

CROP STATISTICS IN GERMANY

Follow up regional workshop on crop statistics

Zagreb, 17 – 18 April 2008

Ute Walsemann

Head of Subdivision “Land use and Crop statistics“

Federal Statistical Office of Germany

Crop Statistics in Germany

Agriculture and horticulture in Germany

- A short overview

German agriculture and horticulture statistics

- Organisation of agricultural statistics
- Main crops - land use, yields and harvested production
- Horticulture - land use, yields and harvested production
 - Vegetables,
 - Fruit trees and bushes
 - Viticulture
- Horticulture - land use
 - Ornamental plants and tree nurseries

Structure of agricultural holdings in Germany

Utilised agricultural area	1949	1971	1991	2007 ^{*)}
Total	2 500 000	1 200 000	650 000	370 000
under 10 ha	2 000 000	720 000	320 000	134 000
10 - 50 ha	520 000	420 000	276 000	151 000
50 - 100 ha	16 000	18 000	44 000	53 000
100 ha and more	4 000	12 000	12 000	32 000

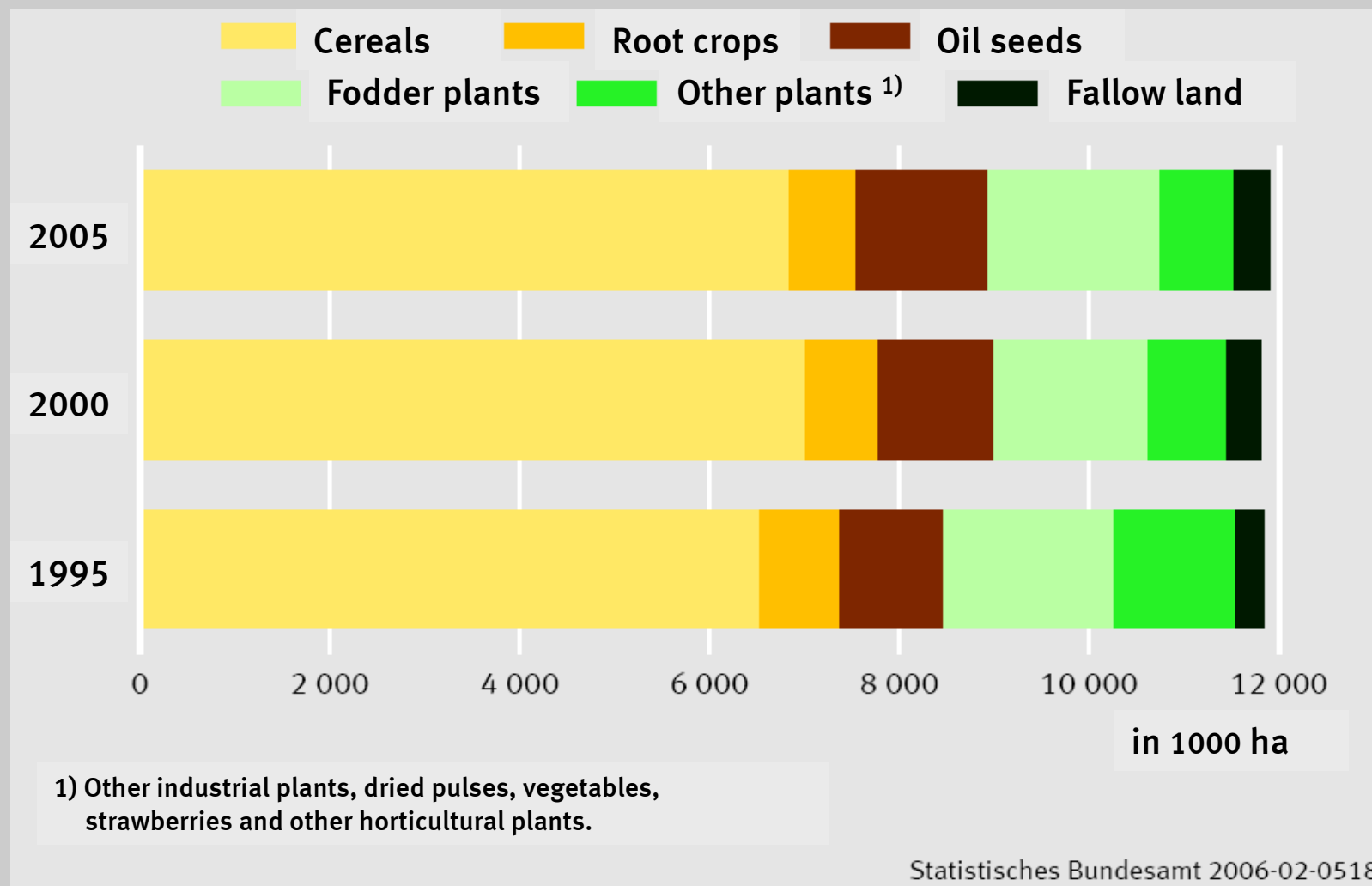
^{*)} preliminary data.

Average size of agricultural holdings in Germany

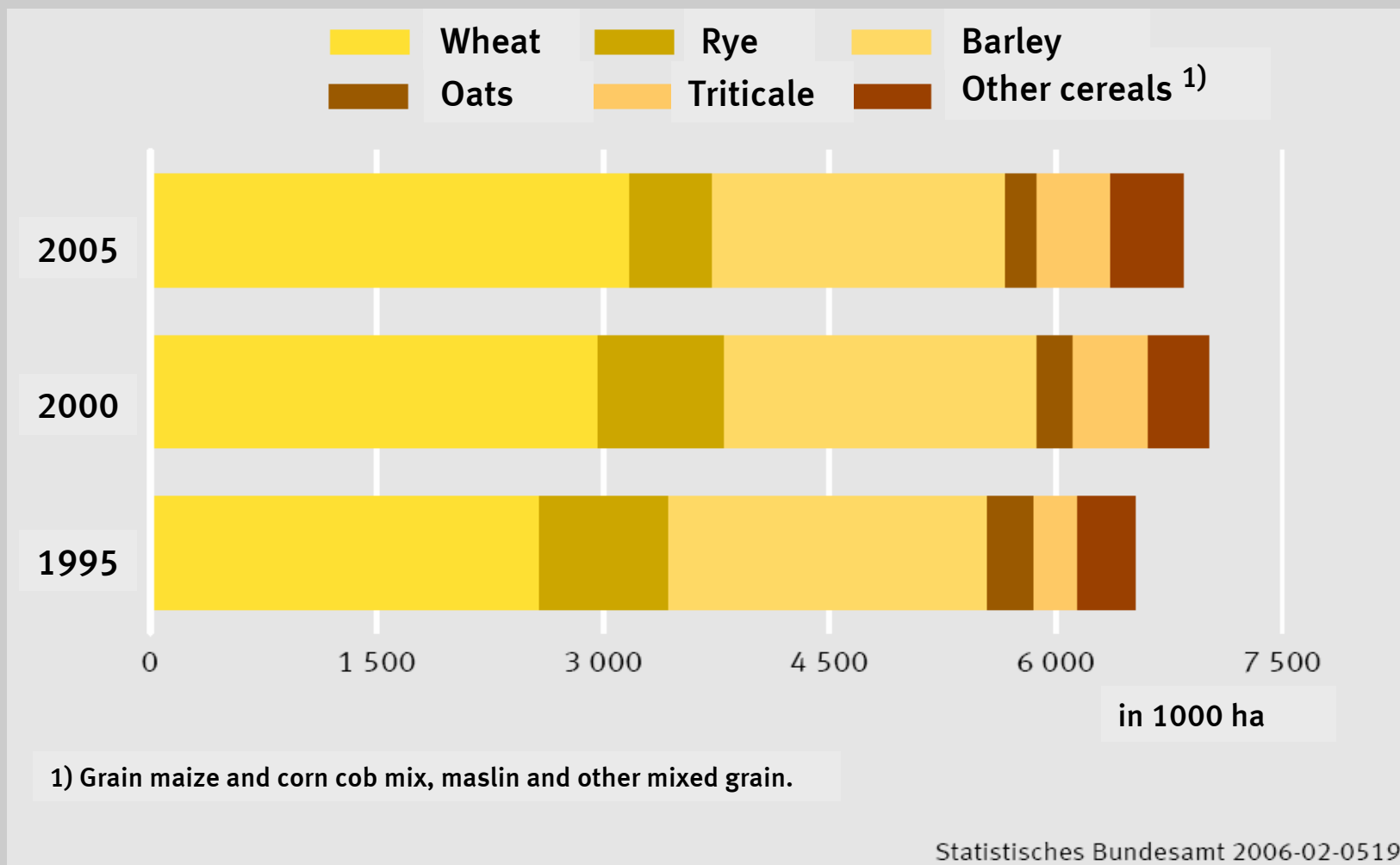
Year	1949	1971	1991	2007 ^{*)}
Agricultural holdings	2 500 000	1 200 000	650 000	370 000
Average size	8 ha	12 ha	26 ha	46 ha

^{*)} preliminary data.

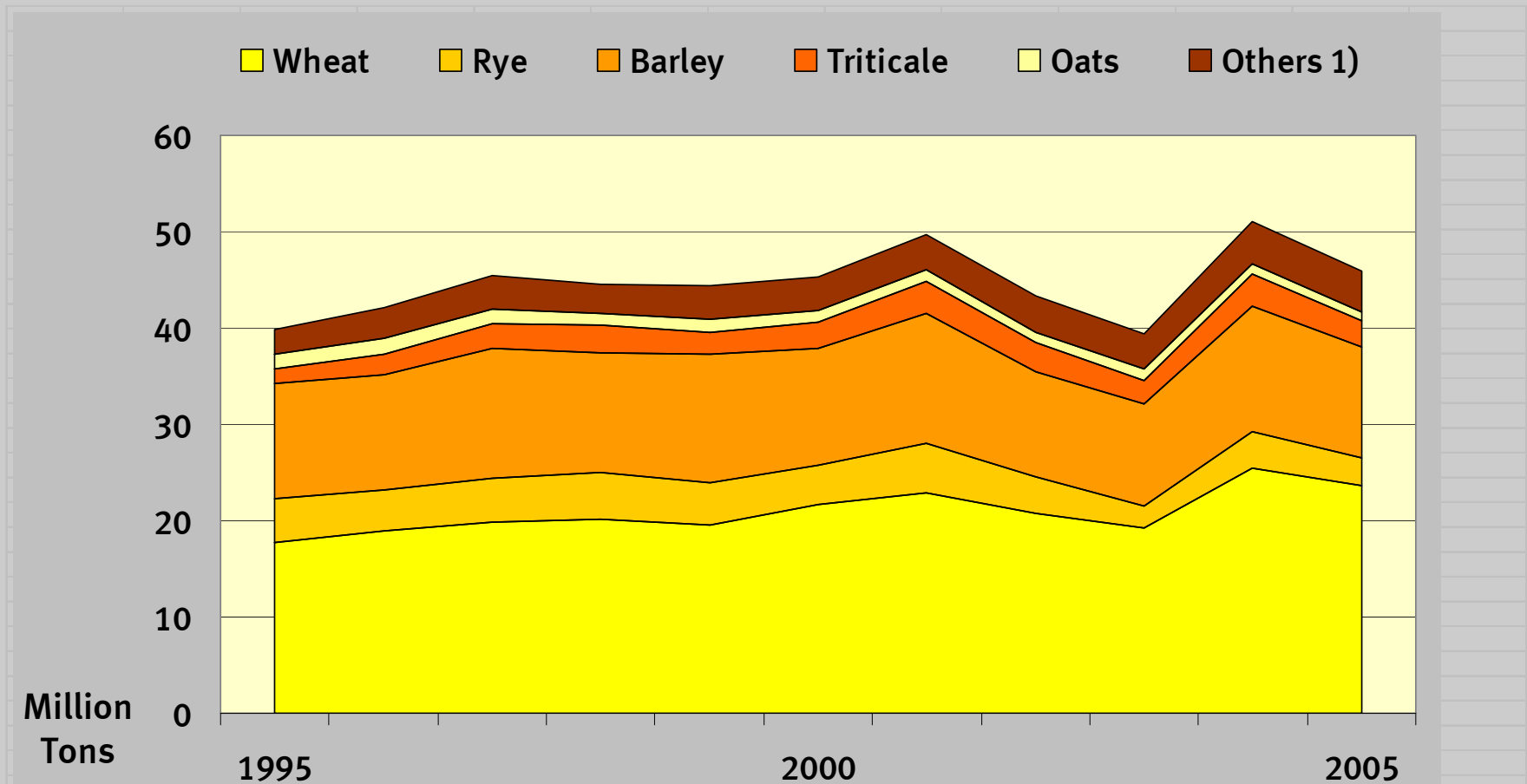
Arable land by main groups of crops in Germany



Cultivation of cereals in Germany

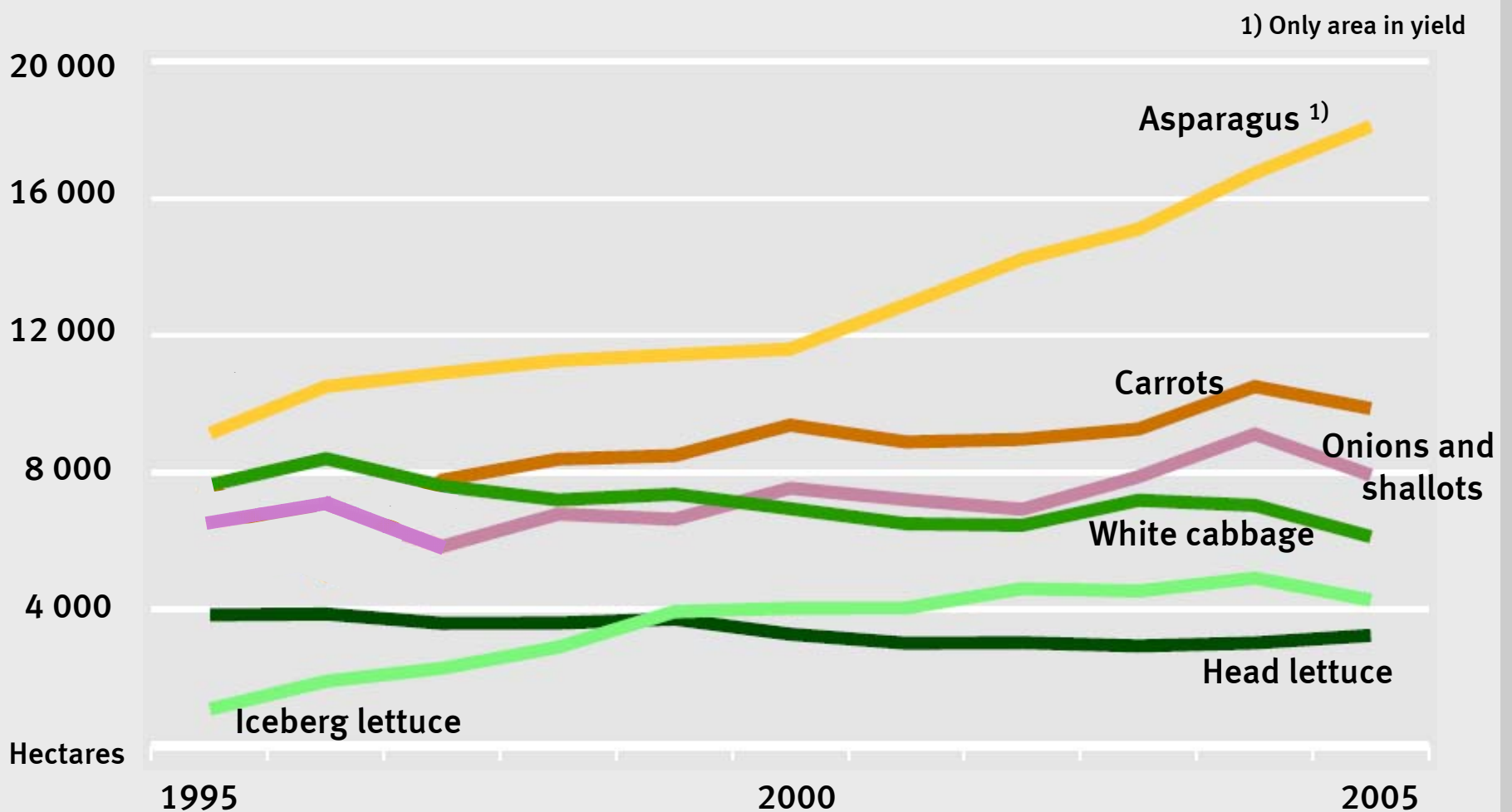


Harvested production of cereals in Germany

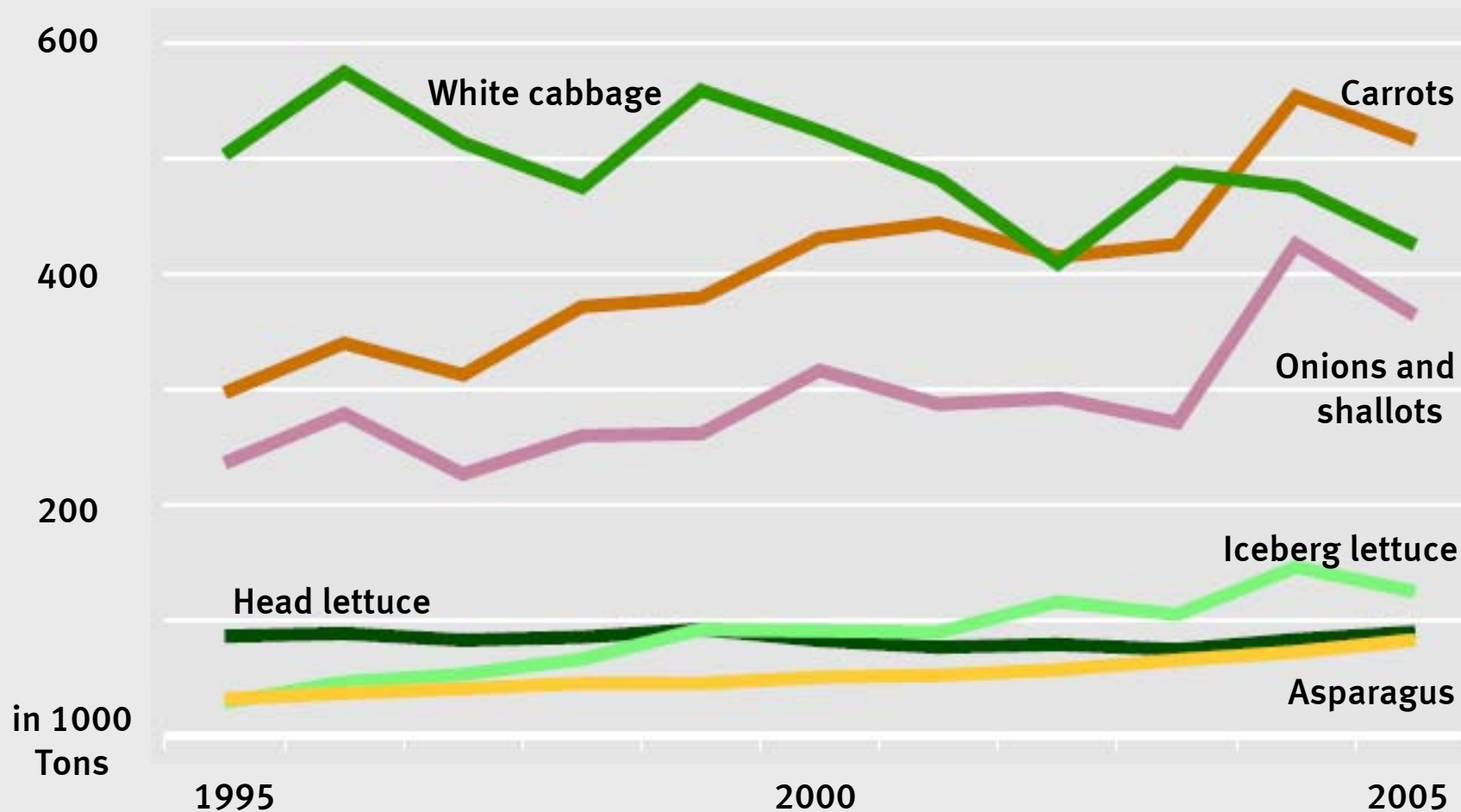


1) Grain maize and corn cob mix, maslin and other mixed grain.

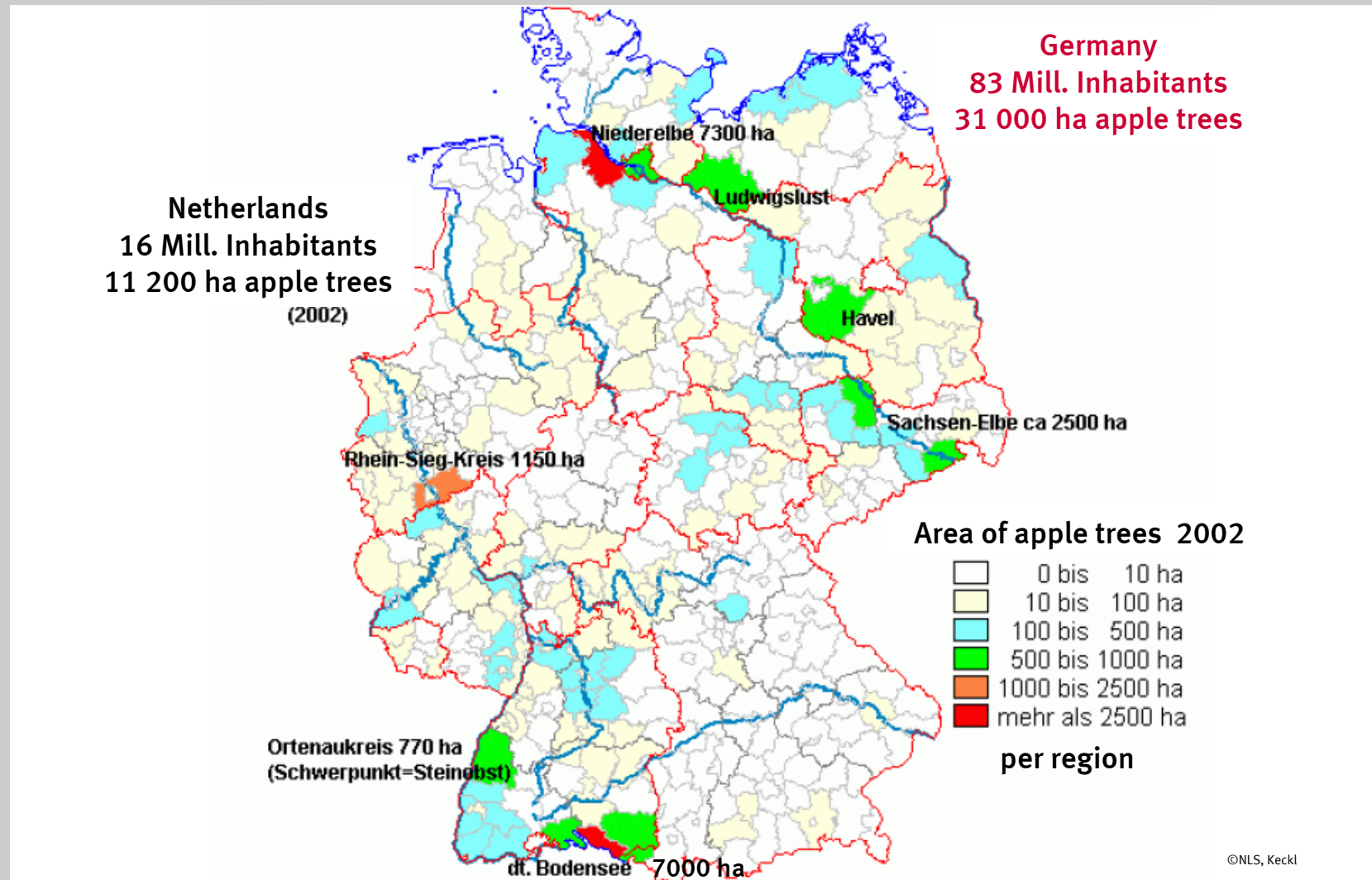
Cultivated area of main vegetables in Germany



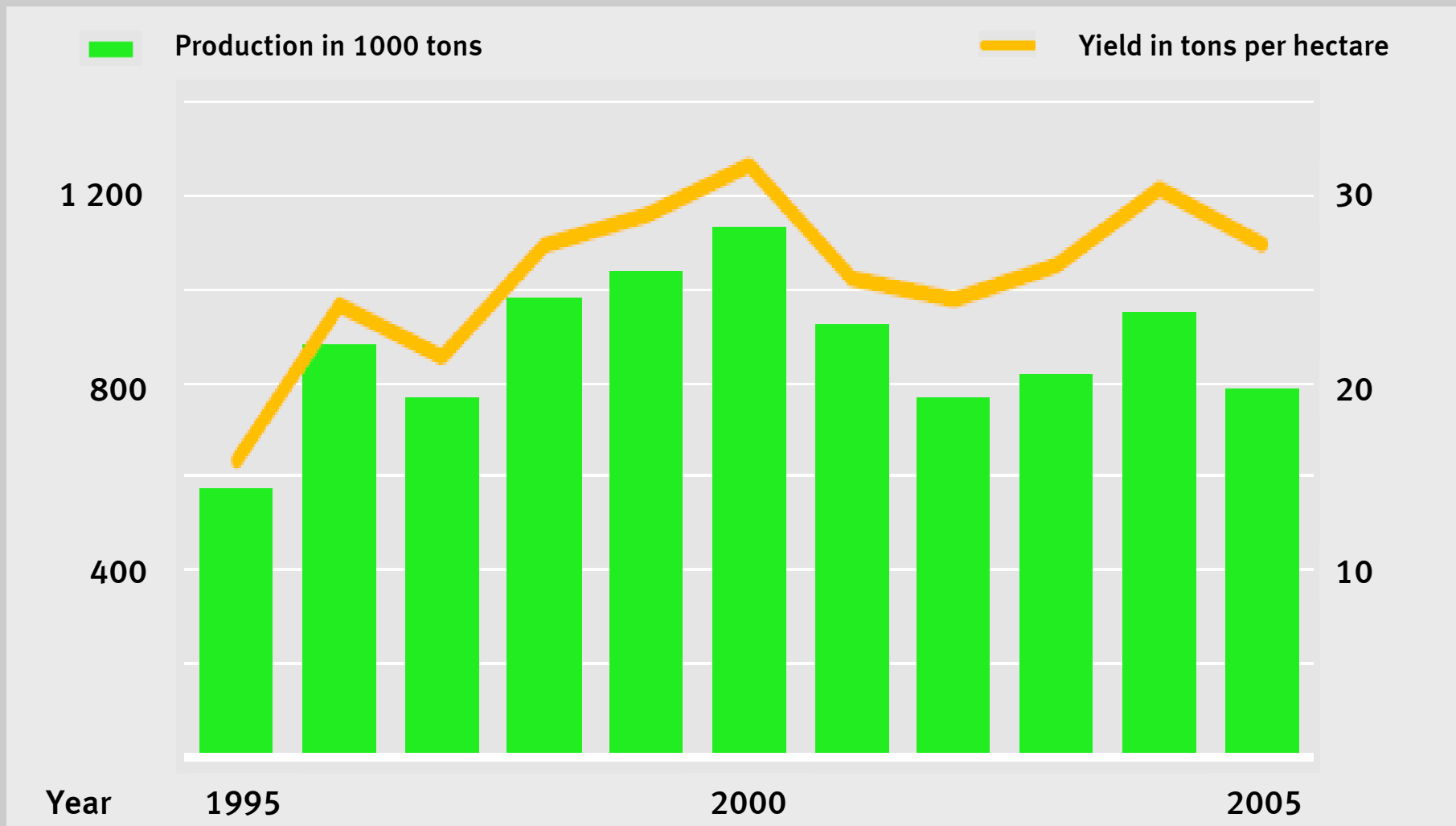
Harvested production of main vegetables



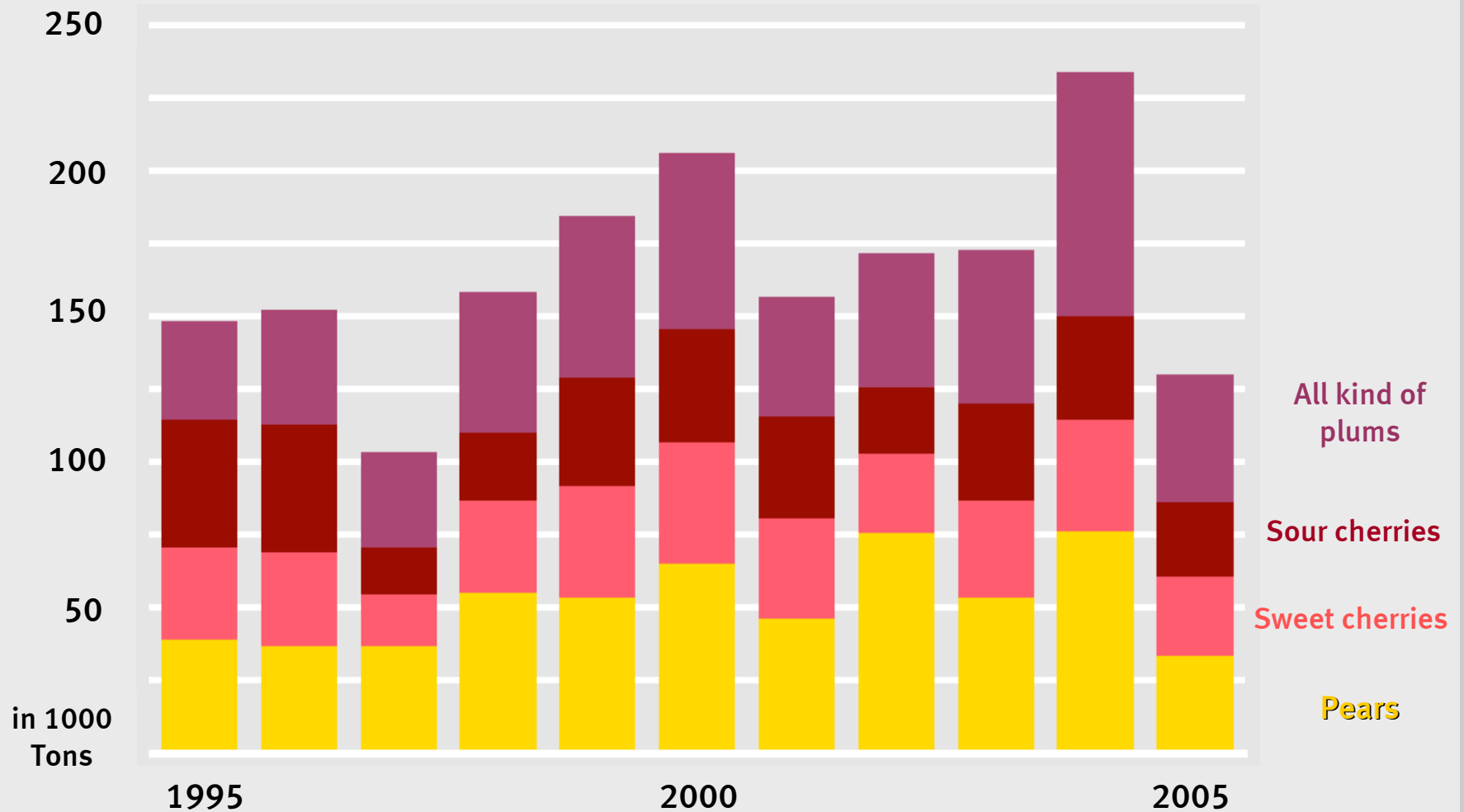
Main regions of apple tree plantations



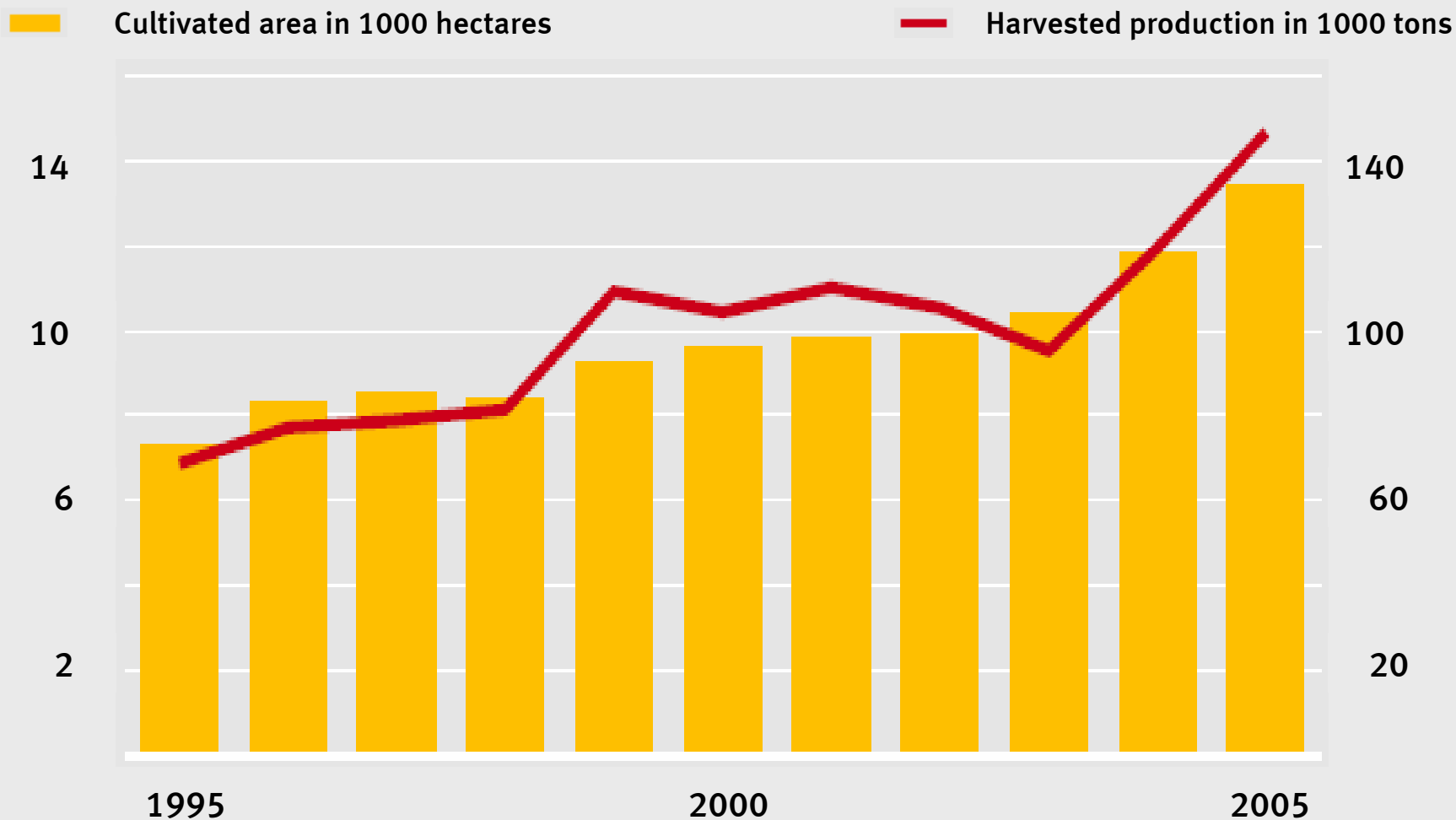
Harvested production and yield of apples in Germany



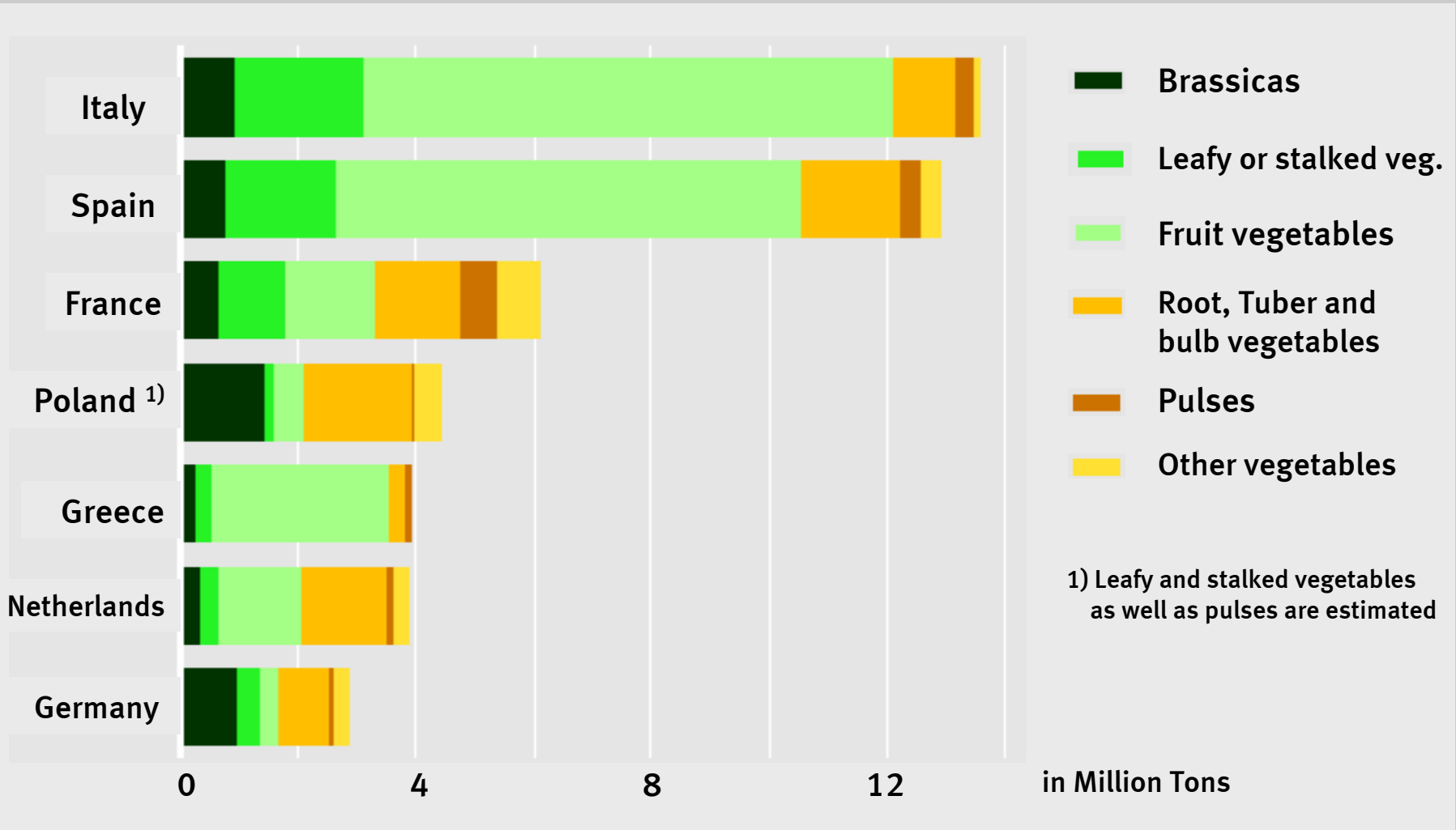
Harvested production of bears, cherries and plums



Cultivated area and yield of strawberries



Harvested production of fresh vegetables 2003



1) Leafy and stalked vegetables as well as pulses are estimated

Crop Statistics in Germany

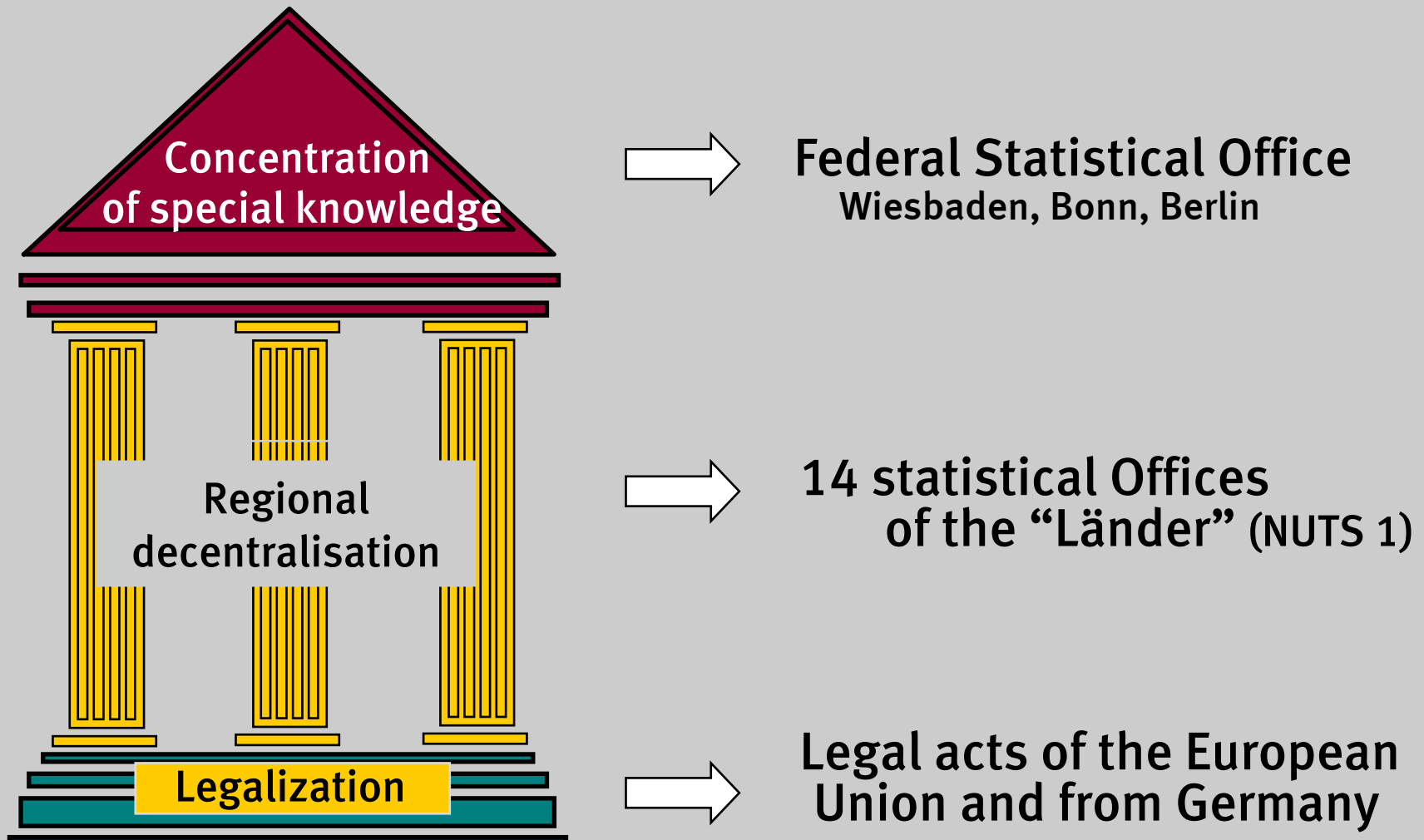
Agriculture and horticulture in Germany

- A short overview

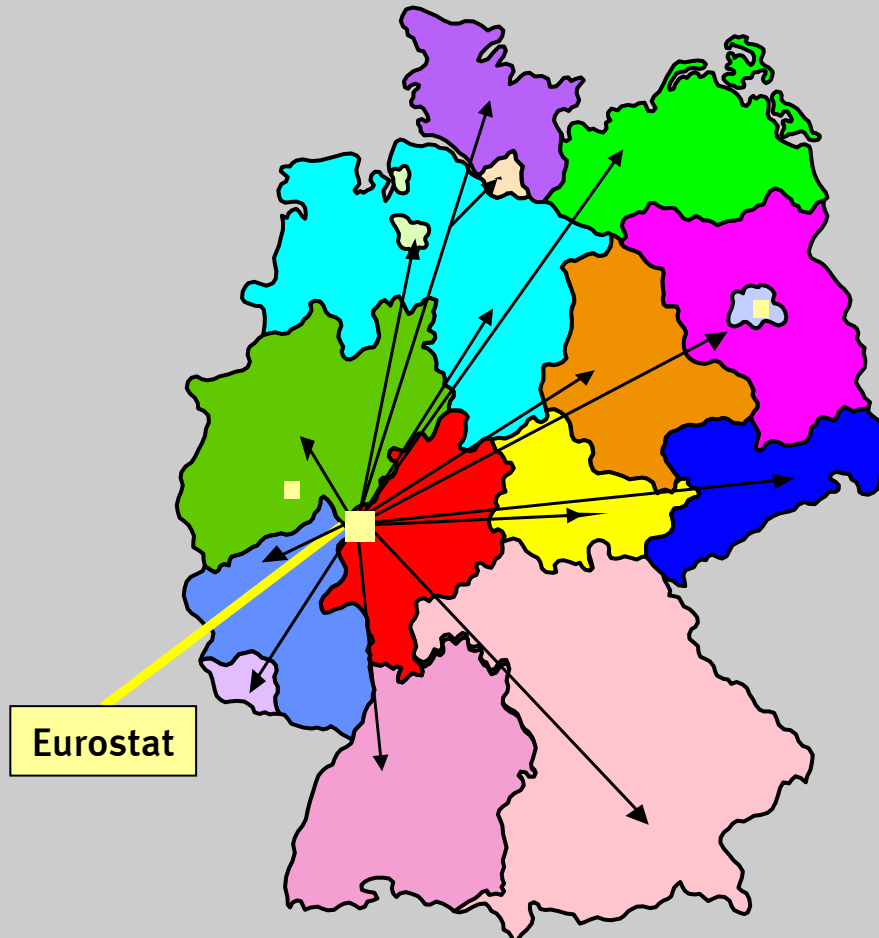
German agriculture and horticulture statistics

- Organisation of agricultural statistics
- Main crops - land use, yields and harvested production
- Horticulture - land use, yields and harvested production
 - Vegetables,
 - Fruit trees and bushes
 - Viticulture
- Horticulture - land use
 - ornamental plants and tree nurseries

Organisation of federal statistics in Germany



Organisation of federal statistics in Germany



- **Federal statistical office**
 - Methodology
 - Coordination (survey contents, design, data control ...)
 - Data analysis on German level
 - Publication of German results

- **“Länder”- Offices**
 - Farm register
 - Organisation of surveys
 - Data processing and control
 - Data evaluation and analysis
 - Publication on “Länder” and regional level

Process organisation of agricultural statistics

German agricultural statistics are mostly decentralised

- **Methodological preparation**
 - Contents of the survey - EU and national legal basis
 - Sample size and selection or census
 - Specification of data control and coordinated tables
- **Survey organisation**
 - Establishment of the survey procedures
 - Data collection and data entry (in the “Länder”)
 - Data processing, estimation and analysis

Legal basis for agricultural statistics

EU legal acts and “gentlemen’s agreements”

- Regulation on surveys on structure of agric. holdings
- New regulation concerning crop statistics
- Directive on orchard surveys (every 5 years)
- Regulations on basic and intermediate vineyard surveys
- Different gentlemen’s agreements
 - Main crop production
 - Vegetable production
 - Fruit production
 - Production of flowers and ornamental plants

Legal basis for agricultural statistics

National legal basis in Germany

- **Agricultural Statistics Act (Agrarstatistikgesetz)**
- **Federal Statistics Act (Bundesstatistikgesetz)**
- **Regulation on the suspension and inclusion of characteristics pursuant to the Agricultural Statistics Act**
- **Wine (statistics) Act (Weingesetz)**
 - access to administrative data of the viticulture register

Legal basis for agricultural statistics

Agricultural Statistics Act (Agrarstatistikgesetz)

- Legal provision for all agricultural statistics
 - Content, units, size and scope of the surveys
 - Frequency and reference periods
 - Responsibility for conducting the surveys
 - Administrative and financial regulations
 - Register, right of access to administrative data
 - Selection, obligations and protection
 - of the persons providing information
 - of the staff or persons conducting the surveys

Units in agricultural statistics in Germany

Agricultural holding (farm or production unit)

- 2 hectare and more agricultural cultivated area
or
- less than 2 ha cultivated agricultural area, but reaching or exceeding the following limits
 - 3000 m² area for fruit and berry plantations
 - 3000 m² area for vine yards
 - 3000 m² area for hops or for tobacco
 - 3000 m² area for nurseries or for flowers or ornamental plants
 - 3000 m² area for vegetables
 - 3000 m² area for seeds and seedlings production
 - 3000 m² area for aromatic plants, medicinal and culinary plants
 - 300 m² area under glass or other accessible protective cover

Units in agricultural statistics in Germany

Agricultural holding (farm or production unit)

- Surveys on animal holding or farm structure include also units with the following limits
 - 8 cattle
 - 8 pigs
 - 20 sheep
 - 200 head of different kind of poultry (each)

Included are holdings without any agricultural cultivated area

Main farm structure surveys

Every 10 years (last one)

- **Census of agricultural holdings (1999, next 2010)**
- **Census of horticultural holdings (2005)**
 - Horticultural used area (main area and production area)
 - Area under glass or other accessible protective cover (years of construction, extent and way of heating, energy use)
 - Income and marketing channels
 - Structure of employees

Crop Statistics in Germany

Agriculture and horticulture in Germany

- A short overview

German agriculture and horticulture statistics

- Organisation of agricultural statistics
- **Main crops** - land use, yields and harvested production
- Horticulture - land use, yields and harvested production
 - Vegetables,
 - Fruit trees and bushes
 - Viticulture
- Horticulture - land use
 - ornamental plants and tree nurseries

Main crops - land use

Land use surveys - no LUCAS

- Total surveys up to now (2007) every 4 years in May
 - main area of cereals and other crops -
combined with livestock surveys (all main species)
→ about 370 000 units
- Sample surveys every year between also in May
 - main area of cereals and other crops -
combined with livestock surveys (cattle, pigs and sheep)
→ up to 100 000 units (free extrapolation)
administrative data are used for both if possible
- Smaller sample surveys every year in November and April

Main crops - yields

Expert valuation of yields combined with sample control measurement at harvest time

- Expert valuation: voluntary sample survey for all crops
 - special experts or farmers themselves -
 - 5 times a year for special crops
 - ➔ June, July, August, September and October
- Sample control measurement at harvest time
 - main cereals, potatoes and winter rape -
 - two-step selection (farm and field – respective production area in each region)
 - either total thrashing of the field or several samples on the field

Main crops - yields and harvested production

Land use results

multiplied with

final results of yields



harvested production for each crop

Crop Statistics in Germany

Agriculture and horticulture in Germany

- A short overview

German agriculture and horticulture statistics

- Organisation of agricultural statistics
- Main crops - land use, yields and production
- **Horticulture** - land use, yields and production
 - Vegetables,
 - Fruit trees and bushes
 - Viticulture
- Horticulture - land use
 - ornamental plants and tree nurseries

Horticultural surveys in Germany

- **Census of horticultural holdings (latest 2005)**
 - 35 000 units / every 10 years / general
- **Orchard survey (latest 2007)**
 - 12 000 units / every 5 years / general
- **Survey of vegetable production area (incl. strawberries)**
 - 12 000 units / annual - sample survey / 4-yearly general
- **Survey of ornamental plants (latest 2004 and now 2008)**
 - 10 000 units / every 4 years / general
- **Survey of nurseries (latest 2004 and now 2008)**
 - 4 000 units / every 4 years / general

Census of horticultural holdings 2005

Special contents of the survey

Horticultural used area



Fruit trees / bush berries / strawberries /
Vegetables / ornamental plants /
Nurseries / seed and seedlings //
Cover of greenhouses

Greenhouses



Kind of cover /
Year of construction and main area /
Production area / way and extend
of heating / irrigation

Income and marketing channels



Percentage of own production / trading /
Service delivery / kind of marketing
channels and part of sales proceed

Not primary surveyed was the whole area of horticultural service delivery

Crop Statistics in Germany

Agriculture and horticulture in Germany

- A short overview

German agriculture and horticulture statistics

- Organisation of agricultural statistics
- Main crops - land use, yields and production
- **Horticulture** - land use, yields and production
 - Vegetables,
 - Fruit trees and bushes
 - Viticulture
- Horticulture - land use
 - ornamental plants and tree nurseries

Survey of vegetable production area since 2006

Contents of the survey



Annual – sample survey

Every 4 years – total
last one 2004 – now 2008

Characteristics

Production area of:

9 brassicas

12 leafy vegetables

rhubarb / asparagus / celery

7 root and tuber vegetables

5 fruit vegetables

5 pulses

5 further vegetables

8 vegetables under glass

**strawberries open air
and under glass**



Characteristics

Additionally:

Production area for contracts

Growing of seedlings

Main area for vegetables

Special questions for early- und later production of
several brassicas and lettuces, spinach, carrots,
gherkins and peas have been cancelled since 2006

Vegetables - yields and harvested production

Expert valuation of yields

■ Voluntary sample surveys for all vegetables (since 2006)

■ 1 500 units / sample survey / 3 times a year: **June**, Aug., Nov.

- special experts or farmers themselves –

■ June: strawberries, asparagus and rhubarb

■ August: all vegetables - preliminary results end of September

■ November: all vegetables - final results end of December



©NLS, Keckl

Crop Statistics in Germany

Agriculture and horticulture in Germany

- A short overview

German agriculture and horticulture statistics

- Organisation of agricultural statistics
- Main crops - land use, yields and production
- **Horticulture** - land use, yields and production
 - Vegetables,
 - **Fruit trees and bushes**
 - Viticulture
- Horticulture - land use
 - ornamental plants and tree nurseries

Orchard Survey 2007

Survey contents

Fruit tree species

Pomaceous fruit:

apples and pears

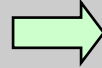
Stone fruit:

sweet cherries

sour cherries

plums

mirabelles / greengages



Characteristics

Varieties for minimum 80% of production area of each species of orchard plantation / age of trees / production area / number of trees (density of plantation) / kind of usage (dessert fruits or other purposes)

Varieties of dessert fruit or other purposes / Production area / age of trees / Number of trees (density of plantation)

Apricots, peaches and walnuts are no more part of survey (latest 2002)

Fruits - yields and harvested production

Expert valuation of yields

- **Voluntary sample surveys for all fruits** (since 2006)
- 1 800 units / sample survey / 4 times a year: **June**, July, Aug., Nov.
 - special experts or farmers themselves -
 - June: sweet cherries (preliminary results)
 - July: apples, cherries, plums (preliminary results)
 - August: apples, pears (preliminary), cherries, currents (final)
 - results end of September
 - November: apples, pears, all kinds of plums, raspberries, blueberries
 - final results in January

Plantation of pears



Crop Statistics in Germany

Agriculture and horticulture in Germany

- A short overview

German agriculture and horticulture statistics

- Organisation of agricultural statistics
- Main crops - land use, yields and production
- **Horticulture** - land use, yields and production
 - Vegetables,
 - Fruit trees and bushes
 - **Viticulture**
- Horticulture - land use
 - ornamental plants and tree nurseries

Surveys of areas under vine (EU-VO 357/79)

Data of vineyard register

- Basic surveys – every 10 years in all viticultural holdings (last survey in 1999, next survey in 2009)
 - Entire area under vine
 - Varieties of vine
 - Age of the vines
 - Yield classes
 - Bracing devices
- Interim surveys – every year
 - Area under vine
 - Land clearings, replantation and discontinuation of cultivation
 - Varieties of vine

Must of wine - yields and harvested production

Expert valuation of yields

■ Voluntary sample surveys for wine must

- 1 000 units / sample survey / 3 times a year: Aug., Sept., October
 - special experts or farmers themselves -
 - August: white must / red must – (preliminary, results in Sept.)
 - Sept.: important varieties of vines – (preliminary, results in Nov.)
 - October: weight and quality of must –
(preliminary, results in Dez.)

Estimation of the expected harvest of wine must
Acreage recorded by the viniculture survey

Must of wine - yields and harvested production

Final results of yields and harvested production

- **Results from the vineyard register**
 - Reports of winegrowers in mid-December
final harvest of wine must – results in mid-March
 - Quality of must
 - White and red must
 - Important varieties of vine
 - Regional varieties of vine
 - Weight of must

Crop Statistics in Germany

Agriculture and horticulture in Germany

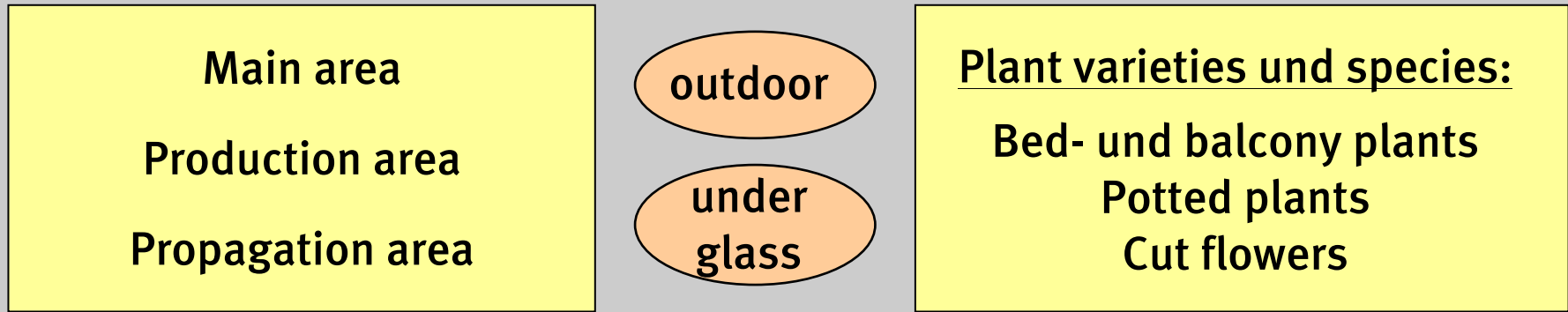
- A short overview

German agriculture and horticulture statistics

- Organisation of agricultural statistics
- Main crops - land use, yields and production
- Horticulture - land use, yields and production
 - Vegetables,
 - Fruit trees and bushes
 - Viticulture
- **Horticulture - land use**
 - **ornamental plants and tree nurseries**

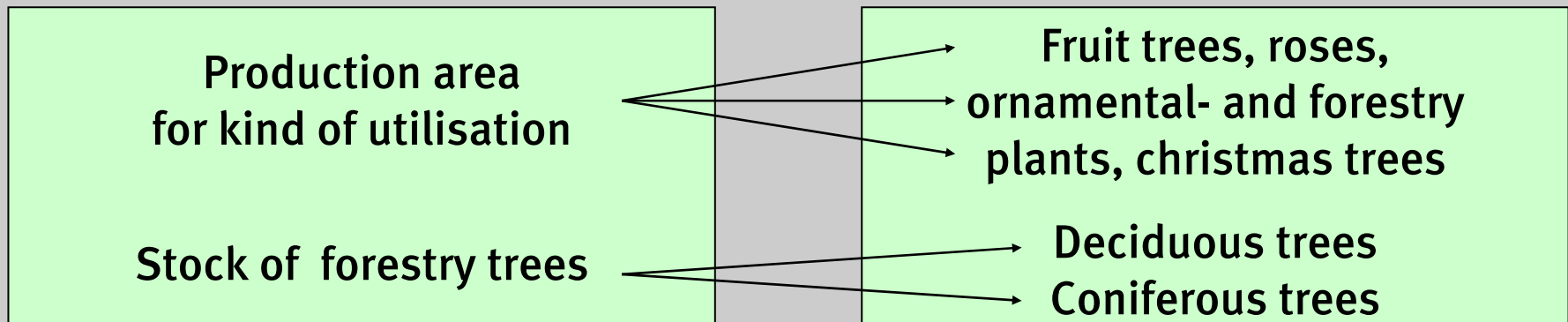
Survey of ornamental plants 2004/2008

Survey contents



Nursery survey 2004/2008


Survey contents





Flowers and
in the
background
asparagus

©NLS, Keckl

Adresse  http://www.destatis.de/jetspeed/portal/cms/Sites/destatis/Internet/EN/Navigation/Homepage__NT.psm1


**Statistisches Bundesamt
Deutschland**

[Home](#) | [Contact](#) | [Press](#) | [Imprint](#) | [About us](#) | [RSS](#) | [Deutsch](#)



DESTATIS
wissen. nutzen.

You are here: [Start](#)

Search: 

[Search instructions](#) | [Extended Search](#)

Time Series

Economic indicators

Long Term Series

Topics

Earnings and labour costs

Labour market

National accounts

Population

Prices

Further Topics 

Services

Press

Information service

Publications

Library

Events

Databases

GENESIS-Online

Federal Health Monitoring System

Number of employees in manufacturing increasing by 2.7% in February 2008

Press release No. 149 / 2008-04-14 - At the end of February 2008, 5.3 million persons worked in local units of manufacturing with 50 or more employees. As further reported by the Federal Statistical Office (Destatis), that were about 141,000 persons or 2.7% more than in February 2007. The number of hours worked in February 2008 increased 6.1% from a year earlier, reaching 714 million.

[more...](#)

STATmagazin - New ways for our range of information



With our [STATmagazin](#), we offer up-to-date and specially edited information on topics that are the focus of public discussion. Authors from all statistical areas write articles for you, dealing with the latest information and thus providing comprehensive and independent statistical background knowledge.

You may also subscribe to the STATmagazin editions using our [RSS Newsfeeds](#). This will keep you informed about current articles, even if you have not opened our pages.

Economic and Financial Data for Germany



The actual data corresponding to the data described on the International Monetary Fund's Dissemination Standards Bulletin Board (DSBB) is available [here](#).

For a fuller explanation of the DSBB and the statistical standards to which Germany has committed, please click on [DSBB Home Page](#).

Interactive Applications



We are offering interaction and communication applications typical of online environments, such as our [interactive applications](#) of the Animated population pyramids on the population forecast, the Atlas of Regional Statistics, the Personal inflation calculator, the Atlas of foreign trade data and the Air transport atlas (the interactive applications are only in German). Get an easy overview of complex matters by using the new forms of presentation you can alter as required.

[Personal inflation calculator](#) | [Animated age pyramids Germany](#) | [Animated age pyramids Länder](#)

[Online Atlas of Regional Statistics](#) | [Atlas of foreign trade data](#) | [Air transport atlas](#) | [Publication service](#) | [STATmagazin](#)

Statistics Portal

Federal Returning Officer

The German Council of Economic Experts

Federal Institute for Population Research

EDS European Data Service

Research and development

Scientific forum

Research Data Centre

Standard Cost Model

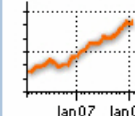
Data collection

Online methods (german)

Intra/Extra-EU trade

Census 2011

Price monitor



Zeitreihen
Wirtschaft aktuell
Lange Reihen
Land- und Forstwirtschaft
Strukturen landwirtschaftlicher Betriebe
Ökologischer Landbau
Bodennutzung
Ernte
Weinanbau und Weinerzeugung
Viehbestand
Tierische Erzeugung
Forstwirtschaft
nach oben

Services
Presse
Informationsservice
Publikationen
Bibliothek
Veranstaltungen

Datenbanken
GENESIS-Online
Gesundheitsberichterstattung des Bundes

Grundlagen
Klassifikationen
Rechtsgrundlagen

Forschung und Entwicklung
Wissenschaftsforum
Forschungsdatenzentrum
Standardkosten-Modell

Land- und Forstwirtschaft, Fischerei

Informationen darüber, welche Leistungen wie viele landwirtschaftliche Betriebe erbringen und wie diese aufgebaut sind, werden im Rahmen von Agrarstatistiken ermittelt.

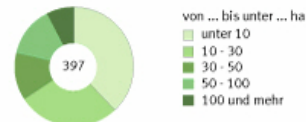
Es ist Aufgabe der amtlichen Agrarstatistiken, die auf gesetzlichen Grundlagen beruhen und in das agrarstatistische System der Europäischen Union (EU) eingebunden sind, die strukturellen und sozialen Anpassungen der Landwirtschaft an veränderte marktwirtschaftliche und agrarpolitische Bedingungen zu erfassen und möglichst zeitnah darzustellen. Als Basis hierfür werden Daten zur aktuellen Betriebsstruktur und Produktionskapazität ermittelt, die für Wirtschaft und Politik wichtige Entscheidungshilfen auf nationaler und supranationaler Ebene darstellen. Sie dienen zum einen der Beobachtung der Märkte für landwirtschaftliche Produkte und der Beurteilung der Versorgung der Bevölkerung mit sicheren Nahrungsmitteln zu angemessenen Preisen. Zum anderen sind sie eine Grundlage der Erfolgskontrolle von Maßnahmen der europäischen und nationalen Markt- und Preispolitik und der Abschätzung künftiger Entwicklungen sowie der damit verbundenen Agrarausgaben. Zudem werden die Daten auch für die Beobachtung der Auswirkungen der landwirtschaftlichen Tätigkeiten auf die Agrarumwelt sowie den ländlichen Raum genutzt.

[mehr zum Thema...](#)

Landwirtschaftliche Betriebe 2005 nach Betriebsgrößen und Viehbestand Mai 2006¹

in Tausend

Betriebe²



Viehbestand³



¹ Werte für Pferde und Geflügel aus Mai 2005 fortgeschrieben.

² Landwirtschaftliche Betriebe mit einer landwirtschaftlich genutzten Fläche von mindestens 2 ha und mehr bzw. mit einer Mindestgröße an Erzeugungseinheiten.

³ Berechnung der Anteile auf Basis des zuvor in Großvieheinheiten umgerechneten Viehbestandes.

© Statistisches Bundesamt Deutschland 2007

Weitere Informationen

[Pressemitteilungen](#)

[Veröffentlichungsplan](#)

[Rechtsgrundlagen](#)


[Qualitätsberichte](#)

[Publikationen](#)



Time Series
Economic indicators
Long Term Series

Land use
level up

Services
Press
Information service 
Publications
Library
Events

Databases
GENESIS-Online
Federal Health Monitoring System

Research and development
Scientific forum
Research Data Centre
Standard Cost Model

Data collection
Online methods (german)
Intra/Extra-EU trade

Land use

Autumn seeding in 2007: More winter grain, less rape


In autumn 2007, farmers in Germany sowed winter grain for the coming harvest in 2008 on an area of 5.72 million hectares, while an area of more than 1.40 million hectares was sowed with winter rape. The area used for winter grain is hence 4.8% above the provisional results from the main survey of land use of May 2007. The area used to cultivate winter rape by contrast decreased from last year's high by 8.4% and hence corresponds to the value of 2006.

The above data have been taken from the crop production reports on field crops and grassland. They are based on information supplied by harvest reporters in the Laender and, due to their limited number, must be considered as provisional cultivation trends only.

The actual areas under cultivation are covered in May as part of the main survey of land use.

[more...](#)


Tables

- [Agriculturally used area by main types of uses](#)
- [Arable land by main groups of crops and by types of crops](#)
- [Orchard Survey 2002 and 2007](#)
- [Tree nurseries an areas of tree nurseries](#) 
- [Cultivation of ornamental plants](#)

Further Information

[Press releases](#)

You are here: [Start](#) > [Further Topics](#) > [Agriculture and forestry](#)

 Search: 

[Search instructions](#) | [Extended Search](#)
[Time Series](#)
[Economic indicators](#)
[Long Term Series](#)
Agriculture and forestry
[Animal production](#)
[Ecological farming](#)
[Forestry](#)
[Land use](#)
[Livestock population](#)
[Structures of agricultural holdings](#)
[Viticulture and production of wine](#)
[Yields](#)
[level up](#)
Services
[Press](#)
[Information service](#)
[Publications](#)
[Library](#)
[Events](#)
Databases
[GENESIS-Online](#)
[Federal Health Monitoring System](#)
Research and development
[Scientific forum](#)
[Research Data Centre](#)
[Standard Cost Model](#)
Data collection
[Online methods \(german\)](#)
[Intra/Extra-EU trade](#)
Land Use
Orchard Survey 2002^{*} and 2007

Species of fruit trees	Holdings		Area of fruit trees		Trees	
	2002	2007	2002	2007	2002	2007
	number		ha		number	
Fruit plantations, total¹	13,671	11,454	49,597	47,912	74,213,229	77,896,318
of which						
Apples	10,561	9,058	32,405	31,761	64,182,007	67,849,813
Pears	5,901	5,325	2,188	2,101	2,703,016	2,875,828
Sweet Cherries	7,732	6,577	5,504	5,482	1,826,669	2,150,042
Sour Cherries	3,281	2,238	4,231	3,444	2,914,387	2,285,960
Plums and damsons	8,038	6,864	4,562	4,564	2,294,788	2,502,509
Mirabelle plums/ greengage	2,604	2,623	473	561	186,805	232,166
Apricots	202	.	53	.	30,157	.
Peaches	525	.	103	.	66,131	.
Walnuts	636	.	77	.	9,269	.

. = numerical value unknown or not to be disclosed.

^{*} In the year 2006 the result of the orchard survey 2002 were corrected retroactively (Lower Saxony, North Rhine-Westphalia).

¹ Starting from the year 2007 apricots, peaches and walnuts are not any longer raised.

Version: 2.24.0 / 31.08.2007

Thank you for your attention !

For subject-related information and queries please contact:
Agriculture and forestry, fisheries

Phone: +49 (0) 1888 644-8660 (Ute Walsemann -8606)

Fax: +49 (0) 1888 644-8983

E-mail: ernte@destatis.de or agrار@destatis.de