ORGANIC IN EUROPE

PROSPECTS AND DEVELOPMENTS 2016

IFOAM EU GROUP
MAKING EUROPE MORE ORGANIC
FiBL
UNIVERSITÀ POLITECNICA DELLE MARCHE
Naturland

EDITOR AND PUBLISHER:

IFOAM EU GROUP MAKING EUROPE MORE ORGANIC

IFOAM EU Group
Rue du Commerce 124, BE - 1000 Brussels, Belgium
Phone: +32 2280 1223 - Fax: +32 2735 7381
info@ifoam-eu.org
www.ifoam-eu.org

EDITORS: Stephen Meredith and Helga Willer
PRODUCTION SUPPORT: Eva Berckmans
STATISTICAL DATA COLLECTION, DRAFTING AND EDITING: FiBL Projekte GmbH, Marche Polytechnic University
LANGUAGE EDITING: Ben Tannahill

SPECIAL THANKS FOR THEIR CONTRIBUTIONS TO: Matthias Stolze, Raffaele Zanoli, Julia Lenroud and Diana Schaack

DESIGN AND LAYOUT: fuel.bvba/sprl – www.fueldesign.be

DOWNLOAD THIS BOOK FROM THE IFOAM EU WEBSITE: www.ifoam-eu.org

ISBN: 978-3-03736-313-3

PARTNERS:

FiBL

UNIVERSITÀ POLITECNICA DELLE MARCHE

Naturland

SUPPORTERS:

ARIZA

CIHEAM MAI BARI

Green Organics

ORGANIC FLAVOUR COMPANY

TRADIN Organic Global Organic Ingredients

wessanen

cyclus This publication is printed on CyclusOffset, a 100% recycled chlorine-free paper type.

IFOAM EU, FiBL, Marche Polytechnic University
and Naturland

ORGANIC IN EUROPE

PROSPECTS AND DEVELOPMENTS 2016

FOREWORD

It is my great pleasure to welcome the second edition of *Organic in Europe: Prospects and Developments 2016*. This publication provides an invaluable overview of the latest developments and future prospects for organic production and market development in Europe. It comes at a time of yet another record year of growth for European organic food markets valued at €24 billion in the EU-28 (€26.2 billion across the European continent) in 2014. Indeed the organic market has seen double digit growth in the latest decades, both in terms of the European market and the area of organically managed agricultural land – which now represents 5.7% of total agricultural area in the EU-28 (2.4% in Europe).

At the same time it is important to acknowledge that despite growth demand for organic food amongst European consumers, the development of the EU organic farmland area is slowing down and in some cases stagnating or even decreasing. This simply beggars belief when the sustainability challenges facing food and farming systems in Europe and worldwide are becoming ever greater and more acknowledged in the public sphere. These current trends in Europe not only highlight the necessity of a positive policy environment in which farmers and food business can make important investment decisions, but also the importance of having reliable production and market information to hand.

With this in mind this edition of the book is divided into two sections covering both themes. The first chapter takes the form of a think piece which considers the current imbalances in organic supply and demand in Europe and how such gaps should be closed. Such reflections are critically important at time when the organic movement in Europe envisages that 50% of farmland in Europe should be managed based on organic principles within the decade and half as parts of *An Organic Vision for Europe in 2030*. The second chapter explores the latest production and markets to 2014 accounting for supply and demand patterns are developing in different part of Europe. We are also pleased to announce that this publication is complemented by a series of interactive infographic where readers can explore the data through www.ifoam-eu.org.

We wish you and enjoyable read and trust that this edition of the book will be a useful source of reference for organic stakeholders, policymakers, journalists, and other interest parties in working to make Europe more organic.

Christopher Stopes
IFOAM EU President
March 2016

TABLE OF CONTENTS

List of production and market figures

List of production and market tables

List of production and market annexes

NATURAL TEMPTATION

Because you make my world more beautiful

You're more thoughtful with tea.

New

www.naturaltemptation.eu

Natural Temptation is a brand of ORGANIC FLAVOUR COMPANY

THE WORLD OF ORGANIC AGRICULTURE 2016

The latest data on organic agriculture worldwide

Get your copy at www.shop.fibl.org – Order number 1698

More information at www.organic-world.net

FIBL & IFOAM – ORGANICS INTERNATIONAL

THE WORLD OF ORGANIC AGRICULTURE

STATISTICS & EMERGING TRENDS 2016

OCEANIA 17.3 MILLION HA

EUROPE 11.6 MILLION HA

LATIN AMERICA 6.8 MILLION HA

ASIA 3.6 MILLION HA

NORTH AMERICA 3.1 MILLION HA

AFRICA 1.3 MILLION HA

Supported by

International Trade Centre

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Economic Affairs SECO

BIOFACH

ORGANIC IN EUROPE

EXPLORE THE INTERACTIVE MAP

PRODUCTION & RETAIL DATA BY COUNTRY

ifoam-eu.org/en/organic-europe

Produced by

IFOAM EU GROUP MAKING EUROPE MORE ORGANIC

FiBL

UNIVERSITÀ POLITECNICA DELLE MARCHE

Supported by

Wessanen

Green Organics

Co-financed by

Action co-financed by the European Commission, Directorate General for Agriculture and Rural Development

01 ORGANIC IN EUROPE: EXPANDING BEYOND A NICHE

Matthias Stolze,[1] Raffaele Zanoli[2] and Stephen Meredith[3]

DYNAMIC MARKET GROWTH – BUT IS ORGANIC REACHING ITS FULL POTENTIAL?

Over the last three decades, organic food and farming has continued to grow year-on-year across Europe. Since the mid-1980s, in the European Union (EU) alone the total area of farmland under organic production has increased steadily to 10.3 million hectares (as of 2014). This has been accompanied by buoyant market growth over the last ten years, with the total value of the EU organic retail market doubling from €11.1 billion in 2005 to €24 billion in 2014. Further details about the latest European production and market trends for 2014 can be found in chapter 2.[4]

Such advances reflect the vibrant and innovative nature of organic food and farming in response to the expectations of policymakers and the demands of EU consumers for high-quality food production that supports the environment, animal welfare and the development of rural areas. More recently, the organic movement has been working towards an organic vision for fairer, more environmentally conscious and healthier food and farming systems by 2030. This vision envisages 50% of Europe's agricultural land being managed according to the organic principles of health, ecology, fairness and care.[5] Yet, despite unprecedented growth, a significant imbalance continues to exist between the current supply of organic produce and the growing demand for organic food.

Based on current market growth, the increase in organic production over the last number of decades, and the vision that the EU organic movement has set itself, the organic sector still has huge potential to be a flagship for smart, sustainable and inclusive development. However, if the sector does not succeed in closing the gap between organic demand and supply, Europe may miss the chance to capitalise on the organic sector's sustainable growth and investment potential. In this respect, both policymakers and the organic sector can play an important role in supporting the progressive development of organic food and farming in Europe.

WHERE DOES ORGANIC FOOD AND FARMING IN EUROPE STAND NOW?

Organic food markets are developing at different rates in each country

The growth of the organic market varies between EU Member States. Indeed, while retail sales in 2014 increased by double digits in Sweden (45%) and France (10%), in countries such as Belgium (3.8%) and the UK (4%) organic retail growth rates were below average. Similarly, there are huge differences in per capita consumption of organic food between Member States, with Luxembourg and Denmark leading and Slovakia and Bulgaria at the lower end. Despite these differences, EU consumers have been increasing their average spend on organic food considerably and the organic food market is an important growth area in the EU grocery retail market.

Current trends in the EU organic market

- **Dynamic retail market:** the EU market for organic products is growing constantly and increased in 2014 by 7.4%. This is exceptional given an average annual growth rate (2006-2012) in grocery retail markets of around 2% to 3%[6]
- **Consumers spending more on organic food:** between 2005 and 2014, per capita organic produce consumption increased by 110% from €22.4 to €47.4 In the same period, household consumption of food and non-alcoholic beverages remained almost constant, increasing only by 13%[7]
- **Consumer demand for high-quality produce:** certain organic product groups achieve above average market shares
  - Organic eggs have a market share of 11-22% in Austria, Belgium, Finland, France, Germany and the Netherlands
  - Dairy products hold a market share of between 5 and 10% in Austria, Germany and the Netherlands. Milk alone can reach even higher shares - 15.7% in Austria
  - Fruit and vegetables now represent around one fifth of many national organic markets, for example in Italy, Ireland, France, Germany, and Sweden

Organic market potential not yet fully exploited

Recent research focused on consumers in the United States and Western Europe suggests that women, foodies and younger people are more likely to be interested in organic products.[8] At the same time, while nearly all consumers are aware of organic produce, communication can still be improved. For instance, only about half of consumers understand the difference between organic and non-organic produce or the specific organic production conditions required under 'organic' labels. In the United States, for example, 92% of consumers believe that organic products taste just as good as conventional products, while in Western Europe the expectation of improved taste appears to be one of the main reasons to purchase organic food. These expectations are also held by professional chefs.[9]

Dynamic market growth, but EU organic production lags behind

How does market growth in the EU compare with the development of organically-managed land? In 2014, 10.3 million hectares were managed organically, which corresponds to 5.7% of the total utilised agricultural area in the EU. But annual growth of organically managed land slowed down to 1.1% in 2014. Even though the number of organic producers has increased by almost 60% over the last 10 years, there was not much growth in 2014 in different countries and a slight drop of 0.2% across the EU as a whole. In some organic pioneer countries such as Austria, Denmark, Germany, and the UK the organically managed land area and the number of organic farms is stagnating or even decreasing. One could argue that these slower growth rates and decreases indicate the consolidation of organic farmland area development. However, positive growth is bucking this trend in other Member States. For example in countries such as Belgium, France, Italy, Portugal, Spain, Bulgaria, Croatia and Slovakia, the organic land area increased in 2014 by more than 5% compared to 2013. For some of these countries such as Portugal, Spain, and Bulgaria this growth has come with an increase in the number of organic farms.

In contrast to the development of organic farms across the EU, the number of organic processers increased considerably in 2014, with around 8,000 more organic processors than in 2013. Therefore while organic food is a huge business opportunity for farmers, importers, retailers and processors the dynamic growth of the organic market has resulted in more and more importers and retailers stepping into organic businesses or expanding engagement with organic food. However, organic production is not moving at the same speed. As organic production in the EU lags behind the growth of the organic market, there is a severe risk that the growing demand will be met by imports and that EU farmers may not benefit.

WHAT ARE THE OBSTACLES FOR FURTHER DEVELOPMENT OF ORGANICS?

There are several obstacles that may hinder both farmers and food businesses from capitalising on the growing demand for organic produce in terms of income generation and job creation.

Member States give differing priority to organic farming

Organic farming support through area payments (Measure 11 - conversion and maintenance) under the new Rural Development Programmes (RDPs) varies considerably across the Member States.[10] Indeed, the most recent figures for the EU expenditure on organic farming maintenance and conversion payments range from 0.2% in Malta to 13.2% in Denmark of total EU spending for RDPs, with limited scope for expanding the organic farmland area (see figure below). The Netherlands provide no targeted measures for organic farming under their new RDP.

The total contribution from the European Agricultural Fund for Rural Development (EAFRD), for 2014 – 2020 to organic farming payments amounts to €6.286 billion or 6.4% of the total EAFRD (€98.958 billion). Thus, the EU share of the rural development spending contribution for organic farming is about the size of the 2014 organic farming area which amounted to 5.7% of the EU's total farmland area. As to the relevance that each Member States gives to organic farming area support compared to its total organic farmland area, there is no common pattern across the different Member States. Countries like Belgium, Bulgaria, Cyprus, Denmark, Germany or Greece, for example, seem to give a higher relevance to organic farming support under the new RDPs than countries like Estonia, Finland, Portugal, Slovenia, Slovakia and the UK. Differences in payment rates also exist between Member States due to factors such as payment differentiations by land-use type, different economic assumptions and different cost and income foregone components in payment calculations. Thus the extent to which Member States give priority to organic farming and the corresponding budget allocations and constraints can determine the payment rates and the policy environment for the development of organic farming.

Whether the organic sector develops proactively or not depends not only on organic area payments, but is also the result of different public support measures, including maintenance and conversion support, marketing support, and training and education.[11] Not all national or regional organic farming support is based on a clear strategy for organic sector development. For instance, the use of national and regional Organic Action Plans as a mechanism for achieving a more integrated and balanced approach to organic policy-making is used with varying degrees of effectiveness in different European countries and at EU level.[12]

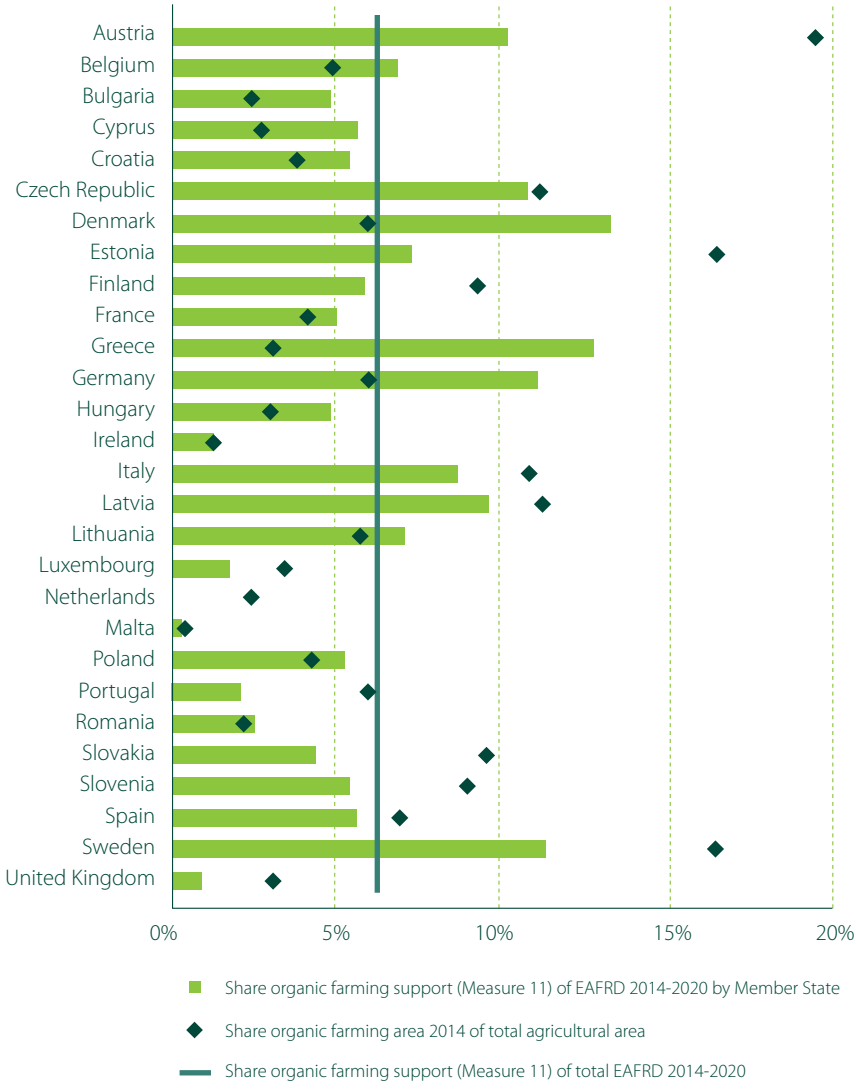


Figure: EAFRD contribution to Measure 11 under CAP 2014-2020 compared to the total organic farmland in 2014 by Member State

Source: DG Agriculture and Rural Development 2016, and own calculations based on Willer et al. 2016

Inefficiencies in organic supply chains

Supply chains suffer from gaps between supply and demand, logistic failures and/or other inefficiencies that do not allow supply and demand to be matched. Most studies on organic supply chains report a number of issues concerning their structure and performance:

- high operating costs
- lack of alignment between supply and demand
- poor reliability of supply
- lack of collaboration among chain members
- different values and motivation among different actors in the chain
- lack of information flow

Currently, there is a large knowledge gap on these issues, and the value chain and the value delivery network in the organic food system often lack transparency in the eyes of both the supply-chain members and the end consumer. While organic supply has shown to be remarkably adaptive to changing demands so far, in the future the organic supply chain will need to adapt itself to rapidly evolving demographics and consumer preferences and to an increasingly complex and global business environment. Improved traceability and assurance systems are needed to keep up with this increasing global complexity. Together with fairer and shorter supply chains, these systems are essential in upholding the integrity of the organic supply chain while maintaining and developing consumer trust. There is some evidence that while organic companies have a collaborative attitude, there is still room for improvement.[13]

Organic farming has mainly developed at the level of primary production

This fact is reflected in organic research, innovation and sector regulation. While consumer expectations are often expressed in terms of final processed products, overall organic processing is less developed and regulated than primary production. Therefore investments in careful processing techniques, sustainable and reusable packaging as well as improved understanding of quality and safety issues in organic supply chains, in combination with regulation, are of paramount importance for creating new value for current and prospective consumers. The minimisation of food mileage and climate change impacts also pose challenges relevant to organic supply chains, and call for a streamlining of the logistics of organic produce networks.

Poor market transparency results in insufficient information to inform future investments

A positive environment for organic sector development requires not only reliable policy support for farmers and food businesses, but also a reliable information system. Despite the efforts of private organic sector institutions and in spite of the fact that EU organic farming legislation requires the collection of relevant statistical information as a tool for market operators and policy makers, organic market data is not nearly as detailed and reliable as general agricultural and food industry statistics. This is the case even in countries with relatively well-developed organic markets.

Indeed, organic market data in most countries is very basic and data on domestic market, international trade, and consumer prices or production volumes does not exist in most EU countries. Incomplete breakdowns by crop or product make data of little use for businesses. What makes things even worse is that there is no harmonised way of aggregating this data.[14] Finally, there is also a lack of information on the economic performance of organic farms in the EU. For instance Bulgaria, Malta and Romania do not include any organic farms in the EU Farm Accountancy Data Network (FADN). For around half of Member States the coverage of organic farms in FADN is poor and small sample sizes do not allow for robust conclusions on the competitiveness of organic farms. Consequently, there is a lack of transparency in the organic market, which means it does not attract investments.

CONSIDERING THE SOLUTIONS FOR MOVING ORGANICS FORWARD

How can we overcome these obstacles so that the entire agriculture and food sector can make more use of the dynamics of organic market growth? Both policymakers and the organic sector itself have an important role to play in addressing obstacles that can hinder farmers and businesses from investing in the further development of organic food and farming.

For policymakers there are several areas where the current policy environment could be improved:

- **Member States should pursue a clear organic sector strategy**. Organic food and farming support should be designed to address relevant bottlenecks to further development. As there is no one-size-fits-all solution, support that takes account of both supply and demand and is tailored to national and regional contexts is required. Furthermore, organic policy design should consider that there might be conflicts and synergies between organic farming support and other support measures, and should outline a consistent approach

- **Shorter organic supply chains that provide environmental and social benefits could be better supported**. As a result national and regional RDPs need to place greater emphasis on local food markets (farmers' markets) and supply chain management (supply chain special projects). This helps to achieve greater balance between local, regional and international provision of organic products
- **Improved statistical processes are required to increase the accuracy of organic market data collection**. In order to avoid choking off the recent dynamic organic market growth, reliable market and economic data – especially beyond the farm gate – are required. The EU should strengthen the institutional framework for the collection, analysis and dissemination of organic market data. Robust and reliable information on the competiveness and the economic performance of organic farms in the EU is essential. Therefore, the EU FADN should include economic data from each Member State on organic farms using a sample size that allows for sound analysis and informed decision-making.

The organic sector can do more in its own right to support organic food and farming development in the EU. Many relevant aspects have already been identified by the EU organic movement in its Organic Vision for Europe. These include:

- **Recalling the transformative nature of organic food and farming** as a key to the further success of organic agriculture. This requires taking stock of what organic has become and how it can proactively face up to the new political, environmental and socio-economic challenges facing the agro-food sector
- **Ensuring that the value chain is strongly linked to the organic principle of fairness** based on cooperation amongst all organic actors from farmers, workers, and processors to distributors, traders and consumers. Such developments must remain transformative and collaborative ensuring a balanced approach to local, regional, and international sustainable development, rather than simply conforming or adjusting to existing agro-food systems
- **Implementing a paradigm shift in education and learning** to scale up the rich body of expertise and know-how that has already been generated by the organic community over the last decades
- **Recognising the need to address the key challenges facing the organic sector**. Improvements in modern agro-food systems and knowledge transfer developments must be backed up by further private and public investment in agro-ecological research and innovation.

A supportive policy environment and private sector investment based on organic principles, can together help to further stimulate the development of a dynamic and innovative organic food and farming sector into the future. In so doing, policymakers and the organic sector could unlock the potential of organic food and farming by positively harnessing the growing organic market in Europe and expanding the sector beyond its niche.

02 GROWTH TRENDS IN EUROPEAN ORGANIC FOOD AND FARMING

Helga Willer,[15] Diana Schaack,[16] Julia Lernoud[17] and Stephen Meredith[18]

ORGANIC MARKET AND PRODUCTION TRENDS 2014

The development of the organic sector in 2014 was characterised by two opposing trends. On the one hand, the market grew at a higher rate than in the two previous years with retail sales in the EU valued at €24 billion (€26.2 billion in Europe). This represented a growth rate of approximately 7.4% (7.6% in Europe) on 2013 figures. Whilst processors and importers numbers increased by 19% and 17% respectively in the EU (18.6% and 16% in Europe), the growth and development of organic agriculture land area in the EU slowed down – growing by 1.1% in the EU (2.3% in Europe) with a drop of 0.2% in the number of producers (a slight increase of 1.4% was recorded in Europe). This chapter serves to outline the latest production[19] and market[20] trends for 2014 in Europe.[21] It focuses primarily on the 28 Member States of the European Union (EU-28)[22] and the EU Candidate and Potential Candidate (CPC)[23] countries, and the members of the European Free Trade Association (EFTA).[24] An analysis of the current market trends for organic in Europe and implications for the further development of organic food and farming can be found in chapter 1.

Table 1: Organic market and production trends in Europe by country group, 2014

Country group	Retail sales (billion EUR)	Per capita consumption (EUR)	Producers	Land area (million hectares)	Total land share
EU-28	24	47.4	257,525	10.3	5.7%
Europe	26.2	35.5	339,824	11.6	2.4%
Global	62.6	8.3	2,260,361	43.7	1.0%
EU-15	23.5	58	194,979	7.8	6.1%
EU-13	0.5	4	62,546	2.4	4.7%
CPC	0.005	0.1	73,375	0.5	1.5%
EFTA	2.1	154	8,500	0.2	4.4%
Other European countries	0.1	1	424	0.7	0.2%

Source: FiBL-AMI survey 2016 based on national data sources

Table 1 provides a European and global overview of the latest market and production trends for organic food and farming. A more detailed overview of organic production and market trends by country can be found in annexes 1-5.

Market highlights

- Retail sales in the EU were valued at €24 billion (€26.2 billion in Europe), representing the second largest single market for organic products in the world after the United States (€27.1 billion)

- The EU market recorded a growth rate of approximately 7.4% (7.6% in Europe). The highest growth was observed in Sweden (over 40%). In the past decade, the value of European and EU markets has more than doubled

- EU consumers spent about €47.4 on organic food per person (€35.5 in Europe). Per capita consumer spending on organic food has almost doubled in the last decade. The Swiss spent the most money on organic food (€221 per capita). In the United States, per capita consumer spending was €85 in 2014

- Globally European countries account for the highest shares of organic food sales as percentage of their respect markets for food. Denmark has the highest share (7.6%), with individual products and product groups holding even higher shares. Organic eggs, for instance, can constitute over 20% of all eggs sold.

Production highlights

- There were almost 260,000 organic producers in the EU (almost 340,000 in Europe), with the largest numbers in Italy (almost 49,000) and Turkey (over 71,000). The past decade has seen the number of producers grow by 57% in the EU (81% in Europe)

- In the EU, there were almost 50,000 processors (almost 51,000 in Europe) and almost 1,700 importers (approximately 1,900 in Europe). The number of processors and importers increased by 19% and 17% respectively in the EU (18.6% and 16% in Europe) and significantly across almost all countries. The country with the largest number of processors was Italy (over 12,000), while Germany had the most importers (326)

- Organic farmland in the EU constitutes 5.7% of the total agricultural land (2.4% in Europe). In the EU, the country with the highest share of organic agricultural land is Austria (19.4%). In Europe, Liechtenstein has the highest share (31%)

- Organic agricultural land grew by 1.1% in the EU (2.3% in Europe). Growth of organic agricultural land, however, has been substantial over the last decade, having increased by approximately 60% since 2005

- In recent years there has been an overall slow down in growth, especially in Greece or the UK. Stagnation was noted in countries such as Austria, Denmark, Germany and Hungary. However, in other countries such as France, Italy, Slovakia and Slovenia the area increased

- Permanent grassland constituted the largest area of the organic land in the EU with 4.6 million hectares (4.8 million hectares in Europe), followed by 4.1 million hectares of arable land (5.1 million hectares in Europe), and 1.2 million hectares of permanent crops (1.4 million hectares in Europe). After plants harvested green, cereals (e.g. leguminous plants and temporary grasses for green fodder in the rotation) were the largest crop groups, covering 1.5 million hectares in the EU (1.9 million hectares in Europe).

ORGANIC MARKET

Table 2: Organic retail market trends in Europe by country group, 2014

Country group	**Retail sales** (million EUR)	**Per capita consumption** (EUR)	**Growth 2013-2014**
EU-28	23,963	47.4	7.4%
Europe	26,203	35.5	7.6%
Global	62,631	8.7	
EU-15	23,491	58	7.6%
EU-13	472.4	4	
CPC	4	0.1	
EFTA	2,099.7	154	10.7%
Other European countries	134.5	0.9	

Source: FiBL-AMI Survey 2016 based on national data sources

Table 2 provides a European and global overview of the retail sales for 2014. A more detailed overview of organic retail market trends by country can be found in annex 1.

Retail sales growth and market share

The organic market in the EU increased by 7.4% to €24 billion (€26.2 billion in Europe, 7.6%) in 2014[25] (see figure 1). All countries for which new data was available showed positive growth. Germany, as the largest market in Europe, had a growth rate of 4.8%. Some countries with very developed markets such as Norway (25%) and France (10%) had double-digit growth rates. Sweden (45%) witnessed unprecedented growth in consumer demand.[26] In the United Kingdom, where retail sales had been decreasing for four consecutive years and only started to grow again in 2013, there was an overall growth rate of 4%. The total value of organic retail sales varies significantly across different European countries with Denmark (7.6%), Switzerland (7.1%), and Austria (6.5% in 2011) continuing to record the highest market shares (see figure 3).

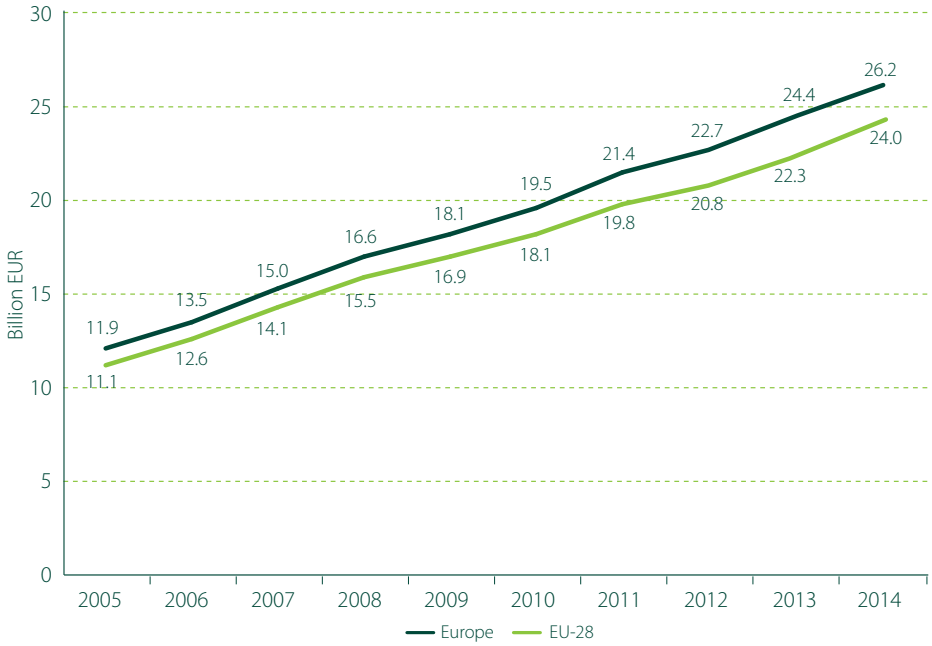


Figure 1: Growth of organic retail sales in Europe, 2005-2014

Source: FiBL-AMI surveys 2006-2016 and OrganicDataNetwork surveys 2013-2015

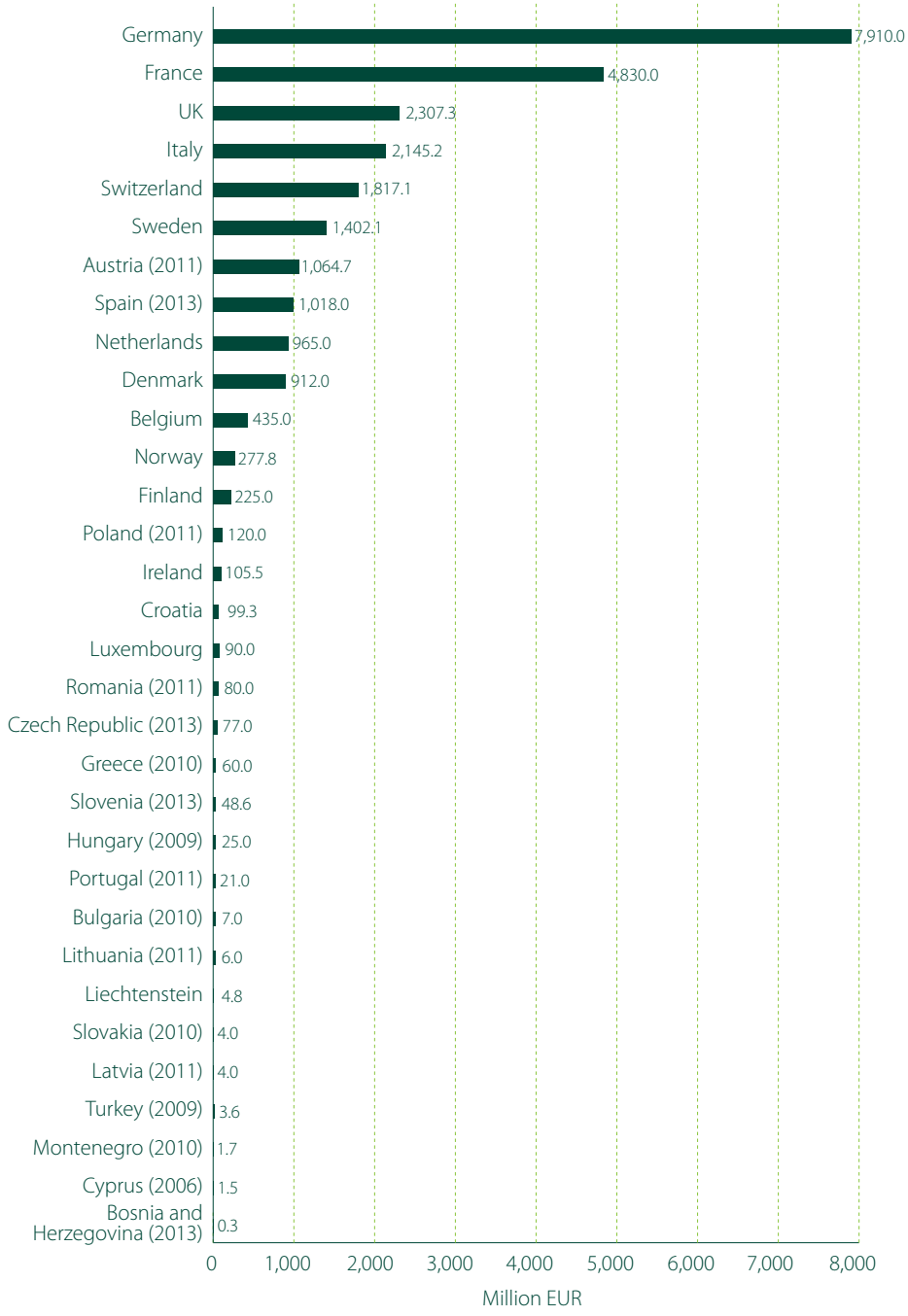


Figure 2: Organic retail sales in Europe by country, 2014

Source: FiBL-AMI survey 2016 based on national data sources

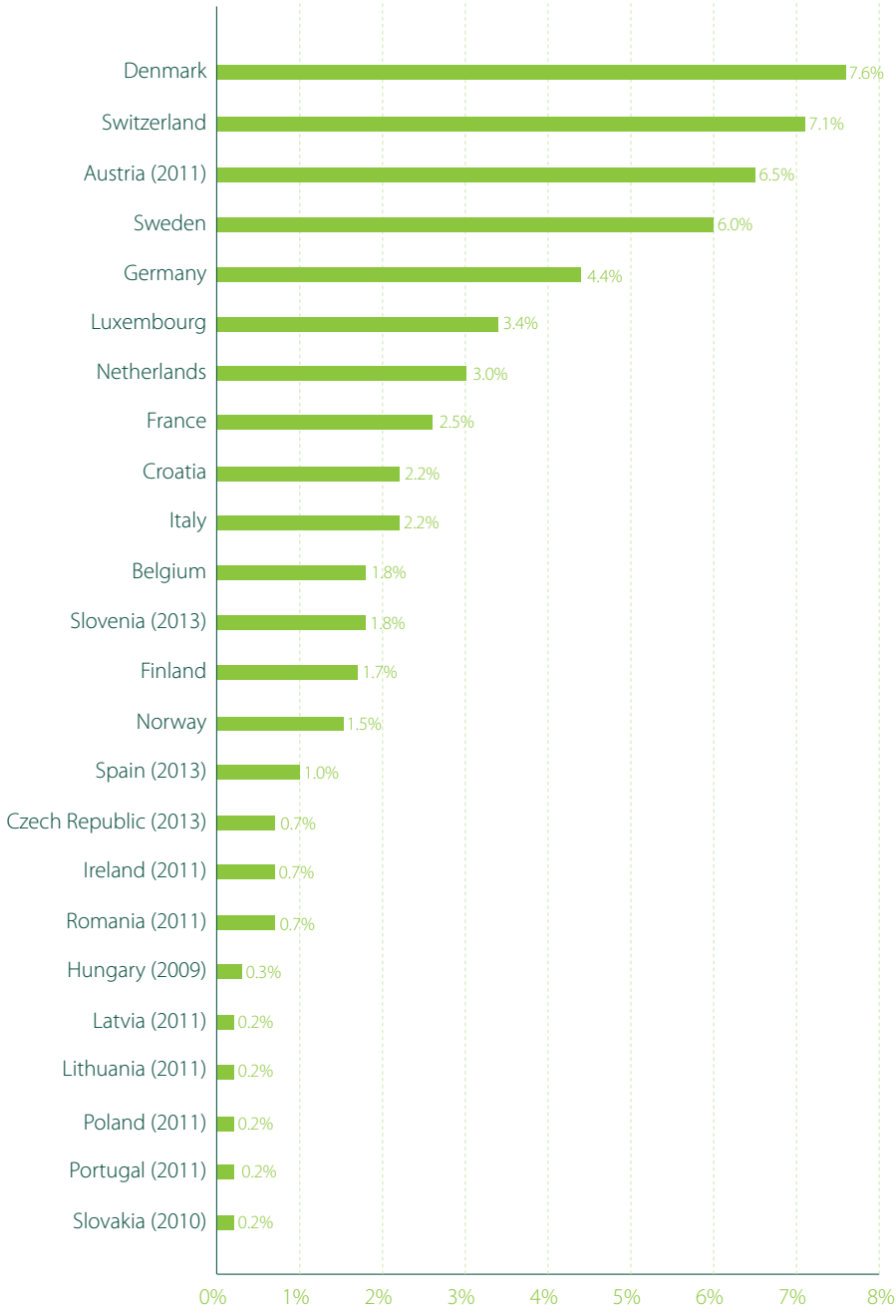


Figure 3: Share of organic retail sales in Europe by country, 2014

Source: FiBL-AMI survey 2016 based on national data sources

Retail sales distribution

In terms of distribution, Germany (€7.9 billion) remains the largest organic single market in the EU and Europe and second globally after the United States. France (€4.8 billion) held second place in a market that has shown very dynamic growth over the past couple of years.[27] The UK (€2.3 billion) was in third place, followed by Italy (€2.1 billion) (see figure 4a). Switzerland remains the fifth largest market in Europe after Italy (see figure 4b). Comparing organic markets worldwide, the United States was the leading single market (43% of global retail sales), followed by the EU (38%) (see figure 4c).

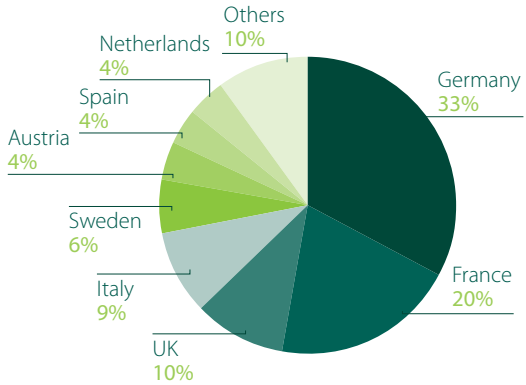


Figure 4a: Distribution of organic retail sales in EU-28, 2014

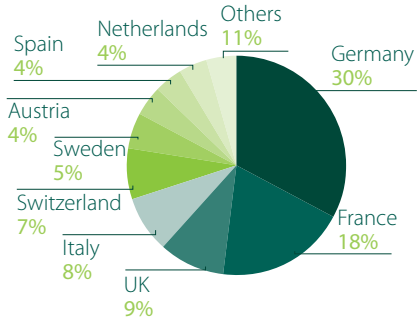


Figure 4b: European distribution of organic retail sales, 2014

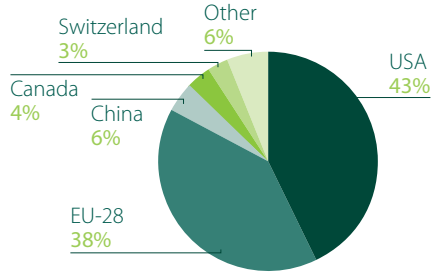


Figure 4c: Global distribution of organic retail sales by single market, 2014

Source: FiBL-AMI survey 2016 based on national data sources

Per capita consumption

Consumer per capita consumption of organic food has almost doubled in the last decade (see figure 5). EU consumers spent around €47 per capita on organic food in 2014 (€36 in Europe, with the Swiss spending the most on organic food (€221)). After Switzerland, the countries with the highest per capita consumption of organic food include Luxembourg (€164), Denmark (€162), and Sweden (€145) (see figure 6). Care must be taken in interpreting these figures as the costs of living across different countries differ quite considerably. Nevertheless, even if adjusted by purchasing power, Switzerland still holds the first place, followed by Luxembourg, Denmark and Sweden.

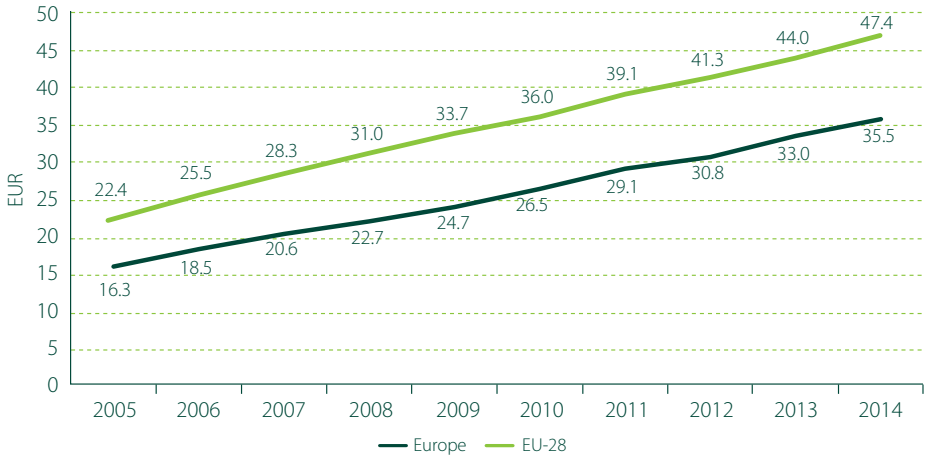


Figure 5: Growth of per capita consumption in Europe, 2005-2014

Source: FiBL-AMI surveys 2006-2016 and OrganicDataNetwork surveys 2013-2015

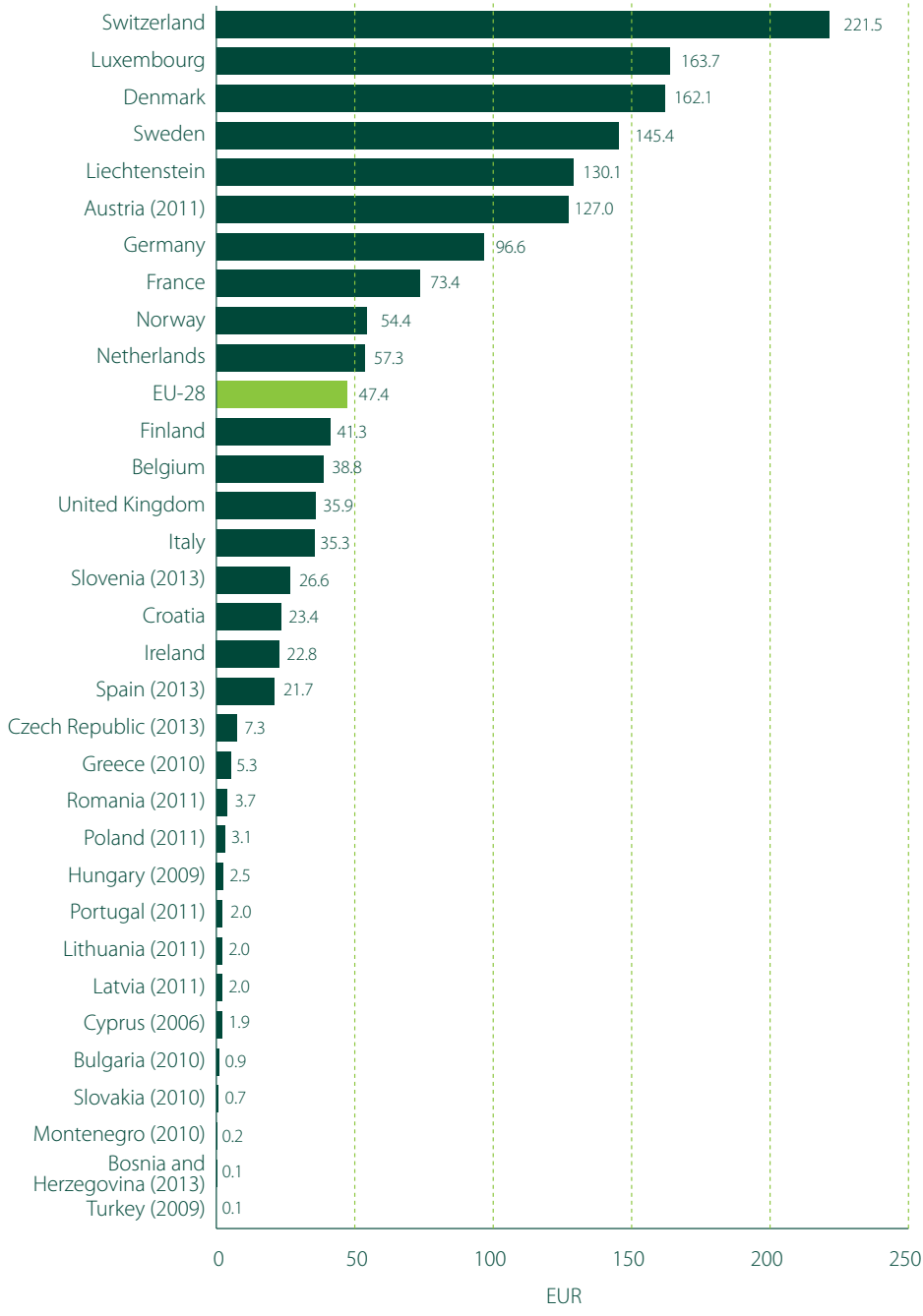


Figure 6: Organic per capita consumption in Europe by country, 2014

Source: FiBL-AMI survey 2016 based on national data sources

Marketing channels

A breakdown of different marketing channels in selected European countries shows their relative importance for the sale of organic food (see figure 7). These channels differ in importance from country to country. France, Italy and Germany are good examples of countries with strong market growth. Here, specialised retailers are playing a very important role as a result of growing levels of professionalisation and greater shop space. In the past, countries with established general retailers, largely supermarkets, have recorded steady growth in the organic market (e.g. Austria, Denmark, Sweden, Switzerland, and the United Kingdom). However, the recent economic recession showed the danger of a strong dependence on supermarkets, with the total UK market contracting during 2008-2012. At the same time in countries such as Germany specialised marketing channels grew significantly, while supermarket sales have stagnated, but have started to grow again in 2014.

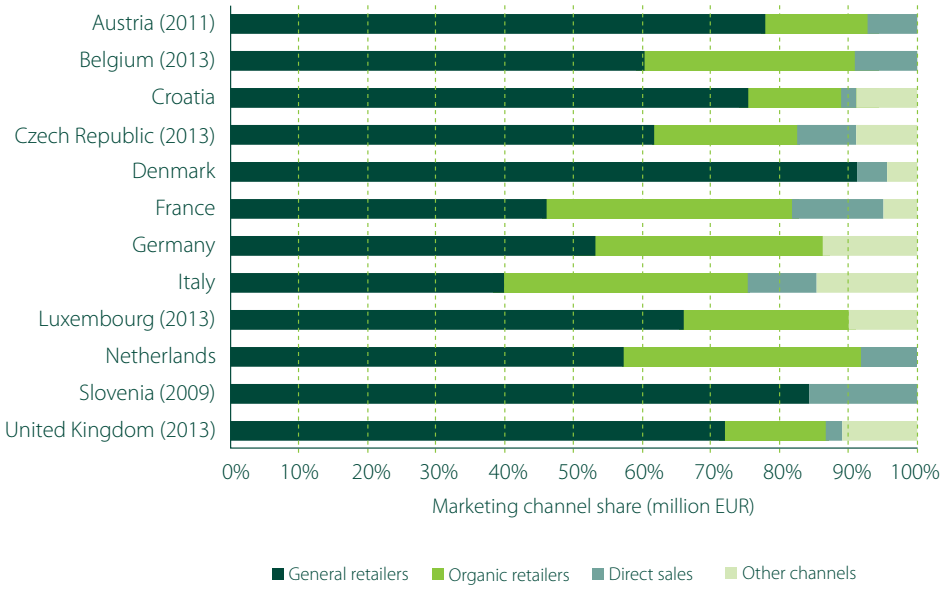


Figure 7: Organic retail sales by marketing channel in selected EU-28 countries, 2014

Source: FiBL-AMI survey 2016 based on national data sources

Product sales

In many countries, the breakdown of sales value by product is often only available from general retailers, as data is based on trade panel data and does not take other marketing channels into account. At the same time, in countries where trade panel data is used, supermarkets have a market share of 80% to 90%.[28]

Table 3: Shares of organic product groups by total market in selected European countries, 2014

Product group	Austria	Belgium	Finland	France	Germany	Netherlands (2013)	Norway	Switzerland
Beverages		0.9%[1]	0.6%	3.0%[2]	1.7%		0.1%	2.7%
Bread and bakery products		1.7%	1.2%	2.5%[3]	7.1%[4]	3.2%	1.0%	4.6%
Cheese	8.5%	1.7%	0.9%	1.2%	3.6%		0.5%	6.0%
Eggs	17.2%	11.2%	12.0%	22.1%	16.7%	12.7%	7.5%	22.7%
Fruit	10.7%	3.5%		4.3%	6.7%		1.7%[5]	10.1%
Meat and meat products	3.5%[6]	1.3%	0.6%	1.6%	2.1%	2.8%	0.3%	4.8%[7]
Milk	15.7%	3.0%	3.2%	10.8%	8.1%		4.0%	18.9%
Milk and dairy products		2.1%		3.2%	8.6%	4.8%	1.8%	11.0%
Vegetables	12.6%	5.4%	3.2%[8]	4.0%	8.6%	3.9%[8]	3.6%	14.6%

[1] Fruit juices, wine and beer - [2] Vegetable drinks, fruit and vegetable juices, wine and alcohol - [3] Flour was included in previous data; it is excluded in the new calculations, which also include fresh pastries. Hence this data is not directly comparable with those from 2013. - [4] Bread only - [5] Fruit, berries and nuts - [6] Meat only - [7] Includes fish - [8] Fruit and vegetables

Source: FiBL-AMI Survey 2016 based on national data sources

Table 3 provides a breakdown of organic product group in selected European countries in terms of their share of the total market.[29]

PRODUCT SALES IN NATIONAL RETAIL MARKETS

There are a number of individual products which have gained considerable shares of their respective total markets in terms of sales value:

- In many countries organic eggs are one of the success stories within the total retail market. Table 3 shows that Switzerland and France, for example, reach market shares in value of over 20%. In most other countries, where data is available, they reach 12% and more

- Organic fruit and vegetables continue to be highly popular purchases among European organic consumers. Organic vegetables have the highest market shares after eggs, representing between 9% and 15% of the sales value of all vegetables sold in Switzerland, Austria, and Germany. Fresh carrots alone, for example, have a 30% market share in Germany

- In some countries, organic dairy products reach market shares of about 5% of all dairy. In Switzerland, they even reach 10%

- Individual products can reach much higher market shares. In Germany organic baby food and meat substitutes, representing over 40% and 60% respectively, are good examples

- On the other hand, products like organic beverages (with the exception of wine) and meat (especially poultry), generally have low market shares. Often, these products are highly processed and/or very cheap on the conventional market.

PRODUCT SALES IN NATIONAL ORGANIC RETAIL MARKETS

Within the overall organic market in Europe, certain organic products are more dominant than others. A survey carried out as part of the OrganicDataNetwork project[30] shows that:

- Fruit and vegetables are pioneering organic products in Europe. They now represent around one fifth of many national organic markets. All over Europe, the organic market is dominated by perishable fresh produce compared to conventional markets. Fresh produce is especially strong in Italy, Ireland, Norway, Sweden, and Germany

- In many countries, and in Northern Europe in particular, animal products, especially milk and dairy products, constitute a high proportion of all organic products sold (up to 20%). Meat and meat products are very successful and constitute around 10% of the organic market in Belgium, the Netherlands, Finland, and France

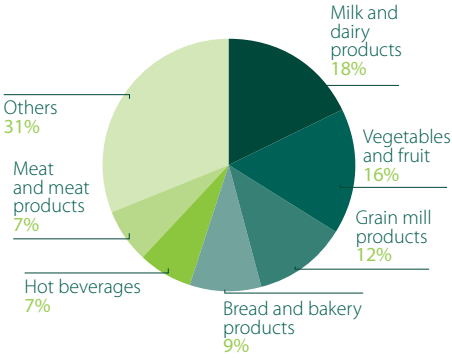
- Beverages, mainly wine, constitute an important part of the organic market – over 10% in France and Croatia

- Hot beverages (coffee, tea, and cocoa) make up 3% to 5% of the organic market in many countries

- Grain mill products[31], which are easily sold and stored in supermarkets, reach high market shares in the Czech Republic as well as in Finland and Norway

- Bread and bakery products are very important in the organic product range, with a market share of up to 10% in Switzerland, the Netherlands, France, Sweden, Finland, and Germany

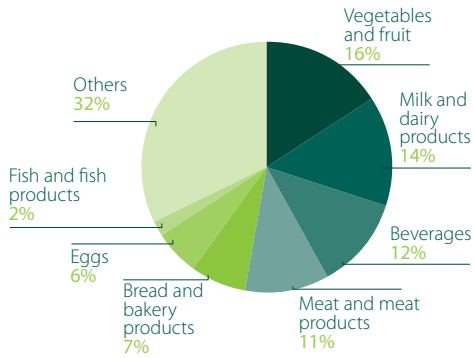
Looking more closely at distribution of organic retail sales in the Czech Republic, France, Germany and Sweden (see figure 8a-d)[32] shows that – with the exception of the Czech Republic – fruit and vegetables are the most popular group amongst organic consumers. This is followed by milk and dairy products, and meat and meat products. By contrast to the other countries fish is more important than meat in Sweden.



Total retail sales: 77 million EUR

Figure 8a: Distribution of organic retail sales in Czech Republic by product group, 2013

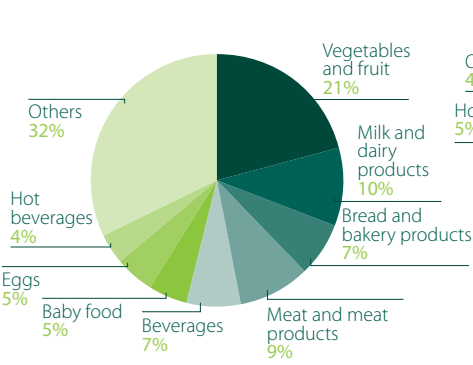
Source: UZEI 2015



Total retail sales: 4.8 billion EUR

Figure 8b: Distribution of organic retail sales in France by product group, 2014

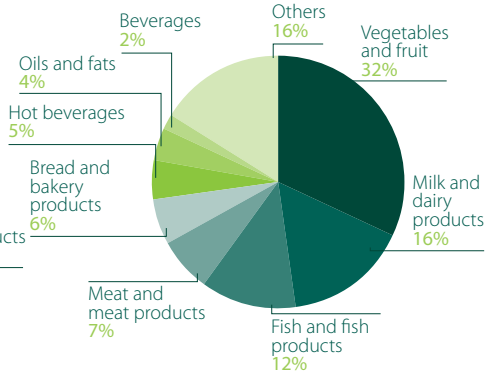
Source: Agence Bio 2015



Total retail sales: 7.9 billion EUR

Figure 8c: Distribution of organic retail sales in Germany by product group, 2014

Source: AMI 2015



Total retail sales: 1.4 billion EUR

Figure 8d: Distribution of organic retail sales in Sweden by product group, 2014

Source: Statistics Sweden 2015

Exports and imports

There is almost no data is available on exports and imports. Up to now, organic and conventional items are not differentiated in most countries. In Italy, for example, import volumes are available from third countries using customs data. Germany also uses a multi-method approach to cover organic import volumes of products.[33]

Denmark is the only country with an additional indicator for organic and conventional products. This provides information on organic imports and exports by product group, country of origin and destination, and can be directly compared to conventional import and export flows.[34] Available data for Denmark show that organic imports have quadrupled from 400 million to 1.9 billion Danish crowns between 2005 and 2014. Until now there is no other country that uses this approach for its international trade statistics. This is mainly because it requires amendments in law or is deemed to be complicated for the responsible agencies.

Currently it can only be assumed that with growing domestic markets, international trade activities will increase for both intra-EU trade as well as exports and imports to and from the EU. As a result there is a need for an effective approach for collecting data on both intra- and extra-EU trade as well as re-exports for organic using the Standard International Trade Classification (SITC).[35]

ORGANIC OPERATORS

Table 4: Organic producers, processors, and importers in Europe by country group, 2014

Country group	Producers	Growth 2013-2014	Processors	Growth 2013-2014	Importers	Growth 2013-2014
EU-28	257,525	-0.2%	49,968	19.0%	1,650	17.3%
Europe	339,824	1.7%	50,774	18.6%	1,847	15.7%
Global	2,260,361	13.4%	61,977	20.9%	2,190	
EU-15	194,979	0.3%	47,636	19.4%	1,382	14.1%
EU-13	62,546	-1.7%	2,332	11.8%	268	36.7%
CPC	73,375	9.8%	190	-11.6%	70	-5.4%
EFTA	8,500	-3.7%	516	-1.1%	67	-9.5%
Other European countries	424	1.2%	100	-2.9%	60	46.3%

Source: FiBL-AMI surveys 2006-2016 based on Eurostat and national data sources

Table 4 provides a European and global overview of organic operators working in 2014. A more detailed overview of organic producers, processors and importers by country can be found in annex 2.

Producers, processors and importers

In 2014, there were almost 260,000 organic producers in the EU and almost 340,000 in Europe. In the EU, the country with the largest number of producers is Italy (almost 49,000), in Europe it is Turkey (over 71,000 – see figure 9). Although there was not much growth in the number of producers in 2014, over the past decade the number of producers in the EU grew by 57% and in Europe by 81% (see figure 10). Almost 15% of the world's organic farmers are in Europe.[36]

The number of processors and importers increased in almost all European countries in 2014. In the EU, there were almost 50,000 processors (almost 51,000 in Europe) and almost 1,700 importers (almost 1,900 in Europe). The number of processors and importers increased by 19% and 17% respectively in the EU (18.6% and 16% in Europe) and significantly across almost all countries. The country with the largest number of processors is Italy (over 12,000), and the country with the most importers is Germany (326).

A large proportion of processors and importers are located in the old Member States and Switzerland. The latest data show, however, that new Member States and other European countries are currently developing their processing capacities in order to become less dependent on organic imports and to increase the value of their own export products.

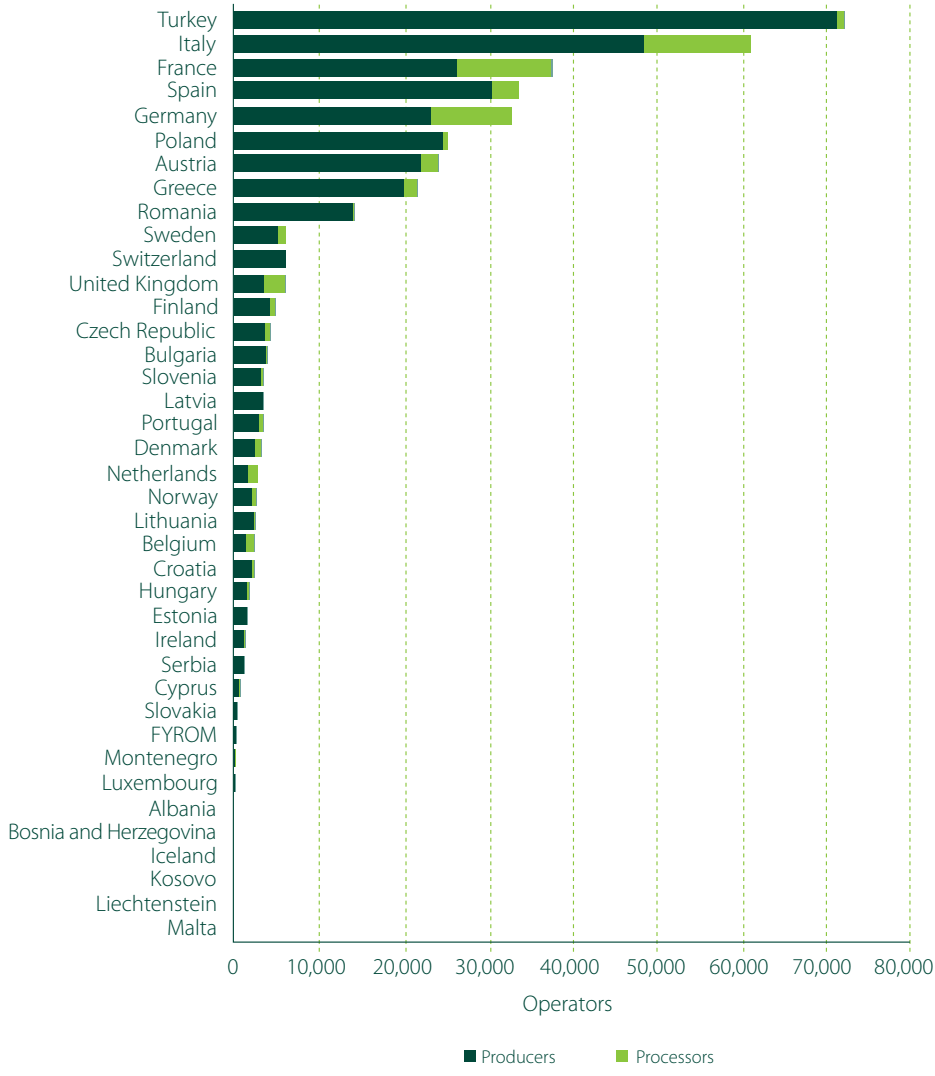


Figure 9: Organic producers, processors and importers in Europe by country, 2014

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

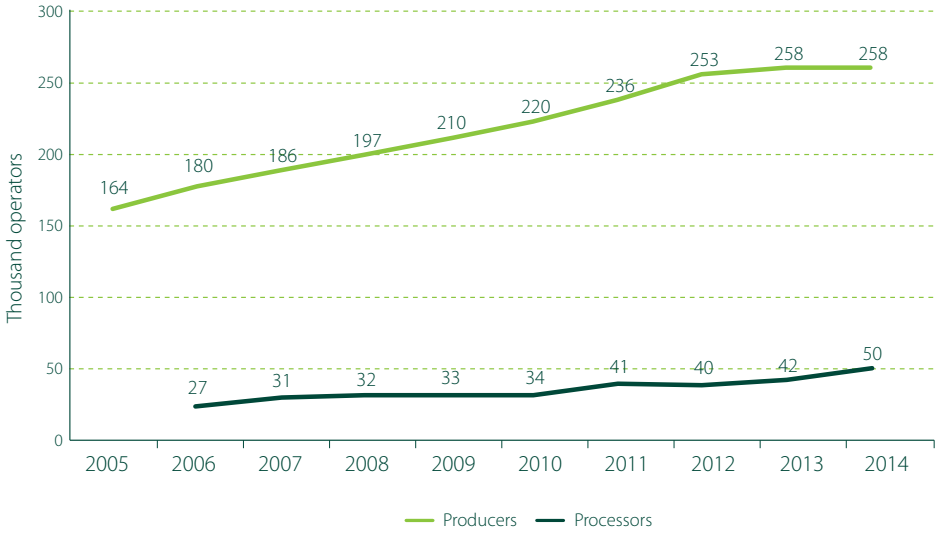


Figure 10: Development of organic producers and processors in EU-28, 2005-2014

Source: FiBL-AMI surveys 2006-2016 and OrganicDataNetwork surveys 2013-2015

Certification and control systems

Certification and control systems for organic operators in Europe have been strongly influenced by the development of organic private standards and legal requirements for organic production, as set out in EU legislation since 1991.

Under EU organic rules, each Member State in the EU must establish a competent authority to regulate the control of organic production. As part of the control system the competent authority may delegate all or part of its control task to one or more private control bodies or confer all or part of its control responsibility to one or more public control authorities. A mixed public/private control system is also possible. In European Free Trade Association (EFTA) countries, controls are delegated to one or more private control bodies. As a result, three types of organic control systems operate in Europe: private control bodies, public control authorities and mixed systems which consists of both private control bodies and public control authorities (see figure 11).[37]

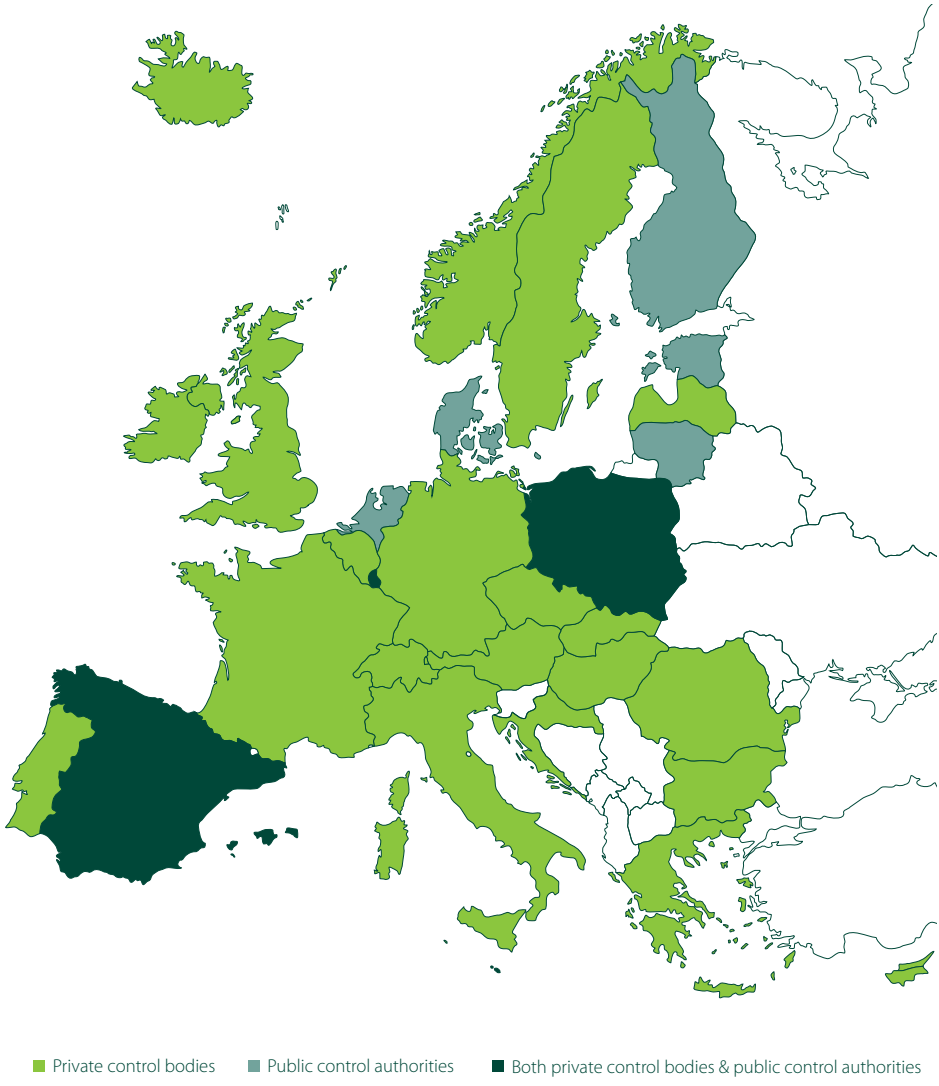


Figure 11: Organic certification in Europe, 2014

Source: DG Agriculture and Rural Development, 2014 and IFOAM EU survey 2015

ORGANIC AGRICULTURAL LAND

Table 5: Organic farmland trends in Europe by country group, 2014

Country group	Land area (hectares)	Total land share	Growth 2013-2014	Growth 2005-2014
EU-28	10,250,742	5.7%	1.1%	59.5%
Europe	11,625,001	2.4%	2.3%	67.4%
Global	43,662,446	1.0%	1.2%	49.5%
EU-15	7,832,820	6.1%	1.1%	44.0%
EU-13	2,417,922	4.7%	1.1%	144.7%
CPC	508,942	1.5%	6.8%	435.8%
EFTA	196,108	4.4%	2.9%	18.0%
Other European countries	669,209	0.2%	19.4%	159.3%

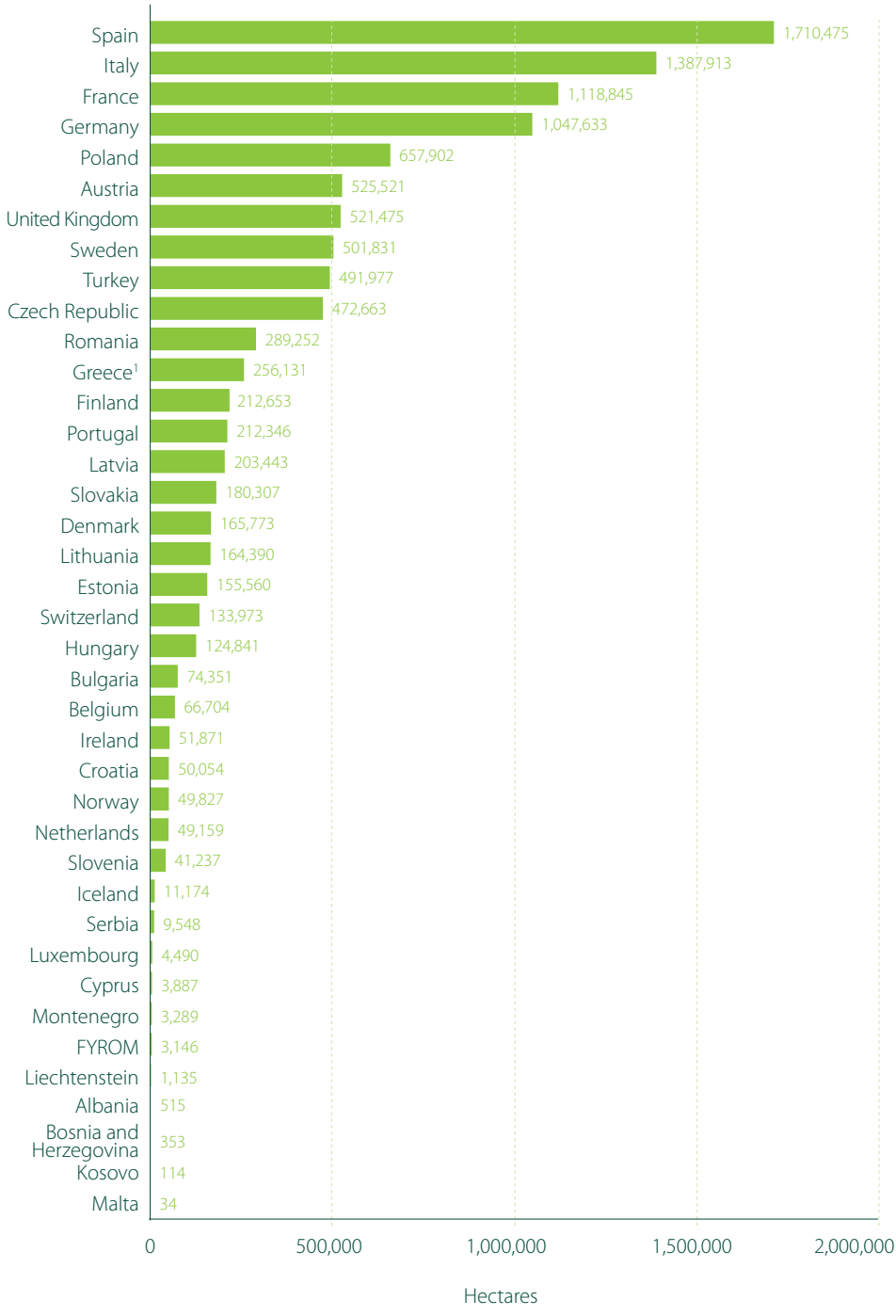
Source: FiBL-AMI Survey 2016 based on Eurostat and national data sources

Table 5 provides a European and global overview of organic agricultural land[38] in 2014. A more detailed overview of organic farmland trends by country for 2014 can be found in annex 3.

Land area and distribution

As of 2014, 10.3 million hectares of agricultural land in the EU and 11.6 million hectares in Europe are organic (this figure refers to agricultural land that is fully converted or in-conversion). The countries with the largest areas of organic land are Spain (1.7 million hectares, one sixth of organic farmland in Europe), Italy (1.4 million), France (1.1 million) and Germany (1.05 million) (see figure 12 and 13a-c).

Globally, 43.7 million hectares of farmland were organic in 2014 and approximately 27% of the world's organic farmland was in Europe. The four European countries mentioned above were among the ten countries with the largest organic areas globally.



[1] The figure reported in this book was provided by the Greek Ministry of Agriculture and differs from the figure reported by EUROSTAT, which is 362,826 hectares.

Figure 12: Organic farmland in Europe by country, 2014

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

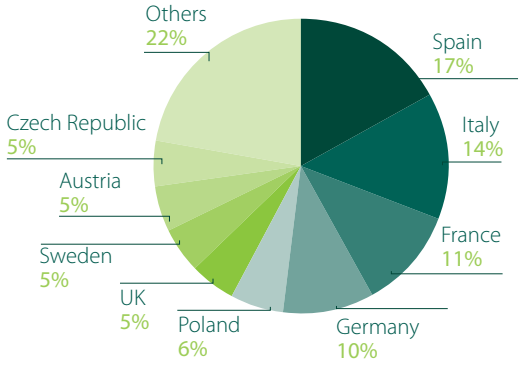


Figure 13a: Distribution of organic farmland in EU-28, 2014

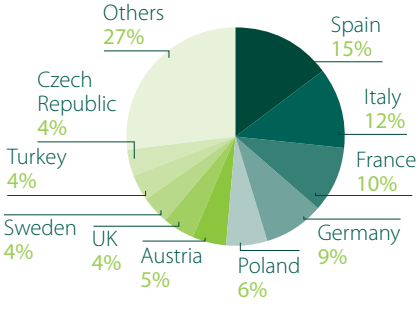


Figure 13b: European distribution of organic farmland, 2014

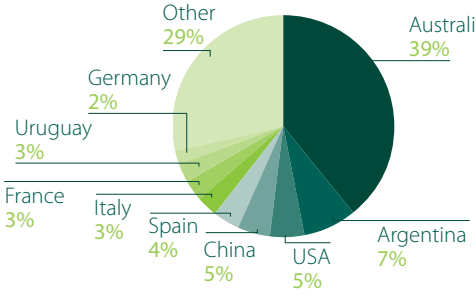


Figure 13c: Global distribution of organic farmland by country, 2014

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

Total land area share

In the EU, organic land constitutes 5.7% of the total agricultural land (2.4% in Europe). In the EU, the country with the highest share of organic agricultural land is Austria (19.4%), Liechtenstein (31%) has the highest share in Europe (see figure 14). In the EU-15, 6.1% of agricultural land was organic, representing a higher share than in the EU-13 (4.7%). Among the new Member States, over 10% of agricultural land in Estonia, the Czech Republic, and Latvia is organic. Despite high share of organic land in some of the new Member States, overall organic production remains low due to the high share of grassland in some countries and a lack of processing facilities. For candidates and potential candidates for EU membership, shares of organic land are still low, whereas shares are very high for two EFTA countries, namely Switzerland (12.7%) and Liechtenstein (31%).

Globally, almost 1% of agricultural land was organic in 2014. The country with the highest share was the Falkland Islands with 36%, followed by a number of European countries. In eleven countries, globally, over 10% of farmland was organic in 2014.

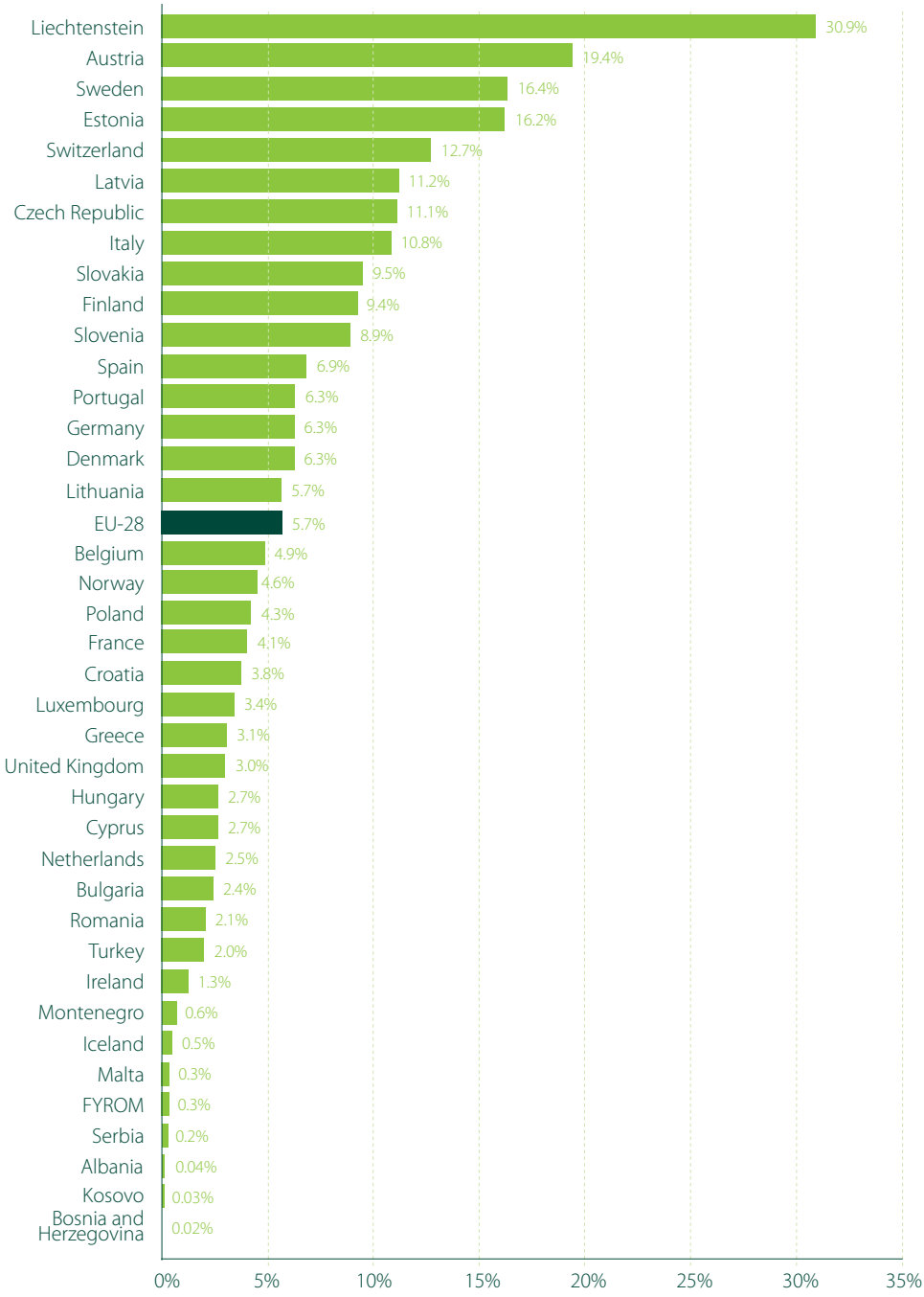


Figure 14: Share of organic farmland in Europe by country, 2014

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

Land area growth

Despite the dynamic development of organic farmland in Europe over the last number of decades, in 2014 there was little growth of agricultural land in the EU (1.1%, 110,000 hectares) and in Europe (2.3%, 260,000 hectares) (see figure 15).

The countries with the largest increase in organic land were Spain (100,000 hectares), Italy (70,000 hectares), and France (60,000 hectares). A major decrease was noted for Greece (130,000 hectares) and the United Kingdom (37,000 hectares).

Since 2005, organic agricultural land area has increased by 60% in the EU (70% in Europe). In the EU-15, growth was slower (44%), whereas in the new Member States, organic land area increased by 144%. In many EU-15 countries, the organic farmland had already grown to a comparatively high level before 2005. For candidates and potential candidates for EU membership, high growth (over 400%) was noted in that time period. Most of the growth of the past years was in Turkey, whereas, in the EFTA countries, growth was modest (18%, 2005-2014). However, with 2.9%, the EFTA countries showed stronger growth than the EU in 2014.

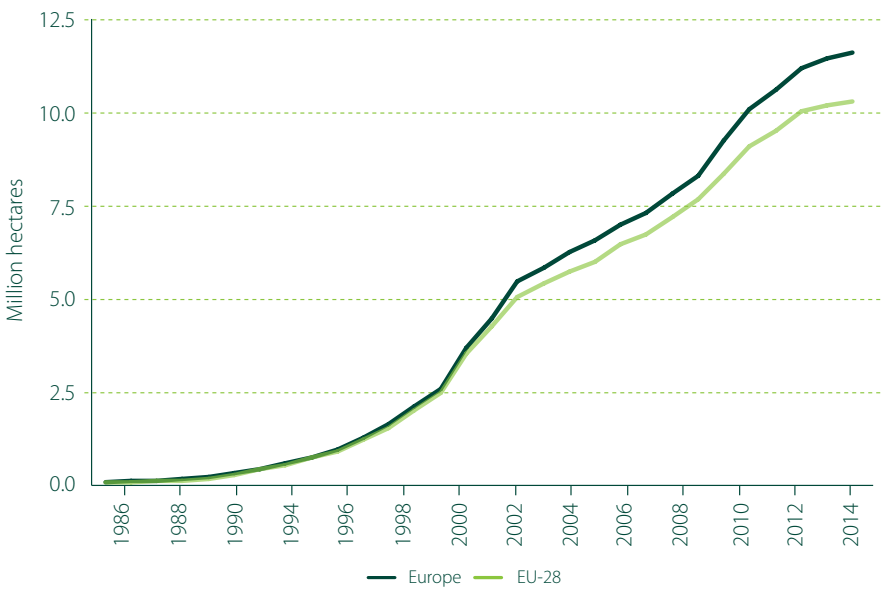


Figure 15: Growth of organic farmland in Europe, 1985-2014

Source: Lampkin, Nic, FiBL-AMI surveys 2006-2016 and OrganicDataNetwork surveys 2013-2015

Land area in conversion

In the EU, of the 10.3 million hectares of organic agricultural land, 7.3 million hectares were fully converted (7.7 million in Europe) and 1.4 million were under conversion (1.6 million in Europe). Most, but not all, countries provided data on their fully converted and under-conversion areas – no details are available for Austria, Germany, and Switzerland. In the EU, the fully converted area has increased by more than 300,000 hectares compared to 2013, which is greater than the overall increase in organic farmland.

Figure 17 shows that in Spain, Italy, France, Poland, Romania and Turkey, large areas were under conversion, and therefore a major increase in supply may be expected from these countries in the near future.

In the EU and in Europe, almost 0.5 million hectares of permanent grassland were under conversion as well as 0.52 million hectares of arable land (0.6 million in Europe) and 0.27 million hectares of permanent crops (0.36 million in Europe).

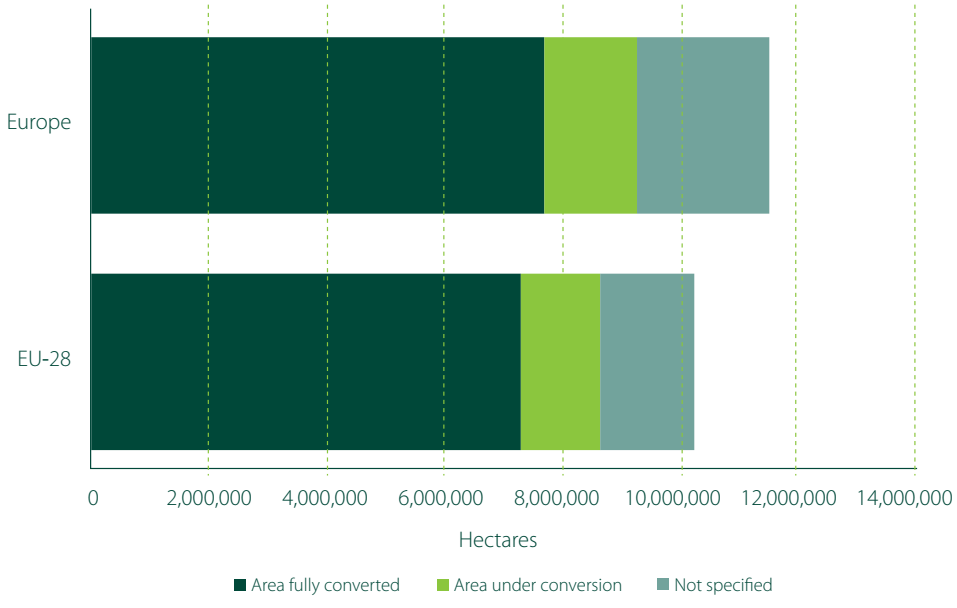


Figure 16: Conversion status of organic farmland in Europe, 2014

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

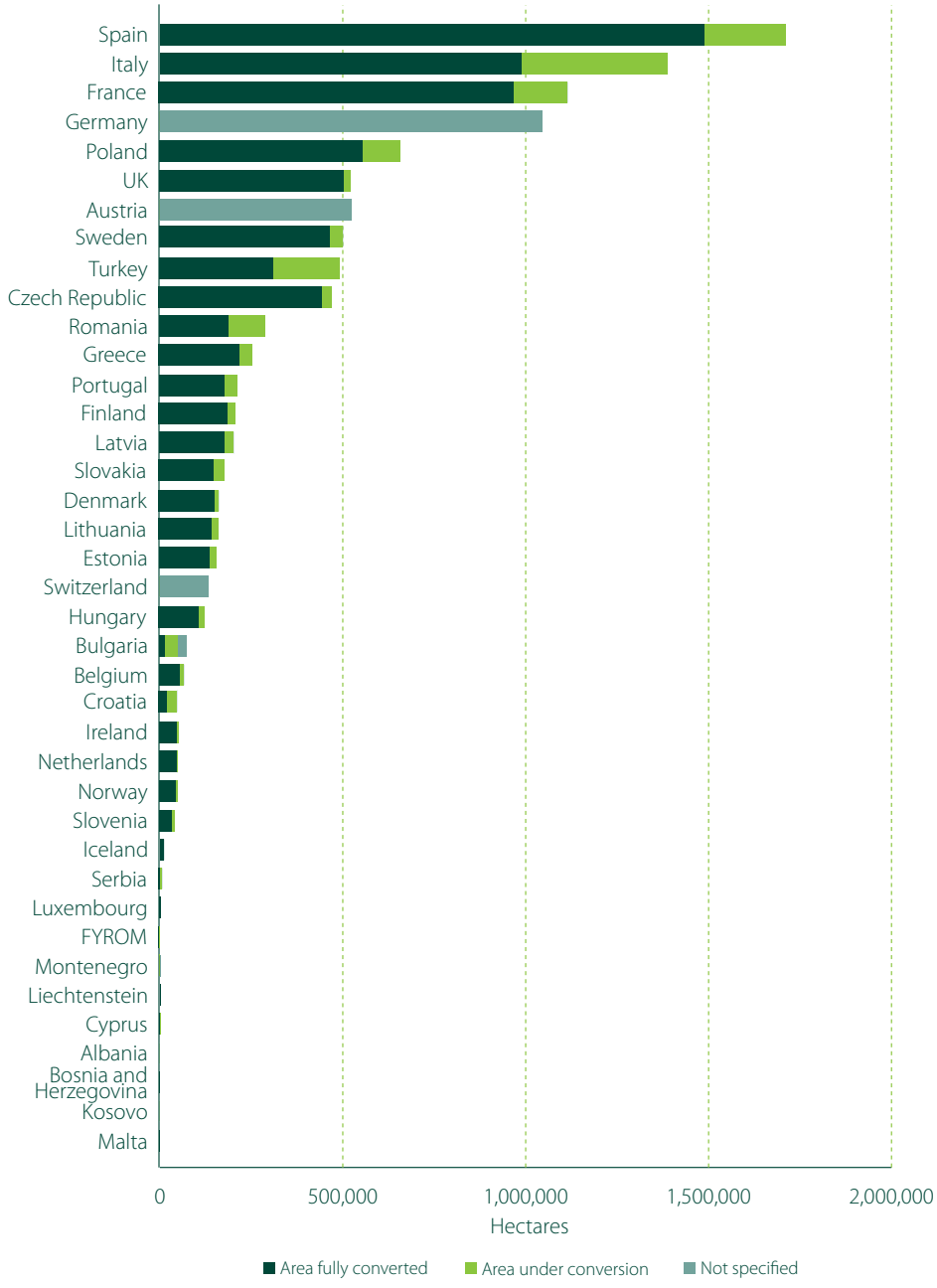


Figure 17: Conversion status of organic farmland in Europe by country, 2014

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

ORGANIC LAND USE, CROPS AND LIVESTOCK

Table 6: Organic farmland by land use type in Europe by country group, 2014

Land use type (million hectares)	Arable crops	Total land use share	Perma-nent crops	Total land use share	Perma-nent grass-land	Total land use share	Total land[1]
EU-28	4.11	3.80%	1.19	10.03%	4.6	6.96%	10.25
Europe	5.06	1.82%	1.36	8.88%	4.8	2.71%	11.63
Global	8.51	0.60%	3.42	2.08%	27.46	0.82%	43.66
EU-15	3.04	4.27%	1.08	10.35%	3.41	6.52%	7.83
EU-13	1.07	2.89%	0.11	7.67%	1.19	8.65%	2.42
CPC	0.34	1.30%	0.16	4.18%	0.02	0.11%	0.51
EFTA	0.06	3.14%	0.002	6.26%	0.12	4.10%	0.20
Other European countries	0.54	0.33%	0.01	0.39%	0.05	0.05%	0.67

[1] Includes other agricultural land

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources with shares calculated based on FAO data.

Table 6 provides a European and global overview of organic agricultural land use in 2014. A more detailed overview of organic land use by country can be found in annex 4.[39]

Land use

For all countries in Europe, land use and crop details are available. In this respect, Europe differs substantially from other parts of the world, for which such data is often not available.

In 2014, in the EU-28, 4.1 million hectares or 40% of farmland (5.1 million hectares in Europe), were used for arable crops, and 4.6 million hectares or 45% of farmland were used as grassland (4.8 million hectares in Europe). Approximately 1.2 million hectares, or 12% of farmland, were used to grow permanent crops (1.4 million hectares in Europe) (see figure 18a-c).

All categories of land use have grown steadily since 2004. The largest increase was for permanent crops, which have almost doubled since 2004 (see figure 19).

By country, the largest permanent grassland or grazing areas are in Spain, followed by Germany and the Czech Republic. The largest cropland areas (i.e. both arable and permanent crops) are in Italy (0.91 million hectares), Spain (0.78 million hectares), and France (0.69 million hectares) (see figure 20).

Apart from agricultural land, there are large areas of wild collection in the EU (12 million hectares) and Europe (16.3 million hectares). The largest area is in Finland (berries) followed by a number of countries in Southeast Europe.

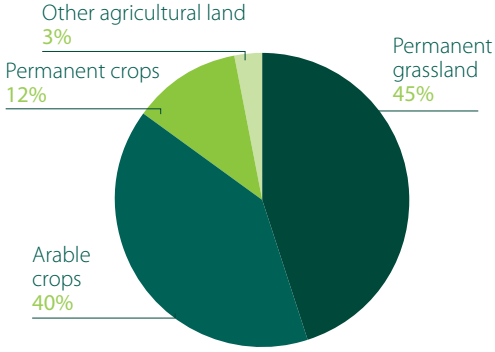


Figure 18a: Use of organic farmland in EU-28, 2014

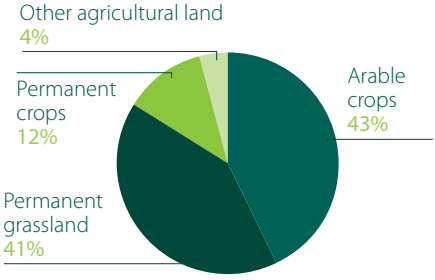


Figure 18b: European use of organic farmland, 2014

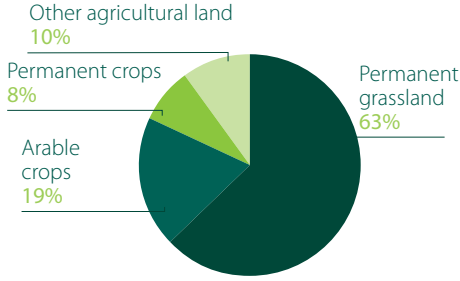


Figure 18c: Global use of organic farmland, 2014

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

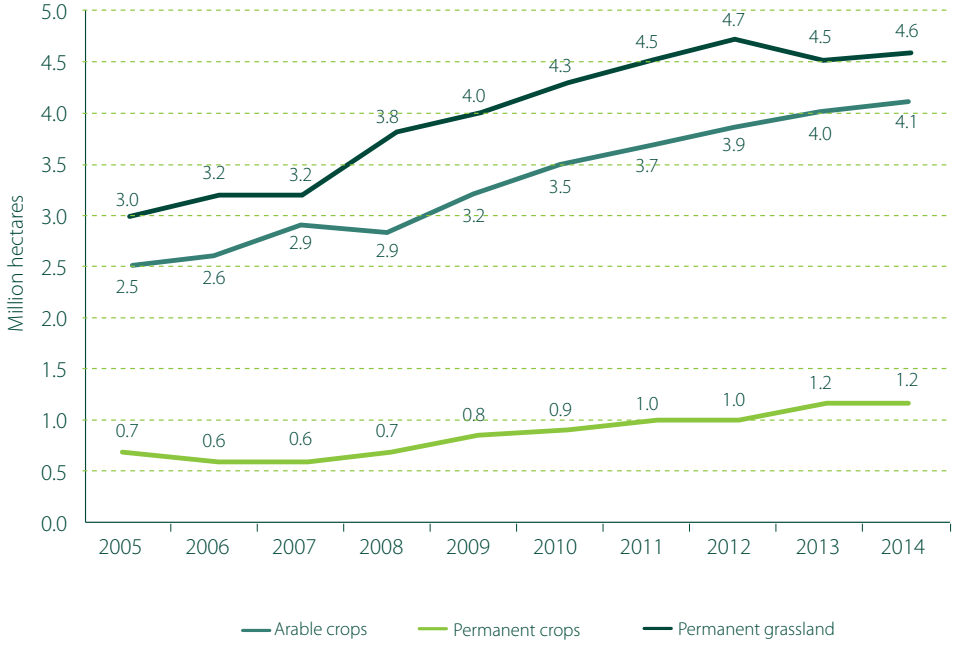


Figure 19: Growth of organic farmland by land use type in EU-28, 2005-2014

Source: FiBL-AMI surveys 2006-2016 and OrganicDataNetwork surveys 2013-2015

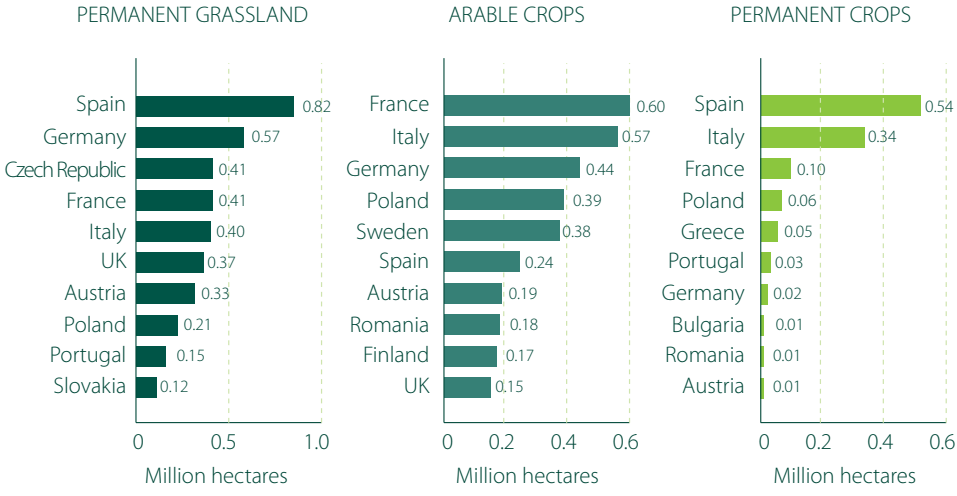


Figure 20: Top 10 countries with the largest organic farmland areas by land use type in EU-28, 2014

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

Crop production

Table 7: Top 10 organic crops in Europe by country group, 2014

Country groups	Crop	Land area (hectares)	Growth 2013-2014	Growth 2005-2014
EU-28	**Plants harvested green**	1,825,988	1.5%	104.3%
Europe		2,040,924	2.6%	117.7%
EU-15		1,393,619	2.1%	88.0%
EU-13		432,370	-0.3%	183.5%
CPC		128,979	-1.0%	
EFTA		44,749	-0.7%	2.4%
Other European countries		41,208	184.3%	
EU-28	**Cereals**	1,525,662	-0.3%	37.8%
Europe		1,911,506	3.1%	70.7%
EU-15		1,098,430	1.2%	15.6%
EU-13		427,232	-4.1%	171.6%
CPC		163,794	0.2%	
EFTA		14,295	-3.4%	15.8%
Other European countries		208,281	42.6%	
EU-28	**Olives**	416,021	-0.1%	61.2%
Europe		492,183	2.6%	90.8%
EU-15		413,212	-0.1%	60.5%
EU-13		2,809	-6.0%	355.2%
CPC		76,162	20.1%	
EU-28	**Dried pulses and protein crops**	255,019	25.2%	244.0%
Europe		299,229	25.0%	302.1%
EU-15		205,153	16.4%	234.9%
EU-13		49,865	29.3%	287.6%
CPC		21,577	156.7%	
EFTA		726	-10.7%	145.1%
Other European countries		21,907	42.2%	
EU-28	**Grapes**	251,514	2.4%	220.5%
Europe		266,212	2.7%	204.6%
EU-15		242,523	2.9%	213.8%
EU-13		8,991	-8.0%	661.6%
CPC		9,257	8.9%	99.9%
EFTA		643	15.5%	125.4%
Other European countries		4,799	1.1%	

Country groups	Crop	Land area (hectares)	Growth 2013-2014	Growth 2005-2014
EU-28	Nuts	154,175	-6.0%	180.9%
Europe		180,802	-4.2%	220.9%
EU-15		144,143	-2.9%	164.8%
EU-13		10,032	-35.2%	2088.4%
CPC		26,288	7.7%	
Other European countries		340	25.5%	
EU-28	Oilseeds	168,783	10.1%	129.4%
Europe		245,693	25.1%	232.7%
EU-15		84,613	5.9%	108.5%
EU-13		84,170	14.8%	155.1%
CPC		5,064	30.7%	
EFTA		576	16.0%	281.6%
Other European countries		71,270	84.2%	
EU-28	Vegetables	118,606	7.3%	76.3%
Europe		131,896	9.4%	92.1%
EU-15		85,853	6.5%	41.0%
EU-13		32,753	9.5%	412.7%
CPC		2,748	9.0%	
EFTA		2,211	15.2%	68.0%
Other European countries		8,331	47.6%	
EU-28	Temperate fruit	108,059	-12.4%	122.1%
Europe		127,478	-8.5%	150.4%
EU-15		47,684	-13.3%	37.3%
EU-13		60,375	-11.7%	333.3%
CPC		16,359	22.3%	879.6%
EFTA		724	-5.1%	30.8%
Other European countries		2,337	33.0%	
EU-28	Citrus fruit	37,753	2.1%	72.8%
Europe		38,232	2.0%	75.0%
EU-15		37,691	2.2%	72.6%
EU-13		61	-7.4%	365.2%
CPC		479	-8.4%	

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

Table 7 provides a European and global overview of crop production in 2014. A more detailed overview of organic crops by country can be found in annex 5.

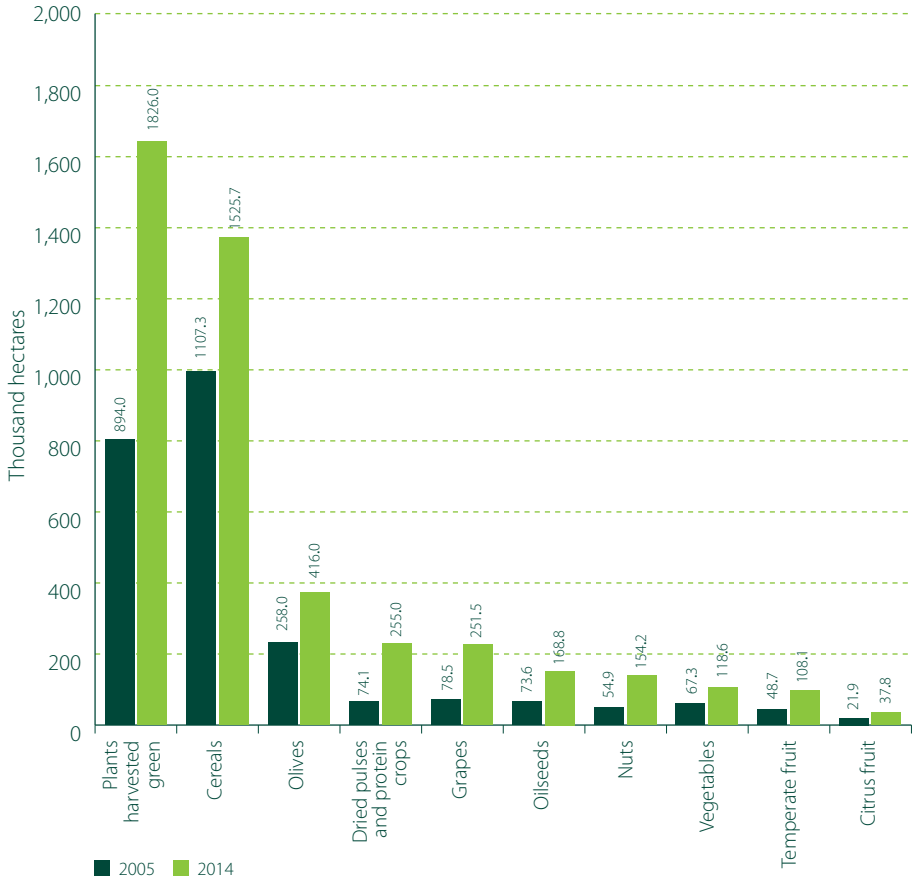


Figure 21: Development of selected organic crop groups in EU-28, 2005-2014

Source: FiBL-AMI surveys 2006-2016 and OrganicDataNetwork surveys 2013-2015

ARABLE CROPS

Plants harvested green from arable land account for 1.8 million hectares of the arable land among the EU-28 (2 million hectares in Europe), followed by 1.5 million hectares of cereals (1.9 million hectares in Europe) (see table 7). Italy, Germany, and Spain have the most land for cereal production in the EU-28 (see annex 5).

In 2014, organic vegetables were grown on 118,600 hectares of land in the EU-28 (131,000 hectares in Europe). The largest areas were in Poland, Italy, France, and the United Kingdom (note that for some countries potatoes are included in the vegetable category).

Between 2005 and 2014 the largest growth among the main arable crop groups was recorded by dried pulses and protein crops (240%) and oilseeds (130%). Cereals grew by 38% (see figure 21).

Organic dried pulses and protein crops achieved the highest share (21.5% in the EU-28, 7.3% in Europe), mainly because the conventional crop area has been decreasing for many years due to the availability of cheap soybeans for both animal feed and human consumption on the world market.

Organic vegetables represent 5.5% of the total organic farmland in the EU-28 (2.7% in Europe) and 7.2% of the area for temperature fruit (2.7% in Europe) have achieved comparatively high shares in meeting the high consumer demand for fresh vegetables and fruit.

PERMANENT CROPS

A large part of the permanent cropland is used for olives, grapes and nuts with the largest areas of permanent cropland in Spain, Italy, and France. For most permanent crops, however, the EU-15 countries have the largest land areas. The EU-13 countries have considerable areas of temperate fruit (e.g. apples in Poland and berries in the Baltic countries). Both Polish apples (in concentrate) and berries from the Baltic countries can be found in juices or yogurts all over Europe. Across Europe, high growth rates were achieved between 2005 and 2014, particularly for grapes (204%) and temperate fruit (150%). The organic share of all permanent crops were higher than those for the arable land: 11.1% for nuts, 10.7% for berries, and 8.6% for olives.

Livestock

Table 8: Organic livestock by animal type and total share in EU-28 and Europe, 2014

Animal type	EU-28		Europe	
	Animals (per head)	Total animal share	Animals (per head)	Total animal share
Cattle[1]	3,273,285	4.1%	3,487,237	2.8%
Goats	697,015	5.7%	730,647	
Sheep	4,256,342	4.3%	4,483,164	2.9%
Pigs	845,305	0.5%	877,463	0.4%
Poultry	35,116,136	2.3%	36,941,068	1.4%

[1] Includes beef and dairy cattle, buffalo

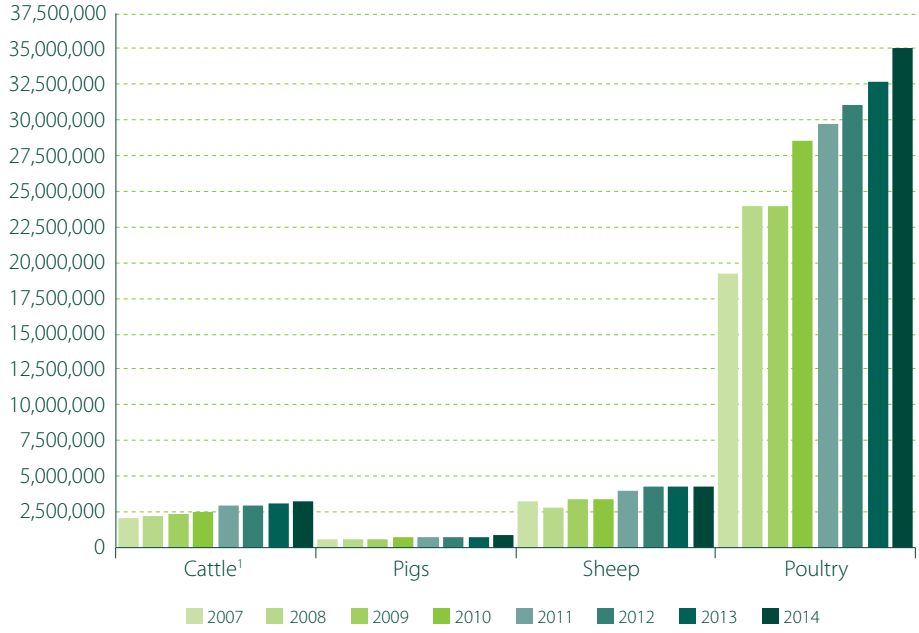
Source: FiBL-AMI Survey 2016 based on FAOSTAT, Eurostat and national data sources

Table 8 provides a European overview of organic livestock in 2014.[40] In many countries, organic animal husbandry began with beef, milk and sheep production. Livestock products continue to have the highest organic share of the overall sector. In the EU-28, 3.3 million bovine animals, 4.3 million sheep, 0.8 million pigs, and 35 million poultry were kept.

The greatest increase between 2007 and 2014 was for poultry, which must partly be attributed to the high demand for eggs (see the chapter on the organic market) (+83%). However, beef and dairy cattle also grew substantially (+57%), as did pigs (+36%) and sheep (+30%) (see figure 22). Organic animal livestock numbers remain limited in comparison with the total animal production in Europe and the EU-28 (between 0.5% and 4%, depending on the animal species). Monogastric animals (pigs and poultry) have the lowest shares, partly because of the difficulties posed by the insufficient internal supply of organic feeds, the difficulties in the provision of traceable certified feed imports and the high price premiums consumers have to pay. The highest shares are found for organic sheep and cattle. These meat types are considered to be of premium value in the conventional market and realise higher prices; therefore organic premiums are lower.

Milk production has almost doubled since 2006 in order to meet rising demand for milk and dairy products. Organic dairy cows milk production now stands at 3.8 million metric tons, constituting more than 2.6% of EU milk production from dairy cows in 2014.[41] Some of this growth, however, must be attributed to improved data availability (see figure 23).

Statistics on the number of organic animals are incomplete and do not allow, for the moment, for a complete picture of the sector. However, taking into account all currently available information, the organic animal sector is developing at a fast pace in the EU-28 countries.



[1] Includes beef and dairy cattle, buffalo

Figure 22: Development of organic livestock in EU-28 by animal type, 2007-2014

Source: FiBL-AMI surveys 2006-2016 based on FAOSTAT, Eurostat and national data sources

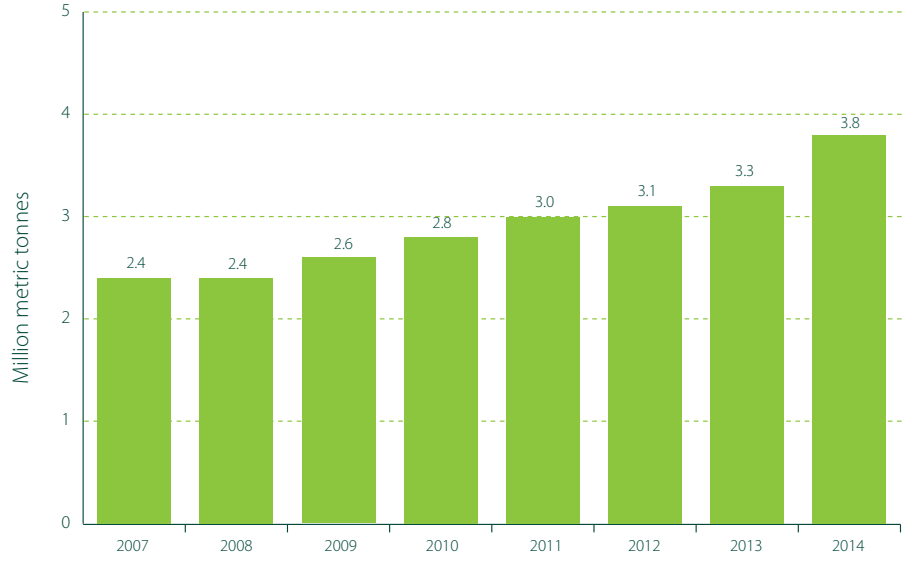


Figure 23: Development of organic milk production from dairy cows in EU-28, 2007-2014

Source: FiBL-AMI surveys 2009-2015

ANIMAL FEED

Fresh and conserved forage from grassland is the primary source of animal feed for organic ruminants such as bovines and sheep supplemented by concentrate feedstuffs as an additional source of protein and energy. However, for organic monogastrics such as pigs and poultry, the availability and suitability of organic feedstuffs remains a challenge for developing 100% organic feeding strategies that comply with organic principles in terms of animal health and welfare and overall sustainability. Currently a complete picture of demand and supply for organic animal feed is unavailable in any EU Member States or other European countries.

Estimates based on 2011 data indicate that the total demand for dry matter organic concentrate feed in Europe was 2,350,000 metric tonnes. 2011 data for selected European countries – which accounted for the majority of organic livestock: pigs (85%), poultry (80%) and cattle (70%) – showed a total dry matter demand of 1,923,000 metric tons with over 50% fed to bovine animals, 16% to pigs and 30% to poultry. In these countries the overall demand for crude protein was 300,000 metric tons with 49% fed to bovine animals, 34% to poultry and 17% to pigs[42] (see table 9).

Table 9: Production and demand for organic concentrate feed in selected European countries, 2011

Country	**Concentrate feed production in dry matter** (metric tonnes)	**Total demand for concentrate feed in dry matter** (metric tonnes)
Austria	143,127	161,928
Denmark	125,899	194,761
Finland	26,021	20,815
France	334,084	323,959
Germany	305,141	445,074
Netherlands	9,142	146,461
Sweden	182,610	227,476
Switzerland	8,959	60,803
United Kingdom	140,502	330,428
Total	1,275,485	1,911,705
European total (est.)		**2,350,000**

Source: FiBL calculation based on information from ICOPP partners (Früh et al. 2015)

2011 data for selected European countries showed a total self-sufficiency rate of 69% and 56% for concentrate feed and protein crude, respectively.

Current available data show that, across Europe, gaps in the availability for concentrate feed and, in particular, for crude protein continue to exist. Indeed, estimates of European supplies using available data on protein crop production show that there would still be a gap even if surplus protein feed producing countries were to export 80% of their total protein crops (including soya and other oilseeds) to the European countries that suffer from a feed deficit. Even in this case, an estimated 30% of the crude protein demand would still have had to have been imported from outside Europe in 2011.[43]

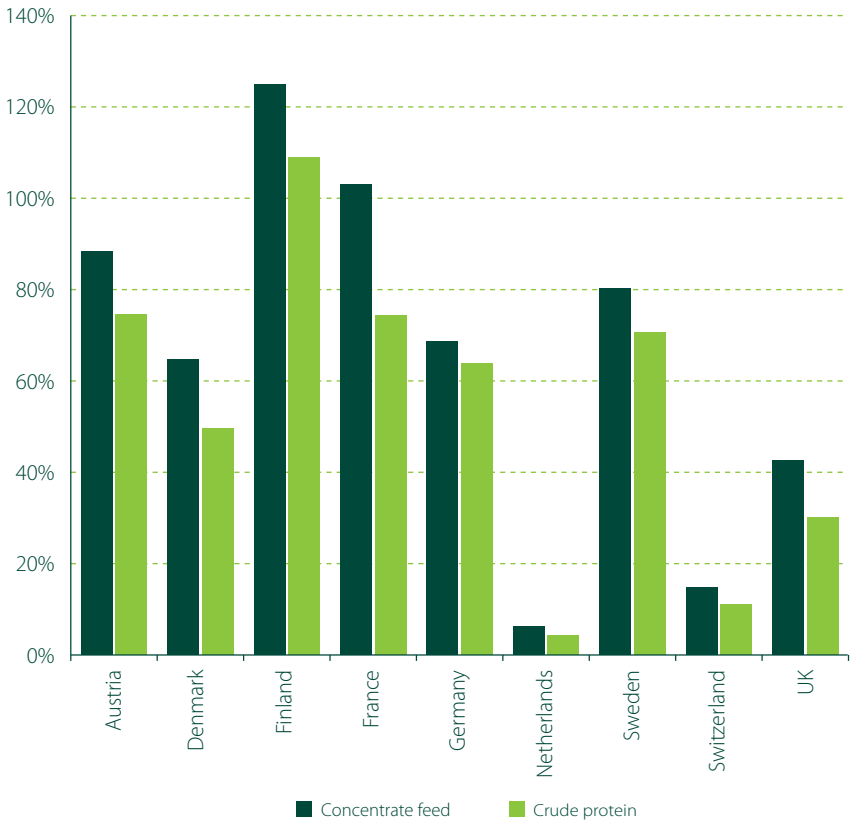


Figure 24: Self-sufficiency rate for organic concentrate feed and crude protein in selected European countries, 2011

Source: FiBL calculation based on information of the ICOPP partners (Früh et al. 2015)

ACKNOWLEDGEMENTS

This chapter gives an overview of results of the market data collected by FiBL and AMI in 2015 and 2016. FiBL's activities were carried out under the framework of the global survey on organic farming supported by the Swiss State Secretariat of Economic Affairs, the International Trade Centre and NürnbergMesse and co-financed by the European Commission. It builds on the activities of the OrganicDataNetwork project, which was funded by the EU under its 7th Framework Programme between 2012-2014. Under this project, detailed organic market data for all European countries was collected and stored in one single database for the first time.[44] The authors would like to thank all of those who have provided data and information for this report, in particular, the partners of the OrganicDataNetwork project and to Raffaele Zanoli for his invaluable comments and suggestions to the text.[45]

100% CERTIFIED RAW ORGANIC MATERIALS

240+ PRODUCTS
60+ ORIGINS

ORGANIC INGREDIENTS *with a story*

Tradin Organic Agriculture supplies the international food industry with globally sourced organic raw materials. From farm to the market, it is our mission to work with the utmost respect for people & planet.

ENSURING STABLE SUPPLY AND ORGANIC INTEGRITY

www.tradinorganic.com

TRADIN™ Organic

Global Organic Ingredients

ANNEXES

ANNEX 1:

Organic retail market trends in Europe by country, 2014

Country group	Country	Retail sales (million EUR)	Total retail sales share	Per capita consumption (EUR)	Growth 2013-2014
EU-28		23,943		47.4	7.4%
Europe		26,183		35.5	7.6%
Global		62,816		8.7	
EU-15	Austria (2011)	1,064.7	6.5%	127.0	
	Belgium	435.0	1.8%	38.8	3.8%
	Denmark	912.0	7.6%	162.1	6.3%
	Finland	225.0	1.7%	41.3	4.6%
	France	4,830.0	2.5%	73.4	10.2%
	Germany	7,910.0	4.4%	96.6	4.8%
	Greece (2010)	60.0		5.3	
	Ireland	105.5	0.7%	22.8	
	Italy	2,145.2	2.2%	35.3	6.2%
	Luxembourg	90.0	3.4%	163.7	7.0%
	Netherlands	965.0	3.0%	57.0	9.9%
	Portugal (2011)	21.0	0.2%	2.0	
	Spain (2013)	1,018.0	1.0%	21.7	
	Sweden	1,402.1	6.0%	145.4	45.0%
	United Kingdom	2,307.3		35.9	4.0%
Total		**23,490.0**		**58.0**	**7.6%**

Country group	Country	Retail sales (million EUR)	Total retail sales share	Per capita consumption (EUR)	Growth 2013-2014
EU-13	Bulgaria (2010)	7.0		0.9	
	Croatia	99.3	2.2%	23.4	
	Cyprus (2006)	1.5		1.9	
	Czech Republic (2013)	77.0	0.7%	7.3	
	Hungary (2009)	25.0	0.3%	2.5	
	Latvia (2011)	4.0	0.2%	2.0	
	Lithuania (2011)	6.0	0.2%	2.0	
	Poland (2011)	120.0	0.2%	3.1	
	Romania (2011)	80.0	0.7%	3.7	
	Slovakia (2010)	4.0	0.2%	0.7	
	Slovenia (2013)	48.6	1.8%	26.6	
Total		**472.4**		**4.0**	
CPC	Bosnia and Herzegovina	1.7		0.4	
	Montenegro (2010)	0.1		0.2	
	Turkey (2009)	3.6		0.1	
Total		**5.4**		**0.2**	
EFTA	Liechtenstein	4.8		130.1	
	Norway	277.8	1.5%	54.4	25.0%
	Switzerland	1,817.1	7.1%	221.5	7.5%
Total		**2,099.7**		**154.0**	**10.7%**

Source: FiBL-AMI survey 2016 based on national data sources

ANNEX 2:

Organic producers, processors, and importers in Europe by country, 2014

Country group	Country	Producers	Processors	Importers
EU-28		257,525	49,968	1,650
Europe		339,824	50,774	1,847
EU-15	Austria	22,184	2,118	23
	Belgium	1,648	844	58
	Denmark	2,565	787	
	Finland	4,247	648	67
	France	26,466	11,198	148
	Germany	23,398	9,497	326
	Greece	20,186	1,635	7
	Ireland	1,275	197	25
	Italy	48,662	12,641	259
	Luxembourg	79	72	5
	Netherlands	1,706	1,138	
	Portugal	3,029	437	2
	Spain	30,602	3,082	127
	Sweden	5,406	855	247
	United Kingdom	3,526	2,487	88
Total		**194,979**	**47,636**	**1,382**
EU-13	Bulgaria	3,893	132	3
	Croatia	2,194	242	18
	Cyprus	743	51	4
	Czech Republic	3,866	506	110
	Estonia	1,542	109	9
	Hungary	1,672	257	8
	Latvia	3,497	63	6
	Lithuania	2,445	67	5
	Malta	10	9	11
	Poland	24,829	484	68
	Romania	14,159	120	2
	Slovakia	403	56	13
	Slovenia	3,293	236	11
Total		**62,546**	**2,332**	**268**

Country group	Country	Producers	Processors	Importers
CPC	Albania	39	22	4
	Bosnia and Herzegovina (2013)	24	8	
	Kosovo	10	10	
	Montenegro	167	9	
	Serbia	1,281	16	30
	FYROM	382	7	2
	Turkey	71,472	118	34
Total		**73,375**	**190**	**70**
EFTA	Iceland	34	26	2
	Liechtenstein	39		
	Norway	2,232	490	65
	Switzerland	6,195		
Total		**8,500**	**516**	**67**

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

ANNEX 3:

Organic farmland trends in Europe by country, 2014

Country Group	Country	Land area (hectares)	Total land share	Growth 2013-2014	Growth 2005-2014
EU-28		10,250,742	5.7%	1.1%	59.5%
Europe		11,625,001	2.4%	2.3%	67.3%
EU-15	Austria	525,521	19.4%	-0.2%	9.5%
	Belgium	66,704	4.9%	6.7%	190.1%
	Denmark	165,773	6.3%	-2.1%	23.6%
	Finland	212,653	9.4%	3.1%	44.1%
	France	1,118,845	4.1%	5.5%	103.2%
	Germany	1,047,633	6.3%	0.3%	29.8%
	Greece[1]	256,131	3.1%	-33.2%	-11.3%
	Ireland	51,871	1.3%	-3.2%	47.1%
	Italy	1,387,913	10.8%	5.4%	29.8%
	Luxembourg	4,490	3.4%	1.0%	38.5%
	Netherlands	49,159	2.5%	-0.5%	0.8%
	Portugal	212,346	6.3%	7.6%	
	Spain	1,710,475	6.9%	6.2%	111.8%
	Sweden	501,831	16.4%	0.2%	125.3%
	United Kingdom	521,475	3.0%	-6.7%	-14.4%
Total		**7,832,820**	**6.1%**	**1.1%**	**44.0%**
EU-13	Bulgaria	74,351	2.4%	32.1%	2,957.2%
	Croatia	50,054	3.8%	23.2%	1,502.2%
	Cyprus	3,887	2.7%	-9.7%	128.9%
	Czech Republic	472,663	11.1%	-0.3%	85.4%
	Estonia	155,560	16.2%	2.8%	160.4%
	Hungary	124,841	2.7%	-4.7%	-2.9%
	Latvia	203,443	11.2%	1.5%	95.2%
	Lithuania	164,390	5.7%	-1.2%	154.7%
	Malta	34	0.3%	380.9%	139.8%
	Poland	657,902	4.3%	-1.8%	305.2%
	Romania	289,252	2.1%	-4.0%	211.8%
	Slovakia	180,307	9.5%	14.2%	99.9%
	Slovenia	41,237	8.9%	6.7%	75.5%
Total		**2,417,921**	**4.7%**	**1.1%**	**144.7%**

Country group	Country	Land area (hectares)	Total land share	Growth 2013-2014	Growth 2005-2014
CPC	Albania	515	0.1%		
	Bosnia and Herzegovina	353		20.9%	-15.2%
	Montenegro	3,289	0.6%	7.2%	
	Serbia	9,548	0.2%	16.0%	
	Turkey	491,977	2.0%	6.6%	428.3%
	FYROM	3,146	0.3%		1,082.8%
	Kosovo	114			
Total		**508,942**	**1.5%**	**6.8%**	**435.8%**
EFTA	Iceland	11,174	0.5%	15.1%	124.0%
	Liechtenstein	1,135	30.9%	-0.2%	9.1%
	Norway	49,827	4.6%	-3.6%	15.8%
	Switzerland	133,973	12.7%	4.6%	14.4%
Total		**196,108**	**4.4%**	**2.9%**	**18.0%**

1 The figure reported in this book was provided by the Greek Ministry of Agriculture and differs from the figure reported by EUROSTAT, which is 362,826 hectares.

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

ANNEX 4:

Organic farmland by land use type in Europe by country, 2014

Country group	Country	Land use type	Land area (hectares)	Organic land share (%)	Growth 2013-2014	Growth 2005-2014
	EU-28	Arable crops	4,113,352	40.1%	3%	64%
		Permanent crops	1,189,791	11.6%	2%	73%
		Permanent grassland	4,601,475	44.9%	1%	56%
		Other agricultural land	346,124	3.4%		
		Total	**10,250,742**		**1%**	**59%**
	Europe	Arable crops	5,055,335	43.5%	7%	80%
		Permanent crops	1,359,534	11.7%	4%	94%
		Permanent grassland	4,800,100	41.3%	1%	57%
		Other agricultural land	410,032	3.5%		
		Total	**11,625,001**		**2%**	**67%**
EU-15	**Austria**	Arable crops	188,803	35.9%		40%
		Permanent crops	6,995	1.3%	5%	88%
		Permanent grassland	325,541	61.9%		-2%
		Other agricultural land	4,182	0.8%		
		Total	**525,521**			**10%**
	Belgium	Arable crops	18,237	27.3%	74%	87%
		Permanent crops	574	0.9%	-4%	25%
		Permanent grassland	47,216	70.8%	-6%	269%
		Other agricultural land	677	1.0%		
		Total	**66,704**		**7%**	**190%**
	Denmark	Arable crops	137,206	82.8%	-4%	24%
		Permanent crops	547	0.3%	9%	-81%
		Permanent grassland	24,231	14.6%	-3%	29%
		Other agricultural land	3,789	2.3%		
		Total	**165,773**		**-2%**	**24%**
	Finland	Arable crops	171,014	80.4%	9%	233%
		Permanent crops	396	0.2%	7%	-37%
		Permanent grassland	2,815	1.3%		-95%
		Other agricultural land	38,428	18.1%		
		Total	**212,653**		**3%**	**44%**
	France	Arable crops	595,190	53.2%	11%	102%
		Permanent crops	95,417	8.5%	5%	252%
		Permanent grassland	410,615	36.7%	5%	80%
		Other agricultural land	17,623	1.6%		
		Total	**1,118,845**		**5%**	**103%**

	Country	Land use type	Land area (hectares)	Organic land share (%)	Growth 2013-2014	Growth 2005-2014
EU-15	**Germany**	Arable crops	440,000	42.0%	-1%	25%
		Permanent crops	17,000	1.6%	6%	56%
		Permanent grassland	565,000	53.9%	-3%	35%
		Other agricultural land	25,633	2.4%		
		Total	**1,047,633**			**30%**
	Greece	Arable crops	93,179	36.4%	4%	73%
		Permanent crops	53,833	21.0%	2%	12%
		Permanent grassland	102,109	39.9%	-51%	-45%
		Other agricultural land	7,010	2.7%		
		Total	**256,131**		**-33%**	**-11%**
	Ireland	Arable crops	3,760	7.2%	96%	235%
		Permanent crops	50	0.1%	37%	
		Permanent grassland	47,921	92.4%	-7%	48%
		Other agricultural land	139	0.3%		
		Total	**51,871**		**-3%**	**47%**
	Italy	Arable crops	574,368	41.4%	8%	-4%
		Permanent crops	336,981	24.3%	-3%	65%
		Permanent grassland	404,071	29.1%	6%	78%
		Other agricultural land	72,492	5.2%		
		Total	**1,387,913**		**5%**	**30%**
	Luxembourg	Arable crops	1,948	43.4%	-1%	48%
		Permanent crops	138	3.1%	2%	151%
		Permanent grassland	2,379	53.0%	3%	28%
		Other agricultural land	26	0.6%		
		Total	**4,490**		**1%**	**38%**
	Netherlands	Arable crops	20,140	41.0%	-1%	33%
		Permanent crops	503	1.0%	-14%	5%
		Permanent grassland	28,067	57.1%	-1%	2%
		Other agricultural land	449	0.9%		
		Total	**49,159**			**1%**
	Portugal	Arable crops	24,586	11.6%	2%	-43%
		Permanent crops	29,344	13.8%		17%
		Permanent grassland	150,937	71.1%	9%	6%
		Other agricultural land	7,479	3.5%		
		Total	**212,346**		**8%**	
	Spain	Arable crops	243,656	14.2%	-4%	98%
		Permanent crops	537,562	31.4%	10%	58%
		Permanent grassland	820,325	48.0%	19%	206%
		Other agricultural land	108,932	6.4%		
		Total	**1,710,475**		**6%**	**112%**

	Country	Land use type	Land area (hectares)	Organic land share (%)	Growth 2013-2014	Growth 2005-2014
EU-15	**Sweden**	Arable crops	377,431	75.2%		163%
		Permanent crops	470	0.1%	79%	74%
		Permanent grassland	111,109	22.1%		183%
		Other agricultural land	12,821	2.6%		
		Total	**501,831**			**125%**
	United Kingdom	Arable crops	149,728	28.7%	-11%	-12%
		Permanent crops	1,721	0.3%	-60%	2%
		Permanent grassland	369,977	70.9%	-4%	-14%
		Other agricultural land	49			
		Total	**521,475**		**-7%**	**-14%**
EU-13	**Bulgaria**	Arable crops	31,775	42.7%	51%	
		Permanent crops	9,442	12.7%	-44%	
		Permanent grassland	12,089	16.3%	-22%	
		Other agricultural land	21,044	28.3%		
		Total	**74,351**		**32%**	**2,957%**
	Croatia	Arable crops	26,982	53.9%	30%	1,119%
		Permanent crops	6,192	12.4%	16%	4,261%
		Permanent grassland	16,403	32.8%	15%	2,117%
		Other agricultural land	477	1.0%		
		Total	**50,054**		**23%**	**1,502%**
	Cyprus	Arable crops	1,487	38.3%	-14%	74%
		Permanent crops	1,695	43.6%	-17%	113%
		Permanent grassland	351	9.0%	2%	
		Other agricultural land	354	9.1%		
		Total	**3,887**		**-10%**	**129%**
	Czech Republic	Arable crops	53,276	11.3%	-4%	157%
		Permanent crops	6,569	1.4%	-14%	701%
		Permanent grassland	411,664	87.1%		96%
		Other agricultural land	1,154	0.2%		
		Total	**472,663**			**85%**
	Estonia	Arable crops	64,761	41.6%	-1%	46%
		Permanent crops	1,611	1.0%	-2%	72%
		Permanent grassland	86,210	55.4%	2%	595%
		Other agricultural land	2,978	1.9%		
		Total	**155,560**		**3%**	**160%**

	Country	Land use type	Land area (hectares)	Organic land share (%)	Growth 2013-2014	Growth 2005-2014
EU-13	**Hungary**	Arable crops	53,464	42.8%		4%
		Permanent crops	5,056	4.0%	-10%	95%
		Permanent grassland	63,635	51.0%	-8%	-5%
		Other agricultural land	2,686	2.2%		
		Total	**124,841**		**-5%**	**-3%**
	Latvia	Arable crops	99,648	49.0%	1%	10%
		Permanent crops	946	0.5%	12%	5%
		Permanent grassland	98,918	48.6%	10%	292%
		Other agricultural land	3,930	1.9%		
		Total	**203,443**		**2%**	**95%**
	Lithuania	Arable crops	108,740	66.1%	-1%	169%
		Permanent crops	6,301	3.8%	3%	74%
		Permanent grassland	47,319	28.8%		181%
		Other agricultural land	2,030	1.2%		
		Total	**164,390**		**-1%**	**155%**
	Malta	Arable crops	6	17.6%	264%	91%
		Permanent crops	23	67.6%	331%	109%
		Other agricultural land	5	14.7%		
		Total	**34**		**381%**	**140%**
	Poland	Arable crops	392,193	59.6%	-3%	386%
		Permanent crops	57,625	8.8%	-8%	460%
		Permanent grassland	207,038	31.5%	2%	209%
		Other agricultural land	1,046	0.2%		
		Total	**657,902**		**-2%**	**305%**
	Romania	Arable crops	175,078	60.5%	-1%	265%
		Permanent crops	9,431	3.3%		1,190%
		Permanent grassland	95,685	33.1%	-9%	126%
		Other agricultural land	9,059	3.1%		
		Total	**289,252**		**-4%**	**212%**
	Slovakia	Arable crops	61,965	34.4%	18%	180%
		Permanent crops	1,460	0.8%	29%	128%
		Permanent grassland	115,254	63.9%	12%	83%
		Other agricultural land	1,628	0.9%		
		Total	**180,307**		**14%**	**100%**
	Slovenia	Arable crops	4,730	11.5%	8%	518%
		Permanent crops	1,908	4.6%	9%	341%
		Permanent grassland	34,596	83.9%	6%	60%
		Other agricultural land	3			
		Total	**41,237**		**7%**	**75%**

	Country	Land use type	Land area (hectares)	Organic land share (%)	Growth 2013-2014	Growth 2005-2014
CPC	**Albania**	Arable crops	93	18.0%		
		Permanent crops	420	81.6%		
		Other agricultural land	2	0.4%		
		Total	**515**			
	Bosnia and Herzegovina	Arable crops	236	80.8%	11%	-37%
		Permanent crops	56	19.2%	31%	
		Total	**292**		**21%**	**-15%**
	Kosovo	Arable crops	114	100.0%		
		Total	**114**			
	Montenegro	Arable crops	212	6.4%	74%	
		Permanent crops	208	6.3%	166%	
		Permanent grassland	2,868	87.2%		
		Other agricultural land	1			
		Total	**3,289**		**7%**	
	Serbia	Arable crops	5,724	59.9%	43%	
		Permanent crops	2,061	21.6%	54%	
		Permanent grassland	1,549	16.2%	-46%	
		Other agricultural land	213	2.2%		
		Total	**9,548**		**16%**	
	FYROM	Arable crops	1,736	55.2%		879%
		Permanent crops	266	8.5%		271%
		Other agricultural land	1,144	36.4%		
		Total	**3,146**			**1,083%**
	Turkey	Arable crops	332,620	67.6%	5%	3,543%
		Permanent crops	153,518	31.2%	21%	2,344%
		Permanent grassland	15,544	3.2%	5%	
		Other agricultural land	11,132	2.3%		
		Total	**491,977**		**7%**	**428%**

	Country	Land use type	Land area (hectares)	Organic land share (%)	Growth 2013-2014	Growth 2005-2014
EFTA	**Iceland**	Arable crops	1,011	9.0%		
		Permanent grassland	8,370	74.9%		
		Other agricultural land	1,792	16.0%		
		Total	**11,174**		**15%**	**124%**
	Liechtenstein	Arable crops	225	19.8%	-16%	-25%
		Permanent crops	7	0.6%	61%	
		Permanent grassland	903	79.6%	4%	22%
		Total	**1,135**		**0%**	**9%**
	Norway	Arable crops	39,367	79.0%	-3%	-6%
		Permanent crops	242	0.5%	0%	90%
		Permanent grassland	9,459	19.0%	-5%	
		Other agricultural land	759	1.5%		
		Total	**49,827**		**-4%**	**16%**
	Switzerland	Arable crops	23,919	17.9%	2%	42%
		Permanent crops	1,575	1.2%	4%	63%
		Permanent grassland	105,489	78.7%	4%	8%
		Other agricultural land	2,990	2.2%		
		Total	**133,973**		**5%**	**14%**

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

ANNEX 5:

Top 5 organic crops in Europe by country, 2014

	Country	Crop group	Land area (hectares)	Growth 2013-2014	Growth 2005-2014
EU-15	**Austria**	Cereals	97,783	-2.9%	45.8%
		Plants harvested green[1]	52,698	-1.7%	22.4%
		Oilseeds	16,109	11.4%	138.3%
		Dried pulses and protein crops	12,313	19%	1.6%
		Grapes	4,677	6%	161.1%
	Belgium	Cereals	8,079	16.4%	238.7%
		Plants harvested green	8,053	21.6%	22.1%
		Vegetables	1,039	18%	179.2%
		Temperate fruits	473	-10.6%	
		Root crops	450		110.1%
	Denmark	Plants harvested green	77,403	-3.6%	24.2%
		Cereals	51,422	-7.6%	37.6%
		Dried pulses and protein crops	3,823	15.5%	-35.7%
		Vegetables	2,015	12.2%	77.1%
		Root crops	1,488	0%	37.7%
	Finland	Plants harvested green	101,187	23.8%	5,393.3%
		Cereals	49,515	10%	11.3%
		Dried pulses and protein crops	14,436	438.3%	10.4%
		Oilseeds	2,641	24.3%	1.1%
		Root crops	576	29.2%	30.9%
	France	Plants harvested green	309,766	7.8%	159.8%
		Cereals	140,506	4.6%	47.3%
		Grapes	66,211	2.5%	265.1%
		Dried pulses and protein crops	57,668	25.4%	404.1%
		Oilseeds	32,459	11.2%	69.2%
	Germany	Cereals	199,000	-1.5%	7.6%
		Plants harvested green	149,000	-2.6%	42.6%
		Dried pulses and protein crops	26,000	4%	46.1%
		Vegetables	10,392	-3.6%	19.4%
		Root crops	10,050	5.6%	37.7%

	Country	Crop group	Land area (hectares)	Growth 2013-2014	Growth 2005-2014
EU-15	**Greece**	Olives	47,059	4.7%	18.7%
		Cereals	45,101	5.7%	226.3%
		Plants harvested green	32,594	-9.3%	258.6%
		Dried pulses and protein crops	6,383	36.7%	5,153.6%
		Grapes	4,388	-7.0%	16.3%
	Ireland	Plants harvested green	1,972		
		Cereals	1,395		84.3%
		Vegetables	213	-14.0%	-42.0%
		Dried pulses and protein crops	86		
		Root crops	58		
	Italy	Plants harvested green	256,307	2.9%	-11.3%
		Cereals	203,685	6.4%	-21.3%
		Olives	170,067	-3.3%	59.0%
		Grapes	72,361	6.5%	113.6%
		Nuts	35,132	-9.8%	313.6%
	Luxembourg	Plants harvested green	925	0.2%	68.5%
		Cereals	811	1.8%	55.6%
		Dried pulses and protein crops	119	26.0%	77.1%
		Grapes	96	1.2%	1,497.5%
		Berries	42		
	Netherlands	Plants harvested green	8,539	6.5%	123.7%
		Vegetables	6,003	4.1%	150.2%
		Cereals	3,543	-13.8%	-33.2%
		Root crops	1,665	3.5%	-48.4%
		Temperate fruits	401	1.2%	-8.8%
	Portugal	Olives	19,024	-2.4%	-1.6%
		Plants harvested green	13,463	-7.5%	
		Cereals	8,135	16.0%	-80.7%
		Nuts	4,588	5.0%	40.3%
		Grapes	2,772	-0.4%	148.6%
	Spain	Olives	172,391	2.1%	88.4%
		Cereals	154,760	-2.7%	60.7%
		Nuts	94,646	-1.8%	128.8%
		Grapes	84,381	0.5%	427.7%
		Dried pulses and protein crops	41,216	19.1%	

	Country	Crop group	Land area (hectares)	Growth 2013-2014	Growth 2005-2014
EU-15	**Sweden**	Plants harvested green	264,985	-0.2%	
		Cereals	92,692	1.5%	75.6%
		Dried pulses and protein crops	10,155	3.4%	31.7%
		Oilseeds	3,865	6.5%	22.0%
		Vegetables	1,380	10.7%	159.0%
	United Kingdom	Plants harvested green	93,931	-5.3%	-4.1%
		Cereals	42,003	-4.6%	-11.9%
		Vegetables	5,885	-41.3%	-57.1%
		Dried pulses and protein crops	3,288	139.7%	
		Temperate fruits	1,454	-12.4%	
EU-13	**Bulgaria**	Cereals	12,060	57.3%	
		Medicinal and aromatic plants	5,577	-14.7%	
		Plants harvested green	5,215	81.0%	
		Oilseeds	4,294	62.1%	
		Nuts	3,677	-58.9%	
	Croatia	Plants harvested green	10,203	9.9%	
		Cereals	8,776	20.3%	
		Oilseeds	4,624	96.5%	
		Medicinal and aromatic plants	2,876	110.2%	
		Nuts	2,259	11.1%	
	Cyprus	Olives	1,104	-23.7%	91.7%
		Plants harvested green	948	3,484.1%	
		Cereals	422	-62.5%	38.1%
		Grapes	201	-10.6%	117.4%
		Temperate fruits	99	-0.8%	
	Czech Republic	Cereals	24,255	-6.3%	
		Plants harvested green	22,710	0.5%	
		Temperate fruits	4,845	-19.2%	527.7%
		Oilseeds	2,046	17.8%	
		Dried pulses and protein crops	1,893	-2.6%	

	Country	Crop group	Land area (hectares)	Growth 2013-2014	Growth 2005-2014
EU-13	**Estonia**	Plants harvested green	29,528	-3.4%	-19.5%
		Cereals	27,182	17.7%	297.4%
		Oilseeds	4,409		6,110.0%
		Dried pulses and protein crops	3,228	40.4%	1,334.6%
		Berries	1,211	6.8%	
	Hungary	Cereals	24,099	-10.4%	-5.3%
		Plants harvested green	13,983	2.8%	7.8%
		Oilseeds	9,227	15.8%	34.3%
		Dried pulses and protein crops	2,750	51.2%	115.4%
		Vegetables	1,854	-15.9%	103.2%
	Latvia	Plants harvested green	61,211	-10.2%	-4.0%
		Cereals	31,390	12.1%	65.3%
		Dried pulses and protein crops	3,744		537.9%
		Industrial crops	1,238	46.7%	4,662.8%
		Root crops	1,138	1.9%	-79.7%
	Lithuania	Cereals	68,406	-9.6%	119.5%
		Dried pulses and protein crops	27,819	22.1%	337.7%
		Medicinal and aromatic plants	6,360	10.4%	1,522.5%
		Berries	5,018	4.7%	93.8%
		Oilseeds	3,848	18.5%	164.8%
	Malta	Grapes	15	385%	1,360.0%
		Olives	7	211.4%	1.4%
		Vegetables	3	267.0%	67.0%
		Plants harvested green	1		
		Citrus fruit	1		13.0%
	Poland	Plants harvested green	235,801	-1.8%	789.4%
		Cereals	111,506	-9.5%	177.8%
		Temperate fruits	41,326	-9.3%	370.3%
		Vegetables	26,664	8.0%	526.7%
	Romania	Cereals	102,531	-6.0%	363.9%
		Oilseeds	51,528	1.4%	139.1%
		Plants harvested green	13,494	28.0%	310.1%
		Temperate fruits	6,035	-4.2%	1,911.7%

	Country	Crop group	Land area (hectares)	Growth 2013-2014	Growth 2005-2014
EU-13		Dried pulses and protein crops	2,314	-3.5%	2,214.4%
	Slovakia	Plants harvested green	35,081	11.5%	310.4%
		Cereals	14,868	-7.2%	45.6%
		Oilseeds	2,522	5.2%	48.3%
		Temperate fruits	907	22.4%	65.2%
		Dried pulses and protein crops	759	13.7%	-16.1%
	Slovenia	Plants harvested green	2,295	8.1%	
		Cereals	1,734	7.5%	236.6%
		Grapes	422	5.1%	529.6%
		Oilseeds	260	70.5%	1,630.7%
		Olives	226	8.6%	3,131.0%
CPC	**Albania**	Olives	198		
		Medicinal and aromatic plants	175		
		Fruit	123		
		Grapes	14		190.0%
		Vegetables	3		
	Bosnia and Herzegovina (2013)	Cereals	191		
		Berries	39		
		Vegetables	31		
		Fruit	9		
		Grapes	8		
	Kosovo	Medicinal and aromatic plants	114		
	Montenegro	Tropical and subtropical fruit	3		
		Grapes	3		
		Olives	2		
	Serbia	Cereals	2,828	24.4%	
		Temperate fruits	1,397	67.6%	
		Plants harvested green	1,205	102.6%	
		Oilseeds	1,200	80.0%	
		Berries	622	38.4%	
	FYROM (2013)	Cereals	1,550		882.0%
		Temperate fruits	154		1,225.5%
		Oilseeds	76		3,363.2%
		Vegetables	66		
		Nuts	60		98.9%

	Country	Crop group	Land area (hectares)	Growth 2013-2014	Growth 2005-2014
CPC	**Turkey**	Cereals	159,226		
		Plants harvested green	127,775	-1.4%	
		Olives	75,785	20.2%	
		Nuts	26,208	7.7%	
		Tropical and subtropical fruit	23,162	44.4%	
EFTA	**Iceland**	Plants harvested green	887		
	Liechtenstein	Cereals	77	-52.1%	54.0%
		Plants harvested green	70	-25.9%	-70.0%
		Vegetables	14	261.5%	182.0%
		Root crops	8	9.5%	62.0%
		Oilseeds	5		-8.0%
	Norway	Plants harvested green	31,182	-3.8%	-7.4%
		Cereals	7,026	-6.9%	-2.8%
		Vegetables	223	24.9%	110.8%
		Temperate fruits	185	4.9%	203.0%
		Dried pulses and protein crops	145	-12.7%	-51.1%
	Switzerland	Plants harvested green	12,610	0.5%	28.7%
		Cereals	7,193	1.6%	41.8%
		Vegetables	1,974	13.7%	63.8%
		Root crops	684	4.2%	34.9%
		Grapes	638	15.0%	123.9%

[1] Refers to leguminous plants and temporary grasses for green fodder in the rotation

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources

ENDNOTES

1 Matthias Stolze, Research Institute of Organic Agriculture, FiBL, Frick, Switzerland

2 Raffaele Zanoli, Polytechnic University of Marche, Ancona, Italy

3 Stephen Meredith, IFOAM EU, Brussels, Belgium

4 For further information see Chapter 2 of this publication Willer, H., Schaack, D., Lernoud, J, Meredith, S., (2016): Growth trends in European Organic Food and Farming Organic Farming and Market Development in Europe

5 Barabanova, Y., Zanoli, R., Schlüter, M., Stopes, C., (2015): Transforming Food and Farming: An Organic Vision for Europe in 2030. IFOAM EU, Brussels. This initiative complements that the IFOAM – Organics International Organic 3.0 seeks to position organic as a modern, innovative system for addressing key global challenges. For more information see discussion paper Arbenz, M., Gould, D., Stopes, C., (2015): Organic 3.0: For truly sustainable farming & consumption. IFOAM - Organics International, Bonn. Available at: www.ifoam.bio/sites/default/files/organic_3.0_discussion_paper.pdf

6 European Commission, (2014): The Economic Impact of Modern Retail on Choice and Innovation in the EU Food Sector: Final Report. Publications Office of the European Union, Luxembourg

7 Eurostat, (2015): Final consumption expenditure of households by consumption purpose (COICOP 3 digit) [nama_10_co3_p3]. Eurostat, Luxembourg

8 Olivas, R., Bernabeu, R., (2012): Men's and women's attitudes toward organic food consumption. A Spanish case study. Spanish Journal of Agricultural Research 10(2), 281-291; Sullivan Higdon & Sink, (2013): A Fresh look at Organic and Local. Sullivan Higdon & Sink FoodThink, Wichita, KS. Available at: shsfoodthink.com/; Aggarwal P., (2014): Supply Chain Management of Locally-Grown Organic Food: A Leap Toward Sustainable Development Cognizant 20-20 Insights. Teanek, NJ. Available at: www.cognizant.com/InsightsWhitepapers/Supply-Chain-Management-of-Locally-Grown-Organic-Food-A-Leap-Toward-Sustainable-Development-codex928.pdf

9 Zanoli, R. (ed.) (2004): The European consumer and organic food. Organic marketing initiatives and rural development (Vol. 4). University of Wales Aberystwyth, School of Management and Business; Poulston, J., Yiu A.Y.K., (2011): Profit or principles. Why do restaurants serve organic food? International Journal of Hospitality Management 30(1), 184-191; The European Food Information Council (EUFIC), (2013): Organic food and farming: scientific facts and consumer perceptions, Brussels, BE: EUFIC REVIEW 10/2013; Napolitano, F., Braghieri, A., Piasentier, E., Favotto, S., Naspetti, S., & Zanoli, R. (2010a): Cheese liking and consumer willingness to pay as affected by information about organic production. The Journal of Dairy Research, 77(3), 280-286; Napolitano, F., Braghieri, A., Piasentier, E., Favotto, S., Naspetti, S., & Zanoli, R. (2010b): Effect of information about organic production on beef liking and consumer willingness to pay. Food Quality And Preference, 21(2), 207–212

10 DG Agriculture and Rural Development (2016): Public expenditure for organic farming support (Measure 11) under EAFRD 2014-2020, European Commission, Brussels

11 Sanders, J., Stolze, M., Padel, S., (2011): Use and efficiency of public support measures addressing organic farming. Johann Heinrich von Thünen Institut, Braunschweig

12 Schmid, O., Padel, S., Lampkin, N., Meredith, S. (2015): Organic Action Plans: A Guide for Stakeholders. IFOAM EU. Brussels

13 Naspetti, S., Lampkin, N., Nicolas, P., Stolze, M., & Zanoli, R. (2011): Organic Supply Chain Collaboration: A Case Study in Eight EU Countries. Journal of Food Products Marketing 14(2), 141-162

14 Feldmann, C., Gerrard, C., Hamm, U., Home, R., Lošťák, M., Padel, S., Schaack, D., Stolze, M., Vairo, D., Vieweger, A., Willer, H., Zanoli, R., 2014. Data Network for better European Organic Market Information - Synthesis Report. Ancona

15 Helga Willer, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org

16 Diana Schaack, Agrarmarkt Informations-Gesellschaft mbH, Bonn, Germany, www.ami-informiert.de

17 Julia Lernoud, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org

18 Stephen Meredith, IFOAM EU, Brussels, Belgium, www.ifoam-eu.org

19 Area, land use, crop and operator data: Albania: Mediterranean Organic Agriculture Network (MOAN); Albanian Ministry of Agriculture, Rural Development and Water Administration; Austria: Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management; Belgium: Eurostat; Bosnia and Herzegovina: Organska Kontrola; Bulgaria: Eurostat, Bulgarian Ministry of Agriculture and Food; Croatia: Eurostat; Cyprus: Eurostat; Czech Republic: Eurostat; Denmark: Eurostat; Estonia: Eurostat; Finland: Eurostat, Finnish Food Safety Authority (Evira); Former Yugoslav Republic Macedonia: Mediterranean Organic Agriculture Network (MOAN); France: Eurostat; Germany: Agricultural Market Information Company (AMI); Greece: Eurostat, Greek Ministry of Agricultural Development and Food; Hungary: Eurostat; Iceland: Vottunarstofan Tún EHF; Ireland: Eurostat; Italy: Eurostat, National Information System on Organic Farming (SINAB); Kosovo: Initiative for Agricultural Development of Kosovo (IADK); Latvia: Eurostat; Liechtenstein: Klaus Büchel Anstalt; Lithuania: Eurostat; Luxembourg: Eurostat; Malta: Eurostat; Montenegro: Montenegrin Ministry of Agriculture and Rural Development, Mediterranean Organic Agriculture Network (MOAN); Netherlands: Eurostat; Norway: Eurostat; Poland: Eurostat; Portugal: Eurostat; Romania: Eurostat; Serbia: Eurostat; Slovakia: Eurostat; Slovenia: Eurostat; Spain: Eurostat; Sweden: Eurostat; Switzerland: Bundesamt für Statistik; Turkey: Turkish Ministry of Food Agriculture and Livestock; United Kingdom: Eurostat

20 Austria: Organic Retailers Association, Agrarmarkt Austria Marketing; Belgium: Departement Landbouw en Visserij (LV); Bosnia and Herzegovina: Organska Kontrola; Bulgaria: BIOSELENA - Foundation of organic agriculture; Croatia: Darko Znaor; Cyprus: Sustainable developpement for agriculture and food sectors (Ecozept); Czech Republic: Institute of Agricultural Economics and Information (UZEI); Denmark: Statistics Denmark, The Danish Agriculture & Food Council (LF); Estonia: no data available; Finland: Finnish Organic Food Association (Pro Luomu); Former Yugoslav Republic Macedonia: no data available; France: Agence BIO; Germany: Agricultural Market Information Company (AMI); Greece: Nicolette van der Smissen; Hungary: Biokorsar Survey; Iceland: no data available; Ireland: Irish Food Board (Bord Bia); Italy: Italian Institute for Studies, Research and Information on the Agricultural Market (ISMEA), Nomisma; Kosovo: no data available; Latvia: International Centre for Organic Agriculture of Central and Eastern Europe (EkoConnect); Liechtenstein: Klaus Büchel Anstalt; Lithuania: International Centre for Organic Agriculture of Central and Eastern Europe (EkoConnect); Luxembourg: BIOGROS; Malta: no data available; Montenegro: Sustainable developpement for agriculture and food sectors (Ecozept); Netherlands: Bionext; Norway: Norwegian Agricultural Authority (SLF); Poland: Bioekspert; Portugal: Interbio; Romania: BCG-Global Advisors and Bio Romania; Serbia: no data available; Slovakia: Sustainable developpement for agriculture and food sectors (Ecozept); Slovenia: Institute for Sustainable Development (ISD); Spain: Spanish Ministry of Agriculture, Food and Environment; Sweden: Statistics Sweden (SCB); Switzerland: Bio Suisse; Turkey: Turkish Ministry of Food Agriculture and Livestock; United Kingdom: Soil Association

21 The latest key organic production and market trends in Europe can be explored through the IFOAM EU website. Available at: www.ifoam-eu.org/en/organic-europe. More detail organic production and market data sets are available through the OrganicDataNetwork at: www.organicdatanetwork.net/odn-statistics.html. For further information see Willer, H., Schaack, D., (2016): Organic Farming and Market Development in Europe. In: Willer, H., Lernoud, J., (eds.) (2016): The World of Organic Agriculture. Statistics and Emerging Trends 2016. Research Institute of Organic Agriculture (FiBL), Frick, and IFOAM – Organics International, Bonn. Available at: www.organic-world.net/yearbook/yearbook-2016.html; Willer, H., Schaack, D., (2015): Organic Farming and Market Development in Europe. In: Willer, H., Lernoud, J., (eds.) (2015): The World of Organic Agriculture. Statistics and Emerging Trends 2015. Research Institute of Organic Agriculture (FiBL), Frick, and IFOAM – Organics International, Bonn. Available at: www.organic-world.net/yearbook/yearbook2015.html; Biofach (2015): Healthy development in the global organic market. Press release of September 2015. Biofach www.biofach.de NürnbergMesse, Nürnberg. Available at: bit.ly/1TeVM1c; Eurostat (2015): Data tables organic agriculture. Eurostat, Luxembourg. Available at ec.europa.eu/eurostat/web/agriculture/data/database; DG Agriculture and Rural Development (2013): Facts and figures on organic agriculture in the EU-28. European Commission, Brussels. Available at: ec.europa.eu/agriculture/markets-and-prices/more-reports/pdf/organic-2013_en.pdf; DG Agriculture and Rural Development (2010): An Analysis of the EU Organic Sector. European Commission, Brussels. Available at: ec.europa.eu/agriculture/analysis/markets/organic_2010_en.pdf

22 The EU-28 is subdivded into the EU-15 and EU-13. EU-15 refers to countries who have been EU Member States before 2004 - Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and the United Kingdom. EU-13 refers to countries who became EU Member States in or after 2004 - Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, and Slovenia

23 CPC refers to EU Candidate and Potential Candidate countries - Montenegro, Serbia, the Former Yugoslav Republic of Macedonia (FYROM) and Turkey and, Potential candidates - Albania, Bosnia and Herzegovina, Kosovo

24 EFTA refers to members of the European Free Trade Association. It includes Iceland, Liechtenstein, Norway and Switzerland

25 Unfortunately, not all countries provide data on their domestic markets on a regular basis, and for many countries new data is missing

26 See Ceije, J., (2016): Organic Boom in Sweden in 2014 and 2015. In: Willer, H, and Lernoud, J., (eds.) (2016): The World of Organic Agriculture. Statistics and Emerging Trends 2016. Research Institute of Organic Agriculture (FiBL), Frick, and IFOAM – Organics International, Bonn. Available at www.organic-world.net/yearbook/yearbook-2016.html

27 See Vedura (2015): Le marché du bio en France continue de progresser. Vedura, September 29, 2015. Available at: www.vedura.fr/actualite/8733-marche-bio-france-continue-progresser

28 For further information see the OrganicDataNetwork market database available at: www.organicdatanetwork.net/odn-statistics.html

29 Shares of total market by organic product group are based on sales value

30 Willer, H., Schaack, D., (2014): D4.3 Final report on compilation of key organic market data. Research Institute of Organic Agriculture (FiBL), Frick, Switzerland. Available at: orgprints.org/27939/

31 Grain mill products include: rice, semi- or wholly milled, or husked or broken; cereal and vegetable flour; mixes thereof; groats, meal and pellets and other cereal grain products; bran, sharps and other residues from the working of cereals. This product group is separate from bakery and farinaceous products, which includes bread as well as macaroni, noodles, couscous and similar farinaceous products. However, not all countries distinguish between these two groups and may cluster them into one group

32 French and German figures for beverages include alcoholic drinks

33 Schaack, D., Rampold, C., Pusch, E., and Willer, H., (2014): Markt Charts - Importangebot von Bio-Produkten in Deutschland . [Market charts – Imports of organic products in Germany.] Agrarmarkt Informations-Gesellschaft mbH, Bonn, Germany. Available at: www.ami-informiert.de/ami-shop/ami-shop-startseite/produkte/markt-charts/markt-charts-chartsammlungen.html

34 See StatBank Denmark, Statistics Denmark, Copenhagen. Available at: www.statbank.dk

35 OrganicDataNetwork (2014): International trade = Chapter C2.7 of the OrMaCode: Organic Market data Manual and CODE of Practice. OrganicDataNetwork c/o Research Institute of Organic Agriculture, Frick. Available at www.ormacode.organicdatanetwork.net/ormacode/part-c-how-to-establish-and-implement-an-organic-market-data-collection-system-manual/c2-guidelines-on-the-collection-of-different-data-categories/c26-domestic-market.html?L=0

36 See Willer. H., Lernoud, J., (eds.) (2016): The World of Organic Agriculture. Statistics and Emerging Trends. Research Institute of Organic Agriculture FiBL, Frick, and IFOAM – Organics International, Bonn. Available at: www.organic-world.net/yearbook/yearbook-2016.html

37 Further information about different certification systems and their impact on the internal market for organic goods including recommendations for improving the organic food certification systems in terms of efficiency, transparency and cost effectiveness was conducted under CERTCOST a European research project supported by the European Commission between 2008-2011. See Dabbert, S., et al. (2012): Economic Analysis of Certification Systems in Organic Food and Farming – Synthesis Report of Results. University of Hohenheim, Hohenheim. More information available at: www.certcost.org/

38 Organic farmland refers to agricultural land that is either fully converted or in conversion

39 Total includes other agricultural land and land for which no further details were available hereby referred to as "Other agricultural land"

40 Shares of all livestock elaborated by FiBL based on FAO data (FAOSTAT 2014). FAOSTAT only provides totals for bovine animals, sheep, pigs and poultry without further specifications. For both Eurostat data and national data, no clear distinction is made for pigs and poultry between the number of animals slaughtered and the places or average numbers of stock over the year, and it is not always clear which of these is given when "livestock numbers" are quoted. Adding up the data for pigs and poultry over all countries, therefore, is not necessarily completely reliable. The data that are presented here should, therefore, be treated as an approximation of the overall picture. Cattle includes bovine animals such as buffalo

41 In the case of milk, some of the growth must be attributed to improved data availability

42 Früh, B., Schlatter, B., Isensee, A., Maurer, V., Willer, H., (2015): Report on organic protein availability and demand in Europe = Deliverable 1.2 of the CORE Organic project (ICOPP). Research Institute of Organic Agriculture (FiBL), Frick, Switzerland

43 The project "Improved contribution of local feed to support 100% organic feed supply to pigs and poultry (ICOPP)" was a European research project on different local feeds and their wider impact on growth, health and welfare and the environment to identify feeding strategies which comply with organic principles supported through CORE Organic 2 between 2011 and 2014. More information available at: www.organicresearchcentre.com/icopp/. Note that the extrapolation for Europe is only a rough estimation due to a lack of reliable data. For other crops, even less data is available to make reliable estimates

44 The project "Data network for better European organic market information" (OrganicDataNetwork) has received funding from the European Union's 7th Framework Programme under grant agreement no 289376. More information available at: www.organicdatanetwork.net/

45 Raymond Aendekerk, Institut fir biologesch Landwirtschaft an Agrarkultur asbl IBLA Luxemburg, Munsbach. Luxembourg; Stoilko Apostolov, Bioselena: Foundation for organic agriculture, Karlovo, Bulgaria; Andreas Basler, FiBL, Switzerland; Marian Blom, Bionext, AR Zeist, The Netherlands; Lorcan Bourke, Bord Bia - Irish Food Board, Dublin 2, Ireland; Marie Reine Bteich, Centro Internazionale di Alti Studi Agronomici Mediterranei - Istituto Agronomico Mediterraneo di Bari - CIHEAM-IAM Bari, Bari, Italy; Klaus Büchel, Klaus Büchel Anstalt, Mauren, Liechtenstein; Johan Cejie, KRAV Incorporated Association, Uppsala, Sweden; Catarina Crisostomo, Portugal; Dóra Drexler, Hungarian Research Institute of Organic Agriculture (ÖMKi), Budapest, Hungary; Victor Gonzálvez Pérez, Sociedad Española de Agricultura Ecologica (SEAE) / Spanish Society for Organic Agriculture, Catarroja, Spain; Rannveig Guðleifsdóttir, Vottunarstofan Tún ehf., Reykjavik, Iceland; Gunnar Gunnarsson, Vottunarstofan Tún ehf., Reykjavik, Iceland; Sampsa Heinonen, Evira, Helsinki, Finland; Otto Hofer, Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft, Wien, Austria; Andrea Hrabalová, Institute of Agricultural Economics and Information (UZEI), Brno, Czech Republic; Basri Hyseni, Initiative for agricultural development of Kosovo (IADK), Mitrovica, Republic of Kosovo; Andrey Khodus, Eco-control Ltd., Solnechnogorsk, Russian Federation; Bernisa Klepo, Organska Kontrola (OK), Sarajevo, Bosnia & Herzegovina; Barbara Köcher-Schulz, AMA-Marketing GesmbH AMA, Wien, Austria; Marja-Riitta Kottila, Pro Luomu, Kauniainen, Finland; Ralph Liebing, ORA ~ Organic Retailers Association, Wien, Austria; Martin Lundø, Food Industries, Statistics Denmark, Copenhagen, Denmark; Alexander Lysenkov, ABCert GmbH, Esslingen, Germany; Merit Mikk, Centre of Ecological Engineering - Ökoloogiliste Tehnoloogiate Keskus, Tartu, Estonia; Eugene Milovanov, Organic Federation of Ukraine, Kyiv, Ukraine; Pham Minh Duc, Vietnam; Julie Kilde Mjelva, Norwegian Agricultural Authority SLF, Oslo, Norway; Susanne Padel, Organic Research Centre, Hamstead Marshall, Newbury, UK; Ejvind Pedersen, Landbrug & Fødevarer, Copenhagen, Denmark; Andrijana Rakočević, Ministry of Agriculture and Rural Development, Podgorica, Crna Gora, Montenegro; Pia Reindl, AMA-Marketing GesmbH AMA, Wien, Austria; Nathalie Rison Alabert, Agence BIO, Montreuil-sous-Bois, France; Marta Romeo, Sistema d'Informazione nazionale sull'agricoltura biologica SINAB, Roma, Italy; Vincent Samborski, Landbouw en Visserij, Brussels, Belgium; Aender Schanck, BIOGROS Logistique, Munsbach; Hana Šejnohová, Institute of Agricultural Economics and Information, Brno, Czech Republic; Anamarija Slabe, Institut za trajnostni razvoj, Ljubljana, Slovenia; Nicolette van der Smissen, Consultant for Organic Production, Feres, Greece; Erdal Süngü, Ministry of Food Agriculture and Animal Husbandry, Ankara, Turkey; Bavo van den Idsert, Bionext, AR Zeist, The Netherlands; Paul Verbeke, BioForum Vlaanderen vzw, Ant-werpen, Belgium; Fabienne Wengler, Beaufort, Luxembourg; Raffaele Zanoli, Università Politecnica delle Marche, Ancona; Darko Znaor, Independent Consultant, Zagreb, Croatia

GREEN ORGANICS

Your Partner In Organic Potatoes, Vegetables and Fruits

Imports & exports of fresh and industrial organic potatoes, vegetables and fruits. Custom designed and reliable services for supplying and marketing your organic products.

Green Organics

Green Organics BV | De Kromme Rijn 1 | 8253 RG Dronten
T +31 321 38 53 40 | F +31 321 38 53 41 | info@greenorganics.nl | www.greenorganics.nl

ORGANIC IN EUROPE

EXPLORE THE INTERACTIVE MAP

PRODUCTION & RETAIL DATA BY COUNTRY

ifoam-eu.org/en/organic-europe

Produced by

IFOAM EU GROUP MAKING EUROPE MORE ORGANIC

FiBL

UNIVERSITÀ POLITECNICA DELLE MARCHE

Supported by

wessanen

Green Organics

Co-financed by

Action co-financed by the European Commission, Directorate General for Agriculture and Rural Development

Action co-financed by the European Commission, Directorate General for Agriculture and Rural Development.

ISBN: 978-3-03736-313-3