

Agriculture Statistics 2006

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. The volume of 2006 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/>.

As from 2008 Statistics Norway will prepare a new publication in the series Statistical Analysis. This publication will contain a survey on official agricultural statistics, collected by Statistics Norway as well as other institutions.

Berit Bjørlo and Anne Ingun Løvberget have prepared this publication. Ole Osvald Moss, Head of Division for Primary Industry Statistics, is responsible for the publication.

Statistisk sentralbyrå
Oslo/Kongsvinger, 18 December 2008

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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 2006

The statistics for Farmer's income and property refer to the year 2005, all the other statistics refer to the year 2006.

2. Agricultural properties

2.1. Main results, 2006

In 2006 there were 190 600 land properties with agricultural or productive forest area in Norway. Of these properties, 177 800 had some kind of building located on the property. About 91 per cent of the built-on properties had dwelling houses.

In total, 1 030 000 buildings were registered on agricultural properties, of which 23 per cent were dwelling houses, 45 per cent were agricultural buildings and 32 per cent were other types of buildings. About 22 per cent of all the buildings had protection status according to cultural heritage.

One out of five agricultural properties uninhabited

About 34 100, or 21 per cent, of a total of 161 300 agricultural properties with dwelling houses did not have people living there permanently. About 10 per cent of the properties were uninhabited in the counties surrounding Oslo, while about 30 per cent of the properties were uninhabited in the counties in the northern part of the country. The variation within counties is large from municipality to municipality. Central agricultural municipalities around the lake Mjøsa and in the district of Jæren have a lower percentage of uninhabited properties compared to municipalities in the northern part of Norway.

Most uninhabited among properties without own agricultural activity

The total agricultural area, the number of properties and the size of properties have not changed much over time. However, the number of properties with own agricultural activity has dropped significantly during recent decades. Uninhabited properties are most frequent among properties without agricultural activity. On these properties, the area is either out of use or rented out to other farmers. About 28 per cent of these properties are uninhabited. Among properties with own agricultural activity, the corresponding figure is 4.5 per cent.

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. 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. To minimize this type of error, 363 agricultural properties with more than 20 persons inhabited are reduced by totally 21 000 persons.

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 period 1997-2006.

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

<i>Measurement and processing errors</i>	Errors may arise when data are entered into the various administrative registers.
<i>Non-response errors</i>	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, see: http://www.ssb.no/english/subjects/10/04/laeiby_en/. When comparing data from 2000 and 2006, improved quality of the registers and different demarcation of the population may influence the statistics at municipality level.

2.7. Availability

<i>Publications and Internet address</i>	The statistics is published on the internet-site of Statistics Norway: <u>Agricultural properties and buildings</u>
<i>Micro data</i>	Primary data is stored at Statistics Norway.

2.1. Buildings on agricultural and forestry properties¹. 2006

	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				
The whole country	177 788	24.1	1 030 341	22.0	237 524	466 547	80 783	245 487
County								
Østfold	6 496	23.3	36 137	20.1	9 264	19 382	445	7 046
Akershus/Oslo	7 455	24.7	45 767	24.9	12 209	19 467	441	13 650
Hedmark	16 088	25.5	102 673	26.2	22 083	49 996	8 082	22 512
Oppland	14 524	25.5	99 439	24.8	20 821	53 155	7 314	18 149
Buskerud	9 298	26.9	73 828	29.0	13 290	36 750	4 440	19 348
Vestfold	4 535	28.4	24 633	21.8	6 083	11 365	405	6 780
Telemark	7 829	23.2	50 502	25.1	11 021	22 728	2 714	14 039
Aust-Agder	5 276	24.9	25 929	31.5	6 258	10 662	1 327	7 682
Vest-Agder	7 034	24.5	30 724	27.6	8 392	11 694	1 411	9 227
Rogaland	10 493	36.4	60 975	12.6	15 452	28 894	3 085	13 544
Hordaland	13 212	25.0	77 585	22.2	16 950	34 108	10 202	16 325
Sogn og Fjordane	10 316	22.6	67 523	24.9	15 084	34 577	8 032	9 830
Møre og Romsdal	13 927	22.0	77 573	28.3	18 197	31 635	9 895	17 846
Sør-Trøndelag	10 933	26.2	67 459	18.8	14 738	32 423	5 545	14 753
Nord-Trøndelag	9 435	30.8	53 234	12.5	12 973	25 455	3 781	11 025
Nordland	17 006	15.2	75 096	11.4	19 405	24 070	7 224	24 397
Troms Romsa	10 499	15.9	46 931	16.7	11 544	15 677	5 734	13 976
Finnmark Finnmarku	3 432	14.1	14 333	8.8	3 760	4 509	706	5 358
Inhabitation								
Agricultural and forestry properties with dwelling houses and inhabitation	127 156	28.6	817 213	21.5	198 166	383 766	57 229	178 052
Other properties	50 632	12.7	213 128	24.1	39 358	82 781	23 554	67 435

¹Including 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 inhabitation¹. 2006

	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
			Per cent			Per cent		Per cent
The whole country	190 634	177 788	93.3	161 304	127 156	21.2	446 847	9.6
County								
Østfold	7 088	6 496	91.6	6 075	5 281	13.1	19 553	7.5
Akershus/Oslo	8 370	7 455	89.1	6 897	6 139	11.0	23 612	2.3
Hedmark	17 338	16 088	92.8	14 655	11 910	18.7	39 371	20.9
Oppland	15 449	14 524	94.0	13 290	11 199	15.7	39 964	21.8
Buskerud	10 069	9 298	92.3	8 326	7 045	15.4	25 715	10.5
Vestfold	4 879	4 535	92.9	4 259	3 897	8.5	14 583	6.6
Telemark	8 361	7 829	93.6	6 974	5 476	21.5	18 322	11.0
Aust-Agder	5 679	5 276	92.9	4 851	3 699	23.7	12 029	11.6
Vest-Agder	7 562	7 034	93.0	6 365	4 606	27.6	14 798	9.1
Rogaland	11 243	10 493	93.3	9 570	8 077	15.6	33 395	8.4
Hordaland	13 779	13 212	95.9	11 969	9 251	22.7	32 223	7.1
Sogn og Fjordane	10 589	10 316	97.4	9 797	7 552	22.9	27 837	26.1
Møre og Romsdal	14 532	13 927	95.8	12 782	10 240	19.9	36 089	14.7
Sør-Trøndelag	11 683	10 933	93.6	9 867	7 860	20.3	29 345	10.7
Nord-Trøndelag	10 156	9 435	92.9	8 752	7 380	15.7	28 925	22.5
Nordland	18 658	17 006	91.1	14 702	9 249	37.1	27 383	11.6
Troms Romsa	11 284	10 499	93.0	9 167	6 139	33.0	17 365	11.3
Finnmark Finnmarku	3 915	3 432	87.7	3 006	2 156	28.3	6 338	8.7
Owner								
Male	131 477	124 876	95.0	115 558	95 323	17.5	347 031	.
Female	44 647	41 686	93.4	37 491	27 302	27.2	86 199	.
Properties of persons deceased/ legal person/unknown	14 510	11 226	77.4	8 255	4 531	45.1	13 617	.
Agricultural activity								
Property without agricultural area	12 325	7 961	64.6	3 846	2 270	41.0	6 255	.
Property with own agricultural activity	49 725	49 483	99.5	48 766	46 593	4.5	206 197	.
Property with agricultural area rented out or out of use	128 584	120 344	93.6	108 692	78 293	28.0	234 395	.
Owned agricultural area								
0- 4 decares	12 337	7 973	64.6	3 852	2 276	40.9	6 273	.
5- 49 "	103 427	96 609	93.4	86 556	61 082	29.4	179 423	.
50- 99 "	36 510	35 481	97.2	34 016	28 994	14.8	104 992	.
100-199 "	25 816	25 350	98.2	24 765	23 123	6.6	98 456	.
200-299 "	7 859	7 765	98.8	7 628	7 329	3.9	34 526	.
300-499 "	3 723	3 668	98.5	3 589	3 490	2.8	17 981	.
500- "	962	942	97.9	898	862	4.0	5 196	.
Productive forest area								
0- 24 decares	70 734	64 961	91.8	58 455	43 913	24.9	140 089	.
25- 99 "	37 116	34 228	92.2	30 883	24 052	22.1	80 072	.
100- 249 "	33 565	31 592	94.1	28 983	23 127	20.2	83 551	.
250- 299 "	22 000	20 896	95.0	19 334	15 886	17.8	60 468	.
500- 999 "	15 023	14 390	95.8	13 284	11 238	15.4	44 806	.
1 000- 1 999 "	7 688	7 396	96.2	6 758	5 798	14.2	23 986	.
2 000- 4 999 "	3 332	3 210	96.3	2 789	2 456	11.9	10 607	.
5 000-19 999 "	944	897	95.0	682	587	13.9	2 754	.
20 000- "	232	218	94.0	136	99	27.2	514	.

¹ 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, 2006

The number of holdings with agricultural activity dropped by 3.5 per cent from 2005 to 51 200 in 2006, while the average size of farms increased from 195 to 202 decares in the same period.

The total agricultural area in use was 10.24 million decares in 2006.

48 400 holdings were operated by natural persons, while 2 800 were operated by various legal persons, e.g. joint operations, limited companies and institutions.

Fewer farms with dairy cows

Holdings can be classified by type of farming and economic size. From 2005 to 2006, the number of farms with cattle-dairy as main production dropped by 7 per cent. The number of farms with grain and oil seed, and farms with sheep as main production, was reduced by 5 per cent respectively. These three productions are the dominating types of farming in Norwegian agriculture. One quarter of the farms were classified as holdings with cattle - dairying as main type of farming in 2006. 18 per cent of the farms were classified with grain and oil seed as main production, and 18 per cent with sheep.

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, included planted area of permanent crops, which not so far is yielding, and fallow land for one year.

Farm type of agricultural holdings:

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

The standard gross margin of an agricultural holding:

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 (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. SGM for an enterprise within the holding is the SGM per area unit/head of livestock multiplied by the total of the crop/livestock category concerned. The total SGM of the holding is the sum of all enterprises ran 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

	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
2006							
County							
Østfold	2 722	2 614	2 298	316	108	83	25
Akershus og Oslo	2 638	2 549	2 234	315	89	50	39
Hedmark	4 164	3 989	3 447	542	175	149	26
Oppland	5 594	5 124	4 488	636	470	442	28
Buskerud	2 688	2 577	2 200	377	111	80	31
Vestfold	1 814	1 746	1 554	192	68	41	27
Telemark	1 719	1 660	1 430	230	59	43	16
Aust-Agder	758	726	627	99	32	22	10
Vest-Agder	1 240	1 175	1 008	167	65	52	13
Rogaland	5 157	4 769	4 134	635	388	344	44
Hordaland	3 546	3 373	2 888	485	173	157	16
Sogn og Fjordane	3 722	3 550	3 012	538	172	164	8
Møre og Romsdal	3 487	3 272	2 775	497	215	205	10
Sør-Trøndelag	3 567	3 381	2 996	385	186	159	27
Nord-Trøndelag	3 903	3 618	3 187	431	285	261	24
Nordland	2 766	2 631	2 215	416	135	119	16
Troms	1 324	1 277	1 055	222	47	39	8
Finmark	409	386	309	77	23	19	4

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

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

¹ Refers to holdings with at least 5 decares agricultural area in use. ² Joint operations etc. with less than 5 decares agricultural area in use are included. ³ 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. ⁴ For 1959 and 1969 the area used for harvesting of meadow seed is included.

3.3. Agricultural area per holding, by county. 1979, 1989, 1999-2006. Decares

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

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

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

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

¹ Refers to holdings with at least 5 decares agricultural area in use. ² Joint operations etc. with less than 5 decares agricultural area in use are included. ³ Including he-goats.

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

	Cattle				Sheep 1 year and over	Dairy goat	Pig		Hens
	Total	Cow ¹		Pig for breeding			Pig for slaughter- ing		
		Total	Dairy cow					Beef cow	
1979 ²	18,0	9,6	..	..	19,4	³ 33,8	9,7	..	261
1989 ²	25,3	11,7	..	..	31,1	³ 45,9	16,1	..	580
1999 ⁴	34,3	13,2	13,8	6,7	42,1	68,9	27,2	72,3	783
2000 ⁴	34,6	13,5	14,4	7,3	43,4	71,5	30,6	92,2	851
2001 ⁴	36,4	14,0	14,6	8,0	45,2	73,4	33,3	97,7	958
2002 ⁴	37,9	14,5	15,2	8,3	46,9	74,7	36,0	107,4	984
2003 ⁴	39,9	15,2	15,9	9,2	49,6	77,7	39,7	117,0	1 083
2004 ⁴	41,1	15,6	16,3	9,8	51,9	78,8	43,2	126,9	1 275
2005 ⁴	42,9	16,1	16,7	10,6	54,9	80,7	47,6	146,5	1 351
2006 ⁴	44,1	16,8	17,6	10,8	56,1	82,7	53,0	159,6	1 601
2006⁴									
County									
Østfold	54,4	20,9	23,7	13,4	23,6	-	57,6	197,1	3 325
Akershus og Oslo	55,6	20,8	23,0	14,7	37,6	72,0	42,9	183,9	2 349
Hedmark	50,6	19,1	18,9	15,4	62,0	55,9	64,3	196,9	2 251
Oppland	47,7	17,3	17,2	12,5	61,5	82,4	55,0	150,3	840
Buskerud	38,3	15,7	15,3	13,3	59,3	79,7	80,3	96,2	1 190
Vestfold	54,4	22,7	26,8	17,7	32,1	-	59,3	226,8	2 410
Telemark	32,8	12,9	13,3	11,3	55,4	65,3	60,6	130,2	1 226
Aust-Agder	33,2	13,4	14,8	9,4	48,4	-	29,6	112,5	1 538
Vest-Agder	36,2	13,8	14,8	9,6	42,5	-	52,8	89,0	990
Rogaland	53,8	19,5	21,2	8,8	63,5	80,3	64,0	163,6	2 747
Hordaland	26,6	11,7	13,6	6,1	43,9	82,2	29,7	85,3	668
Sogn og Fjordane	27,5	11,8	12,7	5,4	43,8	94,0	26,1	92,0	677
Møre og Romsdal	40,8	16,3	17,3	9,6	46,4	98,7	30,5	128,7	659
Sør-Trøndelag	46,9	17,3	17,7	10,3	71,7	53,0	35,9	120,6	1 406
Nord-Trøndelag	56,3	19,9	20,2	12,1	63,7	72,0	52,1	165,8	2 527
Nordland	45,6	16,3	16,6	10,4	71,1	84,8	42,0	140,5	422
Troms	36,2	15,2	16,1	9,1	73,4	80,1	30,0	132,3	338
Finnmark Finnmarku	41,4	17,5	18,0	6,5	64,0	-	23,2	56,2	1 157

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

3.6. Holdings by type of farming, 2000-2006

	2000	2001	2002	2003	2004	2005	2006
Holdings, total	68 539	65 607	61 890	58 231	55 507	53 003	51 218
Type of farming							
Cereals and oil seeds	11 888	11 676	11 055	10 311	9 990	9 492	9 022
Other field crops	3 312	3 185	2 769	3 276	3 149	3 228	3 386
Horticulture and permanent crops	2 264	2 128	2 179	1 832	1 684	1 669	1 576
Cattle - dairying	18 679	17 652	16 360	15 797	15 108	14 271	13 306
Cattle - rearing and fattening ..	4 510	4 106	4 051	3 836	3 737	3 678	3 919
Cattle - mixed	978	1 098	1 111	699	641	769	671
Sheep	12 455	12 491	11 933	11 864	10 798	9 695	9 249
Various grazing livestock	5 287	4 840	4 485	3 114	3 101	3 090	2 972
Granivores	1 707	1 572	1 667	1 375	1 487	1 626	1 617
Mixed cropping	939	868	819	838	774	675	604
Mixed livestock	1 476	1 350	1 299	1 126	1 031	1 010	941
Mixed crops - livestock	4 955	4 568	4 113	4 163	4 007	3 800	3 955
Not classified	89	73	49	-	-	-	-

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 2006, the register covered 96 per cent of all holdings and 99 per cent of the total agricultural area in use. 97 per cent of holdings with grain and oil seeds applied for governmental subsidies in 2006, 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	51 218	49 366	96,4
Agricultural area in use	10 344 607	10 248 267	99,1
Meadows and pasture land	6 613 284	6 558 964	99,2
Grain area	3 181 806	3 147 244	98,9
Cattle, total	922 976	919 077	99,6
Sheep, 1 year and over	928 486	920 101	99,1
Breeding pigs	102 483	101 184	98,7

4.1. Main results, 2006

Figures from applications for governmental subsidies show that the total agricultural area came to 10.2 million decares in 2006, of which 8.5 million decares were fully cultivated. The area of surface cultivated pastureland increased by 3 per cent to 1.46 million decares from 2005 to 2006.

The grain area was 3.1 million decares in 2006. From 2005 to 2006, the area of wheat increased by 6 per cent, while the area of barley dropped by 7 per cent.

The number of dairy cows decreased by 2.3 per cent from 2005 to 2006, while the number of beef cows increased by 6.3 per cent. The number of dairy goats fell by 5 per cent to a total of 42 400 in 2006, and the number of breeding pigs increased by 2 600 to 101 200.

Organic farming In the four-year period from 2002 to 2006, the percentage of holdings performing organic farming increased from 2.3 to 4.2. In 2006, the organic farmland covered 3.7 per cent of the total agricultural area in use.

23 000 cattle were registered on holdings approved for organic farming in 2006. About 6 000 of these were dairy cows, and 3 300 were 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. 1997-2006¹

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Agricultural area in use, total	10 095 145	10 179 788	10 269 026	10 322 461	10 311 582	10 324 851	10 255 988	10 266 228	10 262 373	10 248 671
Of which cultivated land	8 761 368	8 773 257	8 773 172	8 754 743	8 724 834	8 706 170	8 638 443	8 628 846	8 589 745	8 544 458
Open fields and gardens	3 977 967	3 978 249	3 941 979	3 938 064	3 918 292	3 845 897	3 812 234	3 794 377	3 758 464	3 689 647
Grain	3 185 463	3 224 231	3 236 765	3 267 502	3 210 830	3 210 467	3 230 502	3 238 704	3 213 083	3 147 538
Wheat	578 376	672 773	513 518	679 159	631 157	633 405	754 978	849 374	802 674	852 068
Rye and triticale ..	² 35 741	70 583	26 584	38 065	26 988	23 831	44 405	72 570	69 346	60 411
Barley	1 684 429	1 612 051	1 800 764	1 606 032	1 725 856	1 770 552	1 596 648	1 464 803	1 608 657	1 503 437
Oats	886 917	868 824	895 899	944 246	826 829	782 679	834 471	851 957	732 406	731 622
Oil seeds	71 942	60 501	63 501	57 122	108 600	109 608	75 022	68 602	66 909	65 109
Potato	174 663	157 785	147 618	150 180	151 268	151 178	144 985	140 931	136 713	139 056
Roots for feed, crops for green fodder and silage ..	360 462	358 089	311 424	284 674	269 714	205 027	195 184	175 417	154 889	147 682
Vegetables, field grown	55 572	56 102	60 083	60 255	62 972	60 891	64 147	62 372	65 728	68 897
Other crops	129 865	121 541	122 588	118 331	114 908	108 726	102 394	108 351	121 142	121 315
Meadows for mowing and pastures	6 117 178	6 201 539	6 327 047	6 384 397	6 393 290	6 478 954	6 443 754	6 471 851	6 503 909	6 559 024
Cultivated	4 783 401	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
Permanent grassland and surface cultivated land	1 333 777	1 406 531	1 495 854	1 567 718	1 586 748	1 618 681	1 617 545	1 637 382	1 672 628	1 704 213
Surface-cultivated meadows	254 776	291 793	285 934	281 659	276 397	274 777	265 196	260 638	255 771	248 646
Other infield pasture-land	1 079 001	1 114 738	1 209 920	1 286 059	1 310 351	1 343 904	1 352 349	1 376 744	1 416 857	1 455 567

¹ Comprises those who applied for governmental production subsidies. ² Triticale not included.

4.2. Domestic animals. 1997-2006¹

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Horses	22 009	23 991	25 716	27 314	28 399	29 089	28 051	28 678	29 329	30 662
Cattle	1 015 430	1 031 223	1 032 033	986 953	973 123	955 215	953 393	940 436	932 583	919 163
Cows	342 634	346 155	349 484	342 059	334 981	329 547	329 427	324 992	320 617	318 021
Dairy cows	314 220	314 250	312 824	297 679	289 155	281 502	278 137	272 005	265 201	259 105
Beef cows	28 414	31 905	36 660	44 380	45 826	48 045	51 290	52 987	55 416	58 916
Sheep 1 year and over .....	..	..	949 047	961 012	983 367	973 424	959 915	948 040	946 752	920 101
Dairy goats	55 331	53 385	51 744	50 297	47 784	46 420	45 333	44 757	44 409	42 365
Pigs for breeding	90 593	89 350	99 295	89 988	89 772	88 395	93 835	99 965	98 597	101 184
Laying hens	3 127 280	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

¹ Comprises those who applied for governmental production subsidies.

4.3. Agricultural area in use by county¹. Decares

	Agricultural area in use		Open fields and gardens			Meadows for mowing and pastures		
	Total	Of which cultivated	Total	Of which		Total	Cultivated	Permanent grassland and surface cultivated land
				Grain	Potatoes			
2006	10 248 671	8 544 458	3 689 647	3 147 538	139 106	6 559 024	4 854 811	1 704 213
County								
Østfold	753 852	731 335	647 764	591 848	6 347	106 088	83 571	22 517
Akershus og Oslo	791 010	758 538	662 018	614 200	5 967	128 992	96 520	32 472
Hedmark	1 058 188	996 932	649 724	559 984	48 685	408 464	347 208	61 256
Oppland	1 049 196	869 514	282 773	223 266	15 324	766 423	586 741	179 682
Buskerud	522 292	456 435	275 372	235 899	3 853	246 920	181 063	65 857
Vestfold	415 506	406 728	345 339	277 370	16 075	70 167	61 389	8 778
Telemark	253 737	219 487	98 239	78 695	2 936	155 498	121 248	34 250
Aust-Agder	112 171	99 555	18 778	10 083	2 657	93 393	80 777	12 616
Vest-Agder	193 375	148 888	12 098	8 738	722	181 277	136 790	44 487
Rogaland	1 002 920	562 525	62 669	36 024	9 315	940 251	499 856	440 395
Hordaland	421 378	234 832	10 918	208	183	410 460	223 914	186 546
Sogn og Fjordane	459 069	295 057	10 240	502	1 311	448 829	284 817	164 012
Møre og Romsdal	592 643	484 656	28 249	20 190	2 012	564 394	456 407	107 987
Sør-Trøndelag	767 144	665 597	185 755	165 676	2 320	581 389	479 842	101 547
Nord-Trøndelag	893 714	826 328	365 556	321 343	14 125	528 158	460 772	67 386
Nordland	601 079	474 441	15 086	3 442	3 194	585 993	459 355	126 638
Troms Romsa	261 534	228 067	14 823	70	3 883	246 711	213 244	33 467
Finnmark Finnmarku	99 863	85 543	4 246	0	197	95 617	81 297	14 320

¹ Comprises those who applied for governmental production subsidies.

4.4. Holdings with organic farming and area approved as organically operated¹. 2002-2006

	2002	2003	2004	2005	2006
Holdings, total	58 627	54 946	52 879	51 069	49 369
Of which:					
Holdings with organic farming	1 369	1 936	2 076	2 076	2 090
			Decares		
Agricultural area in use	10 324 851	10 255 988	10 266 228	10 262 373	10 248 671
Of which:					
Area approved as organically operated, total	183 876	294 030	340 901	354 703	374 997
Grain	22 785	42 076	58 460	64 387	66 047
Potatoes, vegetables, fruit and berries	2 295	3 615	3 877	4 125	4 047
Infield pasture land	27 353	43 880	50 613	55 318	60 065
Area sown for the production of green manure	3 134	5 697	5 288	6 792	8 336
Other crops	128 309	198 762	222 663	224 081	236 502

¹ Comprises those who applied for governmental production subsidies.

4.5. Domestic animals by holdings approved for organic farming¹. 2002-2006

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

¹ Comprises those who applied for governmental production subsidies.

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, 2006

1 January 2006 a total of 36 400 livestock producers had applied for production subsidies. This is 1700 fewer than the year before, a decline of 4.4 per cent from the year before.

The decline in the number of livestock farmers from 2005 to 2006 comprises all kinds of domestic animals. Holdings with laying hens went down by 11 per cent from the previous year. The number of holdings with pigs dropped by 9 per cent, while the decline in number of holdings with cattle and sheep was 5 per cent.

More pigs, broilers and beef cows

Forty-two million chickens were slaughtered in 2006, two million more than the year before. The number of pigs for breeding increased by 2 700 to 101 700 on 1 January 2006. In the beginning of 2006 a total of 55 000 beef cows were registered, an increase of 4 900 from 2005. Number of dairy cows dropped by 6 900 to 265 400 in 2006, and the number of dairy goats by 2 100 to 44 000.

Larger herds

The average holding with dairy cows had 17.6 dairy cows in 2006, being 5 more than in 1995. The number of dairy cows has dropped by 18 per cent since 1995, while the number of holdings keeping dairy cows has dropped by 40 per cent.

The average holding with breeding sows had 20 breeding sows in 1995, against 50 in 2006. The number of breeding sows increased with 10 400 to 99 800 in this period, while the number of holdings with breeding sows was more than halved, from 4500 in 1995 to 2 200 in 2006.

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.

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 January¹. County.

County	Holdings keeping domestic animals	Cattle, total	Dairy cows	Beef cows	Winter feed sheep	Dairy goat	Pigs	Laying hens	Broilers ²
1992 ³	55 761	34 595	26 889	2 616	24 869	1 073	7 224	4 492	594
1993 ³	54 965	33 941	26 431	2 982	24 696	1 014	6 959	4 523	623
1994 ³	54 428	33 283	25 784	3 632	24 723	912	6 710	4 414	589
1995 ³	53 714	32 577	25 410	3 941	24 596	899	6 462	4 303	597
1996 ³	52 869	32 047	25 030	4 197	23 784	875	6 376	4 116	596
1997 ³	51 626	31 369	24 170	4 583	22 937	826	5 950	3 946	564
1998 ³	50 351	30 626	23 433	4 837	22 214	772	5 816	3 825	567
1999 ³	49 038	29 399	22 400	5 116	21 817	727	5 795	3 769	484
2000 ³	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

2006**County**

Østfold	944	379	228	160	147	-	253	122	77
Akershus og Oslo	845	385	208	184	218	:	171	100	16
Hedmark	2 364	1 198	792	431	832	28	354	175	110
Oppland	3 907	2 338	1 810	556	1 567	53	364	158	11
Buskerud	1 361	637	371	270	655	19	68	99	12
Vestfold	601	244	96	143	115	-	195	59	34
Telemark	937	363	185	160	457	25	81	90	6
Aust-Agder	573	269	152	89	278	-	34	49	4
Vest-Agder	1 051	641	409	192	504	-	45	75	7
Rogaland	4 817	2 967	2 232	611	2 840	14	925	388	78
Hordaland	3 107	1 620	982	425	2 054	44	165	165	16
Sogn og Fjordane	3 316	1 935	1 480	307	1 979	87	135	158	:
Møre og Romsdal	3 063	2 105	1 492	418	1 207	54	119	162	4
Sør-Trøndelag	2 776	1 903	1 480	427	785	:	140	130	68
Nord-Trøndelag	2 740	1 906	1 502	484	592	11	501	119	59
Nordland	2 477	1 473	1 121	374	1 166	47	149	166	:
Troms	1 207	488	356	96	700	140	41	67	-
Finmark	354	211	174	13	159	-	17	12	-

¹ Comprises holdings which applied for governmental production subsidies. ² Refers to broilers slaughtered during the year. As from 2002 the figures refers to broilers slaughtered the year before. ³ As per 31 December.

5.2. Cattle and sheep. No of heads as per 1 January¹. County.

	Cattle, total	Cows, total	Dairy cows	Beef cows	Other cattle	Winter feed sheep
1992 ²	1 007 539	347 573	335 996	11 577	659 966	1 095 676
1993 ²	1 005 739	344 650	331 014	13 636	661 143	1 095 529
1994 ²	1 000 632	341 597	324 701	16 896	659 035	1 119 997
1995 ²	1 012 849	344 122	324 417	19 705	668 727	1 140 519
1996 ²	1 027 343	349 350	326 766	22 584	677 993	1 109 673
1997 ²	1 035 738	348 838	322 349	26 489	686 900	1 078 574
1998 ²	1 045 574	352 664	322 791	29 873	692 910	1 102 855
1999 ²	1 018 730	351 752	318 047	33 705	666 978	1 104 906
2000 ²	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

2006**County**

Østfold	20 061	7 231	5 224	2 007	12 830	4 425
Akershus og Oslo	20 365	7 182	4 698	2 484	13 183	10 263
Hedmark	57 749	21 075	14 972	6 103	36 674	60 734
Oppland	113 459	38 210	31 766	6 444	75 249	114 686
Buskerud	23 739	9 227	5 801	3 426	14 512	47 780
Vestfold	12 355	4 865	2 447	2 418	7 490	4 686
Telemark	11 998	4 399	2 586	1 813	7 599	29 255
Aust-Agder	8 707	3 128	2 324	804	5 579	16 212
Vest-Agder	22 956	7 759	6 006	1 753	15 197	26 195
Rogaland	154 629	52 284	46 768	5 516	102 345	203 606
Hordaland	45 499	16 395	13 965	2 430	29 104	104 373
Sogn og Fjordane	59 171	21 814	20 054	1 760	37 357	103 028
Møre og Romsdal	86 204	29 278	25 757	3 521	56 926	65 773
Sør-Trøndelag	90 360	30 826	26 705	4 121	59 534	64 929
Nord-Trøndelag	102 081	34 898	29 217	5 681	67 183	43 387
Nordland	64 850	22 197	18 349	3 848	42 653	91 675
Troms	17 339	6 569	5 760	809	10 770	57 868
Finnmark	8 157	3 066	2 985	81	5 091	11 563

¹ Comprises holdings which applied for governmental production subsidies. ² As per 31 December.

5.3. Various domestic animals. No of heads as per 1 January¹. County.

	Dairy goats	Pigs for breeding	Pigs for slaughtering ²	Laying hens	Broilers ³
1992 ⁴	62 557	87 837	1 214 701	3 653 248	16 850 642
1993 ⁴	62 425	87 456	1 190 668	3 658 289	15 705 005
1994 ⁴	59 693	87 134	1 189 066	3 619 810	17 976 664
1995 ⁴	59 176	90 903	1 240 949	3 550 629	19 919 985
1996 ⁴	58 775	91 130	1 328 566	3 378 176	23 264 300
1997 ⁴	55 541	90 118	1 345 208	3 107 275	23 319 780
1998 ⁴	53 477	89 444	1 378 443	3 113 209	23 355 574
1999 ⁴	53 091	93 768	1 334 788	3 216 750	27 523 776
2000 ⁴	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

2006**County**

Østfold	-	8 006	126 221	374 147	7 901 486
Akershus og Oslo	:	4 690	70 251	201 401	1 521 747
Hedmark	1 609	11 742	170 706	363 914	9 443 110
Oppland	4 399	9 125	113 049	123 786	613 635
Buskerud	1 470	2 355	12 761	122 537	776 394
Vestfold	-	6 536	112 379	139 033	2 336 959
Telemark	1 723	2 678	25 596	111 325	146 853
Aust-Agder	-	490	10 568	69 283	121 789
Vest-Agder	-	1 292	9 120	76 627	242 638
Rogaland	1 056	26 174	384 885	978 148	7 073 834
Hordaland	3 462	1 751	26 493	110 233	707 925
Sogn og Fjordane	8 037	1 609	21 925	94 867	:
Møre og Romsdal	5 242	2 165	25 294	97 814	217 537
Sør-Trøndelag	:	2 513	38 033	156 480	5 102 203
Nord-Trøndelag	814	15 626	224 524	244 744	5 572 105
Nordland	4 129	3 852	54 742	65 068	:
Troms	11 983	834	12 284	32 121	-
Finnmark	-	293	2 798	4 118	-

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

5.4. Holdings with various kinds of domestic animals, by size of herd. As per 1 January¹.

	Holdings					Number of heads				
	2002	2003	2004	2005	2006	2002	2003	2004	2005	2006
Cows, total										
Total	23 211	22 086	21 101	20 289	19 317	333 007	330 172	328 469	322 442	320 403
1- 4	1 749	1 470	1 376	1 192	1 101	4 446	3 796	3 472	3 063	2 813
5- 9	4 575	4 138	3 670	3 476	3 199	33 313	30 149	26 851	25 377	23 247
10-14	6 834	6 327	5 713	5 371	4 761	82 407	76 422	69 132	65 077	57 410
15-19	5 627	5 423	5 261	5 167	4 885	93 990	90 836	88 181	86 493	81 968
20-29	3 439	3 550	3 766	3 700	3 754	79 591	82 294	87 728	86 237	88 039
30-	987	1 178	1 315	1 383	1 617	39 260	46 675	53 105	56 195	66 926
Dairy cows										
Total	18 775	17 803	16 900	16 244	15 070	286 164	282 829	280 091	272 301	265 384
1- 4	250	196	160	140	138	817	646	518	459	461
5- 9	3 256	2 782	2 382	2 278	1 914	24 397	20 940	17 968	17 168	14 418
10-14	6 206	5 658	5 082	4 732	4 081	75 069	68 505	61 728	57 547	49 502
15-19	5 350	5 158	4 934	4 799	4 444	89 289	86 425	82 748	80 336	75 574
20-29	3 005	3 150	3 349	3 288	3 292	69 053	72 741	77 625	76 268	76 866
30-	708	859	993	1 007	1 201	27 539	33 572	39 504	40 523	49 563
Beef cows										
Total	5 790	5 493	5 325	5 097	5 340	46 843	47 343	48 378	50 141	55 019
1- 4	2 349	2 008	1 891	1 641	1 588	5 330	4 678	4 335	3 811	3 590
5- 9	1 709	1 703	1 581	1 514	1 599	11 505	11 564	10 883	10 372	10 976
10-19	1 284	1 311	1 332	1 354	1 478	17 038	17 247	17 708	18 280	20 063
20-	448	471	521	588	675	12 970	13 854	15 452	17 678	20 390
Winter feed sheep										
Total	20 875	18 842	17 897	17 068	16 255	1 141 485	1 109 696	1 111 513	1 091 785	1 060 438
1- 9	1 503	1 163	1 088	1 058	957	8 434	6 336	5 908	5 828	5 219
10- 19	2 645	1 885	1 653	1 443	1 484	37 736	27 391	23 935	20 993	21 521
20- 49	7 938	6 984	6 262	5 718	5 244	261 611	234 645	212 115	194 320	178 764
50- 99	5 787	5 692	5 650	5 604	5 354	401 843	394 081	395 038	394 237	378 403
100-149	2 060	2 153	2 188	2 188	2 118	245 256	255 850	261 649	260 608	251 959
150-	942	965	1 056	1 057	1 098	186 605	191 393	212 868	215 799	224 572
Sows for breeding										
Total	2 587	2 423	2 330	2 194	1 980	86 670	89 745	97 059	97 038	99 843
1-19	1 073	957	879	797	661	9 062	8 354	7 707	6 853	5 805
20-39	711	639	572	524	460	20 670	18 470	16 597	14 936	13 359
40-59	462	439	407	380	361	22 346	21 050	19 586	18 405	17 566
60-79	155	179	201	201	190	10 561	12 108	13 681	13 843	12 995
80-99	72	65	95	109	99	6 444	5 747	8 472	9 796	8 821
100-	114	144	176	183	209	17 587	24 016	31 016	33 205	41 297
Laying hens										
Total	3 133	2 926	2 740	2 579	2 294	3 100 503	3 262 382	3 392 283	3 493 440	3 365 646
1- 99	2 025	1 826	1 710	1 604	1 434	31 866	28 948	27 757	25 008	22 611
100- 499	96	112	94	87	77	21 753	25 154	21 686	19 953	16 057
500- 999	101	85	78	65	63	74 518	62 917	58 793	47 854	45 334
1000-1999	311	272	225	195	138	468 829	412 365	343 195	296 206	217 736
2000-4999	401	383	368	322	277	1 099 732	1 058 459	1 024 435	883 517	789 008
5000-	199	248	265	306	305	1 403 805	1 674 539	1 916 417	2 220 902	2 274 900

¹ 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, 2005

Farmers' entrepreneurial income from agriculture amounted to NOK 147 000 on average in 2005. Income from agriculture varied much; one out of four farmers had no positive entrepreneurial income from agriculture, while 6 per cent had an income from agriculture of NOK 400 000 or more.

The agricultural holdings vary considerably in size, from hobby-like production to holdings with a turnover of more than NOK 1 million. This is the main reason for the large variations in entrepreneurial income from agriculture.

In 2005, 2 900 out of 50 300 farmers had an entrepreneurial income from agriculture of at least NOK 400 000. 16 per cent of the farmers had negative entrepreneurial income from agriculture in 2005. This group may include farmers with small holdings or farmers who had just started farming or were expanding. 8 per cent of the farmers have no entrepreneurial income from agriculture. Most of these are assumed to 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. No positive entrepreneurial income from agriculture was most common among farmers who operated specialist cereals and oil-seeds holdings, specialist sheep holdings or various grazing livestock holdings. Among these farmers, every third had no positive entrepreneurial income from agriculture.

For all farmers, the average entrepreneurial income from agriculture increased from NOK 112 000 in 2004 to NOK 147 000 in 2005. Much of the increase is probably due to changes in tax regulations, which entered into force on 1 January 2006. The entrepreneurial income also increased considerably among self-employed in other industries than agriculture from 2004 to 2005, see http://www.ssb.no/english/subjects/05/01/ifpn_en/.

On average, entrepreneurial income from agriculture amounted to 32 per cent of the farmers' total gross income of NOK 465 000 in 2005. Wages and salaries also amounted to 32 per cent, while capital income, other entrepreneurial income and pensions accounted for 19, 13 and 4 per cent respectively.

Married couples who jointly operate an industry may share the taxable entrepreneurial income. In 2005, 10 800 spouses/registered partners had positive entrepreneurial income from agriculture, with NOK 132 700 on average.

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, e.g. general partnership, and consequently these are not included in the statistics.

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

Gross income:

The sum of wages and salaries, pensions, entrepreneurial incomes and other incomes (mainly capital income) reported on the tax return, before deductions.

Wages and salaries:

This is payment in cash and in kind, taxable sick pay and unemployment benefit.

Pensions:

Cover National Insurance Scheme benefits, private pensions 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. In addition, entrepreneurial social security benefits are included.

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:

Consists inter alia interest income, dividends, net realised capital gains and other property income.

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.

The holding's utilized agricultural area:

Comprises both owned area and rented area. Agricultural area consists of arable land, permanent meadow and pasture and other permanent agricultural crops.

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 (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. SGM for an enterprise within the holding is the SGM per area unit/head of livestock multiplied by the total of the crop/livestock category concerned. The total SGM of the holding is the sum of all enterprises ran by the holding.

Farm type of agricultural holdings:

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

6.5. Sources of error and uncertainty

<i>Measurement and processing errors</i>	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.
<i>Non-response errors</i>	A non-significant number of holdings are missing information on income etc. No information is imputed for these holdings.
<i>Other sources of error</i>	Statistics Norway receives data from the Directorate of Taxes before all complaints from taxpayers are finished.

6.6. Comparability and coherence

<i>Comparability over time and space</i>	Changes in the tax regulations influence the data and consequently the statistics over time. 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 the entrepreneurial income is not comparable with the other years. As from 2004, the agricultural deduction again is stated as a deduction on the tax return.
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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 governmental *area* production subsidies. Now, the participants may choose whether they will cultivate fodder in own separate enterprise or operate the area jointly. This condition has decreased the number of holders participating in joint operation and at the same time running their own enterprise.

<i>Coherence with other statistics</i>	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/ .
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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	Total	Without positive income	1-49 999 NOK	50 000-99 999 NOK	100 000-249 999 NOK	250 000-399 999 NOK	400 000- NOK	
	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 ¹ .....	..	..	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	
2005										
County										
Østfold	339	127 400	2 662	25	26	13	18	10	7	
Akershus og Oslo	467	177 400	2 633	29	26	12	19	8	7	
Hedmark	541	130 100	4 154	28	22	11	22	10	7	
Oppland	761	144 800	5 251	23	20	13	29	10	5	
Buskerud	435	160 900	2 701	28	26	12	20	7	7	
Vestfold	258	141 800	1 818	28	26	12	18	9	8	
Telemark	178	102 200	1 742	38	28	12	14	5	3	
Aust-Agder	88	114 600	768	31	26	13	19	7	4	
Vest-Agder	133	107 300	1 242	31	25	12	21	8	4	
Rogaland	1 157	231 500	4 995	20	18	10	25	16	11	
Hordaland	347	96 100	3 613	33	27	12	20	6	2	
Sogn og Fjordane	361	97 100	3 717	24	24	16	26	8	2	
Møre og Romsdal	458	134 600	3 404	22	20	11	28	14	5	
Sør-Trøndelag	635	182 200	3 484	20	18	11	31	13	7	
Nord-Trøndelag	610	164 400	3 711	17	17	10	31	18	7	
Nordland	397	147 200	2 700	17	18	13	30	17	5	
Troms	170	127 800	1 333	19	21	13	31	13	4	
Finmark	64	157 600	408	20	21	10	25	18	6	
Agricultural area in use										
0- 4 decares	133	221 400	599	25	16	11	20	14	14	
5- 49 "	260	55 100	4 725	53	30	6	7	2	2	
50- 99 "	675	67 700	9 963	40	34	11	10	2	2	
100-199 "	1 959	119 100	16 444	22	25	15	27	8	3	
200-299 "	1 969	200 000	9 847	12	14	13	37	18	7	
300-499 "	1 579	245 700	6 425	9	10	10	35	25	12	
500- "	825	353 600	2 333	7	6	6	28	26	26	
Holders by sex										
Males	6 824	156 200	43 690	23	21	12	26	12	6	
Females	576	86 600	6 646	33	26	14	19	5	3	

¹ 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, 2005

	Entrepreneurial income from agriculture		Holders by entrepreneurial income from agriculture							
	Total	Per holder	Total	Without positive income	1-49 999 NOK	50 000-99 999 NOK	100 000-249 999 NOK	250 000-399 999 NOK	400 000- NOK	
	NOK million	NOK	Per cent							
Total	7 399	147 000	50 336	24	22	12	25	11	6	
Type of farming										
Cereals and oil seeds	959	103 200	9 296	34	33	13	14	4	3	
Other field crops	517	165 000	3 131	31	21	9	20	11	8	
Horticulture and permanent crops	350	239 400	1 462	24	21	10	20	12	13	
Cattle - dairying	2 752	215 000	12 802	6	7	11	45	22	7	
Cattle - rearing and fattening	344	95 500	3 600	30	26	15	20	6	3	
Cattle - mixed	174	248 600	699	6	6	10	37	27	14	
Sheep	618	64 900	9 521	33	36	15	13	2	1	
Various grazing livestock	359	120 200	2 986	34	20	11	23	9	3	
Granivores	421	278 800	1 508	15	12	10	24	20	20	
Mixed cropping	135	209 000	647	23	18	10	23	13	14	
Mixed livestock	212	219 400	967	16	10	8	32	20	15	
Mixed crops - livestock	558	150 200	3 717	31	21	9	20	12	8	

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 ¹ .....	..	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
2005						
County						
Østfold	588 500	185 000	127 400	166 600	18 700	90 900
Akershus og Oslo	978 000	203 900	177 400	117 800	21 600	457 300
Hedmark	412 800	150 900	130 100	63 700	19 500	48 500
Oppland	415 600	132 800	144 800	67 200	15 200	55 600
Buskerud	631 100	173 400	160 900	163 500	19 000	114 300
Vestfold	554 700	200 500	141 800	84 700	20 900	106 800
Telemark	600 500	189 400	102 200	73 100	24 000	211 800
Aust-Agder	546 500	141 800	114 600	68 200	25 400	196 400
Vest-Agder	415 500	163 700	107 300	52 800	27 700	64 000
Rogaland	521 800	138 600	231 500	42 900	16 100	92 700
Hordaland	397 500	177 800	96 100	30 600	22 600	70 400
Sogn og Fjordane	327 000	142 300	97 100	26 400	21 800	39 300
Møre og Romsdal	358 300	132 200	134 600	34 000	18 400	39 200
Sør-Trøndelag	429 000	127 400	182 200	43 900	16 300	59 300
Nord-Trøndelag	373 400	125 600	164 400	36 900	12 600	33 800
Nordland	298 700	94 200	147 200	21 400	19 100	16 700
Troms	292 700	114 800	127 800	20 100	15 500	14 600
Finmark	313 100	93 600	157 600	19 500	21 600	20 800
Agricultural area in use						
0- 4 decares	503 000	123 200	221 400	61 900	24 900	71 600
5- 49 "	437 900	197 800	55 100	49 800	37 100	98 200
50- 99 "	408 200	202 600	67 700	50 000	28 100	59 800
100-199 "	448 000	155 400	119 100	54 100	17 800	101 600
200-299 "	438 600	111 000	200 000	60 600	10 500	56 400
300-499 "	518 700	96 200	245 700	66 400	9 000	101 400
500- "	840 100	87 600	353 600	192 600	7 800	198 400
Holders by sex						
Males	490 200	150 800	156 200	66 800	18 600	97 800
Females	301 000	136 800	86 600	32 500	19 400	25 600

¹ 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. 2005. NOK

	Gross income, total	Wages and salaries	Entrepreneurial income from agriculture	Other entrepreneurial income	Pensions	Capital income etc.
Total	465 200	148 900	147 000	62 200	18 700	88 300
Type of farming						
Cereals and oil seeds	575 000	237 400	103 200	102 600	25 300	106 600
Other field crops	540 700	176 500	165 000	80 800	17 900	100 400
Horticulture and permanent crops	587 700	132 000	239 400	65 000	22 200	129 100
Cattle - dairying	360 800	60 000	215 000	30 200	8 800	46 800
Cattle - rearing and fattening ..	438 300	176 100	95 500	59 400	21 600	85 700
Cattle - mixed	400 900	58 200	248 600	36 100	6 000	52 100
Sheep	356 400	182 100	64 900	44 400	25 800	39 100
Various grazing livestock	407 500	149 200	120 200	43 100	24 300	70 800
Granivores	553 500	106 800	278 800	66 700	12 400	88 800
Mixed cropping	508 100	134 100	209 000	64 700	16 300	84 000
Mixed livestock	645 500	88 900	219 400	257 100	10 100	70 000
Mixed crops - livestock	711 400	158 600	150 200	71 000	18 100	313 500

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 ¹	56 234	..	..	..	..	..
2004	53 257	25	15	26	18	17
2005	50 336	24	14	26	18	18
2005						
County						
Østfold	2 662	25	21	29	15	11
Akershus og Oslo	2 633	29	22	30	13	7
Hedmark	4 154	28	14	24	19	15
Oppland	5 251	23	12	26	22	17
Buskerud	2 701	28	20	28	17	8
Vestfold	1 818	28	21	28	14	9
Telemark	1 742	38	20	23	12	8
Aust-Agder	768	31	17	27	16	9
Vest-Agder	1 242	30	16	27	13	13
Rogaland	4 995	20	12	23	20	25
Hordaland	3 613	33	17	24	13	13
Sogn og Fjordane	3 717	24	14	29	19	15
Møre og Romsdal	3 404	22	12	25	19	22
Sør-Trøndelag	3 484	20	11	23	23	23
Nord-Trøndelag	3 711	17	10	24	24	25
Nordland	2 700	17	8	23	20	32
Troms	1 333	19	10	25	17	29
Finnmark	408	20	11	22	16	30
Agricultural area in use						
0- 4 decares	599	25	10	25	20	21
5- 49 "	4 725	53	21	17	6	5
50- 99 "	9 963	40	23	23	8	6
100-199 "	16 444	23	15	29	17	16
200-299 "	9 847	12	9	27	26	27
300-499 "	6 425	9	7	25	28	31
500- "	2 333	7	5	25	35	28
Holders by sex						
Males	43 690	23	15	25	19	18
Females	6 646	33	12	28	14	13

¹ 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, 2005

	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				
Total	50 336	24	14	26	18	18
Type of farming						
Cereals and oil seeds	9 296	34	26	30	8	3
Other field crops	3 131	31	16	26	16	11
Horticulture and permanent						
crops	1 462	24	14	23	18	21
Cattle - dairying	12 802	6	3	20	32	38
Cattle - rearing and fattening ..	3 600	30	16	34	14	7
Cattle - mixed	699	6	3	19	33	40
Sheep	9 521	33	21	29	11	6
Various grazing livestock	2 986	34	12	23	16	15
Granivores	1 508	15	8	22	25	30
Mixed cropping	647	23	12	25	22	17
Mixed livestock	967	16	6	19	27	33
Mixed crops - livestock	3 717	31	14	24	18	14

7. Grain and oil seeds, area and yields

7.1. Main results, 2006

The total production of grain in 2006 is calculated to 1.2 million tonnes, a decrease of 9 per cent from 2005. The total grain area came to 3.2 million decares in 2006.

The total grain harvest consisted of 357 000 tonnes of wheat, 537 600 tonnes of barley, 248 400 tonnes of oats and 26 400 tonnes of rye and triticale in 2006.

Average decare yield of wheat for the entire country was calculated to 416 kilos in 2006. The average decare yield of barley was 353 kilos, and for oats 336 kilos.

The number of holdings growing grain has been reduced from 24 000 in 1997 to 15 800 in 2006. In the same period, the average grain area per holding increased from 141 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/

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, 1999-2006

	Holdings with grain and oil seeds	Area of grain						Oil seeds	
		Area of grain	Wheat			Rye and triticale	Barley	Oats	
			Total	Spring wheat	Winter wheat				
1989	33 103	3 468 588	382 484	..	..	4 245	1 759 910	1 321 950	61 215
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
2006									
Østfold	2 401	598 900	307 500	146 000	161 400	19 200	131 300	141 000	20 700
Akershus/Oslo	2 255	619 600	171 600	97 000	74 600	13 100	208 500	226 400	18 300
Hedmark	2 287	564 300	95 800	88 800	7 100	4 600	302 700	161 200	4 800
Oppland	1 466	224 400	31 200	29 200	2 000	1 400	169 100	22 700	1 600
Buskerud	1 350	239 400	77 600	59 200	18 400	5 900	89 100	66 800	5 900
Vestfold	1 498	281 600	143 600	120 400	23 200	14 600	74 800	48 600	10 500
Telemark	660	80 700	20 900	17 000	3 800	1 200	31 900	26 600	2 800
Aust-Agder	113	10 100	400	200	100	100	5 900	3 700	-
Vest-Agder	112	9 000	-	-	-	-	5 100	3 900	-
Rogaland	410	36 200	1 000	300	700	-	32 200	3 000	-
Hordaland	8	200	-	-	-	-	200	-	-
Sogn og Fjordane	12	500	200	200	-	-	300	-	-
Møre og Romsdal	187	20 500	400	300	-	-	18 900	1 300	-
Sør-Trøndelag	1 136	167 700	1 600	600	1 000	100	148 200	17 800	200
Nord-Trøndelag	1 878	325 000	5 900	2 500	3 400	300	302 900	15 900	300
Nordland	51	3 400	-	-	-	-	3 000	400	-
Troms Romsa	4	100	-	-	-	-	100	-	-
Finmark Finnmarku	-	-	-	-	-	-	-	-	-

7.2. Total production and yield of grain.1989, 1999-2006

	Total production, 1000 tons					Yield per decaire, kilos			
	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	..
1999	1 218.1	229.7	623.6	355.5	9.4	445	342	389	350
2000	1 299.9	313.4	573.5	396.9	16.1	461	357	420	423
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	477	423	423	561
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
2006									
Østfold	257.8	145.3	47.9	53.9	10.8	472	365	382	559
Akershus og Oslo	216.5	68.3	68.6	74.5	5.1	398	329	329	388
Hedmark	222.2	43.2	119.8	57.2	2.0	451	396	355	431
Oppland	66.9	11.5	50.2	4.8	0.4	368	297	211	302
Buskerud	70.0	26.2	25.0	17.2	1.6	338	281	257	268
Vestfold	99.1	51.8	24.8	16.9	5.6	361	332	347	384
Telemark	26.1	7.4	9.5	8.6	0.6	357	298	323	447
Aust-Agder	2.8	0.1	1.6	1.1	-	293	267	300	-
Vest-Agder	2.9	0.0	1.5	1.3	-	297	298	340	-
Rogaland	17.4	0.4	16.0	1.0	-	368	498	344	-
Hordaland	:	-	:	-	-	-	:	-	-
Sogn og Fjordane	:	-	:	-	-	-	:	-	-
Møre og Romsdal	5.0	-	4.6	0.3	-	-	246	268	-
Sør-Trøndelag	62.3	0.6	55.2	6.4	-	393	373	361	-
Nord-Trøndelag	119.5	2.1	112.1	5.2	0.1	361	370	323	442
Nordland	:	-	:	-	-	-	:	-	-
Troms Romsa	-	-	-	-	-	-	-	-	-
Finmark Finnmarku	-	-	-	-	-	-	-	-	-

8. Production of potatoes and forage plants

8.1. Main results, 2006

In 2006, the total yield of meadows for mowing was about 2.6 million tonnes, converted by dry matter into hay. This is 2 per cent less than the year before.

The total yield of meadows for mowing corresponds to a yield of 593 kilos of hay per decare. Total yield of green fodder and silage in 2006 was 255 000 tonnes, a decline of 26 000 tonnes from 2005. About two thirds of this yield was rye-grass.

The yield of potatoes was 378 300 tonnes, corresponding to a per decare yield of 2 693 kilos of potatoes.

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.

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 based on administrative data, [Agricultural yields and production](#).

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 on 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, included planted area of permanent crops, which not so far is yielding, and fallow land for one 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 cale 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/

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

8.1. Yield of potatoes and forage plants. 2003-2006

Crop	Yield in tons				Kilos per decaare			
	2003	2004	2005	2006	2003	2004	2005	2006
Potato	366 800	396 400	316 600	378 300	2 554	2 794	2 305	2 693
Crops for green fodder and silage	366 900	364 200	280 900	255 000	2 053	2 066	1 808	1 710
Annual rye-grass	230 600	230 600	181 400	158 000	2 505	2 646	2 476	2 285
Green forage mixtures/grain crops	113 100	112 600	84 900	85 600	1 257	1 647	1 288	1 296
Forage rape, marrow-stem kale etc. ...	12 400	10 100	6 800	5 400	1 740	1 330	1 488	1 256
Hay ¹	2 684 100	2 788 000	2 653 600	2 599 800	594	626	607	593

¹ Comprise total yield from meadows for mowing converted through energy into hay.

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

	Potato	Green fodder and silage	Hay ¹
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
2006			
County			
Østfold	16.8	11.0	50.8
Akershus og Oslo	17.8	10.3	58.4
Hedmark	148.6	36.9	196.1
Oppland	36.2	50.2	303.0
Buskerud	12.6	8.8	73.9
Vestfold	43.9	6.0	32.3
Telemark	7.0	3.5	54.5
Aust-Agder	4.8	0.8	40.2
Vest-Agder	1.5	2.3	72.4
Rogaland	24.2	15.8	308.1
Hordaland	0.4	1.5	132.4
Sogn og Fjordane	3.3	2.8	184.3
Møre og Romsdal	5.1	4.4	269.1
Sør-Trøndelag	4.5	35.2	262.9
Nord-Trøndelag	39.5	40.7	267.3
Nordland	4.2	9.1	212.1
Troms Romsa	7.5	11.4	58.6
Finnmark Finnmarku	0.3	4.3	23.4

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

9. Horticultural production

9.1. Main results, 2006

The total production of fruit in Norway is estimated to 18 600 tonnes in 2006, an increase of 5 100 tonnes from 2005. The total production of garden berries is estimated to 14 300 tonnes, an increase of 1 600 tonnes from 2005.

The total production of field-grown and greenhouse vegetables amounted to 175 800 tonnes in 2006.

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 m² 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.

Sampling

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.

Since 2005, a total of approximately 3 000 agricultural holdings is included in the survey.

Collection of data

In November questionnaires are sent to the agricultural holdings in the survey. The respondents may also answer the questionnaire via Internet.

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

Production reported in other measuring units than specified on the questionnaire, are recalculated by using predetermined factors.

Estimation 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.

1. Area: 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.

2. Production per area unit: 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.

3. Total production: Calculated total area (article 1) is multiplied by calculated production per area unit (article 2).

Country figures of area and production of each crop is calculated by adding county figures. For counties where area is given for a crop, but where information about production is lacking, a preliminary figure for production per area unit at country level is used for calculating total production. For the three northernmost counties and in some other particular cases the mean for an adjacent county is used.

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 on 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. Regular response-rate for preliminary figures is about 75 percent.

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/.

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

9.1. Yield of various horticultural crops¹. 2006

Crop	Area in decares	Yield in kilos per decare	Yield in tonnes
Fruit			
Apple	16 445	910	14 960
Pear	1 285	600	771
Plum	3 522	432	1 521
Sweet cherries	2 256	418	944
Cherries	454	952	433
Berries			
Black currant	2 770	289	799
Strawberry	15 897	669	10 633
Raspberry	3 720	714	2 656
Blueberry	253	215	54
Other berries	696	284	197
Vegetables, field grown			
Cabbage			
Cauliflower	6 071	1 646	9 990
Early cabbage	1 334	2 383	3 180
Winter cabbage	3 722	4 925	18 331
Brussels sprouts	2 360	851	2 009
Red cabbage	334	5 390	1 801
Chinese cabbage	2 997	2 309	6 920
Broccoli	4 412	1 077	4 749
Table swedes	4 577	2 748	12 576
Carrot	12 290	3 218	39 547
Leek	1 442	1 794	2 587
Beetroots	496	3 843	1 905
Onion	6 830	2 742	18 728
Root celery	1 128	1 750	1 974
Celery	467	2 540	1 186
Turnip-rooted parsley	223	1 239	277
Curled parsley	173	.	132
Ridge cucumber	793	3 206	2 543
Iceberg lettuce	5 751	1 765	10 152
Other lettuces ²	2 674	1 728	1 617
Sweet corn	1 008	551	555
Radishes	670	547	367
Turnips	458	691	316
Vegetables under glass/plastics			
Cucumber	200	55	10 937
Tomato	340	35	12 018
Lettuce ³	⁴ 14 245	.	1 713

¹ 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 m² of vegetables including herbs grown in greenhouses. ² Conversion factor: 350 grams per head. ³ Conversion factor: 110-130 grams per head. ⁴ 1 000 heads of lettuce.

9.2. Yield of fruit, garden berries and vegetables¹. 1996-2006. Tonnes

Year	Fruits	Berries	Vegetables ¹
1996 ²	18 169	13 113	166 653
1997 ²	16 069	9 757	157 659
1998 ²	17 284	9 752	155 003
1999 ²	12 431	11 544	167 788
2000 ²	19 427	11 312	171 440
2001 ²	13 726	11 471	172 492
2002 ²	20 774	11 937	171 538
2003 ²	14 974	11 982	173 435
2004 ²	19 930	13 962	177 523
2005 ²	13 517	12 726	180 113
2006 ²	18 628	14 339	175 823

¹ Main crops, both field grown crops and crops under glass/plastics. ² 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 m² of vegetables including herbs grown in greenhouses.

10. Approved carcasses

10.1. Main results 2006

292 400 tonnes of meat from domestic animal production were approved for the market in 2006, an increase of 9 000 tonnes from 2005.

Pork accounted for 40 per cent of the total meat production in 2006, while beef and poultry accounted for 30 and 21 per cent respectively. Compared with 2005, the quantities of pork, beef and poultry increased, while the quantity of mutton decreased.

The production of meat from poultry was 62 500 tonnes in 2006. Chicken accounted for 85 per cent and turkey 11 per cent. The production of chicken increased by 12 per cent from the year before. Since 2001, the production of chicken has increased by nearly 50 per cent.

As usual, Rogaland county approved most meat and accounted for 21 per cent of the total production of meat in Norway last year.

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

Before 1995, the statistics is based on forms from each slaughterhouse, where number and weight of carcasses of different kinds per month was registered. The location of the holdings with deliveries of carcasses was not registered on the forms, and it was not possible to give other figures than deliveries per month of the different carcasses at county level. As from 1995, the statistics is based on use of register data, and figures can be given also for approved carcasses both in counties and municipalities.

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

	Total	Horse	Cow	Heifer/ox	Calf	Sheep	Pig ¹	Poultry	Other meat ²
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
2006									
Østfold	25 133	30	732	926	50	110	9 582	13 703	0
Akershus og Oslo	11 097	48	768	1 274	35	234	6 299	2 438	1
Hedmark	33 940	37	1 970	3 261	112	1 416	13 914	13 206	22
Oppland	24 883	50	3 713	7 470	156	3 134	9 306	1 016	38
Buskerud	5 818	26	893	1 015	267	1 303	1 176	1 126	13
Vestfold	14 658	25	447	642	32	111	9 480	3 921	1
Telemark	4 462	17	441	834	52	697	1 994	413	15
Aust-Agder	2 206	13	309	486	56	358	713	269	2
Vest-Agder	3 899	9	764	1 477	59	618	758	213	1
Rogaland	60 493	58	5 615	8 601	505	5 099	31 067	9 536	13
Hordaland	9 076	26	1 542	2 308	165	2 213	1 895	902	24
Sogn og Fjordane	9 684	8	2 050	2 998	323	2 221	1 979	52	53
Møre og Romsdal	11 925	8	3 078	4 953	70	1 368	2 122	288	38
Sør-Trøndelag	20 863	35	3 175	5 458	96	1 531	2 895	7 671	2
Nord-Trøndelag	36 137	12	3 602	6 112	96	858	17 689	7 763	5
Nordland	12 974	13	2 276	4 100	17	2 130	4 403	-	36
Troms	4 035	9	657	922	11	1 494	882	-	59
Finnmark	1 122	1	289	370	13	259	191	-	-

¹ As from 2002 weight of pigs without head and trotter. ² Comprise goat and vension.

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

	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
2006								
Østfold	111	2 698	3 053	424	5 486	31	123 244	9 670 642
Akershus og Oslo	169	2 888	4 231	300	11 656	62	83 039	1 964 446
Hedmark	133	7 426	11 635	1 058	71 096	689	183 384	10 809 327
Oppland	185	14 623	26 167	1 466	153 792	2 972	116 792	825 331
Buskerud	94	3 330	3 565	2 124	62 463	1 154	13 457	941 216
Vestfold	91	1 650	2 105	268	5 464	14	127 229	2 789 710
Telemark	63	1 672	2 896	438	35 188	1 321	25 486	296 097
Aust-Agder	49	1 184	1 653	447	18 615	46	9 495	248 854
Vest-Agder	35	3 043	5 167	529	30 803	65	9 738	211 297
Rogaland	218	22 495	30 141	4 518	248 755	1 345	404 587	8 480 523
Hordaland	108	6 396	8 848	1 504	112 232	1 949	24 923	803 821
Sogn og Fjordane	34	8 335	11 359	2 723	108 116	4 199	25 978	49 817
Møre og Romsdal	31	12 112	17 633	781	67 958	3 100	28 113	297 422
Sør-Trøndelag	128	12 534	19 156	1 006	75 369	78	37 662	6 198 967
Nord-Trøndelag	45	14 328	20 941	871	43 158	291	235 596	7 442 002
Nordland	49	8 951	13 919	171	102 384	2 262	57 909	-
Troms	33	2 544	3 565	151	72 207	3 666	11 608	-
Finnmark	2	1 141	1 485	246	12 541	-	2 584	-

11. Local administration of agricultural areas

11.1. Main results, 2006

Norwegian municipalities allowed to transfer 8 000 decares cultivated land and 6 100 decares cultivable land to non-agricultural use in 2006. At the same time, the municipalities permitted land reclamation of 11 600 decares.

This is one of the lowest registered areas of arable land transferred since 1980, but about 300 decares more than the year before. The government has declared a national goal for 50 per cent reduction of agricultural land transferred to non-agricultural use by 2010. In the period 1994-2003 there was a yearly transferring of productive land to non-agricultural use of 13 360 decares. 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.

In addition to reporting land transferred to various types of non-agricultural use, the questionnaire also consider decisions taken about land reclamation, splitting of agricultural property and application for concession to buy a farm.

11.2. Background and purpose

Purpose and history

KOSTRA is an abbreviation for Municipality-State-Reporting. The data collection includes most of the municipal and county municipal activities. The KOSTRA-project started in 1995. 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

Population

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

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 still can be ploughed. 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 evened in such a way that it can be mechanically harvested.

Infield pasture: Pastureland that cannot be mechanically harvested. At least 50 % of the area shall be covered by grass species. The area shall 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 decares shall be deducted.

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

Conversion 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 is given in the middle of June.

Non-response errors

Statistics for 2006 lack information from the municipalities Austrheim in Hordaland, Frøya in Sør-Trøndelag and Rødøy in Nordland.

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 has led to a fall in the figures reported, and the figures for 2005 and 2006 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

	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
	Decare						
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 ¹	17 948	7 714	10 234	2 965	1 473	4 749	8 761
2006 ²	14 137	8 024	6 113	2 988	1 797	5 036	4 316
2006							
County							
Østfold	582	455	127	157	12	298	115
Akershus og Oslo	960	252	708	104	53	148	655
Hedmark	586	337	249	118	197	219	52
Oppland	1 569	587	982	148	188	439	794
Buskerud	632	550	82	47	20	503	62
Vestfold	333	224	109	70	23	154	86
Telemark	224	195	29	185	10	10	19
Aust-Agder	87	72	15	44	9	28	6
Vest-Agder	299	249	50	133	33	116	17
Rogaland	2 431	1 892	539	271	158	1 621	381
Hordaland	545	389	156	241	43	148	113
Sogn og Fjordane	312	165	147	84	119	81	28
Møre og Romsdal	1 309	650	659	247	80	403	579
Sør-Trøndelag	1 134	677	457	260	158	417	299
Nord-Trøndelag	640	487	153	242	31	245	122
Nordland	684	489	195	355	96	134	99
Troms	817	288	529	255	465	33	64
Finnmark	993	66	927	27	102	39	825

¹ 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. ² Excluding information from the municipalities Austrheim in Hordaland, Frøya in Sør-Trøndelag and Rødøy in Nordland.

11.2. Land reclamation. County

	Applications for land reclamation	Area applied for land reclamation	Approved area for land reclamation
	Decares		
2005 ¹	462	11 407	10 693
2006 ²	485	12 626	11 606
2006			
County			
Østfold	9	154	154
Akershus og Oslo	8	375	375
Hedmark	53	1 534	1 489
Oppland	54	1 240	1 034
Buskerud	18	465	465
Vestfold	6	51	51
Telemark	5	44	44
Aust-Agder	3	80	80
Vest-Agder	19	324	320
Rogaland	129	2 780	2 436
Hordaland	13	243	243
Sogn og Fjordane	20	219	189
Møre og Romsdal	20	353	353
Sør-Trøndelag	17	425	393
Nord-Trøndelag	30	1 153	1 108
Nordland	43	1 678	1 465
Troms	25	859	859
Finmark	13	649	548

¹ 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. ² Excluding information from the municipalities Austrheim in Hordaland, Frøya in Sør-Trøndelag and Rødøy in Nordland.

11.3. Applications for exemption from the obligation to inhabit an agricultural or forestry property according to the Concession Act and the Allodial Act. County

	Applications treated according to 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 ¹	1 172	657	424	91
2006 ²	1 048	554	400	94
2006				
County				
Østfold	54	40	13	1
Akershus og Oslo	47	20	27	0
Hedmark	80	51	23	6
Oppland	85	58	17	10
Buskerud	59	42	16	1
Vestfold	17	12	3	2
Telemark	80	28	30	22
Aust-Agder	46	29	12	5
Vest-Agder	65	30	32	3
Rogaland	49	30	17	2
Hordaland	70	40	25	5
Sogn og Fjordane	66	36	17	13
Møre og Romsdal	55	31	17	7
Sør-Trøndelag	62	36	22	4
Nord-Trøndelag	36	16	19	1
Nordland	93	25	65	3
Troms	80	28	43	9
Finmark	4	2	2	0

¹ 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. ² Excluding information from the municipalities Austrheim in Hordaland, Frøya in Sør-Trøndelag and Rødøy in Nordland.

12. Sample survey of agriculture and forestry 2006

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 2006, the main topics were investments in buildings and machinery, leasing and consumption of energy.

12.1. Main results

Higher investments in agriculture

The investments in farm buildings and machinery for agriculture and horticulture were higher in 2005 than in 2001. Average investments per holding with investments in 2005 were approximately NOK 400 000. Investments in farm buildings constituted NOK 2.53 billion in 2005. The corresponding figure in 2001 was NOK 1.26 billion. The amount for 2001 has been converted to fixed 2005 NOK using the consumer price index. Investments in machinery and tools for agriculture and horticulture constituted NOK 2.54 billion in 2005. Average investments per holding with investments in 2005 were NOK 171 500.

Higher energy consumption per holding

The total consumption of electricity in agriculture and horticulture fell from 1.22 billion kWh in 2001 to 1.14 billion kWh in 2005. In the same period, the average consumption per holding increased by 2 000 kWh to 24 000 kWh. The total consumption of diesel in agriculture and horticulture in 2005 was 132 million litres. From 2001 to 2005, the consumption of diesel per holding increased from 2 300 litres to 2 700 litres. Energy consumption in greenhouses is not included in these figures.

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.

<i>Collection of data</i>	Forms are sent to the holdings drawn for inclusion in the survey. The owner or holder of the property provides the data.
<i>Control and revision</i>	A number of controls and corrections are done to ensure consistency both on a single form and between forms and available register information. Among other things, the local agriculture offices are contacted to clear up various questions.
<i>Estimation</i>	The sample is stratified by location, utilized agricultural area and farm type.
<i>Confidentiality</i>	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	
<i>Definitions of the main concepts and variables</i>	<p><i>Agricultural holding:</i> 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.</p> <p><i>Holder:</i> The person considered as responsible for operating the holding, usually the person applying for governmental production subsidies.</p> <p><i>Agricultural area in use:</i> Agricultural land that is harvested at least once during a year, included planted area of permanent crops, which not so far is yielding, and fallow land for one year.</p> <p><i>Type of farming:</i> 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.</p>
<i>Standard classifications</i>	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	
<i>Measurement and processing errors</i>	<p>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.</p> <p>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.</p>
<i>Non-response errors</i>	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.
<i>Sampling errors</i>	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.

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. Holdings with investment in farm buildings. 1988, 1997, 2001 and 2005

	Holdings with investment				Per cent holdings with investment			
	1988	1997	2001	2005	1988	1997	2001	2005
The whole country	13 885	7 289	6 800	6 379	14	9	11	12
Region								
Eastern Norway	5 511	2 912	2 507	2 559	13	9	10	12
Agder-Rogaland	2 037	1 050	1 208	1 013	16	10	14	14
Western Norway	3 274	1 445	1 347	1 152	15	8	10	11
Trøndelag	1 906	1 182	1 062	1 011	15	12	12	14
Northern Norway	1 157	701	676	645	12	10	12	14
Agricultural area in use								
- 49 decares ¹	2 899	630	725	559	8	3	8	9
50- 99 "	3 581	1 227	887	734	14	7	7	8
100-199 "	4 706	2 699	2 201	1 653	19	11	11	10
200-499 "	2 437	2 457	2 549	2 755	22	17	15	16
500- "	262	276	438	679	31	21	19	23

¹ Comprise some holdings with less than 5 decares agricultural area in use, mainly joint operations with milk production and holdings with horticulture.

12.2. Investment in farm buildings. 1988, 1997, 2001 and 2005¹. Fixed 2005-kroner

	Investment, total				Investment per holding with investment			
	1988	1997 ²	2001	2005	1988	1997 ²	2001	2005
	NOK 1000				NOK			
The whole country	2 510 481	1 519 495	1 246 074	2 531 657	180 805	208 464	183 246	396 874
Region								
Eastern Norway	993 635	602 995	510 007	1 038 125	180 300	207 072	203 433	405 676
Agder-Rogaland	420 829	236 794	191 947	462 752	206 593	225 518	158 897	456 813
Western Norway	538 123	224 687	240 168	281 669	164 363	155 493	178 298	244 504
Trøndelag	337 292	292 269	157 562	526 385	176 963	247 267	148 363	520 658
Northern Norway	220 601	162 751	146 390	222 726	190 667	232 170	216 554	345 312
Agricultural area in use								
- 49 decares ³	420 260	104 850	114 228	294 755	144 967	166 429	157 556	527 289
50- 99 "	585 747	178 691	88 475	96 507	163 571	145 632	99 747	131 481
100-199 "	870 226	505 724	326 747	442 236	184 918	187 375	148 454	267 535
200-499 "	555 444	613 086	563 425	1 238 061	227 921	249 526	221 038	449 387
500- "	78 804	117 142	153 198	460 099	300 778	424 427	349 767	677 612

¹ Investments below NOK 10 000 in 1988 and below NOK 15 000 in 1997, 2001 and 2005 are not included. ² Included investment tax. ³ Comprise some holdings with less than 5 decares agricultural area in use, mainly joint operations with milk production and holdings with horticulture.

12.3. Maintenance of farm buildings. 2001 and 2005. Fixed 2005-kroner

	Holdings, total	Holdings with maintenance	Per cent holdings with maintenance	Maintenance, total	Maintenance expenditure per holding with maintenance
			Per cent	NOK 1000	Kroner
2001	61 881	37 426	61	785 566	20 990
2005	51 208	39 986	78	1 093 276	27 341
Region					
Eastern Norway	21 330	15 916	75	469 502	29 499
Agder-Rogaland	7 168	5 731	80	192 063	33 513
Western Norway	10 756	8 711	81	183 645	21 082
Trøndelag	7 452	6 133	82	166 559	27 158
Northern Norway	4 502	3 496	78	81 507	23 314
Agricultural area in use					
- 49 decares ¹	5 990	3 971	66	95 296	23 998
50- 99 "	9 599	7 017	73	114 338	16 294
100-199 "	15 889	12 366	78	272 008	21 996
200-499 "	16 806	14 095	84	457 003	32 423
500- "	2 924	2 538	87	154 631	60 926

¹ Comprise some holdings with less than 5 decares agricultural area in use, mainly joint operations with milk production and holdings with horticulture.

12.4. Holdings with investment in machinery and implements for agriculture and horticulture. 1988, 1997, 2001 and 2005

	Holdings with investment				Per cent holdings with investment			
	1988	1997	2001	2005	1988	1997	2001	2005
The whole country	28 903	16 473	15 975	14 826	29	21	26	29
Region								
Eastern Norway	12 252	7 296	7 419	6 435	29	22	29	30
Agder-Rogaland	3 516	1 838	1 737	1 928	27	18	20	27
Western Norway	5 908	3 281	2 813	2 591	27	18	21	24
Trøndelag	4 564	2 543	2 413	2 338	37	26	28	31
Northern Norway	2 663	1 513	1 593	1 535	28	22	29	34
Agricultural area in use								
- 49 decares ¹	4 439	1 536	954	715	12	8	10	12
50- 99 "	7 147	2 756	1 866	1 670	29	15	14	17
100-199 "	10 910	6 144	5 112	4 333	43	26	26	27
200-499 "	5 864	5 345	6 634	6 548	52	39	40	39
500- "	543	691	1 409	1 561	63	56	62	53

¹ Comprise some holdings with less than 5 decares agricultural area in use, mainly joint operations with milk production and holdings with horticulture.

12.5. Investment in machinery and implements for agriculture and horticulture. 1988, 1997, 2001 and 2005¹. Fixed 2005-kroner

	Investment, total				Investment per holding with investment			
	1988	1997 ²	2001	2005	1988	1997 ²	2001	2005
	NOK 1000				NOK			
The whole country	3 297 470	2 470 326	2 510 557	2 543 182	114 087	149 962	157 155	171 535
Region								
Eastern Norway	1 532 875	1 159 749	1 297 683	1 203 832	125 112	158 957	174 913	187 076
Agder-Rogaland	354 120	232 517	257 256	302 279	100 717	126 506	148 104	156 784
Western Norway	575 325	452 830	363 781	349 810	97 381	138 016	129 321	135 010
Trøndelag	520 198	416 990	363 605	423 905	113 979	163 976	150 686	181 311
Northern Norway	314 952	208 239	228 231	263 356	118 270	137 633	143 271	171 568
Agricultural area in use								
- 49 decares ³	349 891	176 468	122 534	104 708	78 822	114 888	128 442	146 445
50- 99 "	682 886	338 056	195 842	238 325	95 549	122 662	104 953	142 709
100-199 "	1 245 113	784 953	622 653	608 496	114 126	127 759	121 802	140 433
200-499 "	893 083	962 037	1 153 339	1 150 799	152 299	179 988	173 853	175 748
500- "	126 498	208 814	416 189	440 855	232 961	302 190	295 379	282 418

¹ Investments below NOK 9 000 in 1988 and below NOK 15 000 in 1997, 2001 and 2005 are not included. ² Included investment tax. ³ Comprise some holdings with less than 5 decares agricultural area in use, mainly joint operations with milk production and holdings with horticulture.

12.6. Consumption of electricity in agriculture. Excl. greenhouses. 2001 and 2005

	Holdings, total	Holdings with reported consumption	Consumption, total	Value, total	Consumption per holding with reported consumption
			1 000 kWh	NOK 1 000	1 000 kWh
2001	61 232	54 517	1 222 213	659 537	22
2005	50 758	47 285	1 142 109	736 781	24
Region					
Eastern Norway	21 145	19 270	474 555	304 125	25
Agder-Rogaland	6 999	6 608	197 563	121 846	30
Western Norway	10 717	10 196	179 819	117 407	18
Trøndelag	7 424	7 002	189 337	129 285	27
Northern Norway	4 472	4 209	100 836	64 118	24
Agricultural area in use					
- 49 decares ¹	5 652	4 732	112 011	70 246	24
50- 99 "	9 546	8 499	110 926	71 969	13
100-199 "	15 863	14 821	291 480	190 634	20
200-499 "	16 776	16 363	482 472	310 708	29
500- "	2 921	2 870	145 221	93 223	51

¹ Comprise some holdings with less than 5 decares agricultural area in use, mainly joint operations with milk production and holdings with horticulture.

12.7. Consumption of diesel in agriculture. Excl. greenhouses. 2001 and 2005

	Holdings, total	Holdings with reported consumption	Consumption, total	Value, total	Consumption per holding with reported consumption
			1000 litres	NOK 1000	Litres
2001	61 232	56 967	128 812	501 158	2 261
2005	50 758	48 287	131 659	646 595	2 727
Region					
Eastern Norway	21 145	20 116	63 469	308 984	3 155
Agder-Rogaland	6 999	6 597	15 067	74 177	2 284
Western Norway	10 717	10 160	18 522	93 797	1 823
Trøndelag	7 424	7 171	22 799	110 121	3 179
Northern Norway	4 472	4 243	11 802	59 515	2 782
Agricultural area in use					
- 49 decares ¹	5 652	4 455	6 946	35 164	1 559
50- 99 "	9 546	9 008	9 462	48 345	1 050
100-199 "	15 863	15 408	29 927	150 020	1 942
200-499 "	16 776	16 550	60 276	293 962	3 642
500- "	2 921	2 867	25 049	119 103	8 737

¹ Comprise some holdings with less than 5 decares agricultural area in use, mainly joint operations with milk production and holdings with horticulture.