural organizations.

### 4.3. Statistics production

*Population* The population covers everyone who applies for agricultural production subsidies as of 31 July. Those who do not have the right to production subsidies or do not apply for other reasons are not covered by the statistics.

*Data sources* The administrative record of everyone who applies for an agricultural production subsidy from the Norwegian Agricultural Authority is the compilation basis of the statistics. The register contains information on area use and the number of livestock on holdings.

*Control and revision* The Agricultural Authority in the municipality shall ensure that the applications are in compliance with production subsidy regulations. Five per cent of the applications are also selected for special control. The control shall cover all reports submitted by the applicant on physical censuses of animals and measuring of areas. A number of machine controls are also carried out in the material. Statistics Norway also runs some machine controls upon receipt of the data material.

*Confidentiality* Figures are not presented if there is a risk of identifying any unit.

### 4.4. Concepts, variables and classifications

Only one production subsidy is given per holding. A holding is an agricultural enterprise including livestock keeping and horticulture. The holding includes everything operated as a unit, including rented agricultural area, regardless of municipal boundaries.

Beef cows are cattle that are only raised for meat production purposes and not for the production of milk for human consumption.

### 4.5. Comparability and coherence

Since 1984 the statistics on area use and livestock keeping are based on applications for production subsidies.

### 4.6. Availability

*Publications and Internet address* The statistics is published on the internet-site of Statistics Norway: [Agricultural area and livestock](#)

*Micro data* Primary data is stored at Statistics Norway.

**4.1. Agricultural area, by use. 1998-2007. Decares**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
<b>Agricultural area in use, total</b> .....	<b>10 179 788</b>	<b>10 269 026</b>	<b>10 322 461</b>	<b>10 311 582</b>	<b>10 324 851</b>	<b>10 255 988</b>	<b>10 266 228</b>	<b>10 262 373</b>	<b>10 248 267</b>	<b>10 233 107</b>
Of which cultivated land .....	8 773 257	8 773 172	8 754 743	8 724 834	8 706 170	8 638 443	8 628 846	8 589 745	8 544 114	8 503 905
<b>Open fields and gardens</b> .....	<b>3 978 249</b>	<b>3 941 979</b>	<b>3 938 064</b>	<b>3 918 292</b>	<b>3 845 897</b>	<b>3 812 234</b>	<b>3 794 377</b>	<b>3 758 464</b>	<b>3 689 303</b>	<b>3 633 857</b>
Grain .....	3 224 231	3 236 765	3 267 502	3 210 830	3 210 467	3 230 502	3 238 704	3 213 083	3 147 244	3 090 910
Wheat .....	672 773	513 518	679 159	631 157	633 405	754 978	849 374	802 674	851 989	907 971
Rye and triticale ..	70 583	26 584	38 065	26 988	23 831	44 405	72 570	69 346	60 411	76 282
Barley .....	1 612 051	1 800 764	1 606 032	1 725 856	1 770 552	1 596 648	1 464 803	1 608 657	1 503 252	1 388 730
Oats .....	868 824	895 899	944 246	826 829	782 679	834 471	851 957	732 406	731 592	717 927
Oil seeds .....	60 501	63 501	57 122	108 600	109 608	75 022	68 602	66 909	65 109	61 976
Potato .....	157 785	147 618	150 180	151 268	151 178	144 985	140 931	136 713	139 056	143 761
Roots for feed, crops for green fodder and silage ..	358 089	311 424	284 674	269 714	205 027	195 184	175 417	154 889	147 682	136 516
Vegetables, field grown .....	56 102	60 083	60 255	62 972	60 891	64 147	62 372	65 728	68 897	75 036
Other crops .....	121 541	122 588	118 331	114 908	108 726	102 394	108 351	121 142	121 315	125 658
<b>Meadows for mowing and pastures</b> .....	<b>6 201 539</b>	<b>6 327 047</b>	<b>6 384 397</b>	<b>6 393 290</b>	<b>6 478 954</b>	<b>6 443 754</b>	<b>6 471 851</b>	<b>6 503 909</b>	<b>6 558 964</b>	<b>6 599 250</b>
Cultivated .....	4 795 008	4 831 193	4 816 679	4 806 542	4 860 273	4 826 209	4 834 469	4 831 281	4 854 811	4 870 048
Permanent grassland and surface cultivated land .....	1 406 531	1 495 854	1 567 718	1 586 748	1 618 681	1 617 545	1 637 382	1 672 628	1 704 153	1 729 202
Surface-cultivated meadows .....	291 793	285 934	281 659	276 397	274 777	265 196	260 638	255 771	248 646	240 877
Other infield pasture-land .....	1 114 738	1 209 920	1 286 059	1 310 351	1 343 904	1 352 349	1 376 744	1 416 857	1 455 507	1 488 325

**4.2. Domestic animals. 1998-2007**

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Horses .....	23 991	25 716	27 314	28 399	29 089	28 051	28 678	29 329	30 662	32 790
Cattle .....	1 031 223	1 032 033	986 953	973 123	955 215	953 393	940 436	932 583	919 077	903 228
Cows .....	346 155	349 484	342 059	334 981	329 547	329 427	324 992	320 617	318 000	313 941
Dairy cows .....	314 250	312 824	297 679	289 155	281 502	278 137	272 005	265 201	259 084	253 364
Beef cows .....	31 905	36 660	44 380	45 826	48 045	51 290	52 987	55 416	58 916	60 577
Sheep 1 year and over .....	..	949 047	961 012	983 367	973 424	959 915	948 040	946 752	920 101	887 090
Dairy goats .....	53 385	51 744	50 297	47 784	46 420	45 333	44 757	44 409	42 365	41 011
Pigs for breeding .....	89 350	99 295	89 988	89 772	88 395	93 835	99 965	98 597	101 184	97 985
Laying hens .....	3 134 981	3 139 858	3 251 444	3 126 944	3 137 661	3 226 593	3 475 868	3 354 250	3 306 078	3 493 254

**4.3. Agricultural area, by county. 2007. Decares**

	Agricultural area		Open fields and gardens			Meadows for mowing and pastures		
	Total	Of which cultivated	Total	Of which		Total	Of which	
				Grain	Potato		Cultivated	Permanent grassland and surface cultivated land
<b>2007</b> .....	<b>10 233 107</b>	<b>8 503 905</b>	<b>3 633 857</b>	<b>3 090 910</b>	<b>143 761</b>	<b>6 599 250</b>	<b>4 870 048</b>	<b>1 729 202</b>
<b>County</b>								
Østfold .....	756 414	733 702	647 085	585 191	6 642	109 329	86 617	22 712
Akershus og Oslo .....	791 379	758 138	657 334	609 426	6 814	134 045	100 804	33 241
Hedmark .....	1 058 671	996 007	642 554	550 808	51 874	416 117	353 453	62 664
Oppland .....	1 052 104	870 250	274 311	211 997	14 317	777 793	595 939	181 854
Buskerud .....	522 974	453 744	266 240	228 439	4 040	256 734	187 504	69 230
Vestfold .....	413 104	404 070	340 530	269 668	16 976	72 574	63 540	9 034
Telemark .....	253 568	219 500	95 209	76 446	3 026	158 359	124 291	34 068
Aust-Agder .....	112 077	99 015	18 487	9 752	2 250	93 590	80 528	13 062
Vest-Agder .....	191 916	146 933	11 663	8 500	760	180 253	135 270	44 983
Rogaland .....	1 004 512	556 797	59 906	33 463	9 981	944 606	496 891	447 715
Hordaland .....	416 308	228 360	10 749	200	168	405 559	217 611	187 948
Sogn og Fjordane .....	459 299	293 160	9 664	440	1 235	449 635	283 496	166 139
Møre og Romsdal .....	587 616	481 136	27 037	19 123	1 876	560 579	454 099	106 480
Sør-Trøndelag .....	761 519	659 576	186 261	168 091	2 281	575 258	473 315	101 943
Nord-Trøndelag .....	885 654	815 255	359 569	316 453	14 385	526 085	455 686	70 399
Nordland .....	606 045	476 019	13 421	2 877	3 081	592 624	462 598	130 026
Troms Romsa .....	260 639	226 822	10 063	4	3 888	250 576	216 759	33 817
Finnmark Finnmarku .....	99 308	85 421	3 774	32	167	95 534	81 647	13 887

**4.4. Holdings with organic farming and area approved as organically operated. 2002-2007**

	2002	2003	2004	2005	2006	2007
Holdings, total .....	58 627	54 946	52 879	51 069	49 366	48 165
Holdings with organic farming ..	1 369	1 936	2 076	2 076	2 090	2 149
			Decares			
Agricultural area in use .....	10 324 851	10 255 988	10 266 228	10 262 373	10 248 267	10 233 107
Area approved as organically operated, total .....	183 876	294 030	340 901	354 703	374 997	385 387
Grain .....	22 785	42 076	58 460	64 387	66 047	64 510
Potatoes, vegetables, fruit and berries .....	2 295	3 615	3 877	4 125	4 047	5 785
Fertilized pastures .....	27 353	43 880	50 613	55 318	60 065	63 181
Area treated by green manure ..	3 134	5 697	5 288	6 792	8 336	7 508
Other crops .....	128 309	198 762	222 663	224 081	236 502	244 403

**4.5. Domestic animals by holdings approved for organic farming. 2002-2007**

	2002	2003	2004	2005	2006	2007
Cattle .....	10 673	21 158	22 433	21 768	22 698	23 678
Dairy cow .....	3 046	5 613	5 815	5 772	5 969	6 453
Beef cow .....	1 291	2 863	3 292	3 162	3 308	3 379
Other cattle .....	6 336	12 682	13 326	12 834	13 421	13 846
Dairy goat .....	753	1 338	1 316	831	881	736
Pigs for breeding .....	..	..	99	80	121	119

## 5. Livestock husbandry, as of 1 January

On basis of the administrative record of everyone who applies for governmental subsidies, Statistics Norway provides statistics on livestock per 1 January.

### 5.1. Main results, 2007

#### *Decline in livestock keeping*

Per 1 January 2007 a total of 34 900 livestock producers applied for production subsidies. This represents a decline of about 4 per cent compared with 2006.

The number of dairy cows was reduced by 6 700 to 258 700 in 2007. The number of beef cows was 56 400, 1 300 more than in 2006. Since 1996, the total number of cattle has been reduced by 124 100 to a total of 903 300 in 2007.

From 2006 to 2007 the number of dairy goats was reduced by 8 per cent to 40 500. The number of breeding pigs fell by 3 700 to 98 100, and the number of pigs slaughtered fell by about 2 per cent to 1.47 million in 2007.

From 2005 to 2006 the number of broilers slaughtered during the year increased by 11 per cent to 46.5 million.

### 5.2. Background and purpose

#### *Purpose and history*

The purpose is to follow the extent of area use and livestock keeping at the municipal level. Information from administrative records has been used since 1984.

#### *Users and applications*

The statistics are used by the Norwegian Institute for Land Inventory (NIJOS), Norwegian Agricultural Economic Research Institute (NILF), public enterprises at the municipal and county level, the Ministry of Agriculture, Ministry of Environment, in research and by agricultural organizations.

### 5.3. Statistics production

#### *Population*

The population covers everyone who applies for agricultural production subsidies as of 1 January. Those who do not have the right to production subsidies or do not apply for other reasons are not covered by the statistics.

#### *Data sources*

The administrative record of everyone who applies for an agricultural production subsidy from the Norwegian Agricultural Authority is the compilation basis of the statistics. The register contains information on number of livestock on holdings.

#### *Control and revision*

The Agricultural Authority in the municipality shall ensure that the applications are in compliance with production subsidy regulations. Five per cent of the applications are also selected for special control. The control shall cover all reports submitted by the applicant on physical censuses of animals. A number of machine controls of the material are also carried out. Statistics Norway also runs some machine controls upon receipt of the data material.

#### *Confidentiality*

Figures are not presented if there is a risk of identifying any unit.

### 5.4. Concepts, variables and classifications

Only one production subsidy is given per holding. A holding is an agricultural enterprise including livestock keeping. The holding includes everything operated as a unit.

Beef cows are cattle that are only raised for meat production purposes and not for the production of milk for human consumption.

### **5.5. Comparability and coherence**

Since 1984 the statistics on area use and livestock keeping are based on applications for production subsidies.

### **5.6. Availability**

*Publications and Internet  
address*

The statistics is published on the internet-site of Statistics Norway:  
[Holdings keeping domestic animals](#)

*Micro data*

Primary data is stored at Statistics Norway.

**5.1. Holdings keeping domestic animals of various kinds as per 1 January<sup>1</sup>. County**

County	Holdings keeping domestic animals	Cattle, total	Dairy cows	Beef cows	Winter feed sheep	Dairy goat	Pigs	Laying hens	Broilers <sup>2</sup>
1992 <sup>3</sup>	55 761	34 595	26 889	2 616	24 869	1 073	7 224	4 492	594
1993 <sup>3</sup>	54 965	33 941	26 431	2 982	24 696	1 014	6 959	4 523	623
1994 <sup>3</sup>	54 428	33 283	25 784	3 632	24 723	912	6 710	4 414	589
1995 <sup>3</sup>	53 714	32 577	25 410	3 941	24 596	899	6 462	4 303	597
1996 <sup>3</sup>	52 869	32 047	25 030	4 197	23 784	875	6 376	4 116	596
1997 <sup>3</sup>	51 626	31 369	24 170	4 583	22 937	826	5 950	3 946	564
1998 <sup>3</sup>	50 351	30 626	23 433	4 837	22 214	772	5 816	3 825	567
1999 <sup>3</sup>	49 038	29 399	22 400	5 116	21 817	727	5 795	3 769	484
2000 <sup>3</sup>	46 986	27 685	20 493	5 626	21 528	677	4 930	3 583	532
2002	44 167	25 637	18 775	5 790	20 875	619	4 650	3 133	519
2003	41 470	24 285	17 803	5 493	18 842	592	4 504	2 926	535
2004	39 661	23 101	16 900	5 325	17 897	571	4 304	2 740	511
2005	38 113	22 171	16 244	5 097	17 068	559	4 147	2 579	500
2006	36 440	21 062	15 070	5 340	16 255	525	3 757	2 294	506
2007	34 869	19 947	14 050	5 254	15 504	483	3 400	1 925	528
<b>2007</b>									
<b>County</b>									
Østfold	901	376	219	164	136	-	223	109	78
Akershus og Oslo	819	365	195	172	218	-	163	82	16
Hedmark	2 265	1 157	763	429	780	28	325	142	113
Oppland	3 756	2 256	1 714	571	1 477	48	310	128	11
Buskerud	1 280	604	330	280	625	16	63	81	14
Vestfold	571	233	92	137	106	-	179	55	32
Telemark	911	360	173	160	439	20	75	78	6
Aust-Agder	537	253	137	92	259	-	31	37	4
Vest-Agder	997	598	373	192	475	-	34	71	4
Rogaland	4 666	2 806	2 087	617	2 750	13	856	346	84
Hordaland	2 964	1 493	895	406	1 984	39	147	139	15
Sogn og Fjordane	3 151	1 828	1 369	308	1 852	78	107	131	:
Møre og Romsdal	2 881	1 940	1 378	380	1 136	53	109	132	5
Sør-Trøndelag	2 644	1 798	1 384	406	767	-	117	101	69
Nord-Trøndelag	2 632	1 807	1 381	465	561	11	463	93	73
Nordland	2 408	1 411	1 053	372	1 129	41	148	148	:
Troms Romsa	1 137	462	339	90	653	134	36	47	-
Finnmark Finnmarku	349	200	168	13	157	-	14	5	-

<sup>1</sup> Comprises holdings which applied for governmental production subsidies. <sup>2</sup> Refers to broilers slaughtered during the year. <sup>3</sup> As per 31 December.



**5.2. Cattle and sheep. Number of heads as per 1 January<sup>1</sup>. County**

	Cattle, total	Cows, total	Dairy cows	Beef cows	Other cattle	Winter feed sheep
1992 <sup>2</sup> .....	1 007 539	347 573	335 996	11 577	659 966	1 095 676
1993 <sup>2</sup> .....	1 005 739	344 650	331 014	13 636	661 143	1 095 529
1994 <sup>2</sup> .....	1 000 632	341 597	324 701	16 896	659 035	1 119 997
1995 <sup>2</sup> .....	1 012 849	344 122	324 417	19 705	668 727	1 140 519
1996 <sup>2</sup> .....	1 027 343	349 350	326 766	22 584	677 993	1 109 673
1997 <sup>2</sup> .....	1 035 738	348 838	322 349	26 489	686 900	1 078 574
1998 <sup>2</sup> .....	1 045 574	352 664	322 791	29 873	692 910	1 102 855
1999 <sup>2</sup> .....	1 018 730	351 752	318 047	33 705	666 978	1 104 906
2000 <sup>2</sup> .....	979 274	338 876	298 709	40 167	640 398	1 131 734
2002 .....	964 659	333 007	286 164	46 843	631 652	1 141 485
2003 .....	952 442	330 172	282 829	47 343	622 270	1 109 696
2004 .....	942 053	328 469	280 091	48 378	613 584	1 111 513
2005 .....	936 003	322 442	272 301	50 141	613 561	1 091 785
2006 .....	919 679	320 403	265 384	55 019	599 276	1 060 438
2007 .....	903 280	315 080	258 719	56 361	588 200	1 023 818
<b>2007</b>						
<b>County</b>						
Østfold .....	20 125	7 355	5 222	2 133	12 770	4 401
Akershus og Oslo .....	20 076	7 023	4 567	2 456	13 053	9 881
Hedmark .....	58 993	21 334	14 808	6 526	37 659	57 910
Oppland .....	111 427	37 877	31 060	6 817	73 550	107 109
Buskerud .....	23 322	9 108	5 620	3 488	14 214	44 580
Vestfold .....	12 434	4 766	2 354	2 412	7 668	4 130
Telemark .....	11 638	4 278	2 502	1 776	7 360	27 870
Aust-Agder .....	8 826	3 129	2 217	912	5 697	15 597
Vest-Agder .....	22 029	7 548	5 778	1 770	14 481	24 847
Rogaland .....	150 880	51 172	45 627	5 545	99 708	201 952
Hordaland .....	43 718	15 691	13 290	2 401	28 027	100 772
Sogn og Fjordane .....	57 535	21 021	19 212	1 809	36 514	96 826
Møre og Romsdal .....	83 397	28 540	24 977	3 563	54 857	63 223
Sør-Trøndelag .....	87 877	30 392	26 274	4 118	57 485	64 459
Nord-Trøndelag .....	101 380	34 501	28 708	5 793	66 879	42 086
Nordland .....	64 589	21 900	17 992	3 908	42 689	92 283
Troms Romsa .....	16 922	6 370	5 505	865	10 552	54 408
Finnmark Finnmarku .....	8 112	3 075	3 006	69	5 037	11 484

<sup>1</sup> Comprises holdings which applied for governmental production subsidies. <sup>2</sup> As per 31 December.

**5.3. Various domestic animals. Number of heads as per 1 January<sup>1</sup>. County**

	Dairy goats	Pigs for breeding	Pigs for slaughtering <sup>2</sup>	Laying hens	Broilers <sup>3</sup>
1992 <sup>4</sup> .....	62 557	87 837	1 214 701	3 653 248	16 850 642
1993 <sup>4</sup> .....	62 425	87 456	1 190 668	3 658 289	15 705 005
1994 <sup>4</sup> .....	59 693	87 134	1 189 066	3 619 810	17 976 664
1995 <sup>4</sup> .....	59 176	90 903	1 240 949	3 550 629	19 919 985
1996 <sup>4</sup> .....	58 775	91 130	1 328 566	3 378 176	23 264 300
1997 <sup>4</sup> .....	55 541	90 118	1 345 208	3 107 275	23 319 780
1998 <sup>4</sup> .....	53 477	89 444	1 378 443	3 113 209	23 355 574
1999 <sup>4</sup> .....	53 091	93 768	1 334 788	3 216 750	27 523 776
2000 <sup>4</sup> .....	50 859	89 961	1 296 693	3 206 179	33 167 031
2002 .....	47 441	89 254	1 324 173	3 100 503	31 994 661
2003 .....	47 114	92 058	1 360 867	3 262 382	35 595 400
2004 .....	46 292	99 298	1 323 169	3 392 283	36 705 314
2005 .....	46 125	99 065	1 427 464	3 493 440	39 759 182
2006 .....	44 063	101 731	1 441 629	3 365 646	41 819 570
2007 .....	40 493	98 060	1 466 149	3 350 753	46 452 282
<b>2007</b>					
<b>County</b>					
Østfold .....	-	7 084	118 616	378 513	8 749 665
Akershus og Oslo .....	:	4 672	74 868	200 327	1 828 009
Hedmark .....	1 517	10 848	172 504	369 963	10 140 413
Oppland .....	3 954	8 487	112 467	117 405	757 106
Buskerud .....	1 349	2 035	13 274	122 750	833 294
Vestfold .....	-	6 251	117 664	141 939	2 207 544
Telemark .....	1 437	2 252	27 912	115 112	166 416
Aust-Agder .....	-	441	9 313	65 992	175 064
Vest-Agder .....	-	1 265	8 863	73 684	180 124
Rogaland .....	1 090	26 083	392 175	966 718	7 750 274
Hordaland .....	3 131	1 803	25 695	102 711	794 279
Sogn og Fjordane .....	7 348	1 639	25 190	92 568	:
Møre og Romsdal .....	5 255	2 200	27 541	100 696	149 521
Sør-Trøndelag .....	:	2 468	35 808	158 754	5 744 089
Nord-Trøndelag .....	825	15 246	229 459	249 494	6 976 435
Nordland .....	3 146	4 073	60 892	61 008	:
Troms Romsa .....	11 323	949	11 457	21 604	-
Finnmark Finnmarku .....	-	264	2 451	11 515	-

<sup>1</sup> Comprises holdings which applied for governmental production subsidies. <sup>2</sup> Refers to pigs slaughtered during the year. As from 2002 the figures refers to pigs sold to other herds or slaughtered year before. <sup>3</sup> Refers to broilers slaughtered during the year. As from 2002 the figures refers to broilers slaughtered the year before. <sup>4</sup> As per 31 December.

5.4. Holdings with various kinds of domestic animals, by size of herd. As per 1 January<sup>1</sup>

	Holdings					Number of heads				
	2003	2004	2005	2006	2007	2003	2004	2005	2006	2007
<b>Cows, total</b>										
Total .....	22 086	21 101	20 289	19 317	18 312	330 172	328 469	322 442	320 403	315 080
1- 4 .....	1 470	1 376	1 192	1 101	1 066	3 796	3 472	3 063	2 813	2 757
5- 9 .....	4 138	3 670	3 476	3 199	2 820	30 149	26 851	25 377	23 247	20 453
10-14 .....	6 327	5 713	5 371	4 761	4 371	76 422	69 132	65 077	57 410	52 801
15-19 .....	5 423	5 261	5 167	4 885	4 480	90 836	88 181	86 493	81 968	75 328
20-29 .....	3 550	3 766	3 700	3 754	3 788	82 294	87 728	86 237	88 039	88 592
30- .....	1 178	1 315	1 383	1 617	1 787	46 675	53 105	56 195	66 926	75 149
<b>Dairy cows</b>										
Total .....	17 803	16 900	16 244	15 070	14 050	282 829	280 091	272 301	265 384	258 719
1- 4 .....	196	160	140	138	109	646	518	459	461	357
5- 9 .....	2 782	2 382	2 278	1 914	1 604	20 940	17 968	17 168	14 418	12 012
10-14 .....	5 658	5 082	4 732	4 081	3 625	68 505	61 728	57 547	49 502	43 975
15-19 .....	5 158	4 934	4 799	4 444	4 039	86 425	82 748	80 336	74 574	67 925
20-29 .....	3 150	3 349	3 288	3 292	3 295	72 741	77 625	76 268	76 866	76 834
30- .....	859	993	1 007	1 201	1 378	33 572	39 504	40 523	49 563	57 616
<b>Beef cows</b>										
Total .....	5 493	5 325	5 097	5 340	5 254	47 343	48 378	50 141	55 019	56 361
1- 4 .....	2 008	1 891	1 641	1 588	1 522	4 678	4 335	3 811	3 590	3 524
5- 9 .....	1 703	1 581	1 514	1 599	1 513	11 564	10 883	10 372	10 976	10 485
10-19 .....	1 311	1 332	1 354	1 478	1 509	17 247	17 708	18 280	20 063	20 658
20- .....	471	521	588	675	710	13 854	15 452	17 678	20 390	21 694
<b>Winter feed sheep</b>										
Total .....	18 842	17 897	17 068	16 255	15 504	1 109 696	1 111 513	1 091 785	1 060 438	1 023 818
1- 9 .....	1 163	1 088	1 058	957	925	6 336	5 908	5 828	5 219	5 188
10- 19 .....	1 885	1 653	1 443	1 484	1 442	27 391	23 935	20 993	21 521	20 817
20- 49 .....	6 984	6 262	5 718	5 244	5 002	234 645	212 115	194 320	178 764	169 593
50- 99 .....	5 692	5 650	5 604	5 354	4 980	394 081	395 038	394 237	378 403	353 659
100-149 .....	2 153	2 188	2 188	2 118	2 054	255 850	261 649	260 608	251 959	243 862
150- .....	965	1 056	1 057	1 098	1 101	191 393	212 868	215 799	224 572	230 699
<b>Sows for breeding</b>										
Total .....	2 423	2 330	2 194	1 980	1 824	89 745	97 059	97 038	99 843	96 211
1-19 .....	957	879	797	661	569	8 354	7 707	6 853	5 805	5 048
20-39 .....	639	572	524	460	428	18 470	16 597	14 936	13 359	12 395
40-59 .....	439	407	380	361	342	21 050	19 586	18 405	17 566	16 688
60-79 .....	179	201	201	190	178	12 108	13 681	13 843	12 995	12 183
80-99 .....	65	95	109	99	89	5 747	8 472	9 796	8 821	7 927
100- .....	144	176	183	209	218	24 016	31 016	33 205	41 297	41 970
<b>Laying hens</b>										
Total .....	2 926	2 740	2 579	2 294	1 925	3 262 382	3 392 283	3 493 440	3 365 646	3 350 753
1- 99 .....	1 826	1 710	1 604	1 434	1 134	28 948	27 757	25 008	22 611	17 457
100- 499 .....	112	94	87	77	73	25 154	21 686	19 953	16 057	15 953
500- 999 .....	85	78	65	63	34	62 917	58 793	47 854	45 334	26 626
1000-1999 .....	272	225	195	138	117	412 365	343 195	296 206	217 736	184 005
2000-4999 .....	383	368	322	277	245	1 058 459	1 024 435	883 517	789 008	696 845
5000- .....	248	265	306	305	322	1 674 539	1 916 417	2 220 902	2 274 900	2 409 867

<sup>1</sup> Comprises holdings which applied for governmental production subsidies.

## 6. Farmers' income and property

The statistics are based on information from tax returns and cover agricultural holdings operated by a natural person.

### 6.1. Main results, 2006

*NOK 117 000 in income from agriculture*

Norwegian farmers' entrepreneurial income from agriculture amounted to NOK 117 000 on average in 2006. Distributed by farm type, income from agriculture varied from NOK 55 000 for specialised sheep holdings to NOK 242 000 for specialised pig/poultry holdings.

The average entrepreneurial income from agriculture increased from NOK 112 200 in 2004 to NOK 147 000 in 2005, but fell to NOK 117 200 in 2006. The large income in 2005 was mainly due to changes in tax regulations, which entered into force on 1 January 2006. The same changes were implemented for self-employed in other industries, see [http://www.ssb.no/english/subjects/05/01/ifpn\\_en/](http://www.ssb.no/english/subjects/05/01/ifpn_en/).

*Many farmers do not have positive entrepreneurial income from agriculture*

There are large variations in income from agriculture, mainly because agricultural holdings vary considerably in size, from hobby-like production to holdings with a turnover of more than NOK 1 million. 17 per cent of the farmers had negative entrepreneurial income from agriculture in 2006. This group may include farmers with small holdings and farmers who had just started farming or were expanding. 8 per cent of the farmers have no entrepreneurial income from agriculture. We assume that the majority of this group run hobby-like agriculture that is not considered an industry by the tax authorities. Another reason may be that the entrepreneurial income from agriculture is assigned to the farmer's spouse. On the other hand, 5 per cent of the farmers had an entrepreneurial income from agriculture of NOK 400 000 or more.

Married couples who run agricultural production together may share the taxable entrepreneurial income. In 2006, 10 300 spouses/registered partners had positive entrepreneurial income from agriculture, with NOK 116 600 on average. Distributed by all holdings, the average entrepreneurial income for spouses/registered partners was NOK 24 600.

For all farmers, the average gross income was NOK 376 500 in 2006. On average, wages and salaries exceeded the entrepreneurial income from agriculture, accounting for 42 and 31 per cent of the gross income respectively. The remaining gross income consisted of other entrepreneurial income, pensions and capital income.

*Large variations between different farm types and counties*

Specialised cattle dairying, specialised sheep farming and specialised cereal and oil-seed production are the most frequent types of farming in Norwegian agriculture. The holding sizes vary considerable between the three farm types. Cattle dairying requires significant labour input during the whole year, while many farmers run sheep farms and cereal and oil-seed production part time. For farmers who run specialised cattle dairy holdings, the average entrepreneurial income from agriculture was NOK 192 800 in 2006. For farmers with specialised sheep farming and specialised cereal and oil-seed production, the corresponding figures were NOK 54 700 and NOK 57 600 respectively. Farmers who run specialised pig/poultry holdings had the highest entrepreneurial income from agriculture with NOK 242 200.

Distributed by county, farmers in Rogaland and Nord-Trøndelag had highest entrepreneurial income from agriculture. In both counties, the average was NOK 157 000. Farmers in Telemark had the lowest average income with NOK 62 200.

## 6.2. Background and purpose

*Purpose and history* The purpose is to present statistics on income, property, debt and taxes for persons who are operating agricultural holdings, independent of the holding as source of income. An essential feature of the Norwegian agriculture is that many persons that are running agricultural holdings work part-time in agriculture or the work is concentrated to the growing season. Many holders have wage/salary or entrepreneurial income from other industries as main source of income.

Statistics Norway has produced statistics on the farmers' income, property and taxes based on the tax assessment for personal taxpayers since 1968. More detailed tax return data have been presented as from 1999.

*Users and applications* There is much focus on level, distribution and development of incomes of holders in agriculture. The main users of the statistics are the Ministry of Agriculture and Food, the Norwegian Agricultural Economics Research Institute, the Agricultural Budget Commission, the Norwegian Farmers Union, the Norwegian Smallholders Union etc.

## 6.3. Statistics production

*Population* Agricultural holdings are operated by two main types of holders: natural person and legal person. The total number of holdings has been decreasing over many years, while during the last years the number of holdings operated by a legal person has increased. The percentage of holdings operated by a legal person has increased from 1 per cent in 1999 to 5 per cent in 2006. The statistics on the farmers' income and property cover only agricultural holdings operated by a natural person.

The holdings vary much in size, from hobby-like production to holdings with a turnover of more than NOK 1 million. Some of the holdings have small-scale production under the threshold to be considered an industry by the tax authorities.

The individual person who is considered as responsible for operating the holding is referred to as *holder (farmer)*. Some holdings change holder during the year. Mainly, the holder being holder as per 31 July the year concerned is included. For the holders information has been obtained on any spouse, registered partner or cohabitant. Up to and including 2004, cohabitant included only he/she who had children in common with the holder. As from 2005, also cohabitants who lived together with the holder according to the Population and Housing Census 2001 and still has common address is included.

Married couples and registered partners who jointly operate a holding may share the taxable entrepreneurial income. Cohabitants who want to share the entrepreneurial income from a jointly operated holding have to organise the management as a legal entity other than sole proprietorship, or one of them has to be an employee.

The population of persons may differ from one table to another. Mainly, a table either comprises holders only or an aggregate of holders and spouses/registered partners/cohabitants.

*Data sources* The statistics are based on the population of agricultural holdings operated by a natural person and tax return data.

*Estimation* Average figures for a variable, e.g. wages and salaries for the holder, is estimated by summing up the value of the variable wages and salaries for all holders and divide the sum with the number of total holders. This means that holders without wages and salaries are included in the average figures.

*Confidentiality* Figures are not presented if there is a risk of identifying any unit.

## 6.4. Concepts, variables and classifications

### *Definitions of the main concepts and variables*

#### *Agricultural holding:*

A single unit both technically and economically, which has single management and which produces agricultural products. The holding is independent of municipality boundaries. The agricultural holdings headquarter must be located on an agricultural property.

#### *Holder:*

The person considered responsible for operating the holding.

#### *Gross income:*

Total wages and salaries, pensions, entrepreneurial income and property income.

#### *Wages and salaries:*

Comprise payments in cash and in kind, taxable sick pay and unemployment benefit.

#### *Pensions:*

Cover all benefit paid by social security and private pension and life insurance benefit.

#### *Entrepreneurial income:*

A result of the activities of a self-employed person, and is estimated from profit and loss account and balance sheet. The entrepreneurial income is transferred to the tax return and is included in the calculation of ordinary income.

#### *Entrepreneurial income from agriculture:*

This is positive entrepreneurial income from agriculture according to the tax return. In addition, entrepreneurial social security benefits in agriculture, forestry and fishery are included. Deductions such as membership payments to industry organisations, the year's entrepreneurial deficit, interest on debt and a separate agricultural deduction are not deducted. Income from any supplementary industry executed on the holding, e.g. forestry, are included in other entrepreneurial income if the industry concerned are considered as independent according to taxation.

#### *Capital income:*

Consist of interest income, dividends, realised capital gains, rent and other income from property.

### *Standard classifications*

The following classifications are used in the tables: county where the holding is located, size of holding expressed in decares of utilized agricultural area, type of farming of the holding and sex of holder.

#### *County:*

Oslo County is merged with Akershus County because of very few holdings in Oslo County.

#### *Agricultural area in use*

Agricultural land that is harvested at least once during a year, including planted areas of permanent crops, where no harvest has been produced so far. Includes also arable land included in the crop rotation system with no intention to produce a harvest during the year, but which will be harvested the next year.

#### *Type of farming of an agricultural holding*

The type of farming of a holding is determined by the contribution ratio of the different crop and livestock enterprises to its total agricultural production. The standard gross margin is applied as the common measurement of the various enterprises (crop and livestock).

*Standard gross margin of an agricultural holding*

The standard gross margin (SGM) is the balance between the standard value of output and the standard value of certain direct costs. SGMs are calculated at regional level per area unit (decare, square metre) and head of livestock for related crops and livestock categories. The SGM for an enterprise within the holding is the SGM per area unit/head of livestock multiplied by the total of the relevant crop/livestock category. The total SGM of the holding is the sum of all enterprises run by the holding.

**6.5. Sources of error and uncertainty***Measurement and processing errors*

The most important source of error is that taxpayers may fill in incorrect information on income, deductions, property or debt in the personal tax return or place amounts under wrong items. In most cases this will be detected and corrected by the local tax offices. Nevertheless, errors that do not influence the assessment of taxes may be ignored. Furthermore, errors may also originate during the scanning of the tax return forms, despite of the fact that controls are executed.

*Non-response errors*

A non-significant number of holdings are missing information on income etc. No information is imputed for these holdings.

*Other sources of error*

Statistics Norway receives data from the Directorate of Taxes before all complaints from taxpayers are finished.

**6.6. Comparability and coherence***Comparability over time and space*

Changes in the tax regulations influence the data and consequently the statistics over time. The tax regulations were significantly changed as from 1992. The statistics are essentially comparable for the period 1992 - 2002. In 2003, the tax return forms filled in by self-employed persons were considerably changed. Particularly, a separate deduction in entrepreneurial income from agriculture was deducted before the entrepreneurial income was transferred to the tax return form. Due to this neither the entrepreneurial income nor the gross income are comparable with the other years. As from 2004, the agricultural deduction again is stated as a deduction on the tax return.

The tax regulations were insignificantly changed from 2004 to 2005, but considerably changed as from 1 January 2006. The new regulations increased the taxes for certain types of income, compared with the level in 2005. Due to this, taxpayers realised income in 2005 to avoid increased taxes in 2006 or later years.

Due to changes in the regulation concerning governmental production subsidies as per 31 July 2002, the number of holdings operated by other legal entities than sole proprietorship has increased significantly. This concerns particularly the legal entities general partnership and general partnership with shared liability. Furthermore, the change of the regulation has influenced the number of holders participating in joint operation (organised as general partnerships) and at the same time running their own enterprise (sole proprietorship). Before 2002, holders participating in joint operation in milk production had to apply separate for government area production subsidies. Now, the participants may choose whether they will cultivate fodder in own separate enterprise or operate the area jointly.

*Coherence with other statistics*

Yearly, Statistics Norway also presents income statistics for all self-employed persons. At first level the self-employed persons are classified into two groups: self-employed with main income from industry and self-employed with main income from wages/salaries and pensions. Furthermore, those with main income from industry are classified into: primary industry and other industries. Primary industry consists of agriculture, forestry and fishery. More information on: [http://www.ssb.no/english/subjects/05/01/ifpn\\_en/](http://www.ssb.no/english/subjects/05/01/ifpn_en/).

The Norwegian Agricultural Economics Research Institute yearly presents Account Results in Agriculture and Forestry. This survey shows results for holdings where most of the family's total income are derived from the holding. More information: <http://www.nilf.no/>.

### **6.7. Availability**

*Publications and Internet  
address*

The statistics are released electronically via Today's Statistics on Statistics Norway's web site:

[The farmers' income and property](#)

*Micro data*

A data file with anonymous individual data is stored at Statistics Norway.



## 6.1. Entrepreneurial income from agriculture for holders, by county, agricultural area in use and sex of holder

	Entrepreneurial income from agriculture		Holders by entrepreneurial income from agriculture						
	Total	Per holder	Holders, total	Without positive income	NOK 1-49 999	NOK 50 000-99 999	NOK 100 000-249 999	NOK 250 000-399 999	NOK 400 000-
	NOK million	NOK			Per cent				
1999 .....	6 530	93 400	69 910	26	25	13	27	8	2
2000 .....	6 833	101 000	67 625	24	25	13	27	10	2
2001 .....	6 596	102 500	64 352	25	25	13	25	10	3
2002 .....	6 887	114 800	60 010	24	24	12	24	12	4
2003 <sup>1</sup> .....	..	..	56 234	..	..	..	..	..	..
2004 .....	5 975	112 200	53 257	25	24	13	25	11	4
2005 .....	7 399	147 000	50 336	24	22	12	25	11	6
2006 .....	5 652	117 200	48 243	25	23	12	24	11	5
<b>2006</b>									
<b>County</b>									
Østfold .....	300	115 400	2 602	28	26	12	18	9	7
Akershus og Oslo .....	243	95 600	2 539	31	29	11	18	8	5
Hedmark .....	475	119 700	3 970	28	24	10	21	10	6
Oppland .....	579	113 700	5 097	24	21	13	29	11	3
Buskerud .....	228	88 800	2 563	33	26	12	19	7	4
Vestfold .....	186	107 000	1 741	30	28	11	16	9	6
Telemark .....	103	62 200	1 657	42	27	11	15	4	2
Aust-Agder .....	66	90 700	724	31	26	14	18	7	4
Vest-Agder .....	104	88 900	1 171	32	24	13	21	9	2
Rogaland .....	748	157 600	4 747	19	20	11	25	16	9
Hordaland .....	258	76 700	3 367	34	27	12	19	7	2
Sogn og Fjordane .....	327	92 300	3 546	24	25	14	28	8	1
Møre og Romsdal .....	413	126 600	3 261	22	21	13	26	14	4
Sør-Trøndelag .....	445	132 100	3 367	22	18	12	30	15	4
Nord-Trøndelag .....	567	157 200	3 607	16	18	11	31	17	7
Nordland .....	382	145 700	2 624	17	18	13	29	18	5
Troms Romsa .....	171	134 400	1 274	18	19	14	30	15	4
Finmark Finnmarku .....	56	145 300	386	21	19	12	23	18	7
<b>Agricultural area in use</b>									
0- 4 decares .....	107	183 500	581	26	13	9	24	15	14
5- 49 " .....	178	41 900	4 232	50	31	8	8	3	2
50- 99 " .....	427	45 400	9 412	42	33	11	10	2	1
100-199 " .....	1 461	94 000	15 553	24	26	15	26	8	2
200-299 " .....	1 495	157 800	9 470	14	16	13	35	18	5
300-499 " .....	1 296	199 400	6 496	11	11	10	35	24	10
500- " .....	690	276 000	2 499	8	9	7	27	26	23
<b>Holders by sex</b>									
Males .....	5 177	123 900	41 792	24	22	12	25	12	5
Females .....	475	73 600	6 451	34	26	13	20	5	2

<sup>1</sup> Entrepreneurial income from agriculture for 2003 is not comparable with the other years.

**6.2. Entrepreneurial income from agriculture for holders, by type of farming, 2006**

	Entrepreneurial income from agriculture		Holders by entrepreneurial income from agriculture						
	Total	Per holder	Holders, total	Without positive income	NOK 1-49 999	NOK 50 000-99 999	NOK 100 000-249 999	NOK 250 000-399 999	NOK 400 000-
	NOK million	NOK							
				Per cent					
<b>Total</b> .....	<b>5 652</b>	<b>117 200</b>	<b>48 243</b>	<b>25</b>	<b>23</b>	<b>12</b>	<b>24</b>	<b>11</b>	<b>5</b>
<b>Type of farming</b>									
Cereals and oil seeds .....	508	57 600	8 826	37	35	12	12	3	2
Other field crops .....	380	115 600	3 287	33	22	10	18	10	7
Horticulture and permanent crops .....	223	163 900	1 360	26	20	11	20	12	12
Cattle - dairying .....	2 233	192 800	11 584	7	8	11	45	24	6
Cattle - rearing and fattening ...	284	74 400	3 818	32	28	14	20	5	2
Cattle - mixed .....	137	229 800	598	6	8	8	37	27	13
Sheep .....	497	54 700	9 085	32	34	16	15	3	1
Various grazing livestock .....	278	96 700	2 875	33	22	11	23	9	3
Granivores .....	356	242 200	1 469	15	10	10	26	21	20
Mixed cropping .....	107	185 200	578	22	19	8	21	16	14
Mixed livestock .....	197	219 300	900	16	10	6	30	22	16
Mixed crops - livestock .....	451	116 800	3 863	31	21	10	20	12	6

**6.3. Average gross income for holders, by county, agricultural area in use and sex of holder. NOK**

	Gross income, total	Wages and salaries	Entrepreneurial income from agriculture	Other entrepreneurial income	Pensions	Capital income etc.
1999 .....	285 100	109 900	93 400	31 800	16 900	33 100
2000 .....	307 500	117 200	101 000	34 300	17 500	37 600
2001 .....	311 500	124 000	102 500	36 400	18 400	30 100
2002 .....	353 200	133 600	114 800	39 100	17 800	47 900
2003 <sup>1</sup> .....	..	138 100	..	40 300	18 100	47 300
2004 .....	372 400	142 500	112 200	47 000	18 500	52 400
2005 .....	465 200	148 900	147 000	62 200	18 700	88 300
2006 .....	376 500	159 700	117 200	49 700	19 300	30 700
<b>2006</b>						
<b>County</b>						
Østfold .....	489 800	198 700	115 400	101 000	19 700	54 900
Akershus og Oslo .....	491 600	218 500	95 600	98 900	24 600	54 000
Hedmark .....	374 500	157 500	119 700	54 000	20 300	23 000
Oppland .....	343 900	146 000	113 700	47 500	15 300	21 400
Buskerud .....	413 800	187 400	88 800	83 300	19 200	35 000
Vestfold .....	460 400	206 300	107 000	79 400	21 900	45 700
Telemark .....	358 500	193 600	62 200	52 500	24 000	26 100
Aust-Agder .....	382 700	153 900	90 700	69 600	26 000	42 500
Vest-Agder .....	370 500	175 100	88 900	49 800	25 900	30 900
Rogaland .....	418 300	149 500	157 600	43 300	17 200	50 700
Hordaland .....	349 400	189 800	76 700	32 900	22 500	27 500
Sogn og Fjordane .....	319 100	153 100	92 300	26 500	22 200	25 000
Møre og Romsdal .....	344 100	144 800	126 600	34 200	18 900	19 600
Sør-Trøndelag .....	352 900	138 700	132 100	37 600	16 300	28 200
Nord-Trøndelag .....	365 400	137 200	157 200	37 400	12 600	21 000
Nordland .....	305 400	102 900	145 700	21 700	19 700	15 300
Troms Romsa .....	308 800	119 500	134 400	22 800	17 300	14 900
Finnmark Finnmarku .....	308 100	98 900	145 300	22 200	23 500	18 200
<b>Agricultural area in use</b>						
0- 4 decares .....	445 700	134 800	183 500	47 000	22 100	58 300
5- 49 " .....	358 700	208 400	41 900	42 700	36 100	29 500
50- 99 " .....	359 100	213 600	45 400	42 100	30 100	27 900
100-199 " .....	357 500	170 400	94 000	49 200	18 500	25 500
200-299 " .....	366 700	124 400	157 800	47 500	11 400	25 600
300-499 " .....	408 900	104 200	199 400	54 500	9 100	41 600
500- " .....	527 600	91 300	276 000	89 000	10 600	60 700
<b>Holders by sex</b>						
Males .....	391 500	161 500	123 900	53 800	19 300	33 000
Females .....	279 700	148 000	73 600	22 800	19 200	16 100

<sup>1</sup> Gross income and entrepreneurial income from agriculture for 2003 are not comparable with the other years.

**6.4. Average gross income for holders, by type of farming. 2006. NOK**

	Gross income, total	Wages and salaries	Entrepreneurial income from agriculture	Other entrepreneurial income	Pensions	Capital income etc.
<b>Total</b> .....	<b>376 500</b>	<b>159 700</b>	<b>117 200</b>	<b>49 700</b>	<b>19 300</b>	<b>30 700</b>
<b>Type of farming</b>						
Cereals and oil seeds .....	456 900	252 700	57 600	78 100	26 200	42 300
Other field crops .....	430 500	188 800	115 600	68 700	19 300	38 100
Horticulture and permanent crops .....	450 400	142 800	163 900	47 700	24 500	71 500
Cattle - dairying .....	316 800	65 100	192 800	27 700	8 800	22 400
Cattle - rearing and fattening ...	359 400	183 700	74 400	52 700	22 000	26 600
Cattle - mixed .....	355 600	59 700	229 800	38 600	5 200	22 400
Sheep .....	332 000	192 000	54 700	36 100	26 900	22 400
Various grazing livestock .....	337 200	159 000	96 700	40 100	21 700	19 700
Granivores .....	451 000	108 500	242 200	39 800	10 800	49 700
Mixed cropping .....	450 100	139 900	185 200	59 900	17 300	47 800
Mixed livestock .....	484 100	93 200	219 300	116 400	12 500	42 600
Mixed crops - livestock .....	389 500	166 300	116 800	59 300	17 800	29 100

**6.5. Holders by entrepreneurial income from agriculture as per cent of gross income, by county, agricultural area in use and sex of holder**

	Holders, total	Entrepreneurial income from agriculture as per cent of gross income				
		0 per cent	1-9 per cent	10-49 per cent	50-89 per cent	90- per cent
		Per cent				
1999 .....	69 910	26	14	24	20	16
2000 .....	67 625	24	15	25	20	15
2001 .....	64 352	25	14	26	20	15
2002 .....	60 010	24	15	26	20	15
2003 <sup>1</sup> .....	56 234	..	..	..	..	..
2004 .....	53 257	25	15	26	18	17
2005 .....	50 336	24	14	26	18	18
2006 .....	48 243	25	15	26	18	16
<b>2006</b>						
<b>County</b>						
Østfold .....	2 602	28	19	28	15	10
Akershus og Oslo .....	2 539	31	23	28	13	6
Hedmark .....	3 970	28	14	25	19	14
Oppland .....	5 097	24	13	25	22	16
Buskerud .....	2 563	33	19	26	14	7
Vestfold .....	1 741	30	23	25	13	9
Telemark .....	1 657	42	18	24	11	7
Aust-Agder .....	724	31	18	27	16	8
Vest-Agder .....	1 171	32	17	26	15	10
Rogaland .....	4 747	19	14	25	18	23
Hordaland .....	3 367	34	17	23	14	12
Sogn og Fjordane .....	3 546	24	14	30	18	14
Møre og Romsdal .....	3 261	22	12	27	18	21
Sør-Trøndelag .....	3 367	22	11	24	23	21
Nord-Trøndelag .....	3 607	16	12	25	24	23
Nordland .....	2 624	17	10	23	20	31
Troms Romsa .....	1 274	18	11	25	18	28
Finnmark Finnmarku .....	386	21	11	21	18	31
<b>Agricultural area in use</b>						
0- 4 decares .....	581	26	8	26	19	21
5- 49 " .....	4 232	50	21	18	5	5
50- 99 " .....	9 412	42	23	22	8	5
100-199 " .....	15 553	24	16	29	16	14
200-299 " .....	9 470	14	10	27	25	25
300-499 " .....	6 496	11	7	25	28	29
500- " .....	2 499	8	6	25	35	26
<b>Holders by sex</b>						
Males .....	41 792	24	15	25	19	17
Females .....	6 451	34	12	28	14	12

<sup>1</sup> Gross income and entrepreneurial income from agriculture for 2003 are not comparable with the other years.

**6.6. Holders by entrepreneurial income from agriculture as per cent of gross income, by type of farming, 2006**

	Holders, total	Entrepreneurial income from agriculture as per cent of gross income				
		0 per cent	1-9 per cent	10-49 per cent	50-89 per cent	90- per cent
		Per cent				
<b>Total</b> .....	<b>48 243</b>	<b>25</b>	<b>15</b>	<b>26</b>	<b>18</b>	<b>16</b>
<b>Type of farming</b>						
Cereals and oil seeds .....	8 826	37	27	27	7	3
Other field crops .....	3 287	33	16	25	16	11
Horticulture and permanent crops .....	1 360	26	13	25	17	20
Cattle - dairying .....	11 584	7	3	21	33	37
Cattle - rearing and fattening ...	3 818	32	17	31	13	7
Cattle - mixed .....	598	6	4	20	32	38
Sheep .....	9 085	32	22	30	11	6
Various grazing livestock .....	2 875	33	13	25	15	16
Granivores .....	1 469	15	6	23	27	30
Mixed cropping .....	578	22	12	23	24	18
Mixed livestock .....	900	16	6	19	28	31
Mixed crops - livestock .....	3 863	31	14	24	17	13

## 7. Grain and oil seeds, area and yields

### 7.1. Main results, 2007

*Large grain yields* The total production of grain in 2007 is calculated to 1.2 million tonnes, an increase of 3 per cent from 2006. The total grain area came to 3.1 million decares in 2007.

The total grain harvest consisted of 401 100 tonnes of wheat, 485 300 tonnes of barley, 276 000 tonnes of oats and 76 300 tonnes of rye and triticale in 2007.

Average decare yield of wheat for the entire country was calculated to 440 kilos in 2007. The average decare yield of barley was 345 kilos, and for oats 381 kilos.

The number of holdings growing grain has been reduced from 24 000 in 1997 to 15 000 in 2007. In the same period, the average grain area per holding increased from 140 decares to 210 decares.

### 7.2. Background and purpose

*Purpose and history* The purpose is to present statistics on production of grain and oil seeds in Norway.

*Users and applications* The main users of the statistics are the Ministry of Agriculture and Food, the Norwegian Agricultural Economics Research Institute, the Agricultural Budget Commission, the Norwegian Farmers Union, the Norwegian Smallholders Union etc.

### 7.3. Statistics production

*Population* All deliveries of grain and oil seed for sale are registered when received at the corn mill. Information about delivered quantity and quality of the corn on each holding is extracted from this register. In combination with this information, information about area of the different crops is based on the yearly population of agricultural holdings described in chapter 3.

*Data sources* Preliminary figures: Total yield based on forecasts from The Norwegian Agricultural Purchasing and Market Co-operation. Area of grain and oil seeds is taken from the administrative records of everyone who applies for an agricultural production subsidy in Norway.

Final figures: Yields of grain and oil seeds based on the administrative records of the Norwegian Agricultural Authority on all deliveries for sale. Area of grain and oil seeds is taken from the yearly updated population of agricultural holdings established in Statistics Norway.

*Control and revision* Data are checked with the previous submitted reports by various machine controls.

### 7.4. Sources of error and uncertainty

Although the registers involved are of fairly high quality, some coverage errors could occur due to late updating and classification errors. The difference between preliminary figures and final figures are marginal on country level.

### 7.5. Comparability and coherence

All active holders in agriculture are included in the statistics based on the total population of agricultural businesses. The main source for this statistics is the register based on the holders applying for governmental production subsidies. For those who do not apply for governmental subsidies, information about use of area and domestic animals are picked up from various other administrative registers and surveys conducted by Statistics Norway. Information about agricultural area for the

last year is based on the register for governmental subsidies only, and total yield is based on preliminary figures from The Norwegian Agricultural Purchasing and Market co-operation.

### **7.6. Availability**

*Publications and Internet  
address*

The statistics is published on the internet-site of Statistics Norway:

[http://www.ssb.no/10/04/10/korn\\_en/](http://www.ssb.no/10/04/10/korn_en/)

*Micro data*

Primary data is saved in files in the systems of the ordinary storing of data in Statistics Norway.

## 7.1 Holdings with area of grain and oil seeds. Area used for grain and oil seeds. 1989, 1995-2007

	Holdings with grain and oil seeds	Area of grain						Oil seeds	
		Total	Wheat		Rye and triticale	Barley	Oats		
			Total	Spring wheat					
Decares									
1989 .....	33 103	3 468 588	382 484	..	..	4 245	1 759 910	1 321 950	61 215
1995 .....	25 989	3 365 900	657 700	359 400	283 300	40 700	1 750 200	932 300	111 100
1996 .....	24 800	3 325 500	588 400	332 600	239 900	36 800	1 746 300	969 900	76 600
1997 .....	23 987	3 306 600	592 800	376 700	201 700	36 000	1 747 000	945 200	75 900
1998 .....	23 524	3 338 800	689 900	353 800	318 900	70 900	1 670 600	924 600	63 900
1999 .....	21 908	3 281 736	515 798	418 671	97 127	26 891	1 825 917	913 130	63 656
2000 .....	21 379	3 306 000	680 900	405 200	275 700	38 300	1 627 400	959 300	57 200
2001 .....	20 599	3 281 100	636 000	515 700	120 300	27 600	1 768 500	849 100	108 800
2002 .....	19 509	3 268 200	638 000	493 300	144 600	24 100	1 806 000	800 200	109 900
2003 .....	18 277	3 266 800	757 600	439 300	318 300	44 600	1 616 200	848 500	75 400
2004 .....	17 652	3 282 700	853 400	519 800	333 600	72 400	1 490 200	866 600	68 500
2005 .....	16 770	3 252 100	808 200	536 700	271 400	69 400	1 633 000	741 600	66 900
2006 .....	15 828	3 181 800	857 500	561 700	295 800	60 600	1 524 300	739 500	65 100
2007 .....	15 083	3 119 100	912 200	530 300	381 900	76 300	1 406 700	723 900	62 000
<b>County</b>									
Østfold .....	2 332	590 900	325 300	136 800	188 500	22 200	106 700	136 600	19 100
Akershus og Oslo .....	2 155	613 100	186 900	85 500	101 400	15 300	190 200	220 700	16 200
Hedmark .....	2 208	555 400	102 700	93 200	9 400	8 700	279 400	164 600	4 500
Oppland .....	1 375	213 300	33 100	29 600	3 600	1 900	155 300	23 000	2 800
Buskerud .....	1 280	231 800	79 800	56 000	23 800	6 200	83 100	62 700	5 300
Vestfold .....	1 421	273 900	148 600	108 800	39 800	20 000	60 400	44 800	11 900
Telemark .....	609	77 300	21 900	16 900	4 900	1 400	30 600	23 400	1 900
Aust-Agder .....	105	9 900	500	400	100	200	4 900	4 400	-
Vest-Agder .....	104	8 500	:	:	:	:	5 100	3 300	-
Rogaland .....	383	33 700	900	300	600	-	31 200	1 600	-
Hordaland .....	6	:	:	:	-	:	:	:	-
Sogn og Fjordane .....	10	:	:	:	-	:	:	:	-
Møre og Romsdal .....	173	19 200	:	:	:	-	17 200	1 500	:
Sør-Trøndelag .....	1 106	168 700	2 800	600	2 200	100	145 200	20 600	100
Nord-Trøndelag .....	1 769	319 700	8 800	1 700	7 100	400	294 200	16 400	200
Nordland .....	43	2 900	-	-	-	-	2 700	200	:
Troms Romsa .....	-	-	-	-	-	-	-	-	-
Finnmark Finnmarku .....	-	-	-	-	-	-	-	-	-

## 7.2. Total production and yield of grain.1989, 1995-2007

	Total production, 1000 tonnes					Yield per decaare. Kg			
	Grain, total	Wheat	Barley	Oats	Rye and triticale	Wheat	Barley	Oats	Rye and triticale
1989 .....	1 179.6	139.6	613.8	423.4	..	374	351	317	..
1995 .....	1 226.9	312.2	546.7	353.6	..	475	312	379	..
1996 .....	1 345.3	266.1	681.7	385.2	..	453	390	397	..
1997 .....	1 288.4	255.5	663.1	359.6	..	431	380	380	..
1998 .....	1 357.7	323.4	619.4	386.6	28.3	469	371	418	400
1999 .....	1 228.5	229.7	623.6	355.5	9.4	445	342	389	350
2000 .....	1 309.0	313.4	573.5	396.9	16.1	460	352	414	421
2001 .....	1 219.1	259.1	623.7	330.4	5.9	407	353	389	215
2002 .....	1 142.1	261.5	592.9	278.7	9.0	410	328	348	376
2003 .....	1 287.3	349.5	584.8	333.6	19.4	461	362	393	436
2004 .....	1 444.6	406.8	630.5	366.7	40.6	444	423	423	477
2005 .....	1 298.4	395.4	589.3	279.0	34.8	489	361	376	502
2006 .....	1 169.2	357.0	537.6	248.4	26.2	416	353	336	431
2007 .....	1 202.4	401.1	485.3	276.0	76.3	440	345	381	524
<b>County</b>									
Østfold .....	245.0	141.9	37.3	55.0	22.2	436	349	403	487
Akershus og Oslo .....	253.0	85.4	68.5	90.3	15.3	457	360	409	578
Hedmark .....	246.4	51.8	124.4	65.3	8.7	505	445	397	558
Oppland .....	83.1	14.3	59.5	8.5	1.9	432	383	370	403
Buskerud .....	80.1	32.6	24.6	20.2	6.2	408	295	323	440
Vestfold .....	108.3	61.2	19.2	16.7	20.0	412	318	371	560
Telemark .....	24.7	8.0	7.7	8.4	1.4	364	250	360	458
Aust-Agder .....	2.7	:	1.3	1.3	:	:	263	287	:
Vest-Agder .....	2.4	:	1.3	1.2	:	:	247	356	:
Rogaland .....	12.0	0.2	11.4	0.4	-	259	364	237	-
Hordaland .....	:	-	:	-	-	-	:	-	-
Sogn og Fjordane .....	:	:	:	-	:	:	:	-	-
Møre og Romsdal .....	4.1	:	3.9	:	-	:	227	:	-
Sør-Trøndelag .....	53.1	1.4	45.8	5.8	:	507	315	283	:
Nord-Trøndelag .....	86.9	4.0	80.0	2.8	0.4	458	272	169	282
Nordland .....	0.5	-	0.5	:	-	-	168	:	-
Troms Romsa .....	-	-	-	-	-	-	-	-	-
Finnmark Finnmarku .....	-	-	-	-	-	-	-	-	-



## 8. Production of potatoes and forage plants

### 8.1. Main results, 2007

*Low yield of potatoes* The yield of potatoes in 2007 was 329 800 tonnes, a decline of 48 500 tonnes from 2006. The average decare yield of potatoes was 2 280 kilos against 2 693 kilos in 2006.

In 2007, the total yield of meadows for mowing was about 2.6 million tonnes, converted by dry matter into hay. This corresponds to a yield of 589 kilos of hay per decare. In 2006, the average decare yield of hay was 593 kilos.

Total yield of green fodder and silage in 2007 was 246 000 tonnes, a decline of 9 000 tonnes from 2006. About two thirds of this yield was rye-grass.

### 8.2. Background and purpose

*Purpose and history* The purpose of the statistics is to estimate the yield of potatoes, meadows for mowing and coarse fodder in Norway. Since 1990, statistics on grain production have been provided by data from administrative sources (see chapter 7).

*Users and applications* The main users of the statistics are the Ministry of Agriculture and Food, the Norwegian Agricultural Economics Research Institute, the Agricultural Budget Commission, the Norwegian Farmers Union, the Norwegian Smallholders Union etc.

### 8.3. Statistics production

*Population* Statistics on yield of potatoes and forage plants are based on a yearly sample survey. The target population of this survey is holdings referring to these crops when applying for governmental grants.

In a wider context official statistics on agricultural yields cover grain, potatoes and forage plants. Statistics on grain production are described in chapter 7.

*Data sources* The register of holders applying for governmental grants provides information on persons associated with the holding and the size of areas used for potatoes, coarse fodder and meadows for mowing. Data on area harvested, and total yield of each crop are provided by holders who fill in the forms of the annual survey.

*Sampling* Each year a sample is drawn from the register of holders applying for governmental grants. The size of the sample is about 3 100 holders.

All types of holdings with combinations of areas of potatoes, coarse fodder and meadows for mowing are included in the sample survey of agricultural yields. To provide a better representation in certain counties with few holdings a higher percentage of holdings are selected in these areas.

*Collection of data* In November each year, forms are sent to the holdings drawn for inclusion in the survey. As from 2004, the farmers also may report via Internet.

*Control and revision* A number of controls and corrections are done to ensure consistency both within a single form and between forms and available register information.

*Estimation* Data on area harvested and total yield of the different crops, are provided by the holders. Average yield is calculated regarded to this information. Total yield for the entire county is calculated by use of average yield from the sample survey, and area of the different crops in each county based on information from the total population of agricultural holdings.

*Confidentiality* Figures based on few units (holdings) are not published if this causes risk for identifying any of the units concerned, or the results are considered to be all too uncertain for giving estimates.

## 8.4. Concepts, variables and classifications

### *Agricultural holding:*

A single unit, both technically and economically, which has single management and which produces agricultural products. The holding is independent of municipality boundaries. The agricultural holdings headquarter must be located in an agricultural property.

### *Holder:*

The person considered as responsible for operating the holding, usually the person applying for governmental production subsidies.

### *Agricultural area in use:*

Agricultural land that is harvested at least once during a year, including planted areas of permanent crops, where no harvest has been produced so far. Includes also arable land included in the crop rotation system with no intention to produce a harvest during the year, but which will be harvested the next year.

### *Meadows for mowing:*

Include cultivated meadow and surface-cultivated meadow.

### *Coarse fodder crops:*

Include area of rye-grass, grain for silage, fodder rape, fodder kale and fodder roots.

### *Fodder roots:*

Include area of swedes and turnips for feed and fodder beets.

## 8.5. Sources of error and uncertainty

### *Measurement and processing errors*

Primary data are obtained from the forms filled in by the respondents. They may contain errors made by the individual respondents when filling in the form. A number of errors are discovered and corrected during the revision process at Statistics Norway.

A number of errors during the collection and processing of the data are unavoidable and include errors that occur during revision, data processing errors etc. Extensive work has been carried out to reduce these errors as much as possible.

### *Non-response errors*

Non-response in the survey is due to the failure of individual respondents to deliver questionnaires or that a property has been sold or is no longer farmed as an independent unit.

### *Sampling errors*

All sample surveys will be encumbered by a certain amount of uncertainty. Generally, the fewer the observations are, the more uncertain the results. Groups based on few observations will be particularly sensitive to extreme values, i.e. values that deviate considerably from the average. Such extreme values are consequently assigned a weight equal to 1, so that they only represent themselves in the material.

All types of holdings with various combinations of area of potatoes, coarse fodder and meadows for mowing are included in the sample survey. To provide a better representation in certain counties with few holdings a higher percentage of holdings are selected.

*Other sources of error* The quality of the register basis from which the sample is selected also has an impact on the quality of the final result.

## **8.6. Comparability and coherence**

The statistics are basically comparable back to 1970.

## **8.7. Availability**

*Publications and Internet address* The statistics are published electronically via Today's Statistics on Statistics Norway's website:

[http://www.ssb.no/english/subjects/10/04/10/jordbruksavling\\_en/](http://www.ssb.no/english/subjects/10/04/10/jordbruksavling_en/)

*Micro data* A data file with anonymous individual data is stored at Statistics Norway.

**8.1. Yield of potatoes and forage plants. 2004-2007**

Crop	Yield in tons				Kilos per decaare			
	2004	2005	2006	2007	2004	2005	2006	2007
Potato .....	396 400	316 600	378 300	329 800	2 794	2 305	2 693	2 280
Crops for green fodder and silage .....	364 200	280 900	255 000	246 100	2 066	1 808	1 710	1 792
Annual rye-grass .....	230 600	181 400	158 000	143 900	2 646	2 476	2 285	2 215
Green forage mixtures/grain crops .....	112 600	84 900	85 600	94 600	1 647	1 288	1 296	1 540
Forage rape, marrow-stem kale etc. ...	10 100	6 800	5 400	4 300	1 330	1 488	1 256	1 634
Hay <sup>1</sup> .....	2 788 000	2 653 600	2 599 800	2 617 600	626	607	593	589

<sup>1</sup> Comprise total yield from meadows for mowing converted through dry matter into hay.

**8.2. Yield of potatoes and forage plants, by county. 1 000 tons**

	Potato	Green fodder and silage	Hay <sup>1</sup>
2000 .....	368.0	737.3	2 870.6
2001 .....	400.6	648.1	2 930.9
2002 .....	392.7	436.6	2 848.0
2003 .....	366.8	366.9	2 684.1
2004 .....	396.4	364.2	2 788.0
2005 .....	316.6	280.9	2 653.6
2006 .....	378.3	255.0	2 599.8
2007 .....	329.8	246.1	2 617.6

**2007****County**

Østfold .....	11.3	10.9	51.1
Akershus og Oslo .....	18.9	10.3	66.3
Hedmark .....	139.8	38.2	195.4
Oppland .....	29.6	66.9	375.3
Buskerud .....	7.0	7.7	99.8
Vestfold .....	36.2	5.2	41.0
Telemark .....	3.1	4.2	55.6
Aust-Agder .....	4.5	1.2	37.7
Vest-Agder .....	1.0	1.4	69.8
Rogaland .....	26.5	17.4	316.6
Hordaland .....	0.3	1.0	122.6
Sogn og Fjordane .....	2.4	3.5	172.9
Møre og Romsdal .....	4.6	2.5	239.2
Sør-Trøndelag .....	5.3	22.3	237.7
Nord-Trøndelag .....	30.8	34.4	231.2
Nordland .....	4.6	6.7	208.4
Troms Romsa .....	3.7	7.2	72.6
Finnmark Finnmarku .....	0.2	5.2	24.2

<sup>1</sup> Comprise total yield from meadows for mowing. The yield is converted through dry matter into hay.

## 9. Horticultural production

### 9.1. Main results, 2007

#### *Decline in production of fruit*

The total production of fruit in Norway is estimated to 13 500 tonnes in 2007, a decrease of 5 200 tonnes from 2006. The production of fruit in 2007 was among the lowest ever recorded and is well below the average of 16 700 tonnes in the last ten years. Many holdings faced a difficult year, especially due to frost damage during the blooming and much rain during the summer.

The total production of garden berries is estimated to 12 400 tonnes, a decrease of 2 000 tonnes from 2006. The production in the last ten-year period has varied between 9 700 and 14 000 tonnes, and the average for the last ten years is 11 900 tonnes.

In some regions, heavy rain during the growth season caused problems for field-grown vegetables. Despite these problems, the total production of field-grown and greenhouse vegetables was quite good, and amounted to 171 800 tonnes in 2007. The average yearly production of vegetables in the last ten years is estimated to 165 800 tonnes.

### 9.2. Background and purpose

#### *Purpose and history*

The purpose of the statistics is to present annual statistics covering total area, production yields per area unit and total production for important horticultural crops.

Up to 1995 Statistics Norway worked out area and production statistics for horticultural crops. From 1996 to 2004 the Norwegian Agricultural Authority had the responsibility. From 2005 the statistics are again being worked out by Statistics Norway. Methods and procedures were changed when the Norwegian Agricultural Authority was in charge of the statistics. For 2005 Statistics Norway has kept the same methodology as developed and used by the Norwegian Agricultural Authority.

#### *Users and applications*

The statistics are used by professional organizations, the Budget Committee for Agriculture, the Ministry of Agriculture and Food and various research institutions such as the Norwegian Agricultural Economics Research Institute.

### 9.3. Statistics production

#### *Population*

Horticultural production comprises statistics on garden berries, fruits, field grown vegetables and vegetables grown in greenhouses. The statistics are based on information about area and production collected by questionnaire in a sample survey. Active agricultural holdings meeting minimum one of the following requirements are included in the statistics:

- Cultivating minimum 300 m<sup>2</sup> of vegetables grown in greenhouses, including herbs
- Cultivating minimum 1.0 decares of field-grown vegetables, including herbs
- Cultivating minimum 1.0 decares of fruit
- Cultivating minimum 1.0 decares of garden berries

#### *Data sources*

The Register of Applications for Agricultural Production Subsidies provides information about the holding, such as name and address of the holder and size of area of the various crop categories. Detailed information about cultivated area and production of garden berries, fruits, field-grown vegetables and vegetables in greenhouses are compiled from the questionnaire. Data on area and production of processing peas and beans are collected from the processing industry.

<i>Sampling</i>	<p>The sample is based on the list of agricultural holdings used by the Norwegian Agricultural Authority when working out the statistics in the period 1996-2004. As a compensation for agricultural holdings terminating horticultural production, new holdings to the sample are being added. These new holdings are mainly drawn from Applications for Agricultural Production Subsidies.</p> <p>Since 2005, a total of approximately 3 000 agricultural holdings is included in the survey.</p>
<i>Collection of data</i>	<p>In November questionnaires are sent to the agricultural holdings in the survey. The respondents may also answer the questionnaire via Internet.</p>
<i>Control and revision</i>	<p>A number of controls and corrections are done to ensure consistency both on a single questionnaire and between questionnaires and available register information.</p> <p>Production reported in other measuring units than specified on the questionnaire, are recalculated by using predetermined factors.</p>
<i>Estimation</i>	<p>The data compiled are used to calculate total area, yield per unit of area and total production per crop and county for year of survey.</p> <p><i>1. Area:</i> A factor is calculated by dividing area of year of survey by area of the preceding year. The area for both years is reported in the questionnaire. The total area in year of survey is then calculated by multiplying the factor with the total area from the preceding year.</p> <p><i>2. Production per area unit:</i> Production per area unit is calculated by dividing total production with cultivated area for holdings where both area and production information is reported on the questionnaire.</p> <p><i>3. Total production:</i> Calculated total area (article 1) is multiplied by calculated production per area unit (article 2).</p>

## 9.4. Concept, variables and classifications

### *Agricultural holding:*

A single unit both technically and economically, which has single management and which produces agricultural products. The holding is independent of municipality boundaries. The agricultural holdings headquarter must be located in an agricultural property.

### *Area of vegetables:*

If a specific crop is harvested more than once on the same area during the same growth season, the area is counted only once. If the same area is used for various succeeding crops, the area will be counted for each crop. Consequently, the total area will be greater than the basic area used for production of vegetables, e.g. the area recorded in Applications for Agricultural Production Subsidies.

### *Production:*

Defined as production that can be utilized for sale and home consumption.

## 9.5. Sources of error and uncertainty

### *Measurement and processing errors*

Primary data obtained from questionnaires may contain errors. For instance it can be difficult for the holder to give precise figures for crops that can be sold in bunch or pieces, like radishes. A number of errors are discovered and corrected during the data revision at Statistics Norway. However some measurements and processing errors are unavoidable. Extensive work has been carried out to reduce these errors as much as possible.

- Non-response errors* Some of the crops are produced by a limited number of holdings. Non-response of holdings with great area will have significant impact on the estimated figures.
- Sampling errors* All sample surveys will be encumbered by uncertainty. Generally, the fewer the observations are, the more uncertain the results. Crops based on few observations will be particularly sensitive to extreme values, i.e. values that deviate considerably from the average.
- Other sources of error* The quality of the register basis from which the sample is selected also has an impact on the quality of the final result.

The survey model is based on yearly successive computations. Preceding years estimated areas for the various crops are multiplied by a factor (see Estimation in article 9.3). The basis area of the various crops is cultivated area registered in the Census of Agriculture 1999. Because of yearly successive calculations (on cultivated area), possible errors can be magnified. Errors in the area calculations will also have impact on the calculations of production. The errors are however, considered not to have too great impact and the model is considered to still obtain reliable estimates for both areas and production.

## 9.6. Comparability and coherence

The statistics are basically comparable back to 1996.

## 9.7. Availability

- Publications and Internet address* The statistics are published electronically via Today's Statistics on Statistics Norway's website: [http://www.ssb.no/hagebruk\\_en/](http://www.ssb.no/hagebruk_en/).
- Micro data* A data file with anonymous individual data is stored at Statistics Norway.

**9.1. Yield of various horticultural crops<sup>1</sup>. 2007**

Crop	Area in decares	Yield in kg per decare	Yield in tonnes
<b>Fruit</b>			
Apple .....	16 522	661	10 919
Pear .....	1 269	420	533
Plum .....	3 609	377	1 362
Sweet cherries .....	2 310	208	481
Cherries .....	439	412	181
<b>Berries</b>			
Black currant .....	2 769	277	766
Strawberry .....	15 226	599	9 127
Raspberry .....	3 641	633	2 304
Blueberry .....	218	116	25
Other berries .....	635	238	151
<b>Vegetables, field grown, total</b>			
Cabbage .....	21 123	.	41 919
Cauliflower .....	6 241	1 469	9 167
Early cabbage .....	1 311	2 396	3 140
Winter cabbage .....	3 920	4 293	16 829
Brussels sprouts .....	2 228	810	1 804
Red cabbage .....	332	4 053	1 344
Chinese cabbage .....	2 922	2 102	6 144
Broccoli .....	4 170	837	3 491
Table swedes .....	4 772	2 377	11 344
Carrot .....	12 334	3 452	42 574
Leek .....	1 482	1 559	2 310
Beetroots .....	413	1 498	619
Onion .....	7 621	2 520	19 204
Root celery .....	1 129	1 677	1 893
Celery .....	423	2 176	920
Turnip-rooted parsley .....	242	565	137
Curled parsley .....	168	1 600	269
Ridge cucumber .....	728	2 446	1 781
Iceberg lettuce .....	6 179	1 579	9 756
Other lettuces <sup>2</sup> .....	2 783	2 415	6 721
Sweet corn .....	1 143	349	399
Radishes .....	652	352	229
Turnips .....	500	1 112	556
<b>Vegetables under glass/plastics</b>			
Cucumber .....	317	58 678	18 582
Tomato .....	338	34 532	15 510
Curled parsley .....	1	:	:
Rapid lettuce <sup>3</sup> .....	<sup>4</sup> 6 714	:	671
Head/root lettuce <sup>5</sup> .....	<sup>4</sup> 139	:	18
Other lettuce <sup>5</sup> .....	<sup>4</sup> 5 181	:	673

<sup>1</sup> Refers to holdings which fulfil one or more of these conditions: Minimum 1 decare of fruit trees, 1 decare of berries (field-grown), 1 decare of vegetables including herbs (field-grown) or 300 m<sup>2</sup> of vegetables including herbs grown in greenhouses. <sup>2</sup> Conversion factor: 350 grams per head. <sup>3</sup> Conversion factor: 110 grams per head. <sup>4</sup> 1 000 heads of lettuce. <sup>5</sup> Conversion factor: 130 grams per head.

**9.2. Yield of fruit, garden berries and vegetables<sup>1</sup>. 1996-2007. Tonnes**

Year	Fruits	Berries	Vegetables <sup>1</sup>
1996 <sup>2</sup> .....	18 169	13 113	161 335
1997 <sup>2</sup> .....	16 069	9 757	156 946
1998 <sup>2</sup> .....	17 284	9 752	151 546
1999 <sup>2</sup> .....	12 431	11 544	162 405
2000 <sup>2</sup> .....	19 427	11 312	166 868
2001 <sup>2</sup> .....	13 726	11 471	167 433
2002 <sup>2</sup> .....	20 774	11 937	167 042
2003 <sup>2</sup> .....	14 974	11 982	168 723
2004 <sup>2</sup> .....	19 930	13 962	174 131
2005 <sup>2</sup> .....	13 517	12 726	176 106
2006 <sup>2</sup> .....	18 629	14 339	166 695
2007 <sup>2</sup> .....	13 474	12 374	171 781

<sup>1</sup> Main crops, both field grown crops and crops under glass/plastics. Beans and processing peas are not included. <sup>2</sup> Refers to holdings which fulfil one or more of these conditions: Minimum 1 decare of fruit trees, 1 decare of berries (field-grown), 1 decare of vegetables including herbs (field-grown) or 300 m<sup>2</sup> of vegetables including herbs grown in greenhouses.



## 10. Approved carcasses

### 10.1. Main results 2007

297 000 tonnes of meat from domestic animal production were approved for the market in 2007, an increase of 4 000 tonnes from 2006.

#### *Increase in production of poultry and pork*

Pork accounted for 40 per cent of the total meat production in 2007, while beef and poultry accounted for 29 and 24 per cent respectively. Compared with 2006, the quantities of pork and poultry increased, while the quantity of beef and mutton declined.

From 2006 to 2007, the production of meat from poultry increased by 12 per cent. Since 1997, the production has more than doubled, from 33 400 tonnes in 1997 to 70 000 tonnes in 2007.

### 10.2. Background and purpose

#### *Purpose and history*

The purpose for the statistics is to obtain information about production of meat in Norway.

#### *Users and applications*

The main users of the statistics are the Ministry of Agriculture and Food, the Norwegian Agricultural Economics Research Institute, the Agricultural Budget Commission, the Norwegian Farmers Union, the Norwegian Smallholders Union etc.

### 10.3. Statistics production

#### *Population*

The statistics is based on information from the Register for deliveries of carcasses. All deliveries of carcasses to slaughterhouses during the year are supposed to be included in the register.

#### *Data sources*

The register for deliveries of carcasses to Norwegian slaughterhouses.

#### *Control and revision*

The statistics is checked up at aggregated level (country and county figures) by comparing with previous years registrations.

#### *Estimation*

The Register for deliveries of carcasses obtains information about all delivered carcasses during the time period. Statistics Norway gets aggregated data files, where the information about deliveries of different kinds of livestock from each single holder during a month is collected in one record.

#### *Confidentiality*

Figures are not presented if there is a risk of identifying any unit.

### 10.4. Concepts, variables and classifications

#### *Definitions of the main concepts and variables*

The statistics give an overview over number and weight of carcasses from the different livestock. The livestock is separated into horse, cow, ox, heifer, calf, sheep, pig, goat, hen, chicken, turkey and other poultry.

In the statistics, the term poultry is often used. Poultry includes hens, cocks, chickens, turkeys and other poultry.

#### *Standard classifications*

Oslo County is merged with Akershus County because of very few holdings in Oslo County.

### 10.5. Sources of error and uncertainty

The information given through the registration is considered to be of reasonably good quality. The most important source of error is that the slaughterhouse may fill in incorrect information during the registration.

## 10.6. Comparability and coherence

The statistics are basically comparable back to 1952.

## 10.7. Availability

*Publications and Internet address* The statistics are published electronically via Today's Statistics on Statistics Norway's website:

Approved carcasses

*Micro data* A data file with anonymous individual data is stored at Statistics Norway.

**10.1. Public meat inspection. Carcasses approved for human consumption. Tonnes**

Year County	Total	Horse	Cow	Heifer/ox	Calf	Sheep	Pig <sup>1</sup>	Poultry	Other meat <sup>2</sup>
2001	261 969	635	32 629	50 861	2 316	24 313	108 727	42 206	284
2002	261 441	637	31 385	51 855	2 397	24 971	103 998	45 882	318
2003	265 630	569	30 530	52 610	2 174	24 384	106 007	49 043	312
2004	281 270	534	31 925	52 545	2 102	26 133	113 487	54 236	308
2005	283 388	467	31 390	53 936	2 067	25 954	112 793	56 472	309
2006	292 405	425	32 320	53 208	2 116	25 153	116 345	62 518	321
2007	296 566	384	30 305	52 281	2 092	23 426	117 735	70 036	307
<b>2007</b>									
Østfold	26 682	18	687	955	58	91	10 042	14 830	1
Akershus og Oslo	10 657	38	663	1 229	30	206	6 096	2 394	1
Hedmark	35 235	33	1 905	3 301	108	1 286	14 292	14 294	19
Oppland	23 880	43	3 304	6 974	146	2 756	9 659	960	38
Buskerud	5 734	17	758	914	256	1 172	1 273	1 329	15
Vestfold	14 861	16	448	629	43	87	9 287	4 351	1
Telemark	4 016	13	392	761	57	647	1 945	189	13
Aust-Agder	2 173	12	307	507	65	334	692	254	2
Vest-Agder	3 508	10	675	1 333	53	559	684	193	1
Rogaland	62 624	63	5 101	8 316	453	4 817	31 960	11 900	14
Hordaland	8 956	24	1 463	2 331	160	2 072	1 895	980	31
Sogn og Fjordane	9 182	12	1 891	2 998	350	2 027	1 823	36	44
Møre og Romsdal	11 802	5	2 945	4 689	83	1 210	2 553	284	33
Sør-Trøndelag	21 266	38	3 111	5 396	93	1 472	2 485	8 669	3
Nord-Trøndelag	37 797	20	3 577	6 564	100	875	17 282	9 374	6
Nordland	13 307	12	2 207	4 161	13	2 173	4 718	0	22
Troms Romsa	3 805	8	613	850	14	1 389	866	0	63
Finnmark Finnmarku	1 081	2	259	374	9	253	185	0	0

<sup>1</sup> As from 2002 weight of pigs without head and trotter. <sup>2</sup> Comprise goat og vension.

**10.2. Public meat inspection. Carcasses approved for human consumption. Number of carcasses**

Year County	Horse	Cow	Heifer/ox	Calf	Sheep	Goat	Pig	Poultry
2001	2 416	136 078	190 897	22 650	1 203 974	21 196	1 325 955	38 335 296
2002	2 410	130 423	192 441	23 279	1 236 620	21 120	1 328 230	40 932 389
2003	2 148	124 893	190 436	20 731	1 235 941	20 918	1 336 294	42 777 265
2004	1 996	128 983	187 964	19 403	1 292 047	20 376	1 465 439	45 671 085
2005	1 734	124 574	189 809	18 613	1 274 985	21 824	1 469 430	46 729 637
2006	1 578	127 349	187 518	19 025	1 237 281	23 244	1 520 824	51 029 472
2007	1 406	117 172	185 065	18 648	1 164 083	22 180	1 463 943	55 499 318
<b>2007</b>								
Østfold	68	2 487	3 110	493	4 533	51	124 140	10 260 634
Akershus og Oslo	131	2 436	4 078	277	10 246	72	76 469	1 761 377
Hedmark	115	7 158	11 968	1 061	64 881	695	179 176	11 630 661
Oppland	153	12 815	24 459	1 364	135 982	2 734	118 190	703 441
Buskerud	57	2 807	3 206	1 997	55 595	1 394	14 322	1 047 829
Vestfold	55	1 619	2 082	362	4 259	50	114 943	3 136 356
Telemark	47	1 480	2 627	487	32 316	1 081	23 985	141 444
Aust-Agder	44	1 168	1 760	528	17 182	110	8 669	228 172
Vest-Agder	39	2 615	4 681	456	27 996	59	8 416	182 369
Rogaland	241	19 950	29 069	4 017	236 835	1 292	393 601	10 244 763
Hordaland	94	5 875	8 775	1 419	107 300	2 220	23 761	860 172
Sogn og Fjordane	50	7 530	11 291	2 853	100 573	3 703	23 333	34 592
Møre og Romsdal	19	11 443	16 730	903	62 752	2 990	32 712	271 358
Sør-Trøndelag	137	12 034	19 285	979	75 274	138	31 116	6 486 111
Nord-Trøndelag	74	13 979	23 018	936	44 539	330	218 522	8 510 039
Nordland	43	8 460	14 173	148	105 323	1 415	59 350	-
Troms Romsa	32	2 310	3 287	187	66 302	3 842	10 826	-
Finnmark Finnmarku	7	1 006	1 466	181	12 195	4	2 412	-

## 11. Local administration of agricultural areas

### 11.1. Main results, 2007

*Increased conversion of productive land*

Norwegian municipalities allowed to transfer 8 800 decares of cultivated land to non-agricultural use in 2007. This is one of the lowest registered areas of arable land transferred since 1980, but about 800 decares more than the year before.

In 2007, 6 600 decares of cultivable land was transferred, an increase of 500 decares from 2006.

The national government has set as its goal to reduce the transferring of agricultural land to non-agricultural use by 50 percent within 2010. In the period 1994-2003, there was a yearly transferring of cultivated land to non-agricultural use of 13 360 decares.

The municipalities permitted land reclamation of 13 100 decares in 2007, an increase of 1 500 decares from the year before.

### 11.2. Background and purpose

*Purpose and history*

KOSTRA is a national information system that provides information on municipal and county municipal activities. The data collection includes most of the municipal and county municipal activities, including economy, schools, health, culture, the environment, conversion of agricultural land, social services, public housing, technical services and transport and communication. As from 2005, the reporting system also includes agricultural topics.

The figures focus on the priorities, the productivity and the coverage of needs, using a vast number of key indicators.

KOSTRA is supposed to give better information about the municipalities, both for the central and for the local governments. This includes a more coherent data collection, which makes it possible to combine data from many sources, for example combination of data on accounts and data on services and personnel. The focus has also been on comparability between municipalities, to make benchmarking possible as a part of the management process. And timeliness is vital. Information is collected in February and the first figures are published in March. In this publishing only electronic tests check the reliability of data. Revised figures are published in June.

*Users and applications*

The main users of the statistics are the central and local governments, such as the Ministry of Agriculture and Food, the Norwegian Agricultural Economics Research Institute, the Agricultural Budget Commission, the Norwegian Farmers Union, the Norwegian Smallholders Union etc.

### 11.3. Statistics production

*Data sources*

As from 2005, the reporting system on conversion of agricultural land was simplified, as a detailed governmental administrative data system named AJOUR was replaced by a questionnaire through the municipality state reporting system KOSTRA. In addition to report land area transferred to various types of non-agricultural use, the questionnaire also considers decisions taken about land reclamation, splitting of agricultural property and applications for concession to buy a farm.

Information about agricultural area is extracted from official agricultural statistics, Structure of agriculture.

*Control and revision* The municipalities reports electronically to Statistics Norway. The time limit for the municipalities reporting is set to February 15.

The reported data have gone through several controls, both locally and in Statistics Norway. Preliminary figures are presented 15th of March. This data material will be updated with corrections and forms received in the period March - May, and revised figures are made public June 15th each year.

#### **11.4. Concepts, variables and classifications**

The municipalities report land transferred to various types of non-agricultural use, decisions taken about land reclamation, splitting of agricultural property and application for concession to buy a farm.

*Arable land:* Comprise fully cultivated land, surface-cultivated land and infield pastureland.

*Fully cultivated land:* Agricultural area that has been ploughed and can still be ploughed further. The area can be used for cultivating field crops or meadow and pasture renewed by ploughing.

*Surface-cultivated land:* Agricultural area that is mostly cleared and levelled in such a way that it can be mechanically harvested.

*Infield pasture:* Pastureland that cannot be mechanically harvested. At least 50 % of the area must be covered by grass species. The area must be fenced in unless it has natural boundaries such as rivers, lakes, sea, mountains etc. Areas of woodland, bogs, lakes and rocks each exceeding 1.0 decares are deducted.

*Cultivable land:* Area that after land cultivation fulfils the standard of easy or less easy arable land, and which fulfils climate and soil conditions for growing crops.

Conversions of cultivated and cultivable land are distributed on different aims according to the Planning and building Act:

1. *Building areas:* Including areas for dwellings with associated facilities, shops, offices, industry, buildings for leisure purposes (leisure cabins with connected outhouses), as well as sites for public (state, county and municipal) buildings with a specified purpose, other buildings of specifically defined use to the general public, hostels and catering establishments and garages and petrol stations.
2. *Agricultural areas:* Including areas for farming and forestry, reindeer farming and market gardening.
3. *Public traffic areas:* Roads- for the purpose of this Act this also includes streets with pavements, footpaths, cycle paths, courtyards and squares - bridges, canals, railways, tramways, bus stations, parking areas, harbours, airports and other traffic facilities and the necessary land for installations and means of making the traffic areas safe etc.
4. *Public outdoor recreation areas:* Parks, hiking trails, camping sites, areas used for play and sport, and sea areas used for such activities.
5. *Danger areas:* Areas for high voltage installations, shooting ranges, stores of flammable goods and other installations which may represent a hazard to the public, and areas where, due to risk of landslide, flood or other special hazard, building is not permitted or shall be permitted only on special conditions out of consideration for safety.
6. *Special areas:* Including areas for private roads, camping, areas for installations in the ground and in watercourses or for marine installations, areas with buildings and installations which should be preserved on account of their historical, antiquarian or other cultural value, fishing settlements, reindeer farming areas, areas for open-air recreation that are not included under item 4,

green belts in industrial areas, nature conservation areas, climate conservation zones, sources of water supply with catchment area, areas with unobstructed visibility close to roads, areas where building is restricted around airports, and areas and installations for operation of radio navigation aids outside airports, areas for installation and operation of municipal technical facilities, graveyards and cemeteries, water and sewerage installations, areas for construction and operation of plants for energy production or district heating, cableways, amusement parks, golf courses, stone quarries and soil extraction sites and other areas entailing significant encroachment on terrain, installations for the Telecommunications Administration and exercise areas with appurtenant installations for the Defence Forces and the Civil Defence.

7. *Common areas*: Common exit roads and common parking areas, common playgrounds for children, courtyards and other areas common to several properties.
8. *Areas for renewal*: Densely built areas, which are to be totally renewed or improved.

Several land use categories may be established within the same area or in the same building. However, the land use categories open air recreation area and nature conservation area may not be combined with the category agricultural area. It may also be stipulated that an area or building, after a specifically defined period of time or when other specific conditions have been fulfilled, shall be transferred from one land use category to another.

### 11.5. Sources of error and uncertainty

*Measurement and processing errors*

Information is collected in February and the first figures are published in March. In this publishing only electronic tests check the reliability of data. Revised figures are given in the middle of June.

*Non-response errors*

Approximately 95 per cent of the municipalities report, and the figures are based on reporting municipalities.

### 11.6. Comparability and coherence

As from 2005, local administration of agricultural areas is reported through the municipality state reporting system KOSTRA.

Until 2004, information about conversion of agricultural land, was reported through a detailed governmental administrative data system. As from 2005, this registration is replaced by a questionnaire through KOSTRA. Changes in the routines for reporting have led to a fall in the figures reported, and as from 2005 the figures are considered as fairly uncertain.

### 11.7. Availability

*Publications and Internet address*

The statistics are released electronically via Today's Statistics on Statistics Norway's web site:  
[Local administration of agricultural areas](#)

*Micro data*

A data file is stored at Statistics Norway.

**11.1. Agricultural area transferred to non-agricultural uses under the provision of the Land Act and the Planning and Building Act by county. Decares**

	Agricultural area transferred			Transferred under provision of the Land Act		Transferred under provision of the Planning and Building Act	
	Total	Cultivated area	Cultivable area	Cultivated area	Cultivable area	Cultivated area	Cultivable area
1993 .....	16 571	11 430	5 141	9 495	2 678	1 935	2 463
1994 .....	17 678	12 423	5 255	7 765	3 383	4 658	1 872
1995 .....	21 233	13 167	8 066	8 230	4 887	4 937	3 179
1996 .....	21 664	11 641	10 023	5 860	1 645	5 781	8 378
1997 .....	21 159	12 093	9 066	6 110	4 025	5 983	5 041
1998 .....	18 192	12 439	5 753	7 008	2 712	5 431	3 041
1999 .....	18 544	14 743	3 801	7 342	2 080	7 401	1 721
2000 .....	14 993	12 346	2 647	7 587	2 437	4 759	210
2001 .....	19 710	14 974	4 736	8 543	2 619	6 431	2 117
2002 .....	24 839	15 818	9 021	7 491	1 776	8 327	7 245
2003 .....	20 762	13 993	6 769	4 747	2 426	9 246	4 343
2004 .....	21 819	11 653	10 166	4 304	1 704	7 349	8 462
2005 <sup>1</sup> .....	17 948	7 714	10 234	2 965	1 473	4 749	8 761
2006 <sup>2</sup> .....	14 137	8 024	6 113	2 988	1 797	5 036	4 316
2007 <sup>3</sup> .....	15 442	8 809	6 633	2 891	1 565	5 918	5 068
<b>2007</b>							
<b>County</b>							
Østfold .....	375	256	119	107	9	149	110
Akershus og Oslo .....	2 848	1 515	1 333	195	29	1 320	1 304
Hedmark .....	1 008	337	671	224	158	113	513
Oppland .....	886	487	399	192	159	295	240
Buskerud .....	408	151	257	84	29	67	228
Vestfold .....	946	779	167	172	9	607	158
Telemark .....	368	279	89	63	24	216	65
Aust-Agder .....	195	167	28	111	12	56	16
Vest-Agder .....	311	132	179	96	144	36	35
Rogaland .....	1 934	1 371	563	177	127	1 194	436
Hordaland .....	1 448	702	746	237	44	465	702
Sogn og Fjordane .....	919	481	438	196	64	285	374
Møre og Romsdal .....	1 027	527	500	258	178	269	322
Sør-Trøndelag .....	910	564	346	187	83	377	263
Nord-Trøndelag .....	586	397	189	155	76	242	113
Nordland .....	523	326	197	244	149	82	48
Troms Romsa .....	512	269	243	170	218	99	25
Finnmark Finnmarku .....	238	69	169	23	53	46	116

<sup>1</sup> As from 2005, the reporting system is simplified, and the detailed governmental administrative data system is replaced by a questionnaire through the municipality state reporting system named KOSTRA. Excluding information from the municipalities Bokn in Rogaland, Radøy, Austrheim, Fedje and Masfjorden in Hordaland, Vågsøy in Sogn og Fjordane, Giske, Midsund and Tustna in Møre og Romsdal, Grong in Nord-Trøndelag, Hamarøy, Tysfjord, Røst and Moskenes in Nordland, Torsken in Troms and Hammerfest and Kvalsund in Finnmark. <sup>2</sup> Excluding information from the municipalities Austrheim in Hordaland, Frøya in Sør-Trøndelag and Rødøy in Nordland. <sup>3</sup> Excluding information from the municipalities Kvam in Hordaland, Bremanger and Vågsøy in Sogn og Fjordane, Haram in Møre og Romsdal, Herøy, Lurøy and Flakstad in Nordland and Torsken in Troms.

**11.2. Land reclamation. County**

	Applications for land reclamation	Area applied for land reclamation		Approved area for land reclamation
		Decares		
2005 <sup>1</sup> .....	462	11 407		10 693
2006 <sup>2</sup> .....	485	12 626		11 606
2007 <sup>3</sup> .....	547	13 649		13 119
<b>2007</b>				
<b>County</b>				
Østfold .....	5	82		82
Akershus og Oslo .....	10	412		387
Hedmark .....	77	1 766		1 590
Oppland .....	85	1 925		1 857
Buskerud .....	13	135		135
Vestfold .....	12	306		296
Telemark .....	6	64		62
Aust-Agder .....	5	197		197
Vest-Agder .....	16	302		288
Rogaland .....	112	2 099		1 948
Hordaland .....	12	188		148
Sogn og Fjordane .....	8	157		155
Møre og Romsdal .....	35	758		825
Sør-Trøndelag .....	22	696		696
Nord-Trøndelag .....	56	2 049		2 024
Nordland .....	50	1 757		1 724
Troms Romsa .....	8	303		303
Finnmark Finnmarku .....	15	453		402

<sup>1</sup> Excluding information from the municipalities Bokn in Rogaland, Radøy, Austrheim, Fedje and Masfjorden in Hordaland, Vågsøy in Sogn og Fjordane, Giske, Midsund and Tustna in Møre og Romsdal, Grong in Nord-Trøndelag, Hamarøy, Tysfjord, Røst and Moskenes in Nordland, Torsken in Troms and Hammerfest and Kvalsund in Finnmark. <sup>2</sup> Excluding information from the municipalities Austrheim in Hordaland, Frøya in Sør-Trøndelag and Rødøy in Nordland. <sup>3</sup> Excluding information from the municipalities Kvam in Hordaland, Bremanger and Vågsøy in Sogn og Fjordane, Haram in Møre og Romsdal, Herøy, Lurøy and Flakstad in Nordland and Torsken in Troms.

**11.3. Applications for exemption from the obligation in the Concession Act and the Allodial Act. County**

	Applications treated by the Concession Act and the Allodial Act	Applications approved with limited exemption from the obligation	Applications approved with permanent exemption from the obligation		Refused applications
2005 <sup>1</sup> .....	1 172	657	424		91
2006 <sup>2</sup> .....	1 048	554	400		94
2007 <sup>3</sup> .....	911	520	299		92
<b>2007</b>					
<b>County</b>					
Østfold .....	17	14	2		1
Akershus og Oslo .....	23	16	7		0
Hedmark .....	64	40	15		9
Oppland .....	85	57	21		7
Buskerud .....	87	49	26		12
Vestfold .....	25	18	7		0
Telemark .....	88	40	23		25
Aust-Agder .....	37	24	9		4
Vest-Agder .....	55	30	22		3
Rogaland .....	35	21	11		3
Hordaland .....	67	39	25		3
Sogn og Fjordane .....	39	27	9		3
Møre og Romsdal .....	52	34	12		6
Sør-Trøndelag .....	62	41	20		1
Nord-Trøndelag .....	49	26	19		4
Nordland .....	71	31	38		2
Troms Romsa .....	54	13	32		9
Finnmark Finnmarku .....	1	0	1		0

<sup>1</sup> Excluding information from the municipalities Bokn in Rogaland, Radøy, Austrheim, Fedje and Masfjorden in Hordaland, Vågsøy in Sogn og Fjordane, Giske, Midsund and Tustna in Møre og Romsdal, Grong in Nord-Trøndelag, Hamarøy, Tysfjord, Røst and Moskenes in Nordland, Torsken in Troms and Hammerfest and Kvalsund in Finnmark. <sup>2</sup> Excluding information from the municipalities Austrheim in Hordaland, Frøya in Sør-Trøndelag and Rødøy in Nordland. <sup>3</sup> Excluding information from the municipalities Kvam in Hordaland, Bremanger and Vågsøy in Sogn og Fjordane, Haram in Møre og Romsdal, Herøy, Lurøy and Flakstad in Nordland and Torsken in Troms.



## 12. Sample survey of agriculture and forestry 2007

The yearly survey of agriculture and forestry is intended to obtain relevant data not found in administrative data systems. The main topics differ from one year to another. In 2007, the main topics were labour input in agriculture, forestry and supplementary industries.

### 12.1. Main results

*Fewer man-hours in farming*

The total labour input on holdings with agriculture and horticulture was 111.6 million man-hours in 2006/07. In addition, the labour input in farm forestry was 3.5 million man-hours, and in supplementary industries 6.5 million. The labour input to agriculture and horticulture in 2006/07 was 8.1 million man-hours less than two years earlier.

*Supplementary industries widespread in agriculture*

In 2007, 40 per cent of the agricultural holdings were engaged in some sort of supplementary industry in addition to traditional farming and forestry. In this context, supplementary industry refers to an activity that uses the land, buildings or machinery belonging to the holding. The most common activities were machinery-related services, renting out hunting and fishing rights, renting out farm buildings or farmhouses, farm tourism and processing of timber for sale. In total, the gross income from supplementary industries constituted NOK 2.25 billion in 2007.

### 12.2. Background and purpose

*Purpose and history*

The purpose of the Survey of Agriculture is to obtain relevant data not found in administrative data systems, and to obtain data for units not covered by administrative systems.

The Survey of Agriculture is designed to form a picture of the agriculture industry in Norway (the number of holdings and properties) through various questions. The questions vary from year to year (labour, liabilities, investments, fixed assets, extended forest survey etc.).

*Users and applications*

Data from the survey are used by professional organizations, the Budget Committee for Agriculture, the Ministry of Agriculture and Food, the Ministry of Environment, various research institutions such as the Norwegian Agricultural Economics Research Institute and the Division for Environmental Statistics at Statistics Norway.

### 12.3. Statistics production

*Population*

The population is active holdings registered in the administrative Farm Register of the Norwegian Agricultural Authority, and covers all units that meet one or more conditions relating to minimum operating standards. An example of such conditions is that a holding must have at least 5 decares of agricultural area in use.

*Data sources*

The majority of the data comes directly from respondents who fill out forms for the annual agricultural survey. The Agricultural Register provides information on the size of the agricultural and forest area, persons associated with the property/holding and what their association is with the property/holding.

*Sampling*

Each year a sample is drawn from the Farm Register for the Survey of Agriculture. The size of the sample varies between 10 000 and 12 000 active holdings, stratified by the size of the agricultural area and type of production in each county.

*Collection of data*

Forms are sent to the holdings drawn for inclusion in the survey. The owner or holder of the property provides the data.

*Control and revision* A number of controls and corrections are done to ensure consistency both on a single form and between forms and available register information.

*Estimation* The sample is stratified by location, utilized agricultural area and farm type.

*Confidentiality* Figures based on few units (holdings) are not published if this causes risk for identifying any of the units concerned, or the results are considered to be all too uncertain for giving estimates.

## 12.4. Concepts, variables and classifications

*Definitions of the main concepts and variables*

*Agricultural holding:*

A single unit both technically and economically, which has single management and which produces agricultural products. The holding is independent of municipality boundaries. The agricultural holdings headquarter must be located on an agricultural property.

*Holder:*

The person considered responsible for operating the holding.

*Agricultural area in use:*

Agricultural land that is harvested at least once during a year, including planted areas of permanent crops, where no harvest has been produced so far. Includes also arable land included in the crop rotation system with no intention to produce a harvest during the year, but which will be harvested the next year.

*Supplementary industry:*

An activity that uses the land, buildings or machinery belonging to the holding.

*Gross income:*

Total wages and salaries, pensions, entrepreneurial income and property income.

*Type of farming:*

Statistics Norway has established a system for classification of agricultural holdings by type of farming and economic size. The system allows for comparison within EU-countries, and is based on standard gross margin as common measurement for various outputs within agriculture. The standard gross margin is the balance between standard values of certain direct costs easily allocated to this output. Costs related to the following are not deducted: labour input, machinery (repairs, depreciation etc.), fuel and buildings. The type of farming on a holding is determined based on the relative contribution of different enterprises to the holdings total standard gross margin.

*Standard gross margin of an agricultural holding:*

The standard gross margin (SGM) is the balance between the standard value of output and the standard value of certain direct costs. SGMs are calculated at regional level per area unit (decare, square metre) and head of livestock for related crops and livestock categories. The SGM for an enterprise within the holding is the SGM per area unit/head of livestock multiplied by the total of the relevant crop/livestock category. The total SGM of the holding is the sum of all enterprises run by the holding.

*Standard classifications* County where the holding is located, size of holding expressed in decares of utilized agricultural area and type of farming of the holding.

## 12.5. Sources of error and uncertainty

*Measurement and processing errors*

Primary data are obtained from the forms filled out by the respondents. They may contain errors made by the individual respondents when filling out the form. A

number of errors are discovered and corrected during the revision process at Statistics Norway.

A number of errors during the collection and processing of the data are unavoidable and include errors that occur during revision, data processing errors etc. Extensive work has been carried out to reduce these errors as much as possible.

*Non-response errors* Non-response in the survey is due to the failure of individual respondents to deliver questionnaires or that a property has been sold or is no longer farmed as an independent unit.

*Sampling errors* All sample surveys will be encumbered by a certain amount of uncertainty. Generally, the fewer the observations are, the more uncertain the results. Groups based on few observations will be particularly sensitive to extreme values, i.e. values that deviate considerably from the average. Such extreme values are consequently assigned a weight equal to 1, so that they only represent themselves in the material.

All types of holdings are included in the Survey of Agriculture sample. To provide a better representation in certain counties with few holdings a higher percentage of holdings are selected in these areas.

*Other sources of error* The quality of the register basis from which the sample is selected also has an impact on the quality of the final result.

## 12.6. Comparability and coherence

The statistics are basically comparable back to the end of 1940th. However, for some variables there will be a break e.g. between 1998 and 1999. The reason for this is that the method used for estimating the number of holdings from 1990 to 1998 gradually led to too high figures. This was evidently shown by the results of the Complete Census of Agriculture for 1999.

In 2007, the question related to supplementary industries was expanded. In addition to ticking off for relevant industry, the respondents were asked to fill in the corresponding gross income. This modification may have caused a somewhat higher item non-response.

## 12.7. Availability

*Publications and Internet address* The statistics are released electronically via Today's Statistics on Statistics Norway's web site:  
[Sample survey of agriculture and forestry](#)

*Micro data* Primary data is stored at Statistics Norway.

**12.1. Labour input in agriculture, forestry and other supplementary industries on holdings. County. 1 000 man-hours. 2006/07**

	Labour input, total	In agriculture	In forestry <sup>1</sup>	In supplementary industries
1998/99 .....	165 613	151 442	6 003	8 168
2000/01 .....	152 723	139 987	4 736	8 000
2002/03 .....	142 625	131 667	4 481	6 477
2004/05 .....	130 389	119 744	3 837	6 808
2006/07 .....	121 639	111 648	3 462	6 528
<b>2006/07</b>				
Østfold .....	5 111	4 529	260	322
Akershus/Oslo .....	4 573	3 919	160	493
Hedmark .....	9 421	8 497	385	539
Oppland .....	13 406	12 489	327	590
Buskerud .....	5 364	4 623	238	503
Vestfold .....	3 960	3 529	199	233
Telemark .....	3 086	2 657	155	273
Aust-Agder .....	1 671	1 501	83	87
Vest-Agder .....	2 607	2 334	108	164
Rogaland .....	14 816	14 093	174	550
Hordaland .....	7 870	7 258	205	407
Sogn og Fjordane .....	9 174	8 540	213	422
Møre og Romsdal .....	8 911	8 331	170	410
Sør-Trøndelag .....	8 684	7 875	258	551
Nord-Trøndelag .....	10 506	9 716	324	466
Nordland .....	7 849	7 387	124	339
Troms Romsa .....	3 575	3 379	77	118
Finmark Finnmarku .....	1 054	991	2	61

<sup>1</sup>Not included work executed by self-employed persons or firms.

**12.2. Labour input in agriculture by category of manpower. County, type of farming and agricultural area in use. 1 000 man-hours. 2006/07**

	Total	Holders and spouses	Family members	Regular and not regularly employees <sup>1</sup>
1998/99 .....	151 442	115 072	16 773	19 598
2000/01 .....	139 987	103 270	15 910	20 806
2002/03 .....	131 667	94 787	14 356	22 526
2004/05 .....	119 744	85 402	12 516	21 824
2006/07 .....	111 648	77 332	10 780	23 536
<b>2006/07</b>				
Østfold .....	4 529	2 979	410	1 139
Akershus/Oslo .....	3 919	2 654	375	890
Hedmark .....	8 497	5 696	821	1 980
Oppland .....	12 489	8 336	1 178	2 975
Buskerud .....	4 623	3 106	347	1 170
Vestfold .....	3 529	2 035	237	1 257
Telemark .....	2 657	2 026	184	447
Aust-Agder .....	1 501	887	101	512
Vest-Agder .....	2 334	1 707	156	472
Rogaland .....	14 093	9 429	1 526	3 138
Hordaland .....	7 258	5 337	841	1 080
Sogn og Fjordane .....	8 540	6 224	988	1 327
Møre og Romsdal .....	8 331	5 957	952	1 422
Sør-Trøndelag .....	7 875	5 578	749	1 548
Nord-Trøndelag .....	9 716	6 587	857	2 272
Nordland .....	7 387	5 400	602	1 385
Troms Romsa .....	3 379	2 633	357	389
Finnmark Finnmarku .....	991	759	100	132
<b>Type of farming</b>				
Cereals and oil seeds .....	6 286	5 201	542	543
Other filed crops .....	4 284	3 019	379	886
Horticulture and permanent crops .....	10 192	3 544	626	6 022
Cattle - dairying .....	40 821	27 563	3 887	9 371
Cattle - rearing and fattening .....	6 759	5 409	644	706
Cattle - mixed .....	2 837	1 960	375	502
Sheep .....	14 165	11 746	1 606	814
Various grazing livestock .....	8 348	6 424	912	1 012
Granivores .....	4 774	3 348	418	1 008
Mixed cropping .....	2 369	1 287	205	876
Mixed livestock .....	4 676	3 325	550	801
Mixed crops - livestock .....	6 137	4 505	636	995
Not classified .....	0	0	0	0
<b>Agricultural area in use</b>				
- 49 decares .....	11 884	5 057	732	6 095
50- 99 " .....	12 415	9 273	1 257	1 885
100-199 " .....	30 187	23 587	3 030	3 570
200-299 " .....	24 217	18 292	2 619	3 307
300-499 " .....	21 332	14 855	2 191	4 286
500- " .....	11 614	6 269	952	4 393

<sup>1</sup> Comprises also self-employed/firms. <sup>2</sup> Comprises also joint operations with milk production without agricultural area in use and some holdings with crop production in greenhouses.

**12.3. Labour input in agriculture, by sex and category of manpower. County, type of farming and agricultural area in use. 1 000 man-hours. 2006/07**

	Labour input in agriculture, total	Self-employed persons/firms	Males				Females			
			Total	Holders and spouses/cohabitants	Family members	Regular and not regularly employees	Total	Holders and spouses/cohabitants	Family members	Regular and not regularly employees
1998/99 .....	151 442	2 463	112 110	87 097	12 404	12 610	36 869	27 975	4 369	4 525
2000/01 .....	139 987	2 176	103 647	78 429	11 598	13 620	34 164	24 841	4 312	5 011
2002/03 .....	131 667	2 117	97 556	71 984	10 435	15 137	31 995	22 802	3 922	5 271
2004/05 .....	119 744	2 673	88 633	64 967	9 182	14 485	28 438	20 437	3 335	4 666
2006/07 .....	111 648	2 303	82 262	58 410	7 970	15 882	27 083	18 923	2 810	5 351
<b>2006/07</b>										
Østfold .....	4 529	78	3 353	2 319	311	724	1 098	661	99	338
Akershus/Oslo .....	3 919	106	2 931	2 070	309	551	882	584	65	233
Hedmark .....	8 497	263	6 353	4 432	622	1 299	1 881	1 264	199	418
Oppland .....	12 489	300	9 066	6 217	866	1 984	3 123	2 120	312	691
Buskerud .....	4 623	81	3 425	2 307	262	857	1 117	799	85	232
Vestfold .....	3 529	83	2 564	1 584	186	794	882	451	51	380
Telemark .....	2 657	48	1 879	1 484	134	261	729	542	50	137
Aust-Agder .....	1 501	25	1 031	669	70	292	445	219	30	196
Vest-Agder .....	2 334	32	1 753	1 312	104	337	550	395	51	103
Rogaland .....	14 093	346	10 180	6 927	1 129	2 123	3 567	2 502	397	669
Hordaland .....	7 258	155	5 297	4 021	607	668	1 807	1 316	234	257
Sogn og Fjordane .....	8 540	128	6 354	4 671	708	976	2 058	1 553	281	224
Møre og Romsdal .....	8 331	157	6 258	4 576	704	978	1 916	1 381	248	287
Sør-Trøndelag .....	7 875	119	5 882	4 245	541	1 096	1 873	1 332	208	334
Nord-Trøndelag .....	9 716	199	7 416	5 132	673	1 610	2 101	1 455	184	462
Nordland .....	7 387	141	5 340	3 892	453	995	1 905	1 507	149	249
Troms Romsa .....	3 379	36	2 450	1 973	233	244	893	660	123	110
Finnmark Finnmarku .....	991	6	729	578	58	93	256	181	43	32
<b>Type of farming</b>										
Cereals and oil seeds .....	6 286	216	5 156	4 381	466	309	914	820	76	18
Other filed crops .....	4 284	141	3 217	2 405	294	518	926	614	85	227
Horticulture and permanent crops .....	10 192	109	6 431	2 461	425	3 545	3 652	1 083	202	2 368
Cattle - dairying .....	40 821	644	31 425	21 185	2 884	7 355	8 753	6 378	1 002	1 372
Cattle - rearing and fattening ...	6 759	186	5 182	4 262	497	422	1 391	1 147	147	98
Cattle - mixed .....	2 837	46	2 124	1 473	286	366	666	487	89	90
Sheep .....	14 165	265	10 071	8 548	1 088	435	3 829	3 198	518	114
Various grazing livestock .....	8 348	180	5 673	4 446	644	583	2 495	1 977	268	250
Granivores .....	4 774	193	3 354	2 433	280	641	1 227	915	138	174
Mixed cropping .....	2 369	41	1 687	962	167	558	641	326	38	277
Mixed livestock .....	4 676	109	3 304	2 338	414	552	1 263	987	136	140
Mixed crops - livestock .....	6 137	173	4 638	3 515	525	598	1 326	991	111	225
Not classified .....	0	0	0	0	0	0	0	0	0	0
<b>Agricultural area in use</b>										
- 49 decares <sup>1</sup> " .....	11 884	233	8 129	3 492	484	4 153	3 522	1 565	248	1 709
50- 99 " .....	12 415	226	8 868	6 862	901	1 105	3 321	2 411	356	554
100-199 " .....	30 187	477	21 986	17 643	2 190	2 153	7 724	5 944	840	940
200-299 " .....	24 217	423	18 256	14 011	1 961	2 284	5 539	4 280	658	600
300-499 " .....	21 332	562	16 103	11 493	1 682	2 928	4 667	3 361	509	796
500- " .....	11 614	382	8 921	4 908	753	3 260	2 311	1 361	199	751

<sup>1</sup> Comprises also joint operations with milk production without agricultural area in use and some holdings with crop production in greenhouses.

**12.4. Holdings with supplementary industry. County. 2006/07**

	Holdings, total	Holdings with supplementary industry, total	By type of supplementary industry					Proportion of holdings with supplementary industry
			Contracting work with tractor, combine harvester etc.	Renting out hunting or fishing rights	Processing timber for sale	Camping site, cabin renting, farm tourism etc.	Renting out farmhouse or farm buildings	
								Per cent
1998/99 .....	70 740	29 097	14 076	5 851	3 714	3 106	3 490	41
2002/03 .....	58 231	21 260	9 975	4 794	3 915	3 023	4 021	37
2004/05 .....	53 003	25 317	10 551	7 580	4 889	2 827	5 241	48
2006/07 .....	49 935	20 105	8 133	4 791	3 058	2 325	4 116	40
<b>2006/07</b>								
Østfold .....	2 677	1 113	490	67	223	71	372	42
Akershus/Oslo .....	2 558	1 194	551	142	101	62	493	47
Hedmark .....	4 059	1 606	630	452	162	140	324	40
Oppland .....	5 477	2 266	1 028	724	296	209	505	41
Buskerud .....	2 593	1 469	614	568	276	312	314	57
Vestfold .....	1 743	955	400	152	119	64	308	55
Telemark .....	1 663	781	295	109	154	129	138	47
Aust-Agder .....	742	386	210	81	89	27	54	52
Vest-Agder .....	1 228	479	221	48	131	73	89	39
Rogaland .....	5 075	1 661	503	243	196	172	296	33
Hordaland .....	3 503	1 077	419	62	136	156	245	31
Sogn og Fjordane .....	3 584	1 276	368	346	224	229	147	36
Møre og Romsdal .....	3 342	1 305	601	368	193	179	184	39
Sør-Trøndelag .....	3 469	1 546	591	639	208	157	243	45
Nord-Trøndelag .....	3 819	1 571	598	592	189	195	191	41
Nordland .....	2 720	842	372	129	213	87	115	31
Troms Romsa .....	1 285	442	196	67	143	45	80	34
Finnmark Finnmarku .....	398	136	48	0	7	18	16	34

**12.5. Holdings with various supplementary industries<sup>1</sup> by size of gross income from these industries. 2006**

	Holdings with gross income from supplementary industry	Of which				
		Contracting work with tractor, combine harvester etc.	Renting out hunting or fishing rights	Processing timber for sale	Camping site, cabin renting, farm tourism etc.	Renting out farmhouse or farm buildings
2006 .....	16 397	7 656	4 027	2 898	2 045	3 528
<b>Gross income from supplementary industry</b>						
- 9 999 NOK .....	2 170	1 185	2 707	933	230	308
10 000- 49 999 " .....	5 667	2 933	1 118	1 359	763	1 733
50 000- 99 999 " .....	2 981	1 365	133	317	350	849
100 000-199 999 " .....	2 680	1 182	49	123	326	437
200 000-499 999 " .....	1 950	759	9	113	234	142
500 000- " .....	948	233	11	54	141	59

<sup>1</sup> Comprise only holdings where gross income are given.