1 Summary

The objective of the Yearbook of Agricultural Statistics is to compile a manageable portion of the available statistics relating to agriculture and food.

The main part of the yearbook covers agriculture – though there are also sections on horticulture, reindeer keeping and fur farming and also statistics on food.

For detailed information on forestry related to agriculture, please consult the Statistical Yearbook of Forestry, issued by the National Board of Forestry.

Until year 1999, information on food stuffs, such as food manufacturing, trade and consumption, were presented in "När mat kommer på tal – en livsmedelsstatistisk översikt" issued by Statistics Sweden (SCB). From year 2001, the food statistics is included in the Yearbook of Agricultural Statistics.

In many tables, the results are presented by Swedish counties and by production areas (a map of these will be found in Appendix 2).

In the beginning of the book, there is a Table of Contents and a List of Tables and Diagrams with translations into English. The translations of subject headings are, however, somewhat shortened. Information regarding units, years and so on should be obvious by the headings in Swedish, i.e.

Kg = kilogram
Milj. kg = million kilograms
Kr = Swedish kronor, SEK
Milj. kr = million SEK
Hektar = hectares
Ton = metric tons
Procent = per cent, percentages
1 000-tal = thousands

At the end of the book there is a Swedish-English list of terms translating most words and expressions found in the headings and lefthand columns of the tables.

In most cases, the data published in the Yearbook of Agricultural Statistics 2002 refer to the year of 2001 or the production year 2000/01. Estimates pertaining to the whole country are also frequently given for the five previous years.

In the following, you will find a summary of some scopes regarding Swedish agriculture and after that a brief description, chapter by chapter, of the different surveys and other statistical material utilized in the presentation.

Scope

Structure, labour etc.

Structural developments in agriculture over the last few decades have led to fewer but larger farms. In 2001, the total number of agricultural holdings with more than 2 hectares of arable land was around 74 300. The average area of arable land at these farms was 36 hectares.

The table below shows the number of holdings in different size classes.

Agricultural holdings, by size

	1999	2000	2001
All holdings	80 119	76 798	74 291
2,1– 5,0 ha	11 344	11 784	11 522
5,1– 10,0 ha	15 229	14 110	13 657
10,1– 20,0 ha	16 656	15 453	14 732
20,1– 30,0 ha	9 295	8 717	8 199
30,1– 50,0 ha	11 445	10 624	10 052
50,1–100,0 ha	10 969	10 652	10 498
100,1– ha	5 181	5 458	5 631

In densely forested Sweden, farming and forestry often are combined. In the north of Sweden the farms mostly have small areas of arable land.

The number of people engaged in agriculture is steadily decreasing. Less than 3 % of the economically active population is engaged in farming. The farmers' average age is high, 55 % are older than 50 years.

Many Swedish farms are very small if measured by labour requirements. The number of full time enterprises where more than 1 600 hours of labour are required is about 24 000. Around 45% of the holdings requires

less than 800 hours of labour.

Animal husbandry is the dominant line of production. Only in the central part of Sweden the cropping farms dominates. In the north of Sweden there are mostly small farms.

Crop production

The conditions for crop production display great differences between the north and south of Sweden. More than 60 % of the arable land is found on the fertile plains of southern and central Sweden.

The crop production is strongly dominated by cereals and by leys, the former mainly being barley which is often used as feed for cattle and pigs. The proportion of leys increases towards the north of Sweden and makes up most of the area of arable land in Norrland. Oil seed production is mainly located on the plains in Götaland and Svealand. Potatoes are grown throughout the entire country. Sugar beets are grown in the counties of Skåne, Gotland, Kalmar, Blekinge och Halland.

In 2001, the arable land amounted to 2,7 million hectares. The arable land by crop is found in the table below.

Arable land by crop, 1 000 hectares

	1999	2000	2001
Total arable land	2 747	2 706	2 694
Wheat	275	402	399
Rye	25	35	34
Barley	482	411	397
Oats	306	296	278
Mixed grain	33	45	25
Triticale	33	41	40
Potatoes	33	33	32
Sugar beet	60	56	55
Leys, other fodder	980	921	956
Oillseed	110	59	49
Other crops	81	82	86
Fallow, untilled arable land	330	327	341

The total crop production in 2001 is estimated to 5,4 million tonnes of cereals, 109 000 tonnes of oilseed crops, 622 000 tonnes of table potatoes and 303 000 tonnes of potatoes for processing.

Compared to the average for the previous five years (1996–2000), the total yields divergate as follows: winter wheat + 17 %, winter rye + 17 %, spring barely – 10 % and oats – 17 %. For potatoes comparisons with earlier years are uncertain due to changes in the data collection methods in 1999.

The average yield varies in different parts of Sweden. For example for spring barley the average yield in Skåne in the south is 5 860 kg/ha and in Västerbotten in the north it is 1 930 kg/ha.

Total production and average yields are shown in the next table.

Crop production 2001

	Total production, 1 000 tons	Yield, kg/ha
Wheat	2 345	5 880
Rye	180	5 270
Barley	1 642	4160
Oats	964	3 550
Triticale	174	4 410
Mixed grain	86	3 230
Potatoes	925	28 530
Sugar beet	2 659	48 500
Rape and Turnip rape	106	2 370

Livestock

The dairy sector is playing a central role in Swedish agriculture. The number of dairy cows has, however, been decreasing over a long period of time. The number of livestock is shown in the table below.

The number of farms with livestock has decreased the last decades whereas those remaining have increased their number of animals.

In 2000, there were dairy cows on 16 % of all farms. There is an average of 34 cows/herd.

In 2001 there are roughly 4 500 pig farms in Sweden. Around 95 % of the fattening pigs are found in herds with at least 100 animals.

Livestock, mid-year estimates, 1 000s

	1999	2000	2001
Cattle	1 713	1 684	1 652
Dairy cows	449	428	418
Suckler cows	165	167	166
Heifers, bulls, steers, calves	1 100	1 089	1 067
Sheep and lambs	437	432	452
Pigs	2 115	1 918	1 891
Boars, sows	224	206	216
Other pigs	1 891	1 712	1 676
Poultry of laying breed	7 850	7 324	7 408

The structure within sheep-rearing has had great stability during the last ten years. Egg production is dominated by few but large flocks. Around 90 % of the hens of laying breed are found in herds with at least 5 000 hens.

The number of agricultural holdings with different types of animals is shown below.

Number of agricultural holdings with different types of animals

	1999	2000	2001
Cattle	33 978	32 063	30 537
Dairy cows	13 963	12 676	11 828
Suckler cows	14 254	13 861	13 578
Sheep (lambs excl.)	8 209	8 041	8 051
Pigs	6 014	4 809	4 520
Fowls (chickens excl.)	6 441	5 678	5 768
With none of the above animals	36 800	33 300	34 502

Brief description by chapter

Chapter 2 Structure of the enterprises

Since 1968, SCB has carried out an annual registration of enterprises (holdings) in agriculture and forestry. Data have been recorded in the Farm Register. Detailed information on the Farm Register is given in appendix 1.

Some data on the number of holdings in different size groups are given in Table 2.1.

In Table 2.2, number of holdings and area of arable land by type of holdings are shown.

In Tables 2.8, information can be found on the number of holdings by type of farming and labour requirement.

Data on the number of holdings and arable land in different size groups of arable land are given in Table 2.3. Figures refer to holdings with at least 2 hectare of arable land.

Percentage of holdings by type of farming and county are shown in Table 2.7.

Data on animal breeding are given in Tables 2.4–2.6.

Chapter 3 Use of arable land

In the Tables 3.2–3.8 information is given on the use of arable land and on the number of holdings with different crops. In Table 3.1 data are given on different types of land in 1999.

Chapter 4 Crop production

The crop yield surveys comprise investigations of cereals, peas, oilseed crops and potatoes. The surveys cover a sample of holdings with more than 5 hectares or arable land. The statistics are presented in the Tables 4.1–4.5.

The statistics are mainly based on interviews with farmers. For potatoes, however, the yield levels are based on mail inquiries to a sample of farmers and for sugar beet data have been delivered by the Danisco Sugar Co. AB. Due to changes in the 1999 data collection methods for potatoes comparisons with earlier years should be made with great caution.

SCB makes annual estimates of the total production of cereals, peas, oilseed crops and potatoes on the basis of the crop yield surveys. Data on the total production of sugar beet are supplied by the Danico Sugar Co. AB.

Content of starch and sugar in potatoes and sugar beet respectively are supplied by The Swedish Starch Producers and the Danisco Sugar Co. AB respectively.

Standard yields are calculated every year for cereals, potatoes, oilseed crops and sugar beet. The standard yield is an estimate of the yield that can be expected if the weather and other conditions that influence the crops are normal (Table 4.7).

Chapter 5 Horticultural cultivation
All enterprises with horticultural production were until 1999 included in The Farm Register. The statistics in the Tables 5.1–5.6 are entirely based on the horticultural censuses, which have been performed every third year since 1981, the latest one referring to 1999.

Data on the main structure in the horticultural sector are given in the Tables 5.1–5.2. Data on outdoors cultivation of different plants are given in Tables 5.3–5.4 and on cultivation in greenhouses and frames in the Tables 5.5–5.6.

Chapter 6 Livestock
Data from the Farm Register on the number of domestic animals and data on the number of holdings with livestock are given in the Tables 6.1–6.6 (cattle), 6.1–6.3 and 6.7–6.9 (sheep), 6.1–6.3 and 6.10–6.14 (pigs), 6.1–6.3 and 6.15–6.16 (fowls). Data on other animals such as horses, minks, foxes, bees and reindeers are presented in the Tables 6.17–6.20.

Statistics on the number of organicly breeded animals, obtained from KRAV, a Swedish national control society for organic farming, are presented in chapter 11.

Chapter 7 Labour Force in agriculture
The general censuses of population and housing conducted by SCB include information about agriculture. They give statistics, for instance, on the distribution of the population in rural and urban areas. In connection with the Population and Housing Census in 1985, new statistics on regional employment were started. These statistics are based on administrative data and are published yearly. Some data on the size of the economically active population in agriculture and related fields are given in Table 7.1.

The Farm Register provides data on the age distribution of holders and the number of holders and employees in agriculture (Table 7.2).

Data on the number of occupied persons in agriculture for different groups are given in the Tables 7.3–7.4. In these tables also data on employment in terms of AWU (Annual Work Unit) are given. These statistics are also provided by the Farm Register.

In Table 7.5 the number of occupied persons are distributed by working hours in agriculture on the holding.

Chapter 8 Production means
The Swedish Board of Agriculture provides data on the number of tractors and machinery purchased by the agricultural sector. The statistics are shown in tables 8.1–8.2.

The Swedish Board of Agriculture also provides data on the number of pre-tested buildings for livestock (Table 8.3).

Under current regulations, seed for marketing is controlled by the Swedish State Seed Testing Institute, which annually reports statistics on state certified seed (Table 8.4).

The Swedish Board of Agriculture makes an annual survey on the sale of pesticides in agriculture and horticulture. Data in this survey are supplied by manufacturers and importers (Table 8.5).

Information on the consumption of fertilizers in agriculture and horticulture, based on figures supplied by manufacturers and importers, is reported by the Swedish Board of Agriculture (Table 8.6).

Information on the consumption of feeding stuff is annually compiled by the Swedish Board of Agriculture (Tables 8.7–8.8).

Chapter 9 Agricultural support
Support relating to the Common Agricultural Policy (CAP) is reported by the Swedish Board of Agriculture. In the Tables 9.1–9.3, 9.4 and 9.8 the statistics refer to the years for which support have been disbursed and in the Tables 9.6–9.7 the years when support have been granted. Table 9.4 shows areas registered for environmental support.

Chapter 10 Economics
SCB produces national accounts statistics. Some data regarding the agricultural sector and the gross domestic product are given in Table 10.1.

The Economic Accounts for Agriculture

(EAA) are shown in Table 10.2.

In order to illustrate receipts, costs and profitability in Swedish agriculture, SCB makes an annual farm economics survey. The 1999 study is based on the accounts of approx. 1 000 farms. Results from the survey are presented in the Table 10.3.

Some results from an investigation on farmers' assessed net receipts and income are presented in the Tables 10.4–10.5.

The development of prices and costs of agricultural products and requisites is reflected by the Swedish Board of Agriculture in the monthly calculations of different indices, i.a. Input and Output Price Indices and – for price regulated agriculture products – Price Index for the Food Industry and Consumer Price Index. (Tables 10.6 and 10.8)

The Swedish Board of Agriculture compiles average prices of tractors, fuel, fertilizers and vegetable and animal products (Table 10.7).

The Swedish Board of Agriculture compiles statistics on rent prices for agricultural and arable land and on the development of rent prices (Tables 10.9–10.10).

The Swedish Board of Agriculture compiles statistics on prices of agricultural land (Table 10.11).

Statistics on the number of sold agricultural units are produced by SCB (Table 10.12).

Chapter 11 Organic farming

Statistics on organic farming and horticulture and on the number of organicly breeded animals are obtained from KRAV, a Swedish national control society for organic farming. The statistics on organic cultivation either show KRAV controlled areas (Tables 11.1 and 11.3) or areas/crops certified for organic cultivation (Tables 11.2 and 11.4–11.5). In table 11.3 also data on the number of cultivators on KRAV certified holdings are given. The number of KRAV certified animals and animals qualifying for certification is shown in Table 11.6.

Chapter 12 Impacts from agriculture on environment

Data on impacts from agriculture on environment have been compiled by SCB together with the Federation of Swedish Farmers (LRF). The basic data for the information given have been collected by SCB, the Swedish Board of Agriculture, the Swedish Environmental Protection Agency and the National Chemicals Inspectorate.

Chapter 13 Agriculture in the European Union

Information on the agricultural sector in the European Union is mostly obtained from Eurostat; Agriculture – Statistical yearbook 1999. The book contains data produced by the different national statistics offices or the statistical services of the ministries on the basis of harmonised methodologies.

Civilian employment by sector of activity is shown in Table 13.1.

Total agricultural area, forest area and total area (water incl.) are shown in Table 13.2. Utilized agricultural area and number of holdings are shown in Table 13.3.

Harvested area and production of some of the most important crops are shown in Table 13.4.

Harvested production of selected fresh vegetables, berries and fruits are shown in Tables 13.5.

Data on livestock, and the structure of dairy cow holdings are shown in Tables 13.6–13.8.

Production of animal products is shown in Table 13.9.

Human consumption and self sufficiency for certain food products are shown in Table 13.10.

Chapter 14 International statistics on agriculture

Information on the agricultural sector in different countries is obtained from the statistics published annually by The Food and Agriculture Organization of the United Nations (FAO) and The Organization for Economic Co-operation and Development (OECD). These statistics include information on utilized areas (Table 14.1), harvested production of different crops (Table 14.2), number of livestock (Table

14.3), livestock production (Table 14.4) and on active population in agriculture and subsidiary industries (Table 14.5).

Chapter 15 Food manufacturing

The statistics in the Tables 15.1–15.6 and 15.9 on slaughtered animals and on production of eggs and milk products are based on data supplied by The Swedish Board of Agriculture. Information on the number of milk suppliers, the quantity of delivered milk, the uses of dairy milk etc. is found in the statistics on dairy operations published by the Swedish Dairies' Association (Tables 15.7–15.8).

The statistics in the Tables 15.10–15.11 on establishments, employees etc. in foodstuffs and beverage manufacturing and on production of different agricultural products are produced by SCB.

The statistics in Table 15.12 on employment in different branches of the food sector are produced by SCB.

Chapter 16 External trade

Statistics regarding foreign trade are produced by SCB. The system for collecting the basic data for the statistics was totally changed when Sweden entered EU in 1995. From 1995 on data on internal EU trade are collected by inquires to importers and exporters (The Intrastat System), which means that the statistics suffer from non response and errors caused by the the omission of "small" actors in the statistics.

The basis for identification of agricultural products and foodstuffs has been the codes 0, 11, 12, 22 and 4 according to SITC rev.3. Further specification on products within these major SITC groups follows CN (Combined nomenclature). This system for divisions on items is also practiced by the Swedish Board of Agriculture in their presentation of statistics on foreign trade

In Table 16.1 imports and exports are given on SITC groups. Compensation has been made for lack of information depending on mostly non response error in the data delivered to the Intrastat system. The tables 16.2–16.7 reflect collected data, which means that compensation for non response has not been made. Such compensation is only possible for data on at most SITC two-digit level. Compensation is further not possible for different countries.

Table 16.5 shows imports and exports of processed foodstuffs. The identification of this group of products is based on similar compilations which recently were made by the Swedish Board of Agriculture.

Chapter 17 Consumption of food stuffs

The Swedish Board of Agriculture has since the middle of the 1940:ies calculated the consumption of different foodstuffs and produced data both in values and quantities. In Table 17.1 figures are presented for 1999 on consumption per head of different foodstuffs and in Table 17.2 on consumption in million SEK.

The Swedish Board of Agriculture also has made calculations on nutritive values in the intake of foodstuffs (Table 17.3), mean supply per head and day of energy, protein, fat and carbohydrates (Table 17.4) and of vitamins, iron, calcium, and fibres (Table 17.5). All these calculations are based on consumption calculations and on nutritive data from the National Food Administration in Sweden.

In the Swedish National Accounts data are available on private final consumption expenditures by purpose. Statistics for different foodstuffs and beverages are presented in Tables 17.6–17.7

Chapter 18 Food quality

Statistics on food quality are normally not produced on a regular basis. However, data on pesticide residues in food of plant origin are calculated every year by the National Food Administration which makes it possible to create time series.

Figure 18A shows for all products examined the levels of residues found and to what extent the limit values have been exceeded.

Figure 18B shows the frequency of exceeded limit values for residues of pesticides in fresh fruit and vegetables with division on domestic and imported products. The fre-

quency of exceeded limit values for residues amounts to about 3–4 % since the middle of the 1980:ies with very small dispersions from this average level. The findings are mainly limited to imported products. For the national products the level is much lower (less than one per cent).

Chapter 19 Prices of food stuffs

SCB calculates every month Consumer Price Index for different foodstuffs according to COICOP. Yearly indices are shown in Table 19.2 for the period 1980–2001. In Table 19.1 mean retail prices are listed for some common food products used as input in the calculation of Consumer Price Index.

In Table 19.3 price index numbers for the food sector are shown. These indices are partly calculated by the Swedish Board of Agriculture.

Chapter 20 International comparisons on food stuffs

The comparisons between different countries on consumption, price levels and price development for different kinds of foodstuffs are almost entirely based on Purchasing Power Parities for 1999. The basic statistics are presented by Eurostat. Table 20.1 shows to what extent the individual private consumption goes to food and Table 20.2 differences between countries in consumed volumes per head of different foodstuffs. Table 20.3 shows differences between countries in price levels for different foodstuffs and Table 20.5 the price development. Table 20.4 shows the general development of prices in different countries. These statistics are based on data from OECD.

In Table 20.6 Vat rates for food and beverages are shown for different EU countries.

Appendix 1
The Farm Register

The Swedish Farm Register (LBR) contains records on agricultural and forestry enterprises in Sweden and was set up in 1968. The original objectives of the LBR were to achieve a continuous recording of all holdings and their production resources and to provide a basis for statistics.

The farm register has included the following types of enterprises:
a) enterprises with at least 2,1 hectares of arable land
b) enterprises with less than 2,1 hectares of arable land (including enterprises without arable land) which include real estate assessed as agricultural real estate
c) enterprises with large stocks of livestock
d) enterprises with horticultural production of a certain size.

Until 1999 data on enterprises of types a), c), and d) were collected from the holders by mail each year, while data for enterprises of type b) were collected only for certain years.

During 1968–1995 there was an annual data collection for the farm register of items relating to name, address, telephone number, personal identification number of the holder, real estates included in the enterprise, areas of arable and forest land, owner of leased property, tenant of leased land, the acreages under various crops and the number of livestock of different species. A number of other data is collected at intervals. The 1999 data collection was performed similar to the 1968–1995 method, i.e. data were collected for all farms.

In 1996–1998, information on name, address, telephone number, the number of holders on the holding, real estates included in the holding and their area of arable and forest land respectively, was collected for all enterprises. Other data were collected in a sample survey. The sample for the 1998 inquiry was drawn from the 1997 register and amounted to 18 % of the total number of farms. These data covered areas of various crops, area for horticultural plants on open ground and in greenhouses and the number of livestock of various kinds.

From year 2000 the data collection is mainly based on data from the Swedish administrative system for agricultural subsidies, containing data on farmers who have applied for such subsidies. The statistics are also based on information collected by a simplified mail inquiry

to all farmers including those who have not applied for subsidies.

Appendix 2
Geographical divisions
In the Swedish agricultural statistics, information is presented by administrative areas and by areas defined in accordance with natural farming conditions. For the current surveys, data usually are given for counties and larger areas, although, for some years the Farm Register provides information by individual parishes, municipalities, etc.

The majority of the counties has, on the basis of different climatic conditions, the quality of the soil etc. been divided into ”natural farming areas”. These areas can be combined into ”production areas” and ”major regions”. See further Appendix 2 where a map of Sweden can be found.

For the crop yield surveys, the country is divided into 106 ”yield survey districts”, which have been made as homogeneous as possible with regard to annual yield outcome.

Appendix 3
Agricultural statistics quality and organization
Different aspects of quality is discussed in the first part. In the second part, the organisation of the agricultural statistics is presented.

Most of the data presented for the agricultural sector in this yearbook are based on surveys carried out at regular intervals by various agencies, the most important ones being Statistics Sweden (SCB) and the Swedish Board of Agriculture.

Appendix 4
Definition of the food sector
The food sector has no official definition in Swedish statistics. Appendix 4 informs on how the sector in terms of SNI (based on NACE, rev.1) has been delimited in the book.

Appendix 5
Classification on commodities according to SITC/KN
In the statistics on different food and agricultural products, SITC and CN has been used to identify different commodities. Appendix 5 informs on the codes in terms of these nomenclatures, on which the accounts on food manufacturing and foreign are based (Chapter 15 and 16).