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THE WORLD OF ORGANIC AGRICULTURE STATISTICS & EMERGING TRENDS 2016



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Discussion paper by Markus Arbenz, David Gould and Christopher Stopes, based on think tanking by SOAAN & IFOAM - Organics International and launched at the ISOFAR International Organic EXPO 2015, Goesan County

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The World of Organic Agriculture

Statistics and Emerging Trends 2016

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Glossary

- €/person: Per capita consumption in euros
- AMI: Agrarmarkt-Informationsgesellschaft - Agricultural Market Information Company, Germany
- AROS: Asia Regional Organic Standard
- ASEAN: Association of Southeast Asian Nations
- ASOA: ASEAN Standard for Organic Agriculture
- CAP: Common Agricultural Policy of the European Union
- CIHEAM: Centre international de hautes études agronomiques méditerranéennes
- CNCA: China National Certification and Accreditation Administration
- COROS: Common Objectives and Requirements of Organic Standards (COROS) are the Standards Requirements of IFOAM – Organics International
- COTA: Canada Organic Trade Association, Canada
- CPC: Candidates and Potential Candidates for the European Union
- CTAB: Technical Center of Organic Agriculture, Tunisia
- DGAB: Direction Générale de l'Agriculture Biologique, Tunisia
- EACCE: Etablissement Autonome de Contrôle et Coordination et des Exportations
- EFTA: European Free Trade Association
- EIP-AGRI: European Innovation Partnership for Agricultural Productivity and Sustainability
- EOA: Ecological Organic Agriculture; Ecological Organic Agriculture Initiative for Africa
- EU: European Union
- EU-13: The countries that became a member of the European Union in or after May 1, 2004
- EU-15: Member countries in the European Union prior to the accession of ten candidate countries on 1 May 2004
- EU-28: Member countries of the European Union
- EU-Med: European Mediterranean Countries
- Eurostat: Statistical office of the European Union, Luxembourg
- FAO: Food and Agriculture Organisation of the United Nations
- FAOSTAT: Statistics Division of FAO, the Food and Agriculture Organisation of the United Nations
- FiBL: Forschungsinstitut für biologischen Landbau – Research Institute of Organic Agriculture, Switzerland
- GATS: USDA's Global Agriculture Trade System, United States of America
- GOTS: Global Organic Textile Standard
- Ha: Hectares
- Hivos: Dutch Humanist Institute for Cooperation
- Horizon 2020: Research and Innovation programme of the European Union, running from 2014 to 2020
- HS codes: Harmonized System Codes
- IAMB: L'Istituto Agronomico Mediterraneo di Bari – Mediterranean Agronomic Institute Bari, Italy
- IFAD: International Fund for Agricultural Development
- IFOAM EU Group: European Union Group of IFOAM – Organics International
- IISD: International Institute of Sustainable Development, Canada
- ISOFAR: International Society of Organic Agriculture Research, Germany
- ITC: International Trade Centre, Switzerland
- MAEP: Ministry of Agriculture and Environmental Protection, Serbia
- Mio.: Million
- MOAN: Mediterranean Organic Agriculture Network, Italy
- NASAA: National Association for Sustainable Agriculture, Australia
- NASS: USDA's National Agricultural Statistics Services, United States of America
- OCS: Organic Content Standard
- OrganicDataNetwork: Data network for better European organic market information
- OrMaCode: ORganic market data MAnnual and CODE of Practice - Manual and Code of Practice for the initiation and maintenance of good organic market data collection and publication procedures
- OTA: Organic Trade Association, United States of America
- OWC: Organic World Congress of IFOAM – Organics International
- PGS: Participatory Guarantee Systems
- POETcom: Pacific Organic and Ethical Trade Community
- SECO: State Secretariat for Economic Affairs, Switzerland
- SEM: Southern and Eastern Mediterranean Countries
- SÖL: Stiftung Ökologie & Landbau – Foundation Ecology & Agriculture, Germany
- SPC: Secretariat of the Pacific Community
- SSI: State of Sustainability Initiatives, Canada
- SOAAN: Sustainable Organic Agriculture Action Network
- TIPi: Technology Innovation Platform of IFOAM – Organics International
- TP Organics: European Technology Platform for Organic Food and Farming
- USDA: United States Department of Agriculture
- VCO: Virgin Coconut Oil
- VSS: Voluntary Sustainability Standards

Foreword from SECO and ITC

This book provides a clear statement on the resilience of the organic trend. On the consumer side, organic products with a total value of 80 billion US dollars were sold globally in 2014. High growth rates were recorded in the advanced markets for organic products. The market in the United States, the biggest organic market, grew by more than 11 percent in 2014. In Switzerland, where the market has been evolving over several years with high growth rates, it grew by 7.5 percent. The production side is also keeping pace: The latest data show that organic farmland has grown in many countries and the total organic area increased to 43.7 million hectares. In particular, for some tropical crops such as coffee, area growth rates of almost 10 percent were reached in 2014. “New” countries have joined the community of organic producers, so there are now 172.

One challenge is the global organic production compared to the overwhelming majority of “conventional” production. For coffee, the organic area represented almost 8 percent, and for cocoa, 2.5 percent of the total world area for these crops.

On the other hand, the importance of other sustainability standards is increasing. However, data on the performance of these Voluntary Sustainability Standards (VSS) are still scarce and, therefore, collecting timely and accurate market data to facilitate policy and investment decisions is important for policymakers, market actors, and donors. The Research Institute of Organic Agriculture (FiBL), IISD’s¹ State of Sustainability Initiatives (SSI), and the International Trade Centre (ITC) have partnered with the support of SECO in joint data collection efforts to ensure continuous, accurate, and relevant reporting. This partnership has developed a list of indicators and has collected data on nine selected commodities from 14 VSS. The data was published at the end of 2015.²

It is essential for the organic community to gather relevant information on market trends in order to continue attracting the various stakeholders. Transparent information enables credibility and informed decisions on the costs and benefits of organic production for both the producer and the buyer. This book makes a major contribution to such transparency.

Considering the latest figures and the continuous and sustainable growth over many years, the organic movement can look confidently into the future.

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¹ IISD is the International Institute of Sustainable Development, www.iisd.org

² The report “The State of Sustainable Markets. Statistics and Emerging Trends 2015” is available for download on the ITC website at <http://www.intracem.org/publication/The-State-of-Sustainable-Markets>. A summary is available on page 122.

Foreword from FiBL and IFOAM – Organics International

Data collection is a major and constant concern of the Research Institute of Organic Agriculture (FiBL) and IFOAM – Organics International. The comprehensive data provided in this publication serve as an important tool for stakeholders, policymakers, authorities, and the industry, as well as for researchers and extension professionals. The information provided here has proven useful in development programs and supporting strategies for organic agriculture and markets, and crucial for monitoring the impact of these activities. The data collection on organic farming world-wide has become one of the most frequently quoted literature in scientific, technical and descriptive papers and reports on organic agriculture.

With this edition, FiBL and IFOAM – Organics International are presenting “The World of Organic Agriculture” for the 17th time. The data and information compiled in this volume document the current statistics, recent developments, and trends in global organic farming. The statistical information and all chapters have been updated. As in previous editions, regional reports were also compiled.

We would like to express our thanks to all authors and data providers for contributing in-depth information and figures on their region, their country or their field of expertise.

We are grateful to Swiss State Secretariat for Economic Affairs (SECO) and the International Trade Centre (ITC) for their support.

Furthermore, we are happy to count on the continuous support of NürnbergMesse, the organizers of the BIOFACH, the World's leading trade fair for organic food.

Frick and Bonn, February 2016

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Foreword from the Editors

In the 17th edition of the World of Organic Agriculture, we are presenting, like in the past, the latest available data on organic agriculture worldwide – data on area, operators, and retail sales. This data is provided by a large number of data suppliers from all over the world, to whom we are very grateful.

Knowledgeable authors have contributed articles on their region, their country, or their field of expertise. Like in the past, we have the global market report from Organic Monitor; regional reports on Africa, Asia, Europe, Latin America and the Caribbean, and the Pacific Region; as well as country reports on Australia, Brazil, Canada, and the United States.

New additions include an article on organic cotton from the Textile Exchange and a chapter on key commodities certified by Voluntary Sustainability Standards (VSS). The VSS data was collected by FiBL in collaboration with the International Institute of Sustainable Development (IISD) and the International Trade Centre (ITC), under a project funded by the Swiss State Secretariat for Economic Affairs (SECO). We have allocated these commodity-related articles to a new section in this book, called “Commodity Case Studies.”

Another new addition is the “Better Data” section, in which we highlight, in two case studies—one from Thailand and one from Australia—examples of how organic market data are collected and associated challenges.

Our section “Standards & Regulations” has been expanded for this edition of “The World of Organic Agriculture” to cover the theme of policy support. IFOAM–Organics International is currently carrying out a global survey on policy support for organic agriculture, and some first-hand insights are given.

We maintain our Organic-World.net website, where key data are available as interactive data tables and maps. The news section of the website offers information about major developments in the field of organic agriculture, and via our Twitter account at www.twitter.com/FiBLStatistics, we keep our readers informed about latest data on organic agriculture.

Helga Willer and Julia Lernoud

Research Institute of Organic Agriculture FiBL
Frick, Switzerland

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Organic Agriculture 2016: Key Indicators and Top Countries

Indicator	World	Top countries
Countries with organic activities¹	2014: 172 countries	New countries: Kiribati, Puerto Rico, Suriname, United States Virgin Islands
Organic agricultural land	2014: 43.7 million hectares (1999: 11 million hectares)	Australia (17.2 million hectares; 2013) Argentina (3.1 million hectares) US (2.2 million hectares, 2011)
Organic share of total agricultural land	2014: 0.99 % ²	Falkland Islands (Malvinas) (36.3 %) Liechtenstein (30.9 %) Austria (19.4 %)
Wild collection and further, non-agricultural areas	2014: 37.6 million hectares (1999: 4.1 million hectares)	Finland (9.1 million hectares) Zambia (6.8 million hectares) India (4 million hectares)
Producers	2014: 2.3 million producers (1999: 200'000 producers)	India (650'000; 2013) Uganda (190'552) Mexico (169'703; 2013)
Organic market size	2014: 80 billion US dollars (1999: 15.2 billion US dollars)	US (35.9 billion USD; 27.1 billion euros) Germany (10.5 billion USD; 7.9 billion euros) France (6.8 billion USD; 4.8 billion euros)
Per capita consumption	2014: 11 US dollars (14 euros) ³	Switzerland (221 euros) Luxemburg (164 euros) Denmark (162 euros)
Number of countries with organic regulations	2015: 87 countries	
Number of IFOAM affiliates	2015: 784 affiliates from 117 countries	Germany - 91 affiliates China - 57 affiliates India - 44 affiliates USA - 40 affiliates

Source: FiBL survey 2016, based on national data sources and data from certifiers
Global market: Organic Monitor 2016

¹ Where the designation "country" appears in this book, it covers countries or areas see UNSTAT website <http://unstats.un.org/unsd/methods/m49/m49regin.htm>.

² Share of the countries included in the FiBL survey 2016.

³ Total world population 7.26 billion in 2014 according to FAOSTAT, FAO, Rome; <http://faostat3.fao.org/download/O/OA/E>.

The World of Organic Agriculture 2016: Summary

Helga Willer¹ and Julia Lernoud²

Key data on organic agriculture

According to the latest FiBL survey on certified organic agriculture worldwide, as of the end of 2014, data on organic agriculture was available from 172 countries (up from 170 in 2013).

There were 43.7 million hectares of organic agricultural land in 2014, including in-conversion areas. The regions with the largest areas of organic agricultural land are Oceania (17.3 million hectares, 40 percent of the world's organic agricultural land) and Europe (11.6 million hectares, 27 percent). Latin America has 6.8 million hectares (15 percent) followed by Asia (3.6 million hectares, 8 percent), North America (3.1 million hectares, 7 percent) and Africa (1.3 million hectares, 3 percent). The countries with the most organic agricultural land are Australia (17.2 million hectares), Argentina (3.1 million hectares), and the United States (2.2 million hectares). For the detailed results of the survey, see page 34.

Currently, one percent of the agricultural land in the countries covered by the survey is organic. By region, the highest organic shares of the total agricultural land are in Oceania (4.1 percent) and in Europe (2.4 percent). In the European Union, 5.7 percent of the farmland is organic. However, some countries reach far higher shares: Falkland Islands (36.3 percent), Liechtenstein (30.9 percent), Austria (19.4) percent. In eleven countries, more than ten percent of the agricultural land is organic.

For 2014, almost 500'000 more hectares of organic agricultural land were reported than for 2013. There has been an increase in organic agricultural land in all regions, with the exception of Latin America; in Europe, the area grew by almost 0.3 million hectares (+2 percent). In Africa, the area grew by almost 5.5 percent (over 54'000 hectares); in Asia, the area grew by more than 158'000 hectares (+4.7 percent) and in North America by more than 1 percent.³ Only in Latin America did the organic land decrease, mainly due to a decrease in organic grazing areas in Argentina. A major relative increase of organic agricultural land was noted for Nigeria, Myanmar, Tonga, and Malta. In absolute terms, the highest increases were noted for Uruguay (almost 0.4 million hectares), India (+0.2 million hectares) and the Russian Federation (+0.1 million hectares).

Apart from agricultural land, there are further organic areas, most of these being areas for wild collection. Other areas include aquaculture, forests, and grazing areas on non-agricultural land. The areas of non-agricultural land constitute more than 37.6 million hectares. In total, 81.2 million hectares (agricultural and non-agricultural areas) are organic.

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³ No updated data has been received from the US; the latest US data is from 2011.

There were almost 2.3 million producers in 2014.¹ Forty percent of the world's organic producers are in Asia, followed by Africa (26 percent) and Latin America (17 percent). The countries with the most producers are India (650'000), Uganda (190'552), and Mexico (169'703) (see page 58).

Over a quarter of the world's organic agricultural land (11.7 million hectares) and more than 86 percent (1.9 million) of the producers were in developing countries and emerging markets in 2014 (see page 68).

Land use details were available for over 90 percent of the organic agricultural land. Unfortunately, some countries with very large organic areas, such as Australia, Brazil, and India had little or no information on their land use.

Almost two-thirds of the agricultural land were grassland/grazing areas (27.5 million hectares). With a total of at least 8.5 million hectares, arable land constitutes almost 20 percent of the organic agricultural land. An increase of almost seven percent over 2013 was reported. Most of this category of land was used for cereals including rice (3.4 million hectares), followed by green fodder from arable land (2.6 million hectares), oilseeds (almost 1 million hectares), vegetables (0.3 million hectares), and dried pulses (almost 0.4 million hectares). Permanent crops account for eight percent of the organic agricultural land, amounting to 3.4 million hectares. The most important permanent crops were coffee (with more than 0.7 million hectares, constituting almost one quarter of the organic permanent cropland), followed by olives (0.6 million hectares), grapes (0.32 million hectares), nuts (0.28 million hectares), and cocoa (0.25 million hectares) (see page 70).

Selected crops

For this new section, a summary of the “State of Sustainable Markets: Statistics and Emerging Trends – 2015” report is provided. It offers a snapshot of production-related data (area, production and producers) for key global sustainability standards across eight commodity sectors (bananas, cocoa, coffee, cotton, forestry, palm oil, soybeans, cane sugar and tea) and forestry. It also gives an overview of each of the 14 Voluntary Sustainability Standards (VSS) covered (area and production under certification, commodities grown, etc.). The study shows growth across all commodities and all VSS over the past five years (see page 118).

Another addition is a chapter from Textile Exchange dedicated to organic cotton production worldwide: During the 2013/14² growing season, 116'974 metric tons of organic cotton fiber was produced globally by 147'971 farmers on 220'765 hectares of land. There are currently 19 countries producing certified organic cotton, but 97 percent of the global supply comes from just five countries. India is by far the largest supplier, accounting for three-quarters of total production, followed by China, Turkey, Tanzania, and the USA (see page 127).

¹ Please note that some countries report only the numbers of companies, projects, or grower groups, which may each comprise a number of individual producers. The number of producers should, therefore, be treated with caution, and it may be assumed that the total number of organic producers is higher than that reported here.

² The International Cotton Advisory Council (ICAC) set the cotton-growing year from August 1 to July 31.

Global market

Global retail sales of organic food and drink reached 80 billion US dollars¹ in 2014 according to Organic Monitor. North America and Europe generate most organic product sales. These two comprise approximately 90 percent of organic food and drink sales. Many of the organic crops grown in other regions, especially Asia, Latin America, and Africa, are destined for exports. The global market for organic food and drink has expanded over fivefold between 1999 and 2014, and Organic Monitor projects growth to continue. (See the chapter by Amarjit Sahota, page 134).

In 2014, the countries with the largest organic markets were the United States (27.1 billion euros), Germany (7.9 billion euros), and France (4.8 billion euros). The largest single market was the United States (approximately 43 percent of the global market), followed by the European Union (23.9 billion euros, 38 percent) and China (3.7 billion euros, 6 percent). The highest per-capita consumption with more than 100 euros was found in Switzerland, Luxembourg, and Denmark. The highest market shares were reached in Denmark (7.6 percent), Switzerland (7.1 percent) and Austria (6.5 percent in 2011). (See the chapter on the global survey on organic agriculture, section on global market, page 63).

Africa

There were almost 1.3 million hectares of certified organic agricultural land in Africa in 2014, which constitutes about three percent of the world's organic agricultural land. There were more than 570'000 producers. Uganda was the country with the largest organic area (with more than 240'000 hectares) and with the largest number of organic producers. The country with the highest share of organic agricultural land was the island state Sao Tome and Principe, with 12 percent of its agricultural area being organic. The majority of certified organic produce in Africa is destined for export markets. Key crops are coffee, olives, nuts, cocoa, oilseeds, and cotton. There is a growing recognition among policymakers that organic agriculture has a significant role to play in addressing food insecurity, land degradation, poverty, and climate change in Africa.

In October 2015, the African organic movement and its partners and stakeholders gathered in Lagos, Nigeria, for the 3rd African Organic Conference, "Achieving Social and Economic Development through Ecological and Organic Agricultural Alternatives." The conference was moderated by the African organic umbrella organisation AfrONet and had 220 participants from 28 countries (22 from Africa) and four continents, including the participation of the African Union. The Lagos Declaration² calls for more support from the African states for the Ecological Organic Agriculture Initiative and its 10-year strategic plan. The Strategic Plan (2015-2025) provides a visionary direction for the development of Ecological Organic Agriculture on the African continent.

¹ One Euro was 1.3285 US dollars in 2014 according to the Central European Bank (average annual exchange rate).

² The Lagos declaration is available on the website of UNCTAD at http://unctad.org/meetings/en/Contribution/ditc_tedb2015_LagosDeclaration_en.pdf

Asia

The total organic agricultural area in Asia was 3.6 million hectares in 2014. This constituted 8 percent of the world's organic agricultural land. There were more than 0.9 million producers; most of these were in India. The leading countries by area were China (1.9 million hectares) and India (0.7 million hectares); Timor-Leste had the highest proportion of organic agricultural land (almost 7 percent). Organic production and domestic markets have established themselves throughout the region, and Asia has the third-largest market for organic products. Whereas many countries mainly export primary crops, others, including Japan, depend on organic imports (Sahota 2016). Governments are encouraging development – e.g. in Bhutan, Laos and Malaysia. Having completed the ASEAN Standard for Organic Agriculture (ASOA) in 2014, the ASOA Task Force received a mandate to follow up with the development of certification and recognition arrangements in 2015. At the same time, Community Supported Agriculture (CSA) and Participatory Guarantee Systems (PGS) are developing apace as low-cost alternatives to third party certification for the domestic market. For more information including country reports, see the chapter from Ong Kung Wai (page 171).

Europe

As of the end of 2014, 11.6 million hectares of agricultural land in Europe (European Union 10.3 million hectares) were managed organically by almost 340'000 producers (European Union almost 260'000). In Europe, 2.4 percent of the agricultural area was organic (European Union: 5.7 percent). Twenty-seven percent of the world's organic land is in Europe. Organic farmland has increased by approximately 0.3 million hectares since 2013. The countries with the largest organic agricultural areas were Spain (1.7 million hectares), Italy (1.4 million hectares), and France (1.1 million hectares). Eight countries have more than 10 percent organic agricultural land: Liechtenstein has the lead (30.9 percent), followed by Austria (19.4 percent) and Sweden (16.3 percent). Retail sales of organic products totalled approximately 26.2 billion euros in 2014 (European Union: 23.9 billion euros), an increase of 7.6 percent over 2013. The largest market for organic products in 2014 was Germany, with retail sales of 7.9 billion euros, followed by France (4.8 billion euros), and the UK (2.3 billion euros) (see the article by Willer et al., page 199). In 2014 and 2015, the Swedish organic market experienced an unprecedented growth, increasing by more than 40 percent – a rate that is very remarkable for an already well-established market. In his article, Johan Cejie explains the reasons behind this development (page 226).

In 2015, the agricultural ministers of the European Union reached an agreement on the proposal for a new organic regulation. The proposal is currently under negotiation between the European Commission, European Agriculture Council, and European Parliament with a final agreement on the basic legislation foreseen in 2016. In the field of the European Union's Common Agricultural Policy (CAP), 2014 and 2015 have been dominated by the final adoption of implementing rules on direct payments and new Rural Development Programmes. On the research end, early 2015, the European Technology Platform for Organic Food and Farming Research (TP Organics) published priority topics for the Work Programme 2016/2017 of Horizon 2020, the current research framework programme of the European Union. The European Commission's official Work Programme for 2016/2017, published in October 2015, offers many

opportunities for organic food and farming research. (See article by Helga Willer and Stephen Meredith, page 190).

Latin America and the Caribbean

In Latin America, almost 400'000 producers managed 6.8 million hectares of agricultural land organically in 2014. This constituted 15 percent of the world's organic land and 1.1 percent of the region's agricultural land. The leading countries were Argentina (3 million hectares), Uruguay (1.3 million hectares), and Brazil (0.7 million hectares, 2012). The highest shares of organic agricultural land were in the Falkland Islands/Malvinas (36.3 percent), French Guiana (8.9 percent), and Uruguay (8.8 percent).

Many Latin American countries remain important exporters of organic products such as bananas, cocoa and coffee; in countries such as Argentina and Uruguay, temperate fruit and meat are key export commodities. At the same time, domestic markets are trending positively in the region. Healthy products and the gastronomy sector have also been drivers of the organic sector in many countries with value-added products and visible marketing processes such as highly nutritious or gourmet fruits and vegetables. Participatory Guarantee Systems (PGS), e.g. in Brazil, are gaining more recognition among consumers (see article by Laercio Meirelles about Brazil on page 240). For details on Latin America and the Caribbean, see the article by Patricia Flores and Mauricio Soberanes on page 232.

North America

In North America, more than 3 million hectares of farmland were managed organically in 2014. Of these, 2.2 million were in the United States (2011 data) and 0.9 million in Canada, representing approximately 0.8 percent of the total agricultural area in the region and 7 percent of the world's organic agricultural land.

Organic food sales posted an 11 percent increase to reach 35.9 billion US dollars,¹ now representing nearly 5 percent of total U.S. food sales. The 2015 survey of the Organic Trade Association projected that organic food sales could jump by another 11 percent in 2015. Domestic organic production cannot keep up with the robust demand, and there is a consensus that more organic farmers and more production are needed. In 2015, officials from the United States and Switzerland signed an organic equivalency arrangement, which joins the arrangements the U.S. has with Canada (2009), the European Union (2012), Japan (2014), and South Korea (2014). In 2011, USDA began to track a number of organic exports and imports with a special harmonized system trade code, known as an HS code. There are now 34 export and 40 import codes for organic products. Currently, U.S. organic exports are estimated at 3.2 billion US dollars. For more information, see the article by Barbara Haumann, page 250.

In Canada, organic sales were estimated at 4 billion Canadian dollars² (2015), with continued double-digit growth. After three years of meetings of technical experts,

¹ One euro was 1.3285 US dollars in 2014 (average annual exchange rate according to the European Central Bank).

² One euro corresponded to 1.4661 Canadian dollars in 2014 (average annual exchange rate according to the European Central Bank).

Canada's revised and updated organic standards were published in late 2015—the first comprehensive revision since the regulations were introduced in 2009. The new version of Canada's organic standards will become mandatory for any new operations immediately, and for all operators within one year of publication. The process to update Canada's organic standards was overseen by the Organic Federation of Canada and a representative volunteer group of producers, processors, consumer groups, and industry leaders. The Organic Science Cluster II (OSCII), an industry-led research and development endeavours initiated by the Organic Agriculture Centre of Canada at Dalhousie University, is currently in its third year of operation. It is supporting 37 research activities across the country in organic agriculture, livestock management and the processing sector. The federal government of Canada recently announced an investment of eight million for the continuation of the cluster until 2018. For more information, see article by Marie-Eve Levert and Matthew Holmes (page 256).

Oceania

This region includes Australia, New Zealand, and the Pacific Island states. Altogether, there were more than 22'000 producers, managing 17.3 million hectares. This constituted 4.1 percent of the agricultural land in the region and 40 percent of the world's organic land. More than 98 percent of the organic land in the region is in Australia (17.2 million hectares, 97 percent of which is extensive grazing land), followed by New Zealand (106'000 hectares), and Samoa (40'500 hectares). The highest shares of all agricultural land were in Samoa (14.3 percent), followed by Tonga (6.4 percent), the Solomon Islands (6.3 percent), and Kiribati (4.7 percent). Growth in the organic industry in Australia, New Zealand, and the Pacific Islands has been strongly influenced by a rapidly growing overseas demand; domestic sales are also growing. In Australia, the domestic market was valued at 1.3 billion Australian dollars in 2014¹ and in New Zealand at 130 million New Zealand dollars (2012).²

The most recent Australian Organic Market Report valued the organic industry in Australia at 1.72 billion Australian dollars with exports more than doubling in value since 2012. Domestically, the sector continuing to hold the greatest share of the Australian organic market is dairy, which is closely followed by the meat industry and the fruit and vegetable and processed foods sectors. Australia has no specific domestic legislation articulating the criteria for the production and marketing of organic products. The main legislative framework supporting the Australian organic industry remains the Export Control Act. However, the introduction of new consumer laws in 2010 provided additional scope to pursue and prosecute businesses attempting to misuse the organic label. Overall, there is little direct Federal Government support for the organic sector (Monk and Bushell, page 268).

Interest in Participatory Guarantee Systems (PGS) in the Pacific Islands continued to expand through 2014–2015 as market opportunities for PGS-certified products evolved and examples were generated addressing how organic and PGS can be tools for

¹ 1 euro was 1.4719 Australian Dollar (AUD) in 2014 (average exchange rate 2014 according to European Central Bank)

² 1 euro was 1.5995 New Zealand dollars in 2014 (average exchange rate 2014 according to European Central Bank)

sustainable social and economic development. A unique aspect of PGS in the Pacific is the regional PGS mark, “Organic Pasifika Guaranteed,” which facilitates the recognition of organic products in the local market and is recognized across the 22 Pacific Island countries and territories, facilitating intra-regional trade in organic products. Most of the organically certified products from the region are for export, but there are indications of growing local markets through box schemes. Key products include spices, coconut products, and tropical fruit. The main international markets for the listed products are Australia and New Zealand, representing the main destinations for the export of organic products due to the proximity. Japan is a growing market, and other markets include China, North America, and the European Union (see the chapter by Karen Mapusua, page 273).

Standards, regulations, and policy

According to the FiBL survey on organic rules and regulations, the number of countries with organic standards is 87. Eighteen countries are in the process of drafting legislation. The dominating topic in 2015 in the European Union was the European Commission’s proposal for a new organic regulation. Intensive negotiations within and among the European parliament, the EU Member States, and the European Commission have led to a consensus on some topics such as residue limits and the control system. However, on other topics such as the revision of the import system no agreement has been achieved so far. The European Union currently recognizes twelve countries¹ as being equivalent to the European Union’s system (known as the Third Country list). The latest change was in February 2015 when South Korea was listed based on a bilateral agreement. The US has accepted several foreign governments’ accreditation procedures. Certification bodies accredited according to the US requirements by India, Israel, and New Zealand are accepted by the United States Department of Agriculture for certification according to the US National Organic Program (NOP), even though they are not directly accredited by the United States Department of Agriculture (see contribution by Huber et al., page 140).

Participatory Guarantee Systems (PGS) are locally focused quality assurance systems certifying producers based on the active participation of stakeholders and are built on a foundation of trust, social networks, and knowledge exchange. Based on the data collected through the Global PGS Survey 2015 by IFOAM – Organics International, it is estimated that 123 PGS initiatives are now established on all continents, and another 110 are currently under development. PGS are spread over 72 countries. (See article by Simona D’Amico and Flávia Castro, page 147).

Governments have increasingly recognized the potential of organic agriculture to contribute toward their sustainability goals and objectives. Therefore, they are supporting the development of organic agriculture through a variety of government policies and programs such as targeted subsidies, market development, capacity building, and research support. A new initiative of IFOAM – Organics International will enable it to serve as the global repository of information on effective government

¹ Argentina, Australia, Canada, Costa Rica, India, Israel, Japan, New Zealand, Republic of Korea, Switzerland, Tunisia and US

policies and programs to support organic sector development. A comprehensive overview of these policies and programs is in preparation, and related materials are being compiled and analysed. By the end of 2016, a Toolkit on Policies Supporting Organic Sector Development will be released and promoted to governments and their organic sector stakeholders. (see article by Diane Bowen on page 152).

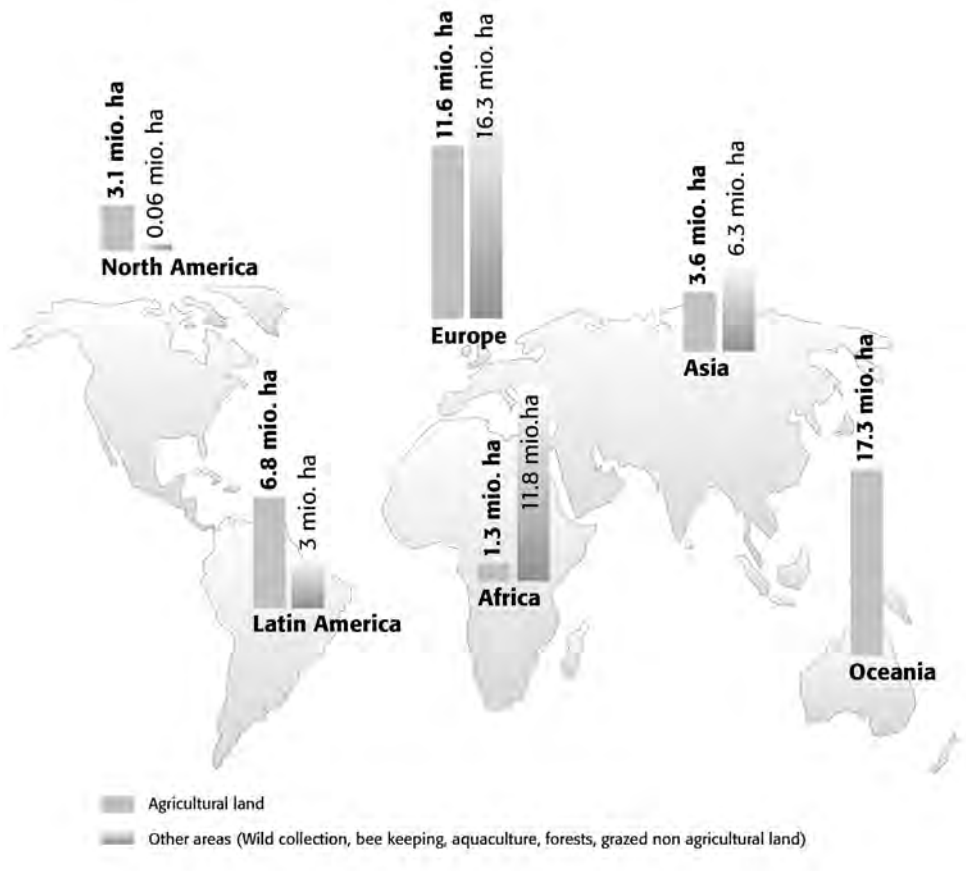
Better data

The section “Better data” is a new addition to “The World of Organic Agriculture”. For this edition, we received two contributions that deal with data collection methods and suggestions for their data collection – Vitoon Panyakul reports about a study that was carried out in Thailand (page 289) and Els Wynen is taking a closer look at the data released by the Australian Bureau of Statistics (page 292).

Moving Toward Organic 3.0

Organic 3.0 was launched at BIOFACH in Nuremberg 2014, and the further development of its content is an ongoing process, writes Markus Arbenz, page 304. After two years of think-tanking, the organic movement consults globally on the content of Organic 3.0. At the end of 2016, the global General Assembly will vote on whether Organic 3.0, as defined now, is the commitment for future development.

Organic Agriculture Worldwide: Current Statistics



Map 1: Organic agricultural land and other non-agricultural areas in 2014

Source: FiBL survey 2016

Current Statistics on Organic Agriculture Worldwide: Area, Producers, Markets, and Selected Crops

JULIA LERNOUD¹ AND HELGA WILLER²

Introduction

The 17th survey of certified organic agriculture worldwide was carried out by the Research Institute of Organic Agriculture (FiBL) with many partners from all around the world. The results are published jointly with IFOAM – Organics International. Data from the Mediterranean countries was supplied by the Mediterranean Organic Agriculture Network (MOAN, c/o Mediterranean Agronomic Institute of Bari), and data from the Pacific Islands was provided by the Pacific Organic and Ethical Trade Community (POET.com). In total, data was provided by more than 200 experts. This survey, as the past surveys, was supported by the Swiss State Secretariat for Economic Affairs (SECO), the International Trade Centre (ITC),³ and NürnbergMesse.⁴

As in previous years, governments, private sector organizations, certifiers, and market research companies have contributed to the data collection effort. Several international certifiers deserve special mention as they provided data on a number of countries: BCS, CERES, Certisys, Control Union, Ecocert, ICEA, Institute for Marketecology (IMO), LACON, Quality Certification Services (QCS), and the Soil Association. A list of all contributors is provided in the annex.

In total, data from 172 countries/territories was available. Kiribati, Puerto Rico, United States Virgin Islands, and Suriname are new to the list of countries with organic data. For Suriname, data had been available in the past, but from 2011 to 2013, data was not received.

Updated data on the organic area was available for 135 countries; however, for some countries, updates were only available for the total organic area and not necessarily for the number of farms, land use, or other indicators. In such cases, data from the previous survey was used. Furthermore, for those countries for which FiBL compiles the country data among the certifiers, it should be noted that not all certifiers provided updates.

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² Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org

³ Since 2014, data collection on organic agriculture worldwide is funded by the International Trade Centre (ITC) and the Swiss State Secretariat for Economic Affairs (SECO) under the project “T4SD Global Platform for Market Data on Organic Agriculture and Sustainability Standards”. In this project, an internet-based information system for voluntary sustainability standards (VSS; including organic) data on production, domestic markets and international trade will be established. For more information on this project, see page 118.

⁴ The organisers of BIOFACH, the World Organic Trade Fair in Nuremberg, Germany (today: NürnbergMesse), have supported data collection on organic agriculture worldwide and the production of the yearbook “The World of Organic Agriculture” since 2000.

Table 1: Countries and areas covered by the global survey on organic agriculture 2014

Region	Countries* with data on organic agriculture	Countries per region ¹	Share of countries that provided data (%)
Africa	39	56	70%
Asia	37	47	79%
Europe	47	47	100%
Latin America and Caribbean	33	46	72%
North America	3	5	60%
Oceania	13	26	50%
World	172	227	76%

Source: FiBL survey 2016

*Where the designation "country" appears in this book, it covers countries or areas.²

Data on the following indicators was collected:

- Organic area in hectares, by country and country groups, including a breakdown by crop;
- Livestock numbers;
- Production data (volumes and values);
- Producers and further operator types;
- Domestic market data (total retail sales value, per capita consumption, share of the total market; breakdown by product);
- International trade data (total import and export values and volumes, and breakdown by product).

Not all data that was collected is published in this book (e.g. production, livestock numbers, breakdown by product for domestic market and international trade data), because it was not possible to draw a complete global picture for these indicators. More information about the data background is available at the end of this chapter on page 299.

More information on www.organic-world.net

Tables with more details on crops, market and international trade, as well as explanations for certain data can be found at the Organic-World website (www.organic-world.net).

Contact

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¹ Number of countries and areas are mostly based on countries as listed in the FAO database at <http://faostat3.fao.org/download/R/RL/E> as well as some additional countries like Kosovo.

² For more information on countries, areas and regions see the UNSTAT website at <http://unstats.un.org/unsd/methods/m49/m49.htm>.

General notes on the data

Organic areas: Data represents **certified organic land/areas that are already fully converted as well as land under conversion** because many data sources do not separate or include the latter (for instance, Austria, Germany, and Switzerland) and also because land under conversion is under organic management. For a definition of organic agriculture, see the IFOAM – Organics International website.¹

PGS: Since 2011, for some countries such as Namibia, areas certified by Participatory Guarantee Systems (PGS) have been included. (For more information about PGS see the article by Simona D'Amico and Flávia Castro on page 147).

Countries: For countries and areas, the Standard Country and Area Classifications as defined by the United Nations Statistics division, are applied to most of the countries/areas.² Where the designation "country" appears in this report, it covers countries or areas.

Data sources: Data was gathered from organizations of the private sector, governments, and certification bodies. For detailed information on the data sources, please check the annex at the end of this volume (page 315).

Direct year-to-year comparison: A direct year-to-year comparison is not possible for all data, as the data sources may change, data is not provided on an annual base, or data access may become better.

Completeness of data: For some countries, either no current data were available or the data provided were not complete. For some countries, no data were available at all. Therefore, it can be assumed that the extent of organic agriculture is larger than documented in this volume.

Share of total agricultural land: In some cases, the calculation of the proportion of organic agricultural land or that of individual crops, based on FAOSTAT and in some cases the Eurostat data, might differ from the organic proportion obtained from ministries or local experts.

Producers: Some countries report the number of smallholders while others report only the number of companies, projects or grower groups, which may each comprise a number of producers. This applies in particular to many African countries. The number of producers is, therefore, probably higher than the number communicated in this report.

Domestic market data: It should be noted that for market and trade data, comparing country statistics remains very problematic due to differing methods of data collection.

Data revisions: Data revisions and corrections are communicated at <http://www.organic-world.net/statistics>.

¹ The following pages at the website of IFOAM – Organics International are informing about definitions and principles of organic agriculture:

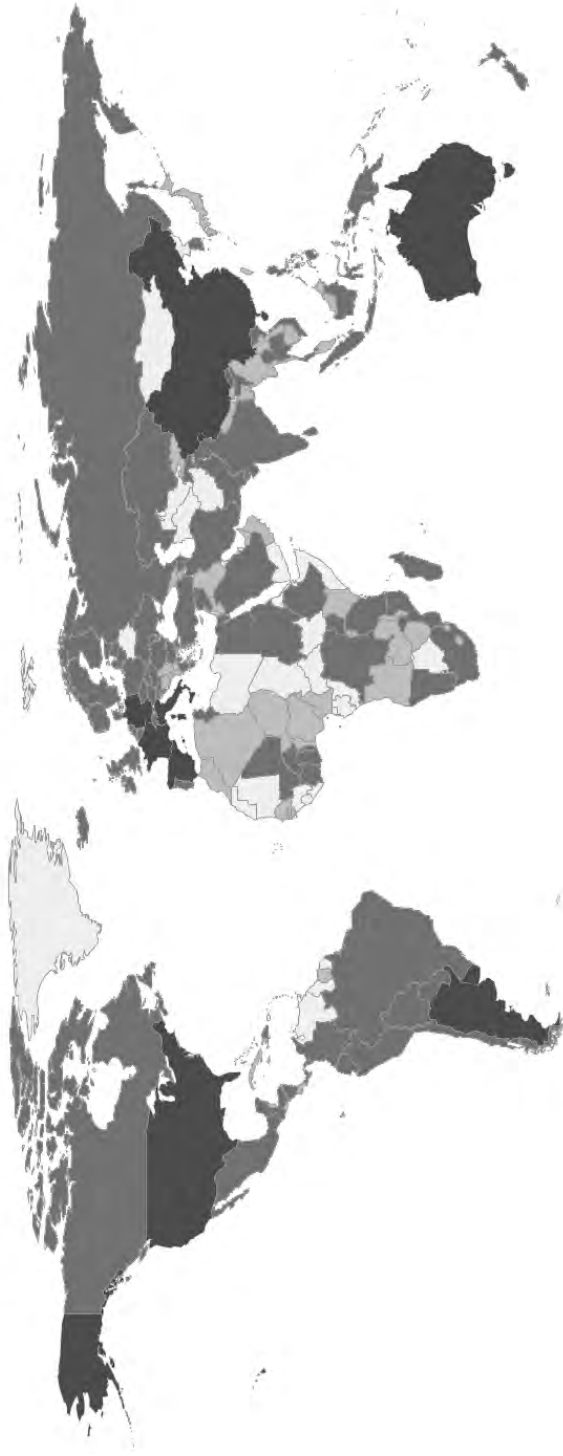
Definition of organic agriculture: www.ifoam.org/en/organic-landmarks/definition-organic-agriculture

Principles of organic agriculture: www.ifoam.bio/en/organic-landmarks/principles-organic-agriculture

The IFOAM Organic Guarantee System: www.ifoam.bio/en/value-chain/ifoam-organic-guarantee-system

IFOAM Family of Standards: www.ifoam.org/en/ifoam-family-standards

² For the composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings see the UNSTAT homepage at <http://unstats.un.org/unsd/methods/m49/m49regin.htm>



Map 2: World Map of Organic Agriculture: Organic agricultural land by country 2014

Black: Countries with more than 1 million hectares

Dark grey: Countries with between 10'000 and 1 million hectares

Grey: Countries with less than 10'000 hectares

Light grey: No data

Source: FiBL survey 2016, produced with StatPlanet software

For more information see <http://www.organic-world.net/statistics/statistics-data-tables/maps.html?L=0>

Please note that StatPlanet does not include all countries covered by the survey

Organic agricultural land

Currently, 43.7 million hectares are under organic agricultural management worldwide (end of 2014 for most data).¹

The region with the most organic agricultural land is Oceania, with 17.3 million hectares followed by Europe with 11.6 million hectares, Latin America (6.8 million hectares), Asia (3.6 million hectares), North America (3.1 million hectares), and Africa (1.3 million hectares).

Oceania has 40 percent of the global organic agricultural land. Europe, a region that has had a very constant growth of organic land over the years, has more than a quarter of the of the world's organic agricultural land followed by Latin America with almost 16 percent (see Table 2, Figure 1).

Australia, which has experienced a major growth of organic land since 2011, is the country with the most organic agricultural land; 97 percent of the farmland are extensive grazing areas. Argentina is second followed by the United States in third place (Table 3, Figure 2). The ten countries with the largest organic agricultural areas have a combined total of 31.8 million hectares and constitute more than seventy-three percent of the world's organic agricultural land.

Apart from the organic agricultural land, there are further organic areas such as wild collection areas. These areas constitute more than 37.6 million hectares.

Table 2: World: Organic agricultural land (including in-conversion areas) and region's shares of the global organic agricultural land 2014

Region	Organic agricultural land [hectares]	Regions' share of the global organic agricultural land
Africa	1'263'105	2.9%
Asia	3'567'474	8.2%
Europe	11'625'001	26.6%
Latin America	6'785'796	15.5%
North America	3'082'419	7.1%
Oceania	17'342'416	39.7%
Total	43'662'446	100.0%

Source: FiBL survey 2016. Note: Agricultural land includes in-conversion areas and excludes wild collection, aquaculture, forest, and non-agricultural grazing areas.

* Includes correction value for French overseas departments.

¹Data provided on the conversion status were included in this work. However, some countries provided only data on the fully converted area, others only on the total organic agricultural land, and thus the conversion area is not known for many countries.

Distribution of organic agricultural land by region 2014

Source: FiBL Survey 2016

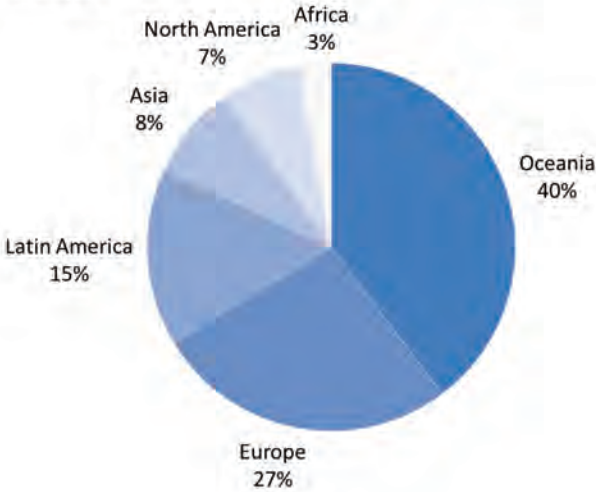


Figure 1: World: Distribution of organic agricultural land by region 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

The ten countries with the largest areas of organic agricultural land 2014

Source: FiBL survey 2016

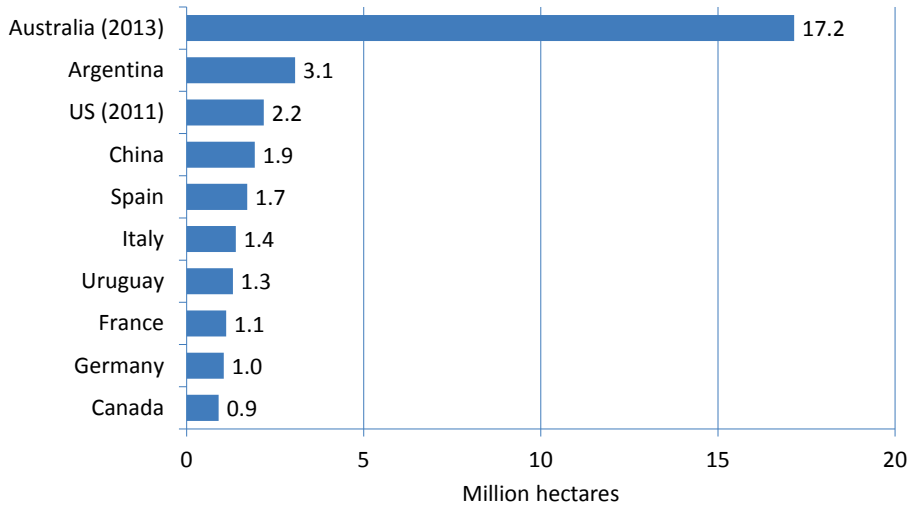


Figure 2: World: The ten countries with the largest areas of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 3: World: Organic agricultural land (including in-conversion areas) by country 2014 (sorted)

For an alphabetical country list (including information on data year), see page 311.

Country	Hectares	Country	Hectares
Australia	17'150'000	Bulgaria	74'351
Argentina	3'061'965	Belgium	66'704
United States of America	2'178'471	Sri Lanka	62'560
China	1'925'000	Paraguay	54'444
Spain	1'710'475	Ireland	51'871
Italy	1'387'913	Croatia	50'054
Uruguay	1'307'421	Norway	49'827
France	1'118'845	Netherlands	49'159
Germany	1'047'633	Ecuador	45'818
Canada	903'948	Viet Nam	43'007
India	720'000	Slovenia	41'237
Brazil	705'233	Samoa	40'477
Poland	657'902	Thailand	37'684
Austria	525'521	Saudi Arabia	37'563
United Kingdom	521'475	Nicaragua	33'621
Sweden	501'831	Colombia	31'621
Mexico	501'364	Madagascar	30'265
Turkey	491'977	Namibia	30'082
Czech Republic	472'663	Timor-Leste	25'479
Falkland Islands (Malvinas)	403'212	Honduras	24'950
Ukraine	400'764	Pakistan	23'828
Kazakhstan	291'203	Azerbaijan	23'331
Romania	289'252	Moldova	22'102
Peru	263'012	Burkina Faso	20'110
Greece	256'131	Syrian Arab Republic	19'987
Russian Federation	245'846	Chile	19'932
Uganda	240'197	Papua New Guinea	19'796
Finland	212'653	Côte d'Ivoire	19'548
Portugal	212'346	South Africa	19'501
Latvia	203'443	Republic of Korea	18'306
Tanzania, United Republic of	186'537	Ghana	15'563
Slovakia	180'307	Mozambique	15'421
Dominican Republic	166'220	Togo	15'321
Denmark	165'773	Panama	15'183
Lithuania	164'390	Guatemala	13'380
Ethiopia	160'987	Tajikistan	12'659
Estonia	155'560	Mali	11'919
Tunisia	139'087	Iran (Islamic Republic of)	11'601
Switzerland	133'973	Iceland	11'174
Sudan	130'000	Cambodia	9'889
Hungary	124'841	Japan	9'889
Bolivia	114'306	Serbia	9'548
Indonesia	113'638	Nepal	9'361
Philippines	110'084	Fiji	9'218
New Zealand	106'753	Morocco	8'660
Congo, D.R.	89'058	Costa Rica	7'832
Egypt	85'801	Zambia	7'552

Statistics: Organic Agricultural Land

Country	Hectares
Kyrgyzstan	6'929
Senegal	6'929
Palestine, State of	6'896
Bangladesh	6'860
Bhutan	6'829
El Salvador	6'736
Sao Tome and Principe	6'706
Israel	6'640
Vanuatu	6'594
Lao P.D.R.	6'275
Taiwan	5'937
Myanmar	5'320
Solomon Islands	5'302
Nigeria	5'021
Kenya	4'894
Luxembourg	4'490
United Arab Emirates	4'286
Cyprus	3'887
Montenegro	3'289
Macedonia, FYROM	3'146
Cuba	2'979
Haiti	2'878
Angola	2'486
Jordan	2'371
Benin	2'344
Rwanda	2'248
French Guiana (France)	2'014
Tonga	1'997
Guinea-Bissau	1'843
Comoros	1'723
Kiribati	1'600
Georgia	1'292
Liechtenstein	1'135
Lebanon	1'079
Armenia	1'000
Belize	892
Algeria	700
Réunion (France)	659
Malaysia	603
Lesotho	560
Albania	515
Zimbabwe	474
New Caledonia	411
Cameroon	380
Bosnia and Herzegovina	353
Niger	262
Faroe Islands	253

Country	Hectares
Martinique (France)	248
Channel Islands	240
Dominica	240
Niue	164
Burundi	148
Kosovo	114
Malawi	102
French Polynesia	93
Grenada	85
Guadeloupe (France)	69
Iraq	51
Bahamas	49
Suriname	39
Oman	38
Malta	34
Jamaica	27
United States Virgin Islands	26
Cook Islands	10
Swaziland	8
Mauritius	6
Mayotte	5
Andorra	4
Belarus (Wild collection only)	
Bermuda (Processing)	
Chad (Wild collection only)	
Guyana (Wild collection only)	
Puerto Rico (area data not available)*	
San Marino (Processing)	
Singapore (Processing)	
Uzbekistan (Wild collection only)	
Venezuela (Processing)	
Total**	43'662'446

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

* For Puerto Rico the area data was not available

**Total includes correction value for French overseas departments

Shares of organic agricultural land by region and country

The share of the world’s agricultural land that is organic is 0.99 percent (for the countries included in the survey).

By region, the organic share is highest in Oceania (4.1 percent) followed by Europe with 2.4 percent and Latin America with 1.1 percent. In the European Union, the share of organic agricultural land is 5.7 percent. In the other regions, the share is less than one percent (see Table 4).

Many individual countries, however, feature much higher organic shares (Figure 3), and eleven countries have even reached more than ten percent of the agricultural land as organic; most of these are in Europe. The country with the highest organic share of agricultural land is the Falkland Islands (Malvinas), where several large sheep farms are organic. It is interesting to note that many island states have high shares of organic agricultural land.

However, 59 percent of the countries, for which data was available, have less than one percent organic agricultural land (Figure 4).

Table 4: World: Organic agricultural land (including in-conversion areas) and shares of total agricultural land by region 2014

Region	Organic agr. land [ha]	Share of total agri. land*
Africa	1'263'105	0.1%
Asia	3'567'474	0.3%
Europe	11'625'001	2.4%
Latin America	6'785'796	1.1%
North America	3'082'419	0.8%
Oceania	17'342'416	4.1%
Total**	43'662'446	1.0%

Source: FiBL survey 2016.

*For the calculation of the shares of total agricultural land, only the countries included in the survey were used.

** Total includes correction value for French overseas departments.

To calculate the percentages, the data for most countries were taken from the FAO Statistical database at the FAOSTAT website.¹ For the European Union, most data were taken from Eurostat. Where available, data from national data sources were used for total agricultural land (for instance, the U.S., Switzerland, and Austria), which sometimes differ from those published by Eurostat or FAOSTAT.

Please note that the calculation of the shares of organic agricultural land, based on the Eurostat and FAOSTAT data, might differ, in some cases, from the data communicated by ministries or experts.

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > at <http://faostat3.fao.org/download/R/RL/E>

**Countries with more than 10 percent of organic agricultural land
2014**

Source: FiBL survey 2016

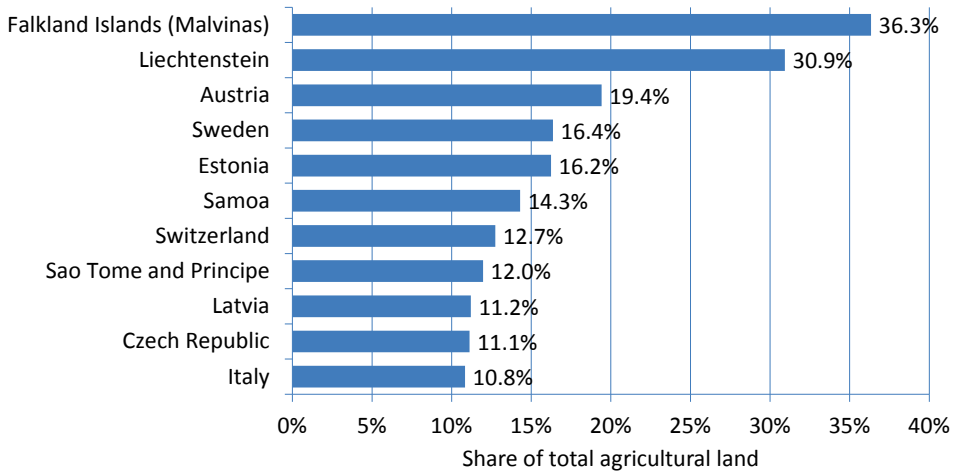


Figure 3: World: Countries with more than 10 percent of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Distribution of the organic shares of the agricultural land 2014

Source: FiBL Survey 2016

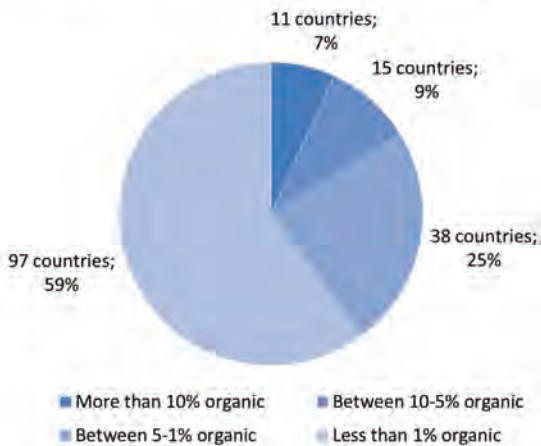


Figure 4: World: Distribution of the organic shares of the agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 5: World: Shares of organic agricultural land by country 2014 (sorted)

For an alphabetical country list (including information on data year), see page 311.

Country	Share	Country	Share
Falkland Islands (Malvinas)	36.3%	Papua New Guinea	1.7%
Liechtenstein	30.9%	Uganda	1.7%
Austria	19.4%	Réunion (France)	1.6%
Sweden	16.4%	Tunisia	1.4%
Estonia	16.2%	Bhutan	1.3%
Samoa	14.3%	Canada	1.3%
Switzerland	12.7%	Israel	1.3%
Sao Tome and Principe	12.0%	Ireland	1.3%
Latvia	11.2%	Peru	1.2%
Czech Republic	11.1%	Comoros	1.1%
Italy	10.8%	Republic of Korea	1.0%
Slovakia	9.5%	Dominica	1.0%
Finland	9.4%	Ukraine	1.0%
Slovenia	8.9%	New Zealand	0.9%
French Guiana (France)	8.9%	Philippines	0.9%
Uruguay	8.8%	Moldova	0.9%
Dominican Republic	8.5%	Martinique (France)	0.9%
Faroe Islands	8.4%	Honduras	0.8%
Spain	6.9%	United Arab Emirates	0.8%
Timor-Leste	6.8%	Taiwan	0.7%
Tonga	6.4%	Grenada	0.7%
Portugal	6.3%	Panama	0.7%
Solomon Islands	6.3%	Nicaragua	0.7%
Denmark	6.3%	Montenegro	0.6%
Germany	6.3%	United States of America	0.6%
Lithuania	5.7%	Ecuador	0.6%
Belgium	4.9%	Belize	0.6%
Kiribati	4.7%	Tanzania, United Republic of	0.5%
Norway	4.6%	Azerbaijan	0.5%
Poland	4.3%	Iceland	0.5%
Australia	4.2%	Bahamas	0.5%
France	4.1%	Togo	0.5%
Croatia	3.8%	Ethiopia	0.5%
Vanuatu	3.5%	El Salvador	0.4%
Luxembourg	3.4%	Costa Rica	0.4%
Niue	3.3%	Viet Nam	0.4%
Greece	3.1%	India	0.4%
United Kingdom	3.0%	Democratic Republic of the Congo	0.4%
Channel Islands	2.7%	China	0.4%
Hungary	2.7%	Cook Islands	0.3%
Cyprus	2.7%	Malta	0.3%
Netherlands	2.5%	Bolivia	0.3%
Bulgaria	2.4%	Guatemala	0.3%
Mexico	2.3%	Macedonia, FYROM	0.3%
Egypt	2.3%	Brazil	0.3%
Sri Lanka	2.3%	Lao People's Democratic Republic	0.3%
Fiji	2.2%	Tajikistan	0.3%
Argentina	2.2%	Paraguay	0.3%
Romania	2.1%	Japan	0.3%
Turkey	2.0%	Jordan	0.2%
Palestine, State of	1.9%	New Caledonia	0.2%

Statistics: Shares of Organic Agricultural Land

Country	Share
Nepal	0.2%
French Polynesia	0.2%
Indonesia	0.2%
Thailand	0.2%
Serbia	0.2%
Cambodia	0.2%
Burkina Faso	0.2%
Guadeloupe (France)	0.2%
Lebanon	0.2%
Haiti	0.2%
Syrian Arab Republic	0.1%
Kazakhstan	0.1%
Chile	0.1%
Russian Federation	0.1%
Guinea-Bissau	0.1%
Rwanda	0.1%
Ghana	0.1%
Côte d'Ivoire	0.1%
Sudan	0.1%
Pakistan	0.1%
Namibia	0.1%
Bangladesh	0.1%
Colombia	0.1%
Madagascar	0.1%
Senegal	0.1%
Benin	0.1%
Kyrgyzstan	0.1%
Armenia	0.1%
Georgia	0.1%
Suriname	0.05%
Cuba	0.04%
Myanmar	0.04%
Albania	0.04%
Mayotte	0.04%
Zambia	0.03%
Kosovo	0.03%
Mozambique	0.03%
Mali	0.03%
Morocco	0.03%
Lesotho	0.02%
Iran (Islamic Republic of)	0.02%
Andorra	0.02%
Saudi Arabia	0.02%
South Africa	0.02%
Kenya	0.02%
Bosnia and Herzegovina	0.02%
Malaysia	0.01%
Burundi	0.01%
Nigeria	0.01%
Jamaica	0.01%
Mauritius	0.01%
Angola	0.004%
Cameroon	0.004%
Zimbabwe	0.003%

Country	Share
Oman	0.002%
Malawi	0.002%
Iraq	0.002%
Algeria	0.002%
Swaziland	0.001%
Niger	0.001%
Belarus (Wild collection only)	
Bermuda (Processing)	
Chad (Wild collection only)	
Guyana (Wild collection only)	
Puerto Rico (area data not available)*	
San Marino (Processing)	
Singapore (Processing)	
Uzbekistan (Wild collection only)	
Venezuela (Processing)	
Total**	0.99%

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

* For Puerto Rico, area data was not available

Development of the organic agricultural land

Compared with 1999, when 11 million hectares were organic, organic agricultural land has almost quadrupled (Willer/Yussefi 2000). In 2014, almost 500'000 hectares or one percent more, were reported compared with 2013. In 2014, the area of organic agricultural land increased in all regions except Latin America (Table 6). The highest absolute growth was in Asia (+4.65 percent, +158'563 hectares). In Latin America, the area decreased by 0.4 percent, as Argentina reported almost 220'000 hectares less in 2014 (grassland/grazing areas).

Sixty-nine countries experienced an increase in the area of their organic agricultural land, while a decrease was reported in 47 countries. In 49 countries, the organic agricultural area either did not change or no new data was received. The largest increases of organic agricultural land were in Nigeria, Myanmar, Tonga, and Malta.

The figures communicated in the following tables and graphs with historical figures may differ from what was previously communicated, as data revisions were received and included in the FiBL database. More information is available in the annex on page 315.

Table 6: World: Organic agricultural land (including in-conversion areas) by region: growth 2013/2014

Region	Organic agr. land [ha] 2013	Organic agr. land [ha] 2014	+/- hectares	+/- percent %
Africa	1'208'825	1'263'105	+54'280	+4.5%
Asia	3'408'912	3'567'474	+158'563	+4.7%
Europe	11'365'411	11'625'001	+259'590	+2.3%
Latin America	6'814'030	6'785'796	-28'234	-0.4%
North America	3'047'710	3'082'419	+34'710	+1.1%
Oceania	17'321'733	17'342'416	+20'683	+0.1%
Total**	43'162'855	43'662'446	+499'591	+1.2%

Source: FiBL survey 2016, based on data from government bodies, the private sector, and certifiers.

For detailed data sources see annex, page 315

** Total includes correction value for French Overseas Departments.

Growth of the organic agricultural land 1999-2014

Source: FiBL-IFOAM-SOEL-Surveys 1999-2016

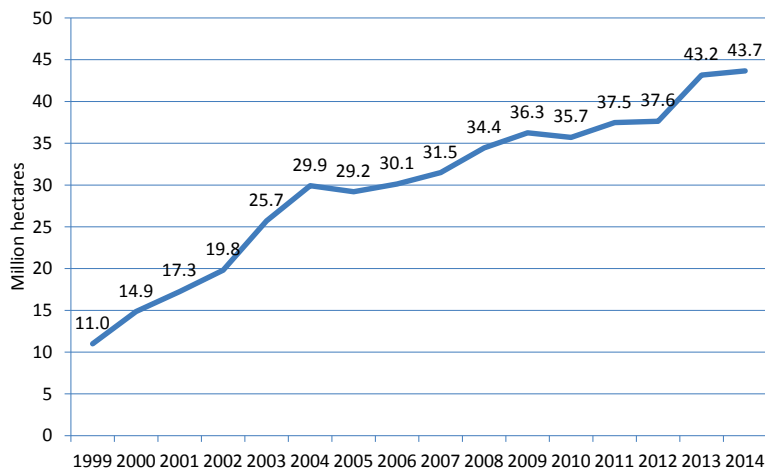


Figure 5: World: Growth of the organic agricultural land 1999-2014

Source: FiBL-IFOAM-SOEL surveys 2000-2016

Growth of the organic agricultural land by continent 2006-2014

Source: FiBL-IFOAM survey 2008-2016

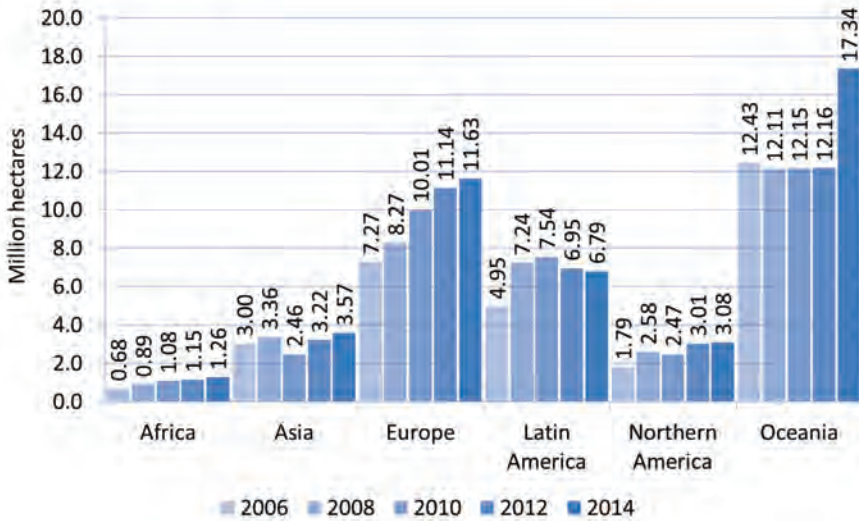


Figure 6: World: Growth of the organic agricultural land by continent 2006 to 2014

Source: FiBL-IFOAM-SOEL surveys 2000-2016

The ten countries with the highest increase of organic land 2014

Source: FiBL survey 2016

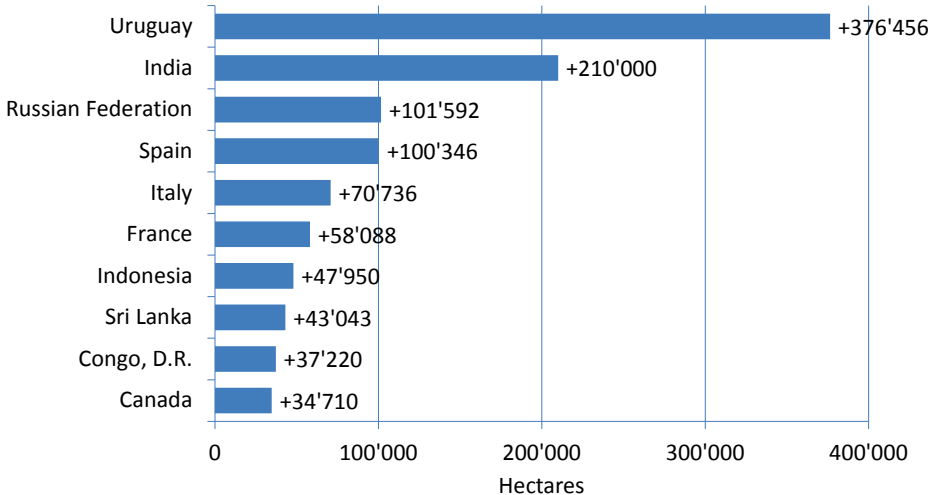


Figure 7: World: The ten countries with the highest increase of organic agricultural land 2014

Source: FiBL survey 2016, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 315

Table 7: World: Development of organic agricultural land by country 2011-2014

Important note: A direct year-to-year comparison is not always possible for many countries, because the data sources may have changed over the years, or data access may have improved. The figures published here may differ from previously published data due to data revisions. Data are not available for all countries for every year and; in these cases, the figure for the previous year is used (see also page 315).

Country	2011 [ha]	2012 [ha]	2013 [ha]	2014 [ha]	Change 13/14 [ha]	Change 13/14 [%]
Afghanistan	61	61	61		-61	-100.0%
Albania	448	515	515	515		
Algeria	692	700	700	700		
Andorra	4		1	4	3	207.7%
Angola		2'486	2'486	2'486		
Argentina	3'796'136	3'637'466	3'281'192	3'061'965	-219'227	-6.7%
Armenia	750	810	1'000	1'000		
Australia	12'001'724	12'001'724	17'150'000	17'150'000		
Austria	542'553	537'706	526'689	525'521	-1'168	-0.2%
Azerbaijan	21'959	23'740	23'331	23'331		
Bahamas			49	49		
Bangladesh	6'810	6'860	6'860	6'860		
Belarus			Wild collection only			
Belgium	55'304	59'718	62'529	66'704	4'175	6.7%
Belize	1'204	753	802	892	90	11.2%
Benin	1'696	2'628	1'987	2'344	357	18.0%
Bermuda			Processing only			
Bhutan	6'150	6'156	6'726	6'829	103	1.5%
Bolivia	146'412	146'412	146'412	114'306	-32'107	-21.9%
Bosnia and Herzegovina	343	343	292	353	61	20.9%
Brazil	687'040	705'233	705'167	705'233	66	0.0%
Bulgaria	25'022	39'137	56'287	74'351	18'064	32.1%
Burkina Faso	19'684	15'000	14'866	20'110	5'243	35.3%
Burundi	550	550	550	148	-402	-73.1%
Cambodia	8'285	9'055	9'889	9'889		
Cameroon	849	663	663	380	-283	-42.7%
Canada	841'216	833'883	869'239	903'948	34'710	4.0%
Chad			Wild collection only			
Channel Islands	250	260	240	240		
Chile	29'068	22'636	23'469	19'932	-3'537	-15.1%
China	1'900'000	1'900'000	2'094'000	1'925'000	-169'000	-8.1%
Colombia	34'060	34'060	31'621	31'621		
Comoros	2'642	2'642	2'642	1'723	-919	-34.8%
Cook Islands	20	20	20	10	-10	-50.0%
Costa Rica	9'570	9'360	7'449	7'832	383	5.1%
Côte d'Ivoire	20'658	19'457	19'263	19'548	284	1.5%
Croatia	32'036	31'903	40'641	50'054	9'414	23.2%
Cuba	2'209	5'280	7'389	2'979	-4'410	-59.7%
Cyprus	3'575	3'923	4'303	3'887	-416	-9.7%
Czech Republic	460'498	468'670	474'231	472'663	-1'567	-0.3%
Congo D.R.	41'032	51'838	51'838	89'058	37'220	71.8%
Denmark	162'173	175'113	169'298	165'773	-3'525	-2.1%
Dominica	240	240	240	240		
Dominican Republic	186'931	168'978	180'609	166'220	-14'390	-8.0%
Ecuador	50'037	56'304	42'781	45'818	3'037	7.1%
Egypt	82'167	85'801	85'801	85'801		
El Salvador	6'736	6'736	6'736	6'736		

Statistics: Development of Organic Agricultural Land

Country	2011 [ha]	2012 [ha]	2013 [ha]	2014 [ha]	Change 13/14 [ha]	Change 13/14 [%]
Estonia	133'779	144'150	151'256	155'560	4'305	2.8%
Ethiopia	140'475	164'777	160'987	160'987		
Falkland Islands (Malvinas)	398'806	403'212	403'212	403'212		
Faroe Islands	253	253	253	253		
Fiji	2'006	2'164	2'164	9'218	7'054	326.0%
Finland	188'189	197'751	206'170	212'653	6'483	3.1%
France	975'141	1'032'941	1'060'756	1'118'845	58'088	5.5%
French Guiana (France)	2'198	2'407	2'702	2'014	-688	-25.5%
French Polynesia	105	2'469	2'469	93	-2'376	-96.2%
Georgia	1'999	1'999	1'999	1'292	-708	-35.4%
Germany	1'015'626	1'034'355	1'044'955	1'047'633	2'678	0.3%
Ghana	19'893	28'161	28'201	15'563	-12'638	-44.8%
Greece	213'276	462'618	383'606	256'131	-127'475	-33.2%
Grenada	85	85	85	85		
Guadeloupe (France)	166	164	193	69	-124	-64.2%
Guatemala	13'380	13'380	13'380	13'380		
Guinea-Bissau			1'843	1'843		
Guyana	4'249	4'249				Wild collection only
Haiti	912	806	2'878	2'878		
Honduras	23'826	24'950	24'950	24'950		
Hungary	124'402	130'609	131'018	124'841	-6'177	-4.7%
Iceland	8'246	8'240	9'710	11'174	1'464	15.1%
India	1'084'266	500'000	510'000	720'000	210'000	41.2%
Indonesia	74'034	88'247	65'688	113'638	47'950	73.0%
Iran (Islamic Republic of)	43'332	42'634	12'156	11'601	-555	-4.6%
Iraq			40	51	11	27.8%
Ireland	54'122	52'793	53'565	51'871	-1'694	-3.2%
Israel	7'095	6'187	6'289	6'640	352	5.6%
Italy	1'096'889	1'167'362	1'317'177	1'387'913	70'736	5.4%
Jamaica	542	542	542	27	-515	-95.1%
Japan	9'401	10'611	9'889	9'889		
Jordan	2'567	2'895	2'898	2'371	-527	-18.2%
Kazakhstan	196'215	291'203	291'203	291'203		
Kenya	4'969	4'894	4'894	4'894		
Kiribati				1'600	1'600	-
Kosovo	11	111	114	114		
Kyrgyzstan	15'097	2'696	2'856	6'929	4'073	142.6%
Lao P.D.R.	5'990	5'990	6'442	6'275	-166	-2.6%
Latvia	184'096	195'658	200'433	203'443	3'010	1.5%
Lebanon	3'303	3'303	2'571	1'079	-1'492	-58.0%
Lesotho	183	617	560	560		
Liechtenstein	1'095	1'086	1'137	1'135	-2	-0.2%
Lithuania	152'305	156'539	166'330	164'390	-1'940	-1.2%
Luxembourg	3'720	4'130	4'447	4'490	43	1.0%
Macedonia, FYROM	26'431	12'731	3'146	3'146		
Madagascar	30'243	30'265	30'265	30'265		
Malawi	166	35	265	102	-162	-61.3%
Malaysia	1'582	603	603	603		
Mali	14'790	14'927	3'727	11'919	8'192	219.8%
Malta	23	37	7	34	27	380.9%
Martinique (France)	298	200	269	248	-21	-7.8%
Mauritius	30	16	16	6	-10	-64.9%

Statistics: Development of Organic Agricultural Land

Country	2011 [ha]	2012 [ha]	2013 [ha]	2014 [ha]	Change 13/14 [ha]	Change 13/14 [%]
Mayotte			5	5		
Mexico	366'812	487'393	501'364	501'364		
Moldova	22'102	22'102	22'102	22'102		
Mongolia			12'922		-12'922	-100.0%
Montenegro	3'068	3'068	3'068	3'289	221	7.2%
Morocco	17'030	16'600	8'660	8'660		
Mozambique	4'468	3'840	13'998	15'421	1'424	10.2%
Myanmar	202	897	897	5'320	4'423	493.1%
Namibia	14'112	14'123	23'086	30'082	6'996	30.3%
Nepal	8'697	10'273	9'361	9'361		
Netherlands	47'205	48'038	49'394	49'159	-235	-0.5%
New Caledonia				411	411	-
New Zealand	133'321	106'753	106'753	106'753		
Nicaragua	33'621	33'621	33'621	33'621		
Niger	76	106	106	262	156	147.5%
Nigeria	9'473	9'521	250	5'021	4'771	1908.4%
Niue	61	61	61	164	102	167.0%
Norway	55'500	55'260	51'662	49'827	-1'835	-3.6%
Oman	38	38	38	38		
Pakistan	24'924	22'397	22'397	23'828	1'431	6.4%
Palestine, State of	6'354	6'354	6'354	6'896	542	8.5%
Panama	4'576	4'576	15'183	15'183		
Papua New Guinea	11'337	11'798	20'939	19'796	-1'143	-5.5%
Paraguay	51'190	51'190	62'274	54'444	-7'830	-12.6%
Peru	185'964	197'837	388'448	263'012	-125'436	-32.3%
Philippines	96'317	80'974	86'155	110'084	23'929	27.8%
Poland	609'412	661'956	669'863	657'902	-11'961	-1.8%
Portugal	200'151	200'151	197'295	212'346	15'051	7.6%
Puerto Rico			Area data not available			
Republic of Korea	19'312	25'467	21'210	18'306	-2'904	-13.7%
Réunion (France)	556	594	595	659	64	10.8%
Romania	229'946	288'261	301'148	289'252	-11'896	-4.0%
Russian Federation	126'848	146'251	144'254	245'846	101'592	70.4%
Rwanda	3'705	3'705	3'705	2'248	-1'457	-39.3%
Samoa	33'515	33'515	33'515	40'477	6'962	20.8%
San Marino			Processing only			
Sao Tome and Principe	4'467	4'051	4'051	6'706	2'656	65.6%
Saudi Arabia	18'563	13'569	36'595	37'563	968	2.6%
Senegal	13'000	6'736	6'929	6'929		
Serbia	6'237	6'340	8'228	9'548	1'320	16.0%
Singapore			Processing only			
Slovakia	166'700	166'700	157'848	180'307	22'459	14.2%
Slovenia	32'149	35'101	38'665	41'237	2'573	6.7%
Solomon Islands	1'307	1'307	1'307	5'302	3'995	305.7%
South Africa	41'947	43'170	37'466	19'501	-17'965	-47.9%
Spain	1'621'898	1'593'197	1'610'129	1'710'475	100'346	6.2%
Sri Lanka	19'469	19'517	19'517	62'560	43'043	220.5%
Sudan	53'017	54'845	130'000	130'000		
Suriname				39	39	-
Swaziland	14	8	3	8	5	143.8%
Sweden	480'185	477'685	500'996	501'831	835	0.2%
Switzerland	123'000	125'961	128'140	133'973	5'833	4.6%
Syrian Arab Republic	19'987	19'987	19'987	19'987		

Statistics: Development of Organic Agricultural Land

Country	2011 [ha]	2012 [ha]	2013 [ha]	2014 [ha]	Change 13/14 [ha]	Change 13/14 [%]
Taiwan	5'016	5'850	5'937	5'937		
Tajikistan	460	12'659	12'659	12'659		
Tanzania	115'022	186'537	186'537	186'537		
Thailand	34'829	32'577	33'840	37'684	3'844	11.4%
Timor-Leste	24'754	24'690	24'690	25'479	789	3.2%
Togo	1'336	3'889	4'638	15'321	10'682	230.3%
Tonga	248	398	398	1'997	1'599	401.8%
Tunisia	178'521	137'188	139'087	139'087		
Turkey	442'582	523'627	461'396	491'977	30'581	6.6%
Uganda	228'166	231'157	230'232	240'197	9'965	4.3%
Ukraine	270'320	272'850	393'400	400'764	7'364	1.9%
United Arab Emirates	958	3'905	4'150	4'286	136	3.3%
United Kingdom	638'528	590'009	558'718	521'475	-37'243	-6.7%
United States of America	2'178'471	2'178'471	2'178'471	2'178'471		
United States Virgin Islands			26	26		-
Uruguay	930'965	930'965	930'965	1'307'421	376'456	40.4%
Uzbekistan	209	213	213	Wild collection	-213	-100.0%
Vanuatu	2'197	4'106	4'106	6'594	2'488	60.6%
Venezuela	59	59	47	Processing	-47	-100.0%
Viet Nam	23'400	36'285	37'490	43'007	5'517	14.7%
Zambia	7'310	7'310	7'552	7'552		
Zimbabwe	466	626	374	474	100	26.7%
Total*	37'469'256	37'625'691	43'162'855	43'662'446	+499'591	+1.2%

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see previous editions of "The World of Organic Agriculture" and annex, page 315

*Total includes correction value for French overseas departments.

All organic areas, including non-agricultural areas

Apart from organic agricultural land, there are additional organic areas. The largest part of these are wild collection areas and areas for beekeeping. Other areas are used for aquaculture, and some are forests or grazing areas on non-agricultural land. These areas totalled 37.55 million hectares, and all the organic areas together summed up to 81.2 million hectares.

It should be noted that many countries do not report non-agricultural organic areas. We can, therefore, assume that the data on the other areas are incomplete, in particular the data on aquaculture and forests.

More information on the use of the wild collection areas is available in the corresponding chapter (page 78).

Distribution of all organic areas in 2014

Source: FiBL Survey 2016

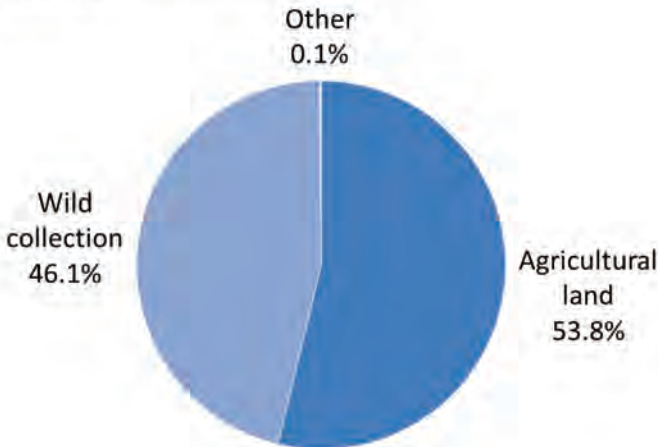


Figure 8: World: Distribution of all organic areas 2014. Total: 81.2 million hectares

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 8: World: Organic areas: Agricultural land (including conversion areas) and further organic areas by region in 2014

Region	Agriculture [ha]	Aqua-culture [ha]	Forest [ha]	Grazed non agri. land [ha]	Wild collection [ha]*	Other non agri. land [ha]	Total [ha]
Africa	1'263'105		42'796		11'790'631		13'096'531
Asia	3'567'474	35'047	123		6'300'019	1'507	9'904'170
Europe	11'625'001	5'049	19'533	8'112	16'279'559		27'937'253
Latin America	6'785'796	3'127			3'007'369		9'796'292
North America	3'082'419		137		63'954		3'146'510
Oceania	17'342'416				765		17'343'181
Total**	43'662'446	43'222	62'589	8'112	37'442'296	1'507	81'220'172

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Blank cells: No data available.

* Wild collection and beekeeping areas

** Total includes correction value for French overseas departments.

Table 9: World: All organic areas by country 2014

Country	Agriculture [ha]	Aqua-culture [ha]	Forest [ha]	Grazed non agri. land [ha]	Wild collection [ha]*	Other non agri. land [ha]	Total [ha]
Albania	515				467'783		468'298
Algeria	700						700
Andorra	4						4
Angola	2'486						2'486
Argentina	3'061'965				458'601		3'520'566
Armenia	1'000				11'250		12'250
Australia	17'150'000						17'150'000
Austria	525'521						525'521
Azerbaijan	23'331		123		937		24'391
Bahamas	49						49
Bangladesh	6'860	9'338					16'198
Belarus					11'494		11'494
Belgium	66'704				3		66'707
Belize	892						892
Benin	2'344				4'505		6'849
Bermuda				Processing only			
Bhutan	6'829				6'315		13'144
Bolivia	114'306				922'991		1'037'297
Bosnia and Herzegovina	353				124'141		124'494
Brazil	705'233				1'209'773		1'915'006
Bulgaria	74'351				679'845		754'196
Burkina Faso	20'110				80'068		100'178
Burundi	148						148
Cambodia	9'889						9'889
Cameroon	380				360'000		360'380
Canada	903'948		137		63'954		968'039
Chad					11'000		11'000
Channel Islands	240						240
Chile	19'932				81'054		100'986
China	1'925'000				1'144'326		3'069'326
Colombia	31'621				7'320		38'941
Comoros	1'723				70		1'793

Statistics: All Organic Areas

Country	Agriculture [ha]	Aqua-culture [ha]	Forest [ha]	Grazed non agri. land [ha]	Wild collection [ha]*	Other non agri. land [ha]	Total [ha]
Cook Islands	10						10
Costa Rica	7'832						7'832
Côte d'Ivoire	19'548				344		19'892
Congo D.R.	89'058						89'058
Croatia	50'054				8		50'062
Cuba	2'979						2'979
Cyprus	3'887						3'887
Czech Republic	472'663						472'663
Denmark	165'773				2'648		168'421
Dominica	240						240
Dominican Republic	166'220				3'845		170'065
Ecuador	45'818	3'123			1'260		50'201
Egypt	85'801						85'801
El Salvador	6'736						6'736
Estonia	155'560				40'579		196'139
Ethiopia	160'987				3'107		164'094
Falkland Islands (Malvinas)	403'212						403'212
Faroe Islands	253						253
Fiji	9'218				653		9'871
Finland	212'653				9'100'000		9'312'653
France	1'118'845				2'809		1'121'654
French Guiana (France)	2'014						2'014
French Polynesia	93						93
Georgia	1'292				215	1'507	3'014
Germany	1'047'633						1'047'633
Ghana	15'563				35'695		51'258
Greece	256'131						256'131
Grenada	85						85
Guadeloupe (France)	69						69
Guatemala	13'380				5		13'385
Guinea-Bissau	1'843						1'843
Guyana					54'000		54'000
Haiti	2'878						2'878
Honduras	24'950						24'950
Hungary	124'841						124'841
Iceland	11'174				214'524		225'698
India	720'000				3'990'000		4'710'000
Indonesia	113'638	3'320			10'730		127'688
Iran	11'601				22'850		34'451
Iraq	51						51
Ireland	51'871						51'871
Israel	6'640						6'640
Italy	1'387'913				62'647		1'450'560
Jamaica	27				36		63
Japan	9'889						9'889
Jordan	2'371						2'371
Kazakhstan	291'203				863		292'066
Kenya	4'894				130'903		135'797
Kiribati	1'600						1'600
Kosovo	114						114
Kyrgyzstan	6'929	2'359			71		9'359
Lao P.D.R.	6'275				16'786		23'061
Latvia	203'443						203'443

Country	Agriculture [ha]	Aqua-culture [ha]	Forest [ha]	Grazed non agri. land [ha]	Wild collection [ha]*	Other non agri. land [ha]	Total [ha]
Lebanon	1'079				163		1'242
Lesotho	560				50'000		50'560
Liechtenstein	1'135						1'135
Lithuania	164'390	5'049					169'438
Luxembourg	4'490						4'490
Macedonia, FYROM	3'146			8'112	556'600		567'858
Madagascar	30'265				91'239		121'504
Malawi	102				4'995		5'097
Malaysia	603						603
Mali	11'919				8'146		20'065
Malta	34						34
Martinique (France)	248						248
Mauritius	6						6
Mayotte	5						5
Mexico	501'364				30'364		531'727
Moldova	22'102						22'102
Montenegro	3'289				139'809		143'097
Morocco	8'660				861'690		870'350
Mozambique	15'421				31'400		46'821
Myanmar	5'320						5'320
Namibia	30'082				2'400'000		2'430'082
Nepal	9'361				24'422		33'783
Netherlands	49'159						49'159
New Caledonia	411						411
New Zealand	106'753						106'753
Nicaragua	33'621				11'463		45'084
Niger	262						262
Nigeria	5'021		150		1'000		6'171
Niue	164				112		276
Norway	49'827						49'827
Oman	38						38
Pakistan	23'828						23'828
Palestine, State of	6'896						6'896
Panama	15'183						15'183
Papua New Guinea	19'796						19'796
Paraguay	54'444				3'067		57'511
Peru	263'012	4			223'590		486'606
Philippines	110'084						110'084
Poland	657'902						657'902
Portugal	212'346		19'533		26		231'905
Puerto Rico			Area data not available				
Republic of Korea	18'306						18'306
Réunion (France)	659						659
Romania	289'252				1'787'548		2'076'800
Russian Federation	245'846				1'835'383		2'081'229
Rwanda	2'248				80		2'328
Samoa	40'477						40'477
San Marino			Processing only				
Sao Tome and Principe	6'706						6'706
Saudi Arabia	37'563						37'563
Senegal	6'929				22'000		28'929
Serbia	9'548						9'548

Statistics: All Organic Areas

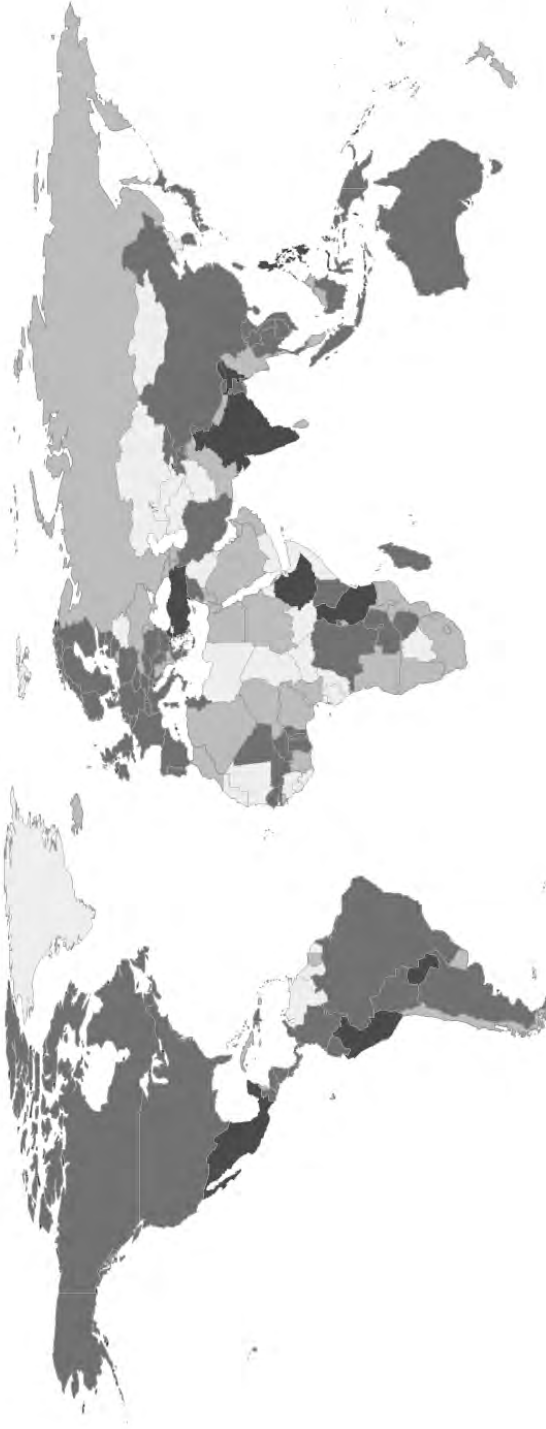
Country	Agriculture [ha]	Aqua-culture [ha]	Forest [ha]	Grazed non agri. land [ha]	Wild collection [ha]*	Other non agri. land [ha]	Total [ha]
Singapore				Processing only			
Slovakia	180'307						180'307
Slovenia	41'237						41'237
Solomon Islands	5'302						5'302
South Africa	19'501				60'579		80'080
Spain	1'710'475				38'184		1'748'659
Sri Lanka	62'560						62'560
Sudan	130'000				84'130		214'130
Suriname	39						39
Swaziland	8						8
Sweden	501'831						501'831
Switzerland	133'973						133'973
Syrian Arab Republic	19'987				8'000		27'987
Taiwan	5'937						5'937
Tajikistan	12'659				1'055'890		1'068'549
Tanzania	186'537				15'040		201'577
Thailand	37'684						37'684
Timor-Leste	25'479						25'479
Togo	15'321				242		15'563
Tonga	1'997						1'997
Tunisia	139'087		42'646				181'733
Turkey	491'977				685'528		1'177'505
Uganda	240'197				158'328		398'525
Ukraine	400'764				530'000		930'764
United Arab Emirates	4'286						4'286
United Kingdom	521'475						521'475
United States of America	2'178'471						2'178'471
United States Virgin Islands	26						26
Uruguay	1'307'421						1'307'421
Uzbekistan					5'000		5'000
Vanuatu	6'594						6'594
Venezuela				Processing only			
Viet Nam	43'007	20'030			2'200		65'237
Zambia	7'552				6'826'424		6'833'976
Zimbabwe	474				549'645		550'119
Total**	43'662'446	43'222	62'589	8'112	37'442'296	1'507	81'220'172

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Blank cells: No data available.

* Wild collection and beekeeping areas

** Total includes correction value for French overseas departments.



Map 3: World Map of Organic Agriculture: Organic producers by country 2014

Black: Countries with more than 500'000 organic producers

Dark grey: Countries with between 1'000 and 500'000 organic producers

Grey: Countries with less than 1'000 organic producers

Light grey: No data

Source: FiBL survey 2016, produced with StatPlanet software

For more information see <http://www.organic-world.net/statistics/statistics-data-tables/maps.html?L=0>

Please note that StatPlanet does not include all countries covered by the survey

Organic producers and other operator types

Producers

It was reported that there are almost 2.3 million organic producers in the world. According to the data obtained, more than three-quarters of the producers are in Asia, Africa, and Latin America (see Figure 9). The country with the most organic producers is India, followed by Uganda and Mexico (see Figure 10).

There has been an increase in the number of producers by almost 270'000, or over 13 percent, in 2013. In 2014, the Philippines, Paraguay, Peru, China, and Thailand reported significant increases. These five countries represent most of the total global increase.

Finding precise figures on the number of organic farms remains difficult, as:

- Some countries report only the numbers of companies, projects, or grower groups, which may each comprise a number of individual producers;
- Some countries do not provide data on the number of producers at all;
- Some countries with wild collection areas include collectors; and
- Some countries provide the number of producers per crop, and there may be overlaps for those growers who grow several crops.

The number of producers should, therefore, be treated with caution, and it may be assumed that the total number of organic producers is higher than that reported here.

Table 10: World: Development of the numbers of producers by region 2013 to 2014

Region	2013 [no.]	2014 [no.]	Change in numbers	Change in %
Africa	572'498	593'050	+20'552	+3.6%
Asia	726'325	901'528	+175'203	+24.1%
Europe	334'170	339'824	+5'654	+1.7%
Latin America	320'148	387'184	+67'036	+20.9%
North America	16'393	16'660	+267	+1.6%
Oceania	22'997	22'115	-882	-3.8%
Total	1'992'531	2'260'361	+267'830	+13.4%

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Organic producers by region 2014

Source: FiBL Survey 2016

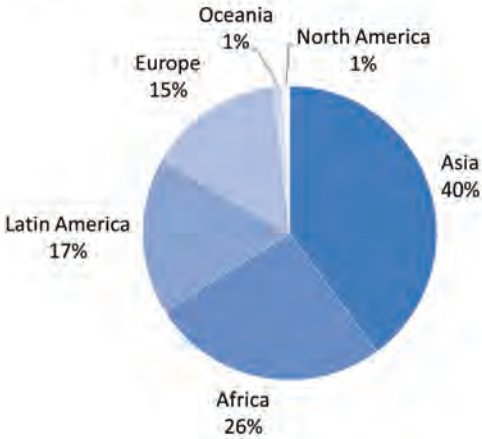


Figure 9: World: Distribution of organic producers by region 2014 (Total: 2.3 million producers)

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

The ten countries with the largest numbers of organic producers 2014

Source: FiBL survey 2016

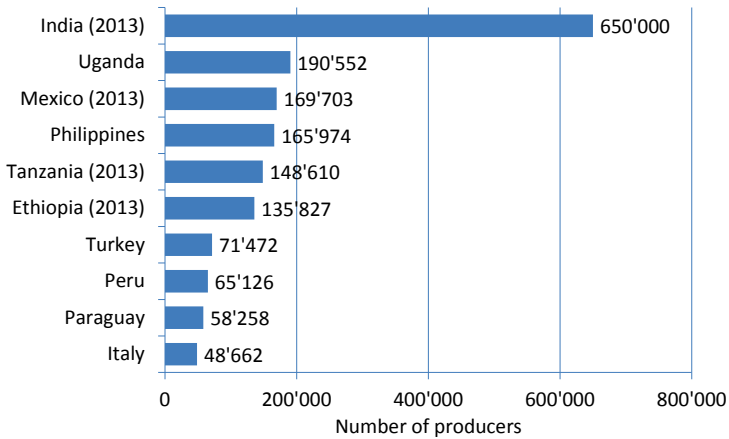


Figure 10: World: The ten countries with the largest numbers of organic producers 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Further operator types

Regarding data on further operator types, there are at almost 62'000 processors and at least 2'190 importers, most in Europe. However, not all countries reported the number of processors, exporters, importers, or other operator types. For instance, data for the United States is missing, and it can be assumed that the number of processors, importers, and exporters is far higher than what is indicated in the table below.

Further operator types reported were beekeepers, exporters, importers, smallholder groups, and aquaculture enterprises, as well as the number of collectors (wild collection).

Table 11: World: Organic producers and other operator types by country 2014

We are doing our best to ensure that this overview table will be more comprehensive in the future. For many countries (particularly those with no private or governmental data collection system), data on the various operator types is missing or incomplete, and only the number of producers or the total number of all operators is available.

Country	Producers ¹	Processors	Importers	Exporters
Albania (2012)	39	22	4	25
Algeria (2013)	57			
Andorra				
Angola (2012)				
Argentina	1'018	289		125
Armenia	17	12		
Australia (2013)	1'707	719		
Austria	22'184	2'118	23	9
Azerbaijan	288	14 (2013)		
Bahamas				
Bangladesh (2011)	9'335			
Belarus (2013)				
Belgium	1'648	844	58	
Belize	721			
Benin	3'159	8		8
Bermuda				
Bhutan	2'680			2
Bolivia	12'114	273 (2011)		
Bosnia and Herzegovina (2013)	24	8		6
Brazil (2012)	12'526			
Bulgaria	3'893	132	3	12
Burkina Faso	9'032	34		35
Burundi	34			
Cambodia (2013)	6'753	2		2
Cameroon	193	6		17
Canada	3'780	1'582		
Chad (2012)				
Chile	446	197		88
China	9'990	2'707	66	1'198
Colombia	4'775	47		45
Comoros	1'558	6		6
Congo, D.R.	1'122	3		4
Cook Islands	50			
Costa Rica	3'000 (2009)	61 (2012)		
Côte d'Ivoire	490	6		9
Croatia	2'194	242	18	2
Cuba	3	8		3
Cyprus	743	51	4	4
Czech Republic	3'866	506	110	54
Denmark	2'565	787		
Dominican Republic	26'423	152		

¹ Some countries report only the numbers of companies, projects or growers groups, which may each comprise a number of producers. See also explanation on page 58.

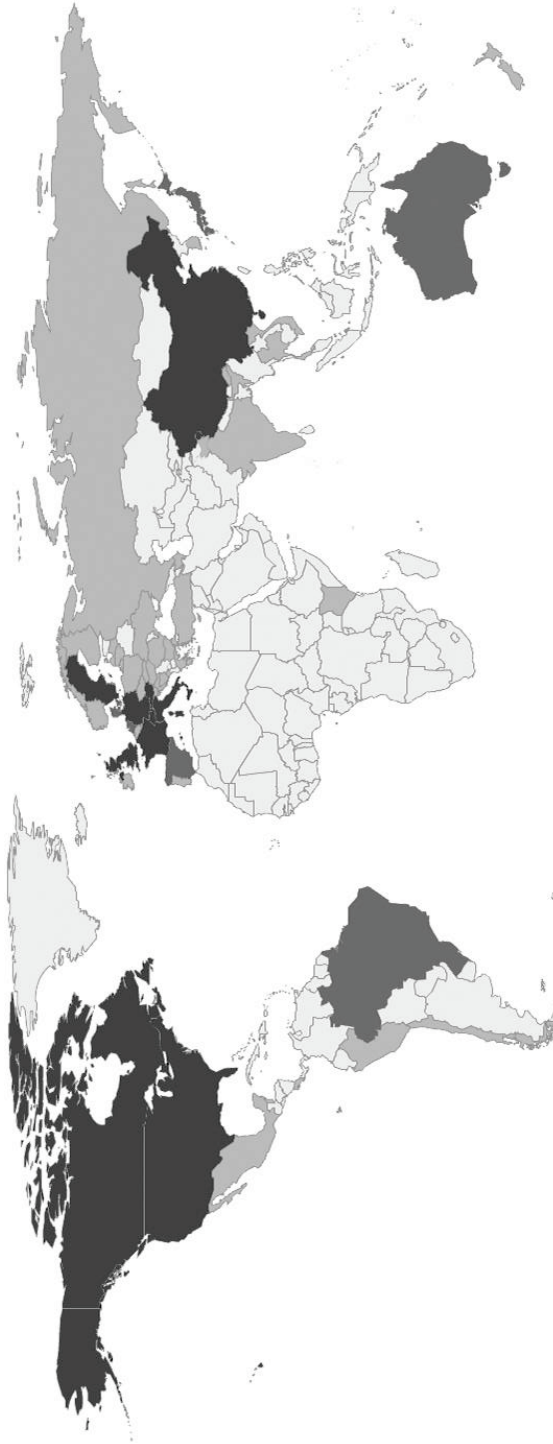
Statistics: Producers and Other Operator Types

Country	Producers ¹	Processors	Importers	Exporters
Ecuador	10'287	22		
Egypt (2009)	790			
El Salvador (2007)	2'000			
Estonia	1'542	109	9	
Ethiopia (2013)	135'827			23
Falkland Islands (Malvinas)	8			8
Faroe Islands				
Fiji	627	10		
Finland	4'247	648	67	
France	26'466	11'198	148	
French Guiana (France)	44	3		
French Polynesia	133	4		
Georgia	159	2		
Germany	23'398	9'497	326	439
Ghana	1'588	22		16
Greece	20'186	1'635	7	27
Grenada (2010)	3	2		2
Guadeloupe (France)	30	5		
Guatemala	3'008 (2010)	23 (2011)		92
Guinea-Bissau				
Haiti (2013)	1'210			
Honduras (2011)	4'989	26		25 (2009)
Hungary	1'672	257	8	
Iceland	34	26	2	
India	650'000 (2013)	699 (2012)		669 (2012)
Indonesia (2013)	5'700	66		
Iran	2'554	8		33
Ireland	1'275	197	25	3
Israel	391	103	38	47
Italy	48'662	12'641	259	
Jamaica (2009)	80			
Japan (2012)	2'130	1'805	193	
Jordan	27	7 (2012)		3
Kenya	12'647 (2011)			30 (2012)
Kiribati	900			
Kosovo (2013)	10	10		8 (2012)
Kyrgyzstan	1'035	2		
Lao P.D.R. (2011)	1'342			
Latvia	3'497	63	6	
Lebanon	93	48	9	
Lesotho (2013)	2	2		
Liechtenstein	39			
Lithuania	2'445	67	5	
Luxembourg	79	72	5	
Macedonia, FYROM (2013)	382	7	2	6
Madagascar	22'851	99		65
Malawi	2	2		
Malaysia (2013)	119			
Mali	12'619	6		8
Malta	10	9	11	
Martinique (France)	39	6		
Mauritius	18			3
Mayotte	2			
Mexico (2013)	169'703	95		
Moldova (2011)	172			
Montenegro	167	9		
Morocco (2010)	120			
Mozambique	5	4		
Myanmar	5	6		
Namibia	12	5		
Nepal (2013)	687			
Netherlands	1'706	1'138		
New Caledonia	75			
New Zealand (2012)	987	274	12	
Nicaragua (2009)	10'060	30		
Niger				
Nigeria	101	80		80
Niue	52	2		
Norway	2'232	490	65	2

Statistics: Producers and Other Operator Types

Country	Producers ¹	Processors	Importers	Exporters
Oman (2013)	4			
Pakistan	108	18		
Palestine, State of	1'096	38		
Panama	1'300 (2013)	2 (2011)		
Papua New Guinea	13'356	10		
Paraguay	58'258	24		22
Peru	65'126			153 (2010)
Philippines	165'974	45		30
Poland	24'829	484	68	71
Portugal	3'029	437	2	
Puerto Rico	5	2		
Republic of Korea	11'633			
Réunion (France)	154	16		
Romania	14'159	120	2	
Russian Federation	68	36		2
Rwanda	3'952	6		7
Samoa	658	3		
San Marino (2013)		2		
Sao Tome and Principe	3'738	5		5
Saudi Arabia	145			
Senegal (2013)	18'393	3		6
Serbia	1'281 (2013)	16	30	33
Singapore		4		
Slovakia	403	56	13	
Slovenia	3'293	236	11	
Solomon Islands	1'018			
South Africa	259	168		51
Spain	30'602	3'082	127	67
Sri Lanka	524	141		223
Sudan	354	4		2
Suriname				
Swaziland (2013)		2		
Sweden	5'406	855	247	32
Switzerland	6'195			
Syrian Arab Republic	2'458 (2010)	9 (2009)		
Taiwan (2013)	2'988			
Tajikistan (2012)	10'486	15		
Tanzania	148'610 (2013)			28 (2011)
Thailand	9'961	217		51
Timor-Leste	73	3		3
Togo	9'933	15		20
Tonga	1'326	2		
Tunisia (2013)	2'810	92	20	60
Turkey	71'472	839	34	37
Uganda	190'552			
Ukraine	182	59 (2012)	60	55
United Arab Emirates	52	2		
United Kingdom	3'526	2'487	88	
United States of America (2011)	12'880			
United States Virgin Islands	2			
Uruguay	4	7		
Uzbekistan				
Vanuatu	1'226	9		
Venezuela				
Viet Nam	2'721			
Zambia	10'059	4		4
Zimbabwe	2'003	5		5
Total	2'260'361	61'977	2'190	4'227

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315
Blank cells: No data available.



Map 4: World Map of Organic Agriculture: Organic retail sales by country 2014

Black: Countries with organic retail sales of more than 1 billion euros
 Dark grey: Countries with organic retail sales between 500 million and 1 billion euros
 Grey: Countries with organic retail sales lower than 500 million euros
 Light grey: No data

Source: FIBL survey 2016, produced with StatPlanet software
For more information see <http://www.organic-world.net/statistics/statistics-data-tables/maps.html?L=0>
 Please note that StatPlanet does not include all countries covered by the survey

Market and international trade data

Whereas Amarjit Sahota presents global trends and a global figure for the organic market, along with much background information (page 134), in this chapter, we show the country-related data that was compiled under the framework of the global survey on organic agriculture. Data on total retail sales value was available for more than 50 countries, which means that for many countries with organic farming activities such data is missing.¹

The countries with the largest market for organic food are the United States (27.1 billion euros), followed by Germany (7.9 billion euros), France (4.8 billion euros) and China (3.7 billion euros). The largest single market is the United States followed by the European Union (23.9 billion euros) and China. By region, North America has the lead (29.6 billion euros), followed by Europe (26.2 billion euros) and Asia.

Market growth was noted in all countries for which 2014 data was available, and in some cases, it was in the double digits. For example, in Sweden, the market grew by more than forty percent, representing the biggest growth. In Norway the market grew by 25 percent.

The highest per capita consumption is in European countries: In 2014, Switzerland had the highest per capita consumption (221 euros) worldwide, followed by Luxembourg (164 euros), and Denmark (162 euros). Looking at the shares the organic market has of the total market, the leader is Denmark (7.6 percent), followed by Switzerland (7.1 percent), Austria (6.5 percent in 2011), the United States (5 percent) and Germany (4.4 percent).

Export data

International trade data is becoming available for more and more countries. These can be expressed as total export/import volumes in metric tons or as values. Some countries also provide a breakdown by crop and product.

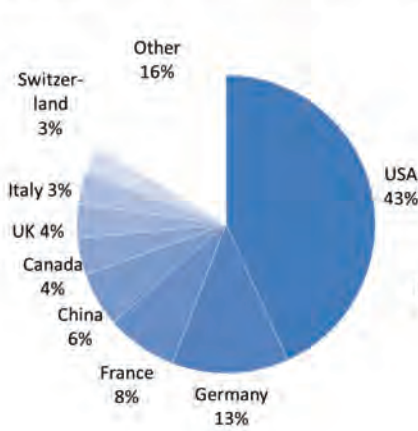
Table 12: Global market data: Retail sales, organic share of all retail sales, per capita consumption, and exports by country 2014 shows the values of total exports, where available. More than 40 countries had data on export values.

It should be noted that the export values are not strictly comparable due to different data collection methods.

¹ Some countries also provide a breakdown by product, be it in value (euros) or volume (tons), and the European OrganicDataNetwork project has made these data accessible (for Europe) on its website at www.organicdatanetwork.net.

Global market: Distribution of retail sales value by country 2014

Source: FiBL-AMI survey 2016, based on retail sales with organic food



Global market: Distribution of retail sales value by region 2014

Source: FiBL-AMI survey 2016, based on retail sales with organic food

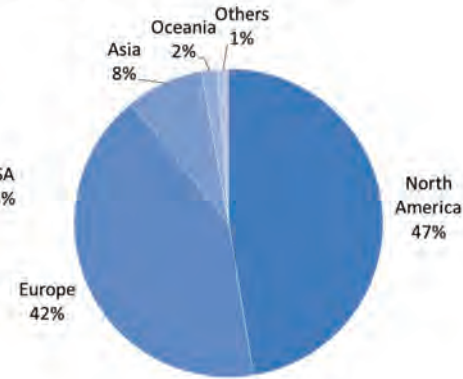


Figure 11: Global market for organic food: Distribution of retail sales by country 2014

Figure 12: Global market for organic food: Distribution of retail sales by region 2014

Source: FiBL-AMI survey 2016, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 315

The ten countries with the largest markets for organic food 2014

Source: FiBL-AMI survey 2016

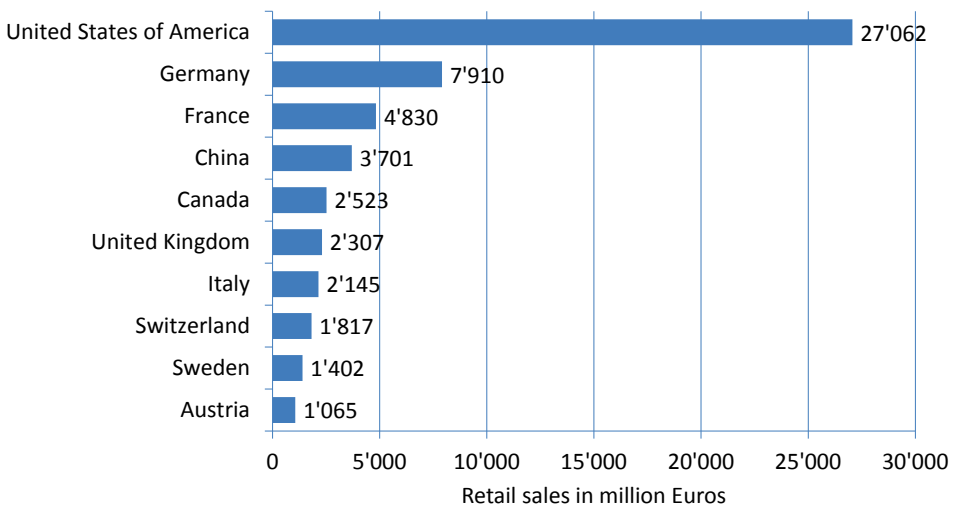


Figure 13: Global market: The countries with the largest markets for organic food 2014

Source: FiBL-AMI survey 2016, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 315

The ten countries with the highest per capita consumption 2014

Source: FiBL-AMI survey 2016

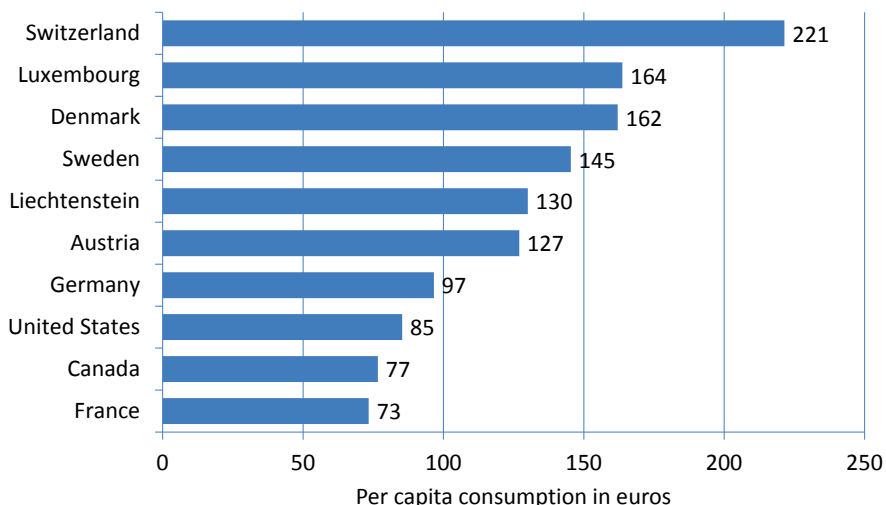


Figure 14: Global market: The ten countries with the highest per capita consumption 2014

Source: FiBL-AMI survey 2016, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 315

Table 12: Global market data: Retail sales, organic share of all retail sales, per capita consumption, and exports by country 2014

It should be noted that for market and trade data, comparing country statistics remains very problematic, due to differing methods of data collection. Comments on this table should be sent to helga.willer@fibl.org.

Revisions will be posted at <http://www.organic-world.net/statistics/statistics-data-revisions.html> and included into the database.

Country	Data year	Retail sales [Million €]	Organic share [%]	€/person	Exports [Million €]
Argentina	2009				122
Australia	2013	962		42	248
Austria	2011	1'065	6.5%	127	80
Azerbaijan	2011	3		0	
Belgium	2014	435	1.8%	39	
Belize	2014	0		0	0
Bolivia	2011				179
Bosnia and Herzegovina	2014	2		0	1
Brazil	2013	700		3	
Bulgaria	2010	7		1	
Cambodia	2009				1
Canada	2013		2.8%		
	2014	2'728		77	378
Chile	2009	2		0	
	2014				152
China	2014	3'701		3	467
Colombia	2007				13
Costa Rica	2009				19
Croatia	2011				3
	2014	99	2.2%	23	

Statistics: Market and International Trade Data

Country	Data year	Retail sales [Million €]	Organic share [%]	€/person	Exports [Million €]
Cyprus	2006	2		2	
Czech Republic	2013	77	0.7%	7	31
Denmark	2014	912	7.6%	162	231
Dominican Republic	2013				172
Ecuador	2014				43
Ethiopia	2013				144
Falkland Islands (Malvinas)	2013				2
Finland	2014	225	1.7%	41	10
France	2014	4'830	2.5%	73	435
Germany	2014	7'910	4.4%	97	
Greece	2010	60		5	
Hungary	2009	25	0.3%	2	20
India	2012	130		0	
	2014				303
Ireland	2011		0.7%		
	2014	105		23	
Italy	2014	2'145	2.2%	35	1'420
Japan	2009	1'000		8	
Kosovo	2013				5
Kyrgyzstan	2014				1
Latvia	2011	4	0.2%	2	
Liechtenstein	2014	5		130	
Lithuania	2011	6	0.2%	2	
Luxembourg	2014	90	3.4%	164	
Mexico	2013	14		0	373
Moldova	2011				15
Montenegro	2010	0		0	
Netherlands	2014	965	3.0%	57	928
New Zealand	2012	82		19	136
Norway	2014	278	1.5%	54	
Paraguay	2011				71
Peru	2010	14		0	
	2014			0	255
Poland	2011	120	0.2%	3	
Portugal	2011	21	0.2%	2	
Republic of Korea	2014	221		4	
Romania	2011	80	0.7%	4	200
Russian Federation	2009				4
	2012	120		1	
Serbia	2013				10
Slovakia	2010	4	0.2%	1	
Slovenia	2013	49	1.8%	27	
Spain	2012	998	1.0%	21	590
Sri Lanka	2014				172
Sweden	2014	1'402	6.0%	145	
Switzerland	2014	1'817	7.1%	221	
Thailand	2014	12		0	28
Tunisia	2013				54
Turkey	2009	4			20
Uganda	2014				34
Ukraine	2014	15			70
United Kingdom	2014	2'307		36	
United States of America	2014	27'062	5.0%	85	2'409
Viet Nam	2014	2			551

Source: FiBL-AMI survey 2016, based on data from government bodies, the private sector, and market research companies. For data sources see annex, page 315

Blank cells: No data available

Organic farming in developing countries and in emerging markets

The countries on the Development Assistance Committee (DAC) list of recipients for Official Development Assistance (ODA) from the Organization for Economic Cooperation and Development (OECD) are analysed in this section.¹ More than 1.9 million producers from the DAC countries were counted (87 percent of all organic producers). Over a quarter of the world's organic agricultural land, 11.7 million hectares, is located in countries listed on the DAC list. If wild collection and beekeeping areas are included, the total area is 34.9 million hectares. Most of the agricultural land is located in Latin American countries (almost 6.4 million hectares), with Asia (3.5 million) and Africa (1.3 million) in second and third place. The countries with the largest areas of organic agricultural land are Argentina, China, Uruguay, India, and Brazil, in that order. Not surprisingly, most of them are large countries (Figure 15).

However, when it comes to organic agricultural land as a percentage of the total area under cultivation, the order is different. The countries with the highest percentages of organic agricultural land are Samoa (14.3 percent), Sao Tome and Principe (12 percent), and Uruguay (8.8 percent). Argentina, with by far the largest area under organic cultivation (with 3.1 million hectares), is ranked fifteenth when the organic agricultural area is expressed as a proportion of the total agricultural area. The share of organic land of the top ten countries on the DAC list is comparable to that of many European countries. These high percentages can be attributed in part to a high potential for, and focus on, exports. Support activities may also play a role. However, out of all the countries on the DAC list, only 23 percent of them have a proportion of organic agricultural land higher than one percent of the total agricultural area (Figure 16).

Land use details were available for almost 80 percent of the agricultural land; crop data is missing for some of the world's largest producing countries (India and Brazil). However, the available statistics show that the shares of grassland/grazing areas and of permanent crops are relatively high when compared with other regions. Arable land, by contrast, is of minor importance. This is because exports play an important role, either for meat products (mainly from Argentina and Uruguay) or for permanent crops. The most important crops are export crops, such as cereals, sugarcane, coffee, coconut, cocoa, and tropical and subtropical fruits, from Latin America, and olives, from the Mediterranean countries.

Table 13: Countries on the DAC list: Development of organic agricultural land 2009-2014

Region	2009 [ha]	2010 [ha]	2011 [ha]	2012 [ha]	2013 [ha]	2014 [ha]
Africa	1'003'648	1'075'554	1'072'848	1'148'867	1'208'225	1'262'441
Asia	3'500'058	2'377'368	3'629'475	3'150'217	3'321'944	3'482'482
Europe	346'159	432'006	479'120	546'658	476'759	508'942
Latin America	7'260'782	7'138'751	6'565'823	6'543'111	6'407'605	6'380'178
Oceania	25'918	17'141	50'691	53'370	62'511	85'159
Total	12'136'564	11'040'820	11'797'956	11'442'222	11'477'045	11'719'202

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

¹ The list is available at

<http://www.oecd.org/dac/stats/documentupload/DAC%20List%20of%20ODA%20Recipients%202014%20final.pdf>

The ten countries on the DAC list with the largest areas of organic agricultural land 2014

Source: FiBL survey 2016

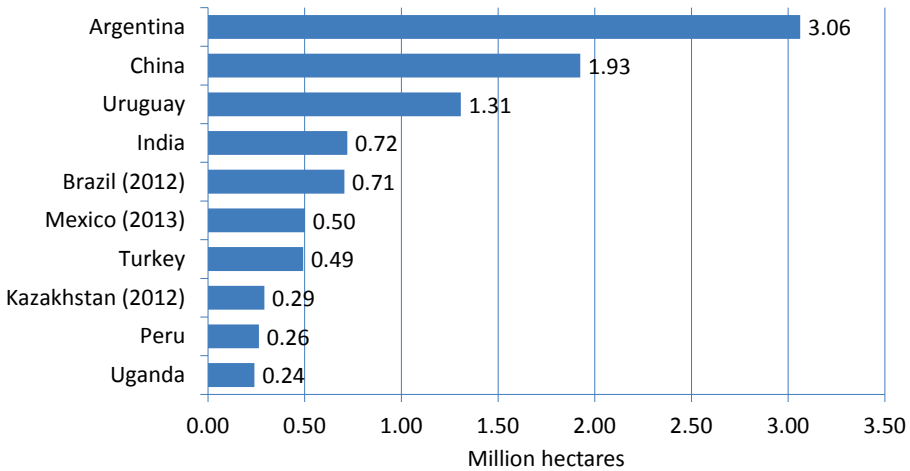


Figure 15: Countries on the DAC list: The ten countries with the largest areas of organic agricultural land in 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

The ten countries on the DAC list with the highest shares of organic agricultural land 2014

Source: FiBL survey 2016

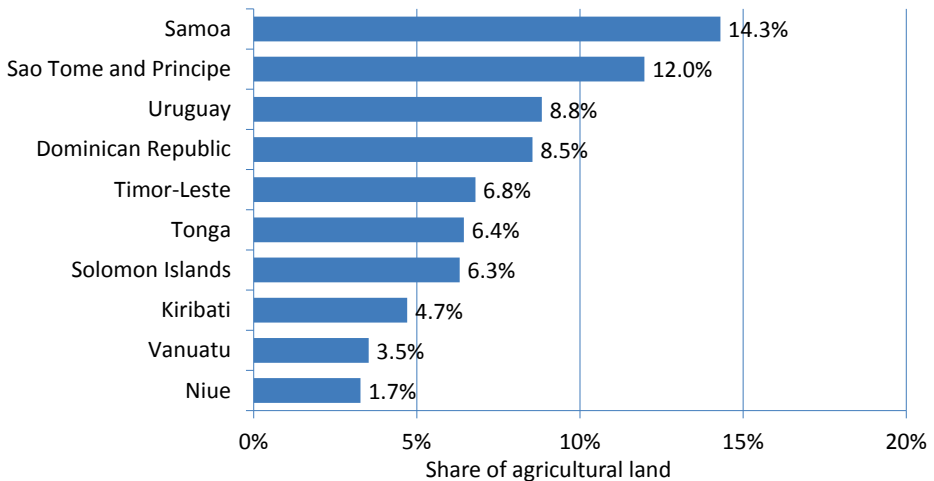


Figure 16: Countries on the DAC list: The ten countries with the highest shares of organic agricultural land in 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Land use and crop data

Almost two-thirds of the 43.7 million hectares of organic agricultural land in 2014 were grassland/grazing areas (27.5 million hectares). The cropland area (arable land with 8.5 million hectares and permanent crops with 3.4 million hectares) constituted 11.9 million hectares, and thus more than a quarter of the organic agricultural land. The cropland area is probably much higher because details on land use are not available for some countries with large organic agricultural areas, such as Brazil and India. General land use information was available for 90 percent of the organic agricultural land; however, this does not mean that detailed crop information is available for all areas, as not all countries provided detailed crop data.¹

The FAO classification² of land use was utilized for this survey, with slight modifications. A system similar to that of Eurostat was used for the classification of crops.³ The following main levels were used to classify the land use data: arable land; permanent crops; cropland for which no further details were available (cropland = arable land + permanent cropland with no details available); permanent grassland/grazing areas; other agricultural areas (such as for instance hedges); and agricultural land for which no details were available at all. For crop groups included in these land use types see Table 15. Aquaculture, forest, and grazed non-agricultural land were distinguished from “agricultural land” with a separate category, as were organic wild collection areas and beekeeping areas.

The land use information can be summarized by geographical region, as follows:

- Africa: Land use information was available for about two-thirds of the organic agricultural land in Africa. Almost half of the agricultural land is used for permanent crops. The main permanent crops are cash crops, such as coffee and olives. For land use details in Africa, see page 163.
- Asia: Land use details are known for over sixty percent of the organic agricultural land in Asia. Arable land is mainly used for cereals, including rice. Furthermore, oilseeds are important. For land use details in Asia, see page 182.
- Europe: In Europe, the agricultural land use is well known, and the main crop categories are well documented. Permanent pastures and arable land have approximately equal shares of the organic agricultural area. Arable land is mainly used for the cultivation of green fodder (2 million hectares) followed by cereals (almost 2 million hectares). Permanent crops account for almost twelve percent of the organic agricultural land. More than one-third of this land was used for olives, followed by grapes, nuts, and fruits. For land use details in Europe, see page 199.
- Latin America and the Caribbean: Nearly two-thirds of the organic agricultural land in Latin America for which information was available is permanent pasture. Permanent crops account for one-tenth of the agricultural area. More than one-half

¹ For some countries, only information on the main uses (arable crops, permanent crops, and permanent grassland) was available. For other countries, very detailed statistical land use information can be found.

² For more details, see the FAOSTAT homepage, faostat.fao.org at Home > Concepts and Definitions > Glossary, or <http://faostat.fao.org/site/379/DesktopDefault.aspx?PageID=379>

³ For details, see www.organic-world.net. For the data collected, a classification system developed in cooperation with AMI, the German Agricultural Market Information Company, is used. The questionnaire, as well as some background information, is also available at www.organic-world.net.

of the permanent cropland is used for coffee, followed by cocoa and tropical fruits. For land use details in Latin America and the Caribbean, see page 242.

- North America: As in Europe, arable land and permanent grassland/grazing areas have almost equal shares. A major proportion of the arable land is used for cereal production and cultivation of green fodder. For land use details in North America, see page 262.
- Oceania: Most of the land in Australia is used for extensive grassland/grazing areas, and only minimal information is available on the remaining land. For land use details in Oceania, see page 281.

Table 14: World: Land use in organic agriculture by region (including in-conversion areas) 2014

Land use	Africa [ha]	Asia [ha]	Europe [ha]	Latin America [ha]	North America [ha]	Oceania [ha]	Total [ha]
Agri-cultural land, no details	343'858	1'285'280	82'019	903'783	14'318	486'561	3'115'819
Arable crops	241'560	1'603'641	5'055'335	327'961	1'245'479	37'399	8'511'374
Cropland, no details		50'072		201'661	378'920	41'739	672'392
Other agri. land	4'777	59'545	328'013	7'668	91'881		491'885
Permanent crops	601'907	541'238	1'359'534	797'867	67'525	48'695	3'416'765
Permanent grassland	71'003	27'699	4'800'100	4'546'856	1'284'296	16'728'022	27'457'976
Total*	1'263'105	3'567'474	11'625'001	6'785'796	3'082'419	17'342'416	43'662'446

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

*Totals include correction values for some countries for land with double cropping during one year.

Distribution of main land use types by region 2014

Source: FiBL survey 2016

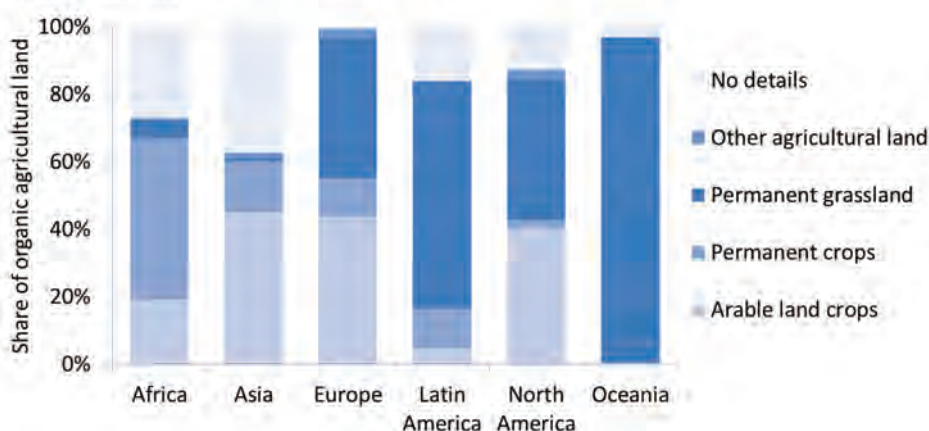


Figure 17: World: Distribution of main land use types by region 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Distribution of main land use types and crop categories 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.

Land use types 2014

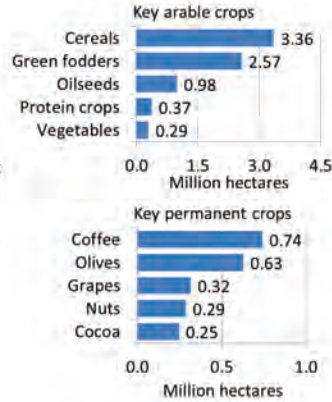
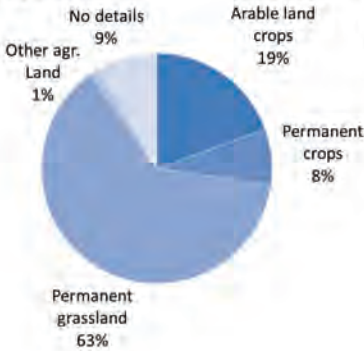


Figure 18: World: Distribution of main land use types and crop categories 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Development of the organic land by land use type 2004-2014

Source: FiBL-IFOAM-SOEL-Surveys 1999-2016

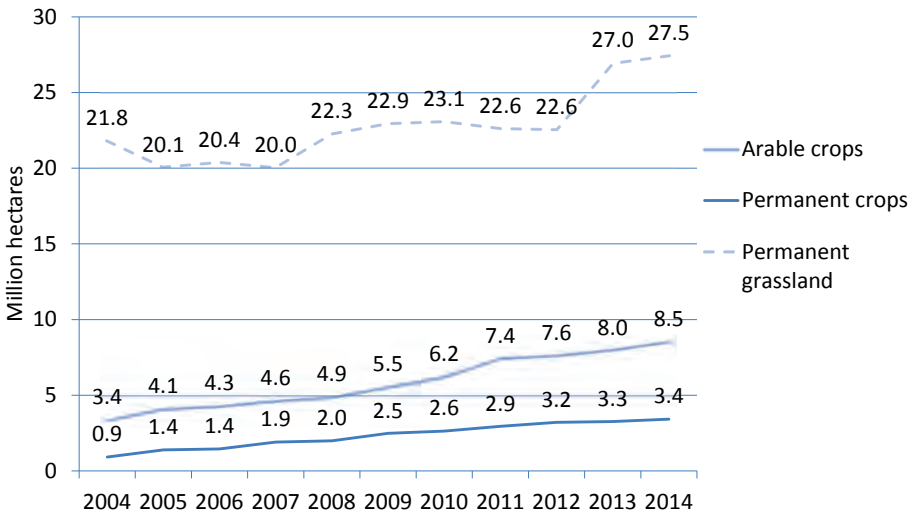


Figure 19: World: Development of organic arable land, permanent cropland and permanent grassland/grazing areas 2004-2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 15: World: Land use and crop categories in organic agriculture worldwide 2014

Land use	Crop group	Area [ha]
Agricultural land and crops, no details		3'127'795
Arable crops	Arable crops, no details	278'375
	Cereals	3'357'439
	Dried pulses	367'485
	Flowers and ornamental plants	9'578
	Green fodders from arable land	2'566'048
	Hops	234
	Industrial crops	25'123
	Medicinal and aromatic plants	118'254
	Mushrooms and truffles	687
	Oilseeds	983'926
	Root crops	61'845
	Seeds and seedlings	150
	Strawberries	4'065
	Sugarcane	70'005
	Textile crops	271'284
	Tobacco	1'902
	Vegetables	290'137
	Arable crops, other	104'836
Arable crops total		8'511'374
Cropland, no details		656'651
Other agricultural land	Other agricultural land, no details	19'333
	Fallow land, crop rotation	418'032
	Hedges	677
	Home gardens	57
	Unutilised land	51'891
	Other agricultural land, other	1'895
Other agricultural land total		491'885
Permanent crops	Berries	45'160
	Citrus fruit	75'215
	Cocoa	245'275
	Coconut	156'373
	Coffee	740'801
	Flowers and ornamental plants, permanent	63
	Fruit, no details	22'810
	Fruit, temperate	188'168
	Fruit, tropical and subtropical	233'143
	Grapes	315'979
	Medicinal and aromatic plants, permanent	28'403
	Nurseries	643
	Nuts	286'109
	Olives	627'478
	Tea/mate, etc.	69'025
	Permanent crops, other	382'120
Permanent crops total		3'416'765
Permanent grassland		27'457'976
Total		43'662'446

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Arable land

With a total of more than 8.5 million hectares, organic arable land constitutes 19 percent of the world's organic agricultural land, and 0.6 of the world's arable crop land.¹

An increase of 6.7 percent over 2013 was reported, and there was an increase in almost all crop categories, with the exception of cereals and vegetables, which decreased by 2.3 percent and 4.7 percent, respectively.

Almost 60 percent of the arable land is located in Europe, followed by Asia (19 percent), and North America (15 percent) (see Figure 20).

Most of this category of land is used for cereals including rice (3.4 million hectares), green fodder (2.6 million hectares), and oilseeds (almost 1 million hectares).

Table 16: Use of organic arable land (including in-conversion areas), 2013 and 2014 compared

Crop group	2013 [ha]	2014 [ha]	Change [ha]	Change [%]
Cereals	3'435'682	3'357'439	-78'244	-2.3%
Dried pulses	308'797	367'485	+58'688	+19.0%
Flowers and ornamental plants	3'081	9'578	+6'497	+210.9%
Green fodders from arable land	2'459'840	2'566'048	+106'208	+4.3%
Hops	225	234	+9	+4.2%
Industrial crops	23'964	25'123	+1'159	+4.8%
Medicinal and aromatic plants	87'640	118'254	+30'614	+34.9%
Mushrooms and truffles	1'520	687	-833	-54.8%
Oilseeds	867'000	983'926	+116'926	+100.0%
Root crops	52'384	61'845	+9'461	+18.1%
Seeds and seedlings	4'721	150	-4'571	-96.8%
Strawberries	4'023	4'065	+42	+1.0%
Sugarcane	69'289	70'005	+716	+1.0%
Textile crops	90'993	271'284	+180'291	+198.1%
Tobacco	1'708	1'902	+194	+11.4%
Vegetables	304'479	290'137	-14'342	-4.7%
Total*	7'980'348	8'511'374	+531'027	+6.7%

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Not all countries included in the survey provided data on land use or crop areas.

*Total includes arable crop groups for which no further details were available.

¹ There were 1'407'843'380 hectares of arable cropland in 2013, according to FAOSTAT, FAO, Rome. See the FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Distribution of organic arable cropland by region 2014

Source: FiBL survey 2016

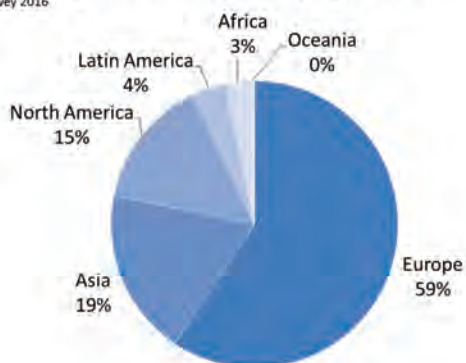


Figure 20: World: Distribution of organic arable cropland by region 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Use of organic arable cropland by crop group 2014

Source: FiBL survey 2016

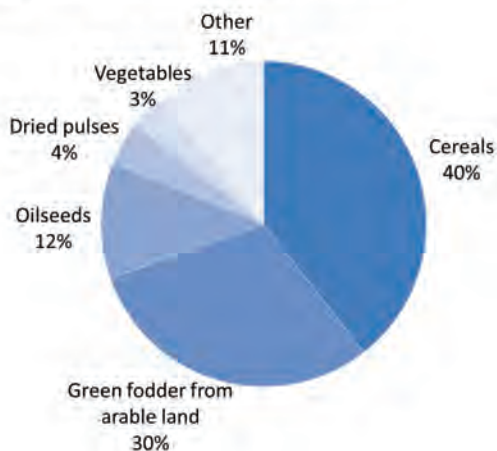


Figure 21: World: Use of arable cropland by crop group 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Permanent crops

Permanent crops account for more than 3.4 million hectares, which is 2 percent of the world's permanent cropland.¹

Compared with the previous survey, an increase of almost 159'000 hectares was reported or 4.9 percent.

With an 8 percent share of the organic agricultural land, permanent cropland has a higher share in organic agriculture than in total agriculture, where permanent crops account for approximately 3 percent of the total.

Most of the permanent cropland is in Europe (1.4 million hectares), followed by Latin America (0.8 million hectares), and Africa (0.6 million hectares) (see Table 14).

The most important crop is coffee, with more than 0.7 million hectares reported and constituting almost one quarter of the organic permanent cropland, followed by olives (0.6 million hectares), grapes (0.32 million hectares), nuts (0.28 million hectares), and cocoa (0.25 million hectares).

Table 17: Use of organic permanent cropland (including in-conversion areas), 2013 and 2014 compared

Crop group	2013 [ha]	2014 [ha]	Change [ha]	Change [%]
Berries	43'801	45'160	+1'358	+3.1%
Citrus fruit	81'715	75'215	-6'499	-8.0%
Cocoa	222'597	249'194	+26'597	+11.9%
Coconut	58'656	156'373	+97'717	+166.6%
Coffee	705'964	762'916	+56'952	+8.1%
Flowers and ornamental plants, permanent	22	63	+41	+187.3%
Fruit, temperate	212'884	188'168	-24'716	-11.6%
Fruit, tropical and subtropical	214'840	233'143	+18'304	+8.5%
Grapes	312'577	315'979	+3'402	+1.1%
Medicinal and aromatic plants, permanent	33'762	28'403	-5'359	-15.9%
Nurseries	752	643	-109	-14.5%
Nuts	323'199	286'109	-37'090	-11.5%
Olives	612'737	627'478	+14'741	+2.4%
Tea/mate, etc.	87'543	69'025	-18'519	-21.2%
Total*	3'258'119	3'416'765	+158'647	+4.9%

Source: FiBL survey 2016, based on data from governments, the private sector, and certifiers. For detailed data sources see annex, page 315

*Total includes permanent crop groups, for which no further details were available.

¹ There were 164'661'190 hectares of permanent cropland in 2013 according to FAOSTAT, FAO, Rome. See the faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Distribution of organic permanent cropland by region 2014

Source: FiBL survey 2016



Figure 22: World: Distribution of permanent cropland by region 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Use of permanent cropland by crop group 2014

Source: FiBL survey 2016

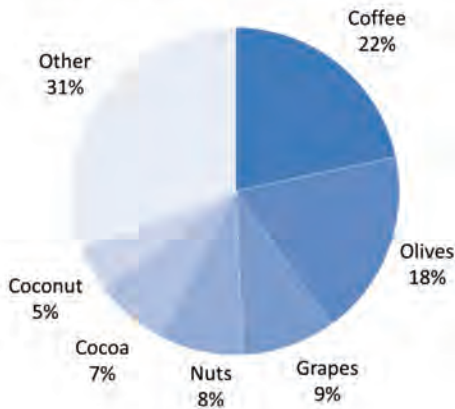


Figure 23: World: Use of permanent cropland by crop group 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Wild collection and beekeeping areas

The collection of wild harvested crops is defined in the IFOAM Norms (IFOAM 2014), and wild collection activities are also regulated by organic laws. A collection area (including beekeeping) of 37.4 million hectares was reported in 2014. The organic wild collection areas are concentrated in Europe, Africa, Asia, and Latin America (Figure 24); the distribution is thus quite different from that of the organic agricultural land.

The countries with the largest areas are Finland (mainly berries), followed by Zambia (beekeeping) and India (Figure 25).

Wild berries, apiculture, medicinal and aromatic plants, as well as shea nuts in Africa and Brazil nuts in Latin America, play the most important roles (see Table 19).

Table 18: Wild collection and beekeeping areas by region 2013 and 2014 compared

Region	2013 [ha]	2014 [ha]	Change [ha]	Change [%]
Africa	10'121'401	11'790'631	+1'669'230	+16.5%
Asia	7'794'340	6'300'019	-1'494'321	-19.2%
Europe	13'357'259	16'279'559	+2'922'300	+21.9%
Latin America	2'749'717	3'007'369	+257'652	+9.4%
North America	71'821	63'954	-7'867	-11.0%
Oceania	765	765	-	-
Total	34'095'303	37'442'296	+3'346'994	+9.8%

Source: FiBL survey 2016, based on data from governments, the private sector, and certifiers. For detailed data sources see annex, page 315

Table 19: Wild collection and beekeeping areas by crop group 2014

Land use	Area [ha]
Apiculture	6'707'330
Berries, wild	41'576
Forest honey	360'000
Fruit, wild	440'297
Medicinal and aromatic plants, wild	3'718'957
Mushrooms, wild	92'558
Nuts, wild	1'192'792
Oil plants, wild	1'416'229
Palm sugar	1'431
Palmito, wild	63'867
Rose hips, wild	60'028
Seaweed	200'032
Wild collection, no details	22'652'071
Wild collection, other	495'128
Total	37'442'296

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Distribution of organic wild collection areas by region 2014

Source: FiBL survey 2016

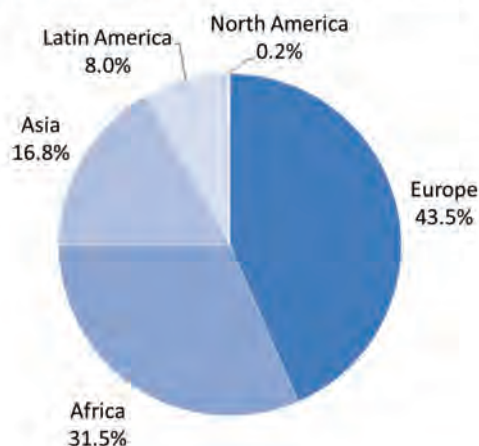


Figure 24: World: Distribution of organic wild collection and beekeeping areas by region in 2014

Source: FiBL survey 2016, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 315

The ten countries with the largest wild collection areas 2014

Source: FiBL survey 2016

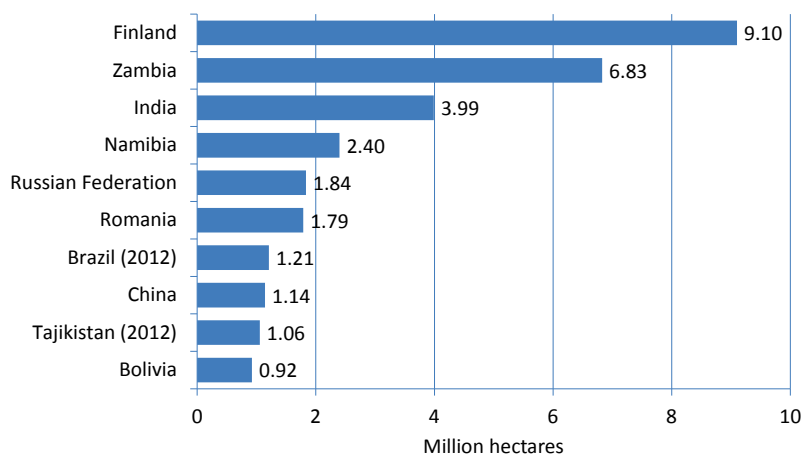


Figure 25: World: The ten countries with the largest organic wild collection and beekeeping areas in 2014

Source: FiBL survey 2016, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 315

Table 20: Wild collection and beekeeping areas by country 2014

Country	Land use	2014
Albania	Medicinal and aromatic plants, wild	467'783
Argentina	Apiculture	454'229
	Wild collection, no details	4'372
Armenia	Wild collection, no details	11'250
Azerbaijan	Berries, wild	161
	Fruit, wild	541
	Medicinal and aromatic plants, wild	56
	Nuts, wild	179
Belarus	Wild collection, no details	11'494
Belgium	Wild collection, no details	3
Benin	Nuts, wild	500
	Wild collection, other	4'005
Bhutan	Medicinal and aromatic plants, wild	6'315
Bolivia	Nuts, wild	922'991
Bosnia and Herzegovina	Wild collection, no details	124'141
Brazil	Wild collection, no details	1'209'773
Bulgaria	Rose hips, wild	1'588
	Wild collection, no details	678'025
	Wild collection, other	232
Burkina Faso	Nuts, wild	65'581
	Wild collection, no details	14'177
	Wild collection, other	310
Cameroon	Forest honey	360'000
Canada	Berries, wild	2'046
	Wild collection, no details	11'315
	Wild collection, other	50'592
Chad	Wild collection, other	11'000
Chile	Berries, wild	17'708
	Rose hips, wild	58'440
	Wild collection, no details	4'906
China	Fruit, wild	432'428
	Medicinal and aromatic plants, wild	11'165
	Mushrooms, wild	91'272
	Nuts, wild	4'990
	Nuts, wild, other	7'807
	Oil plants, wild	44'606
	Wild collection, no details	328'000
	Wild collection, other	224'059
Colombia	Palmito, wild	6'800
	Wild collection, other	520
Comoros	Medicinal and aromatic plants, wild	29
	Wild collection, no details	41
Côte d'Ivoire	Nuts, wild	344
Croatia	Rose hips, wild	0
	Wild collection, no details	7
	Wild collection, other	0
Denmark	Wild collection, no details	2'648
Dominican Republic	Apiculture	130
	Wild collection, other	3'715
Ecuador	Mushrooms, wild	1'260
Estonia	Wild collection, no details	40'579
Ethiopia	Apiculture	350
	Wild collection, other	2'757
Fiji	Wild collection, other	653
Finland	Wild collection, no details	9'100'000
France	Wild collection, no details	2'809
Georgia	Wild collection, no details	215
Ghana	Nuts, wild	33'734
	Wild collection, no details	1'961
Guatemala	Apiculture	5
Guyana	Palmito, wild	54'000
Iceland	Seaweed	200'032
	Wild collection, other	14'493
India	Wild collection, no details	3'990'000
Indonesia	Apiculture	9'007
	Oil plants, wild	137
	Palm sugar	1'431

Country	Land use	2014
Iran (Islamic Republic of)	Wild collection, other	154
	Apiculture	7'850
Italy	Wild collection, no details	15'000
	Wild collection, no details	62'647
Jamaica	Wild collection, other	36
Kazakhstan	Medicinal and aromatic plants, wild	863
Kenya	Apiculture	89'417
	Oil plants, wild	41'486
Kyrgyzstan	Wild collection, no details	71
Lao People's Democratic Republic	Wild collection, no details	16'786
Lebanon	Medicinal and aromatic plants, wild	16
	Wild collection, no details	147
Lesotho	Wild collection, no details	50'000
Macedonia, FYROM	Wild collection, no details	556'600
Madagascar	Wild collection, no details	91'239
Malawi	Fruit, wild	265
	Wild collection, other	4'730
Mali	Nuts, wild	1'446
	Wild collection, other	6'700
Mexico	Apiculture	7'455
	Fruit, wild	6'032
	Medicinal and aromatic plants, wild	60
	Wild collection, no details	3'687
Montenegro	Wild collection, other	13'130
	Medicinal and aromatic plants, wild	139'809
Morocco	Fruit, wild	920
	Medicinal and aromatic plants, wild	186'000
	Oil plants, wild	630'000
	Wild collection, no details	44'000
Mozambique	Wild collection, other	770
	Wild collection, other	31'400
Namibia	Medicinal and aromatic plants, wild	2'400'000
Nepal	Wild collection, no details	24'422
Nicaragua	Apiculture	11'463
Nigeria	Apiculture	1'000
Niue	Fruit, wild	112
Paraguay	Palmito, wild	3'067
Peru	Nuts, wild, other	155'219
	Wild collection, no details	68'371
Portugal	Mushrooms, wild	26
Romania	Wild collection, no details	1'787'548
Russian Federation	Berries, wild	21'660
	Wild collection, no details	1'813'723
Rwanda	Medicinal and aromatic plants, wild	68
	Wild collection, no details	12
Senegal	Wild collection, other	22'000
South Africa	Medicinal and aromatic plants, wild	46'648
	Wild collection, no details	13'931
Spain	Wild collection, no details	38'184
Sudan	Wild collection, other	84'130
Syrian Arab Republic	Wild collection, no details	8'000
Tajikistan	Wild collection, no details	1'055'890
Tanzania, United Republic of	Wild collection, no details	15'040
Togo	Wild collection, other	242
Turkey	Wild collection, no details	685'528
Uganda	Wild collection, no details	158'328
Ukraine	Wild collection, no details	530'000
Uzbekistan	Wild collection, no details	5'000
Viet Nam	Wild collection, no details	2'200
Zambia	Apiculture	6'126'424
	Oil plants, wild	700'000
Zimbabwe	Medicinal and aromatic plants, wild	460'145
	Wild collection, no details	70'000
Total	Wild collection, other	19'500
		37'442'296

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Beehives

Over 1 million organic beehives were reported in 2014, representing almost 1.3 percent of the world's total global beehives, according to FAO data from 2013.¹ Organic beehives are concentrated mainly in Europe (70 percent) and Latin America (19 percent) (see Figure 26). The countries with the largest numbers of organic beehives are Bulgaria (179'106), followed by Italy (146'692) and France (96'478) (Figure 28). Their numbers have doubled since 2007, when over 535'000 beehives were reported (Figure 27).

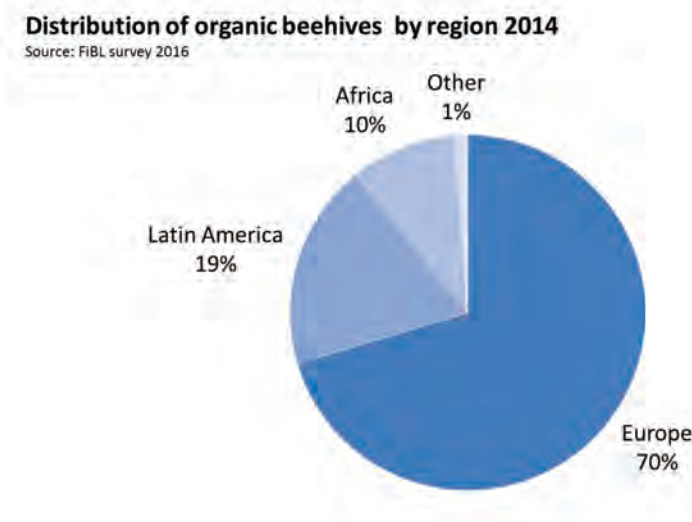


Figure 26: World: Distribution of organic beehives by region in 2014

Source: FiBL survey 2016, based on data from government bodies, the private sector, and certifiers. For detailed data sources see annex, page 315

¹ According to FAO, there were 81'027'785 beehives in 2013. The FAOSTAT website > Production > Live animals at <http://faostat3.fao.org/download/Q/QA/E>

Development of the organic beehives 2007-2014

Source: FiBL-IFOAM-SOEL 2006-2016

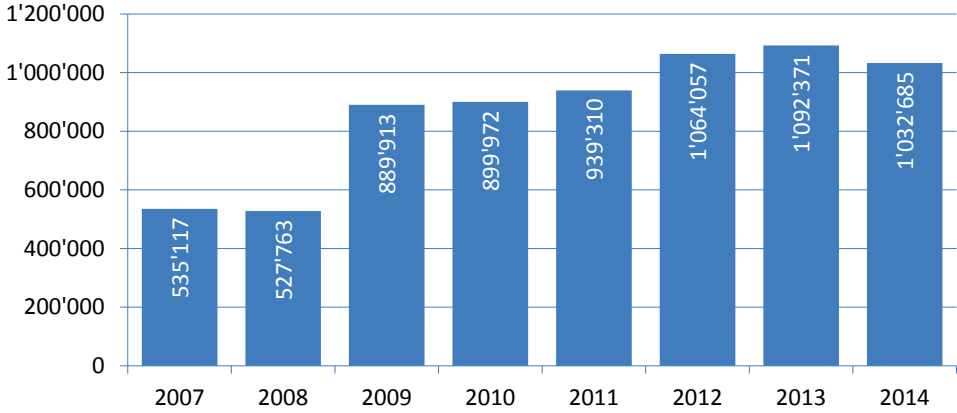


Figure 27: Development of the organic beehives 2007-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016. For detailed data sources see annex, page 315

The ten countries with the largest number of organic beehives 2014

Source: FiBL survey 2016

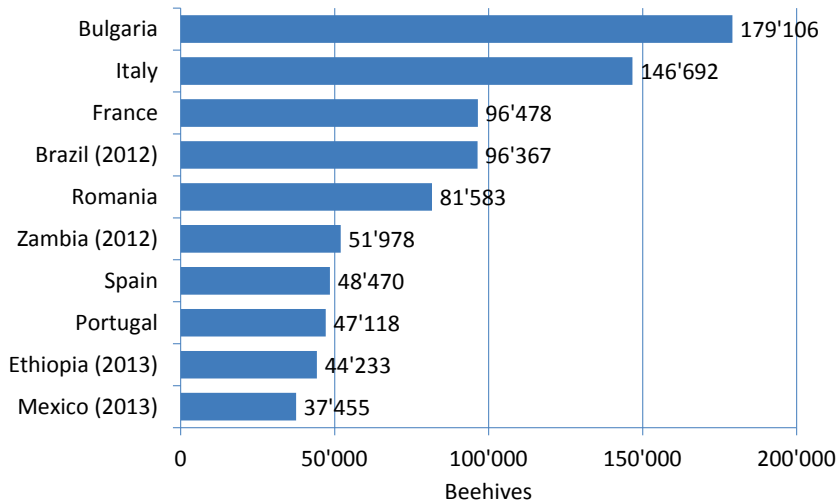


Figure 28: The ten countries with the largest number of organic beehives in 2014

Source: FiBL survey-2016. For detailed data sources see annex, page 315

Table 21: Number of organic beehives by country 2014

Country	Beehives [no.]	Country	Beehives [no.]
Argentina	16'992	Slovakia	477
Armenia	800	Slovenia	1'631
Australia	6'475	South Africa	4
Austria	19'503	Spain	48'470
Azerbaijan	932	Sweden	2'182
Belgium	200	Switzerland	3'392
Bhutan	177	Tunisia	757
Bosnia and Herzegovina	561	Turkey	36'391
Brazil	96'367	Ukraine	300
Bulgaria	179'106	Zambia	51'978
Burkina Faso	11	Total	1'032'685
Canada	85		
Chile	5'414		
Croatia	3'649		
Cuba	24'100		
Czech Republic	39		
Denmark	56		
Estonia	1'684		
Ethiopia	44'233		
Finland	4'915		
France	96'478		
French Guiana (France)	21		
Georgia	570		
Greece	14'865		
Guadeloupe (France)	36		
Hungary	19'296		
Iran (Islamic Republic of)	2'500		
Ireland	58		
Italy	146'692		
Kosovo	40		
Latvia	12'036		
Lebanon	183		
Liechtenstein	1		
Lithuania	790		
Luxembourg	44		
Martinique (France)	120		
Mexico	37'455		
Montenegro	1'057		
Morocco	2'200		
Nicaragua	13'367		
Norway	1'347		
Poland	1'844		
Portugal	47'118		
Réunion (France)	415		
Romania	81'583		
Saudi Arabia	772		
Senegal	32		
Serbia	884		

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Statistics on selected crops

In this section, some of the data received on key crops and crop groups are presented: area under organic management, including conversion areas, and comparison with the total area of the crops (if available). FiBL collected land use and crop data for the first time in 2004; hence, the development graphs show the growth since that year.

It should be noted that the organic areas are compared with the *area harvested* in 2013 as provided by FAO. The data may not necessarily be directly comparable to the areas sown or planted as registered by the certification bodies.

In some cases, the area data may refer to mixed cropping areas or to agroforestry areas in the case of tropical fruit, where the provided crop surfaces are the total surface of the agroforestry system, including shade trees and other crops. This should be kept in mind when comparing the organic crop area to the overall area for a certain crop; particularly in the case of tropical crops.

Data on conversion status: For some countries, data were collated from several certifiers, some of which provided information on the conversion status while others did not. Therefore, the sum of land under conversion and the fully converted land is not necessarily the same as the total land under organic agricultural management.

The tables presented in this section are an example of the information available, including other crops, in the FiBL database, which is available at www.organic-world.net. At this website, slides on key crops with more graphs than are shown here are available.

Table 22: Selected key crop groups and crops in organic agriculture 2014 (overview): Land under organic management (including conversion areas)

Crops	Africa [ha]	Asia [ha]	Europe [ha]	Latin America [ha]	North America [ha]	Oceania [ha]	Total [ha]
Cereals	6'845	755'473	1'911'845	123'223	557'329	2'724	3'357'439
Citrus fruit	6'263	8'311	38'232	14'403	7'528	480	75'215
Cocoa	38'609	3'282		206'242		1'060	249'194
Coffee	223'351	113'061		407'776		18'728	762'916
Dried pulses	354	18'532	299'229	105	49'248	18	367'485
Fruit, temperate	8'124	26'777	127'611	5'321	19'053	1'282	188'168
Fruit, tropical and subtropical	17'289	52'842	31'610	123'568	6'717	1'117	233'143
Grapes	1'316	18'083	266'208	11'496	16'094	2'782	315'979
Oilseeds	123'646	443'878	245'700	46'583	123'902	217	983'926
Olives	125'344	6'876	492'006	2'782		470	627'478
Vegetables	5'932	34'114	131'882	52'474	64'348	1'388	290'137

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

> Cereals

Table 23 shows that at least 3.3 million hectares of cereals were under organic management in 2014. Comparing the organic figure with FAO's figure for the world's harvested cereal area of 714 million hectares in 2013 (FAOSTAT),¹ 0.5 percent of the total cereal area is under organic management.

Cereals include wheat, spelt, barley, oats, grain maize, rice, rye, and triticale (see Figure 30).

The key cereal producers worldwide, according to FAO, are India (99.2 million hectares), China (94.1 million hectares), the United States (59.6 million hectares), and the Russian Federation (40.3 million hectares).

Of these four countries, information on the organic cereal area was available for all except India. China (565'000 hectares) and the United States (almost 330'000 hectares) are the largest organic cereal producers. In China, 0.6 percent of the total cereal area was organic, and in the United States, the organic cereal area represented 0.55 percent of the total cereal area. The United States was followed by Canada (228'855 hectares) and Italy (more than 200'000 hectares).

Some countries reach proportions that are far higher than the global organic cereal share of 0.5 percent. For example, Austria (12.2 percent), Sweden (9.5 percent), Estonia (8.7 percent), and Bolivia (7.7 percent) greatly exceed the global 0.5 percent.

As some of the world's large cereal producers (such as India, and the Russian Federation) provided only little or no land use and crop details, it can be assumed that the cereal area is larger than what is shown here.

The organic cereal area has more than doubled since 2004 (1.2 million hectares), and in 2014, it decreased by 78'000 hectares or 2.3 percent, mainly due to a big drop in the organic oats area in Canada.

The available data on the conversion status indicate that at least 12 percent of the organic cereal area was in conversion in 2014 (more than half a million hectares). Thus, there could be a considerable increase in the supply of organic cereals in the near future.

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Cereals: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

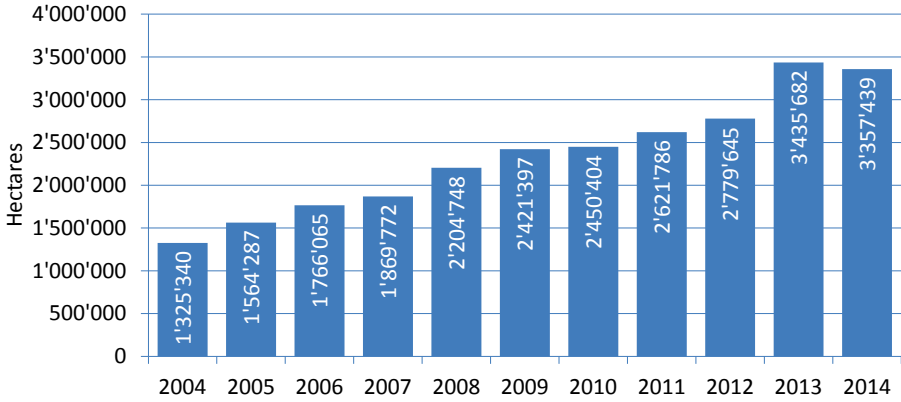


Figure 29: Cereals: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

Cereals: Distribution of cereal types 2014

Source: FiBL survey 2016

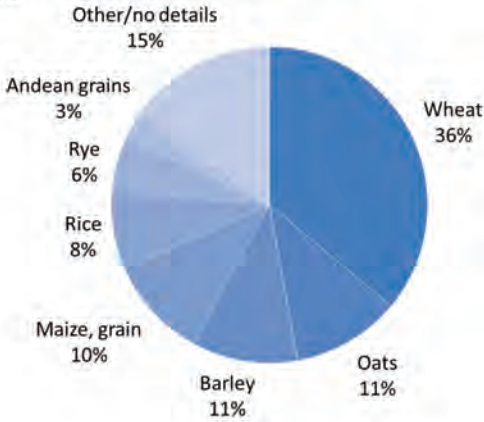


Figure 30: Cereals: Distribution of global organic area by crop 2014

Source: FiBL survey 2016

Table 23: Cereals: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Argentina	21'354	0.2%		
Australia	2'724	0.02%		
Austria	97'783	12.2%		
Azerbaijan	1'598	0.2%		1'598
Bangladesh	101	0.001%		
Belgium	8'079	2.4%	6'392	1'687
Bhutan	1'037	1.9%	1'037	
Bolivia	87'545	7.7%	72'981	14'564
Bosnia and Herzegovina	3	0.001%	3	
Bulgaria	12'060	0.6%	3'506	7'290
Burkina Faso	57	0.001%	57	
Cambodia	2'964	0.1%	2'938	26
Canada	228'855	1.4%	228'855	
Chile	269	0.05%	269	
China	565'754	0.6%	428'100	137'654
Colombia	100	0.01%	98	2
Costa Rica	55	0.1%		
Croatia	8'776	1.5%	3'959	4'817
Cyprus	422	0.9%	413	9
Czech Republic	24'255	1.7%	22'167	2'088
Denmark	51'422	3.6%	47'037	4'385
Dominican Republic	350	0.2%	350	
Ecuador	3'261	0.4%	2'899	362
Estonia	27'182	8.7%	24'322	2'860
Finland	49'515	4.5%	46'717	2'798
France	140'506	1.5%	115'840	24'666
Germany	199'000	3.0%		
Greece	45'101	5.5%	36'629	8'472
Hungary	24'099	0.8%	22'634	1'465
Indonesia	1'314	0.01%	1'309	
Iran	66	0.001%	60	6
Ireland	1'395	0.5%	1'353	42
Israel	928	1.1%	914	14
Italy	203'685	5.9%	154'501	49'184
Japan	3'098	0.2%	3'098	
Kazakhstan	130'882	0.8%	101'210	25'000
Kyrgyzstan	93	0.02%	87	6
Lao People's Democratic Republic	1'030	0.1%		
Latvia	31'390	5.4%	27'444	3'946
Lebanon	2	0.004%	1	1
Liechtenstein	77	-	77	
Lithuania	68'406	5.7%	62'106	6'300
Luxembourg	811	2.8%	740	71
Macedonia, FYROM	1'550	0.9%	781	769
Madagascar	89	0.01%		
Mali	43	0.001%	43	
Malta	1	0.02%	1	
Mexico	4'267	0.04%	4'267	
Moldova	8'399	-		
Morocco	100	0.002%		100
Namibia	177	0.1%	144	33

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Netherlands	3'543	1.7%		
Nigeria	1'012	0.01%		
Norway	7'026	2.5%	6'470	556
Pakistan	10'271	0.1%	10'271	
Palestine, State of	71	-	71	
Paraguay	2	0.0001%	2	
Peru	6'019	0.5%	8	
Philippines	554	0.01%	508	
Poland	111'506	1.5%	97'731	13'776
Portugal	8'135	2.6%	6'620	1'515
Republic of Korea	1'686	0.2%		
Romania	102'531	1.9%	69'002	33'529
Russian Federation	10'415	0.03%	918	329
Saudi Arabia	10'705	4.5%	245	10'460
Senegal	3'689	0.3%	113	3'576
Serbia	2'828	0.1%	985	1'842
Slovakia	14'868	2.0%	13'345	1'523
Slovenia	1'734	1.7%	1'447	286
South Africa	679	0.02%	630	49
Spain	154'760	2.5%	144'345	10'415
Sweden	92'692	9.5%	85'744	6'947
Switzerland	7'193	4.9%		
Taiwan	2'059	-	2'059	
Tanzania	456	-	128	328
Thailand	21'040	0.2%		
Tunisia	414	0.1%	1'088	
Turkey	159'226	1.4%	121'253	37'973
Ukraine	189'467	1.2%		
United Kingdom	42'003	1.4%	41'064	939
United States of America	328'474	0.6%		
Viet Nam	220	0.002%		
Zambia	128	0.01%		
Total	3'357'439	0.5%	2'029'387	424'259

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.
 For detailed data sources see annex, page 315
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> Citrus fruit

The area of organic citrus fruits is shown in Table 24, which includes oranges, lemons, limes, grapefruit, pomelos, tangerines, and “other citrus.” According to this data, 75’000 hectares of citrus fruit are grown organically worldwide. This constitutes 0.8 percent of the world’s total citrus area of 9.6 million hectares in 2013 (FAOSTAT).¹

As no crop details for the organic area were available for some of the world’s leading citrus producers - India (0.97 million hectares), Brazil (0.8 million hectares), and Nigeria (0.79 million hectares) according to FAOSTAT -, it can be assumed that the world figure for the area under organic citrus is higher.

In organic agriculture, the largest producer is Italy, with almost 230’000 hectares constituting 19.3 percent of Italy’s harvested citrus fruit area, followed by Mexico (almost 12’000 hectares, 2.1 percent), and China (almost 8’000 hectares, 0.3 percent).

Burkina Faso has the highest proportion of organic citrus fruit with almost 33 percent of the harvested citrus fruit area according to the available data. It is followed by Italy (19.3 percent) and Ghana (15 percent).

Since 2004, when 28’500 hectares of organic citrus were grown, the area has tripled.

Crop details were available for about two-thirds of the organic citrus fruit area: Oranges were grown in 44 percent of the citrus area, followed by pomelos and grapefruit with 5 percent (see Figure 31). The available data on the conversion status indicates that at least 20 percent of the organic citrus area was in-conversion in 2014 (almost 16’000 hectares). Thus, there could be a considerable increase in the supply of organic citrus fruit in the near future.

Citrus fruit: Use of organic citrus fruit area 2014

Source: FiBL survey 2016

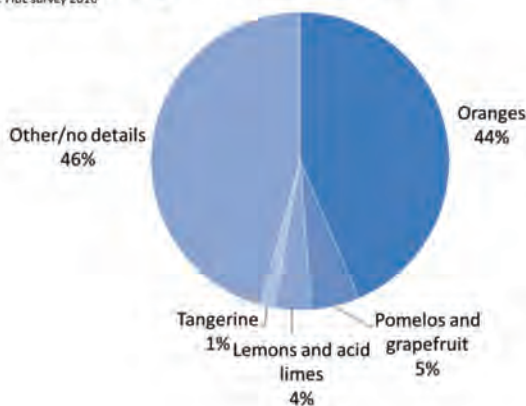


Figure 31: Citrus fruit: Distribution of organic citrus fruit area 2014

Source: FiBL survey 2016

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Table 24: Citrus fruit: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Argentina	815	0.6%		
Australia	480	1.6%		
Azerbaijan	21	0.9%	2	19
Burkina Faso	77	32.9%	49	28
Chile	223	1.5%	223	
China	7'906	0.3%	4'243	3'663
Colombia	3	0.005%	2	1
Croatia	4	0.2%		4
Cuba	226	1.1%		
Cyprus	56	1.7%	42	14
Dominican Republic	1'084	4.5%	1'084	
El Salvador	9	0.2%	9	
France	331	7.8%	261	70
Ghana	3'651	15.0%	3'568	
Greece	338	0.7%		
Indonesia	49	0.1%	49	
Iran	2	0.001%		2
Israel	230	1.5%	225	5
Italy	29'849	19.3%	20'685	9'164
Jamaica	10	0.1%		10
Jordan	37	0.6%		
Lebanon	6	0.1%	5	1
Madagascar	12	0.1%		
Malta	1	0.8%	1	
Mexico	11'917	2.1%	11'917	
Morocco	830	0.7%	760	70
Palestine, State of	0	-	0	
Paraguay	40	0.4%	40	
Peru	75	0.1%	56	
Portugal	153	0.8%	130	24
Republic of Korea	60	0.3%		
Senegal	16	0.2%	3	13
South Africa	1'665	2.3%	815	176
Spain	7'020	2.3%	4'930	2'090
Tunisia	10	0.03%		
Turkey	479	0.4%	308	171
United States of America	7'528	2.3%		
Total	75'215	0.8%	49'407	15'526

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315
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> **Cocoa beans**

Almost 250'000 hectares of cocoa were grown organically in 2014. This constitutes 2.5 percent of the world's harvested cocoa bean area of 10 million hectares 2013 (FAOSTAT).¹

The world's leading producers are Côte d'Ivoire (2.5 million hectares), Indonesia (1.8 million hectares), Ghana (1.6 million hectares), and Nigeria (almost 1.2 million hectares).

The largest organic cocoa areas are in the Dominican Republic (120'315 hectares), Peru (over 25'500 hectares) and Mexico (19'000 hectares). Over 85 percent of the world's organic cocoa area is in Latin America.

Some countries have when compared with the FAO data on harvested crops, very high shares. This can probably be attributed to the fact that some of the organic cocoa bean areas are managed extensively.

The organic cocoa bean area has grown almost fivefold since 2004 (approximately 50'000 hectares) and thus faster than most other crops/crop groups. However, some of the increase must be attributed to the continually improving data availability.

The available data on the conversion status indicate that at least 3 percent of the organic cocoa area was in conversion in 2014 (6'200 hectares). Thus, a slight increase in the supply of organic cocoa in the near future may be expected.

Cocoa beans: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

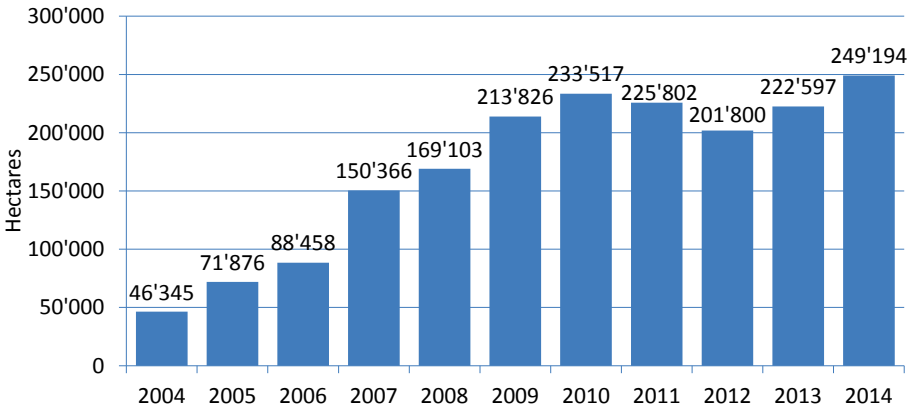


Figure 32: Cocoa beans: Development of the global organic area 2004-2014

Source: FiBL survey 2016

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Table 25: Cocoa beans: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Belize	892	-	834	58
Bolivia	4'595	51.9%	3'976	619
Colombia	381	0.4%	370	11
Costa Rica	131	2.8%		
Côte d'Ivoire	111	0.004%	107	4
Congo, D.R.	14'393	72.0%	14'393	
Dominican Republic	120'315	79.7%	119'967	348
Ecuador	13'643	3.4%	12'667	976
Ghana	5'153	0.3%		
Grenada	65	5.0%		
Haiti	2'812	12.8%		
Honduras	753	44.3%		
Indonesia	22	0.001%	22	
Madagascar	2'133	20.3%		
Mexico	19'382	16.6%	19'382	
Nicaragua	3'666	56.4%	1'521	2'146
Nigeria	500	0.04%		
Panama	14'021	-	4'224	436
Papua New Guinea	1'060	0.8%	1'060	
Peru	25'587	26.2%		
Sao Tome and Principe	6'401	26.1%	6'383	18
Tanzania	3'919	-	3'919	
Thailand	960	-		
Togo	2'249	2.8%	1'736	513
Uganda	3'750	7.8%		
Viet Nam	2'300	-		
Total	249'194	2.5%	190'562	5'128

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315
Blank cells: No data available.

For some of the countries in this table, the cocoa share was very high and not plausible; the corresponding figures were, therefore, eliminated. The high organic share, compared with the total area harvested according to FAO, is probably due to the fact that cocoa is grown more extensively in organic agriculture. Additionally, for the other countries listed in this table, it should be kept in mind that the organic data might not be directly comparable to the overall cocoa area.

For information on cocoa certified by other sustainability standards see page 118.

> Coffee

Almost 763'000 hectares of coffee were grown organically in 2014. This constituted 7.7 percent of the world's harvested coffee area of 9.9 million hectares in 2013, according to FAOSTAT.¹

The world's leading producers are Brazil (2.1 million hectares), Indonesia (1.2 million hectares), Colombia (0.8 million hectares), Mexico (0.7 million hectares), and Vietnam (almost 0.6 million hectares). Data on the organic production was available for all of these countries with the exception of Brazil and Vietnam. More than 50 percent of the world's organic coffee area is in Latin America and almost 30 percent in Africa.

In organic farming, the largest areas were in Mexico (243'000 hectares), Ethiopia (154'000 hectares), and Peru (89'000 hectares). Nepal had the highest share, with almost 46 percent of organic coffee, followed by Timor-Leste (45 percent), Bolivia (37 percent), and Mexico (almost 35 percent). Some of these high percentages must be attributed to the fact that coffee is grown more extensively in organic agriculture, and often in association with other crops.

The organic coffee area has more than quadrupled since 2004.

Coffee: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

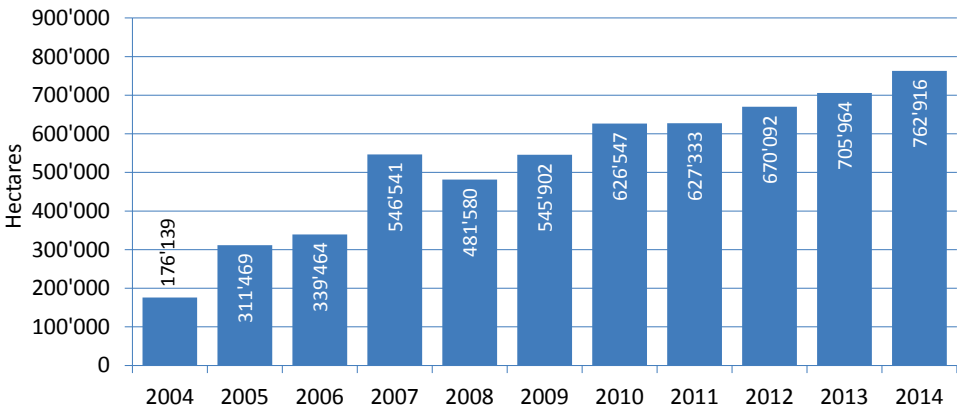


Figure 33: Coffee: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Table 26: Coffee: Organic area by country 2014

Country	Organic > area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Angola	1'738	4.3%	1'738	
Bolivia	11'185	37.3%	9'709	1'476
Cameroon	70	0.03%	70	
Colombia	10'495	1.4%	7'973	2'523
Costa Rica	706	0.8%		
Cuba	1	0.004%		
Congo, D.R.	25'702	30.2%	23'153	2'549
Dominican Republic	1'774	2.4%	1'774	
Ecuador	3'092	5.0%	2'747	345
El Salvador	3'639	2.6%	3'617	22
Ethiopia	154'418	29.7%	154'043	375
Guatemala	8'425	3.4%	6'925	1'500
Honduras	23'500	8.5%		
Indonesia	81'522	6.6%	36'022	
Jamaica	2	0.03%		2
Kenya	240	0.2%	120	120
Lao P.D.R.	4'301	7.5%		
Madagascar	1'102	0.8%		
Mexico	242'603	34.7%	242'603	
Nepal	804	45.9%	804	
Nicaragua	12'257	11.3%	10'433	1'824
Panama	953	4.3%	227	
Papua New Guinea	18'728	26.8%	5'843	12'885
Peru	89'145	22.3%		
Sao Tome and Principe	245	24.5%	245	
Tanzania	22'115	-		
Thailand	1'202	2.4%		
Timor-Leste	25'232	45.1%	25'232	
Uganda	17'721	5.7%		
Total	762'916	7.7%	533'277	23'621

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315
 Blank cells: No data available.

For information on coffee certified by other sustainability standards see page 118.

› **Dried pulses¹**

The total area under organic dried pulses is more than 367'000 hectares, which is 0.5 percent of the total area of dried pulses grown in the world (almost 78 million hectares in 2013, according to FAOSTAT).²

No current data on the organic area was available from the three most important dried pulses-growing countries in the world: India, Niger, and Nigeria. India (28 million hectares) was by far the largest grower.

The countries with the largest organic dried pulses areas are France, Spain, Canada, Italy, Lithuania, and Germany. Sweden has the highest organic share of dried pulses with more than 70 percent. The overall shares have a tendency to be high, as dried pulses play an important role in organic farming.

The dried pulses area has almost quadrupled from 78'000 to 367'000 hectares since 2004, when data on land use and crops was collected for the first time. However, some of the increase must be attributed to the continually improving availability of crop data. In 2014, the dried pulses area grew - compared with 2013 - by more than 58'000 hectares or by 19 percent. A breakdown by crop is not available for many countries. For instance, Eurostat - the statistical office of the European Union - communicates only one figure for “dried pulses”, without breaking that figure down by crop. The data available for a breakdown of the total fully converted and in-conversion area shows that at least 9 percent is in conversion, and will be fully converted in the next few years. This has implications for the availability of organic dried pulses in the near future.

Dried pulses: Development 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

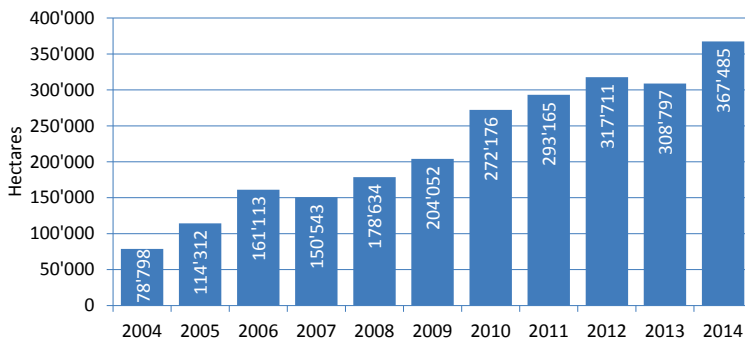


Figure 34: Dried pulses: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016

¹ In the past editions of “The World of Organic Agriculture”, this category was called “Protein crops”. In order to harmonize nomenclature with Eurostat, we changed this to “Dried pulses”

² FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Table 27: Dried pulses: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Argentina	100	0.04%		
Australia	18	0.001%		
Austria	12'313	75.2%		
Azerbaijan	6	0.05%	2	4
Belgium	257	24.0%	218	39
Bulgaria	404	8.3%	245	16
Canada	30'413	1.3%	30'413	
Colombia	1	0.001%	1	
Czech Republic	1'893	9.9%	1'779	114
Denmark	3'823	52.9%	3'125	698
Estonia	3'228	23.8%	2'966	262
Finland	14'436	-	12'153	2'283
France	57'668	26.6%	50'162	7'506
Germany	26'000	34.3%		
Greece	6'383	33.0%	5'221	1'162
Hungary	2'750	13.1%	2'421	329
Ireland	86	1.9%	78	8
Israel	26	0.3%	26	
Italy	29'217	41.0%	23'128	6'090
Kazakhstan	18'399	21.6%	14'099	4'300
Kyrgyzstan	36	0.1%	19	18
Latvia	3'744	55.5%	3'429	316
Lebanon	0.1	0.001%	0.04	0.04
Lithuania	27'819	61.8%	26'628	1'191
Luxembourg	119	34.7%	96	22
Madagascar	59	0.04%		
Malta	0.1	0.01%		0.1
Moldova	4'641	-		
Namibia	36	0.2%	33	3
Netherlands	120	4.3%		
Norway	145	14.2%	110	35
Peru	3	0.001%	3	
Poland	6'917	4.1%	5'070	1'847
Portugal	72	0.3%	72	0
Republic of Korea	64	0.4%		
Romania	2'314	4.5%	1'830	485
Russian Federation	850	0.1%		
Senegal	228	0.2%		228
Slovakia	759	15.6%	745	14
Slovenia	38	5.6%	33	5
Spain	41'216	16.9%	39'406	1'809
Sweden	10'155	78.4%	9'129	1'026
Switzerland	581	14.1%		
Turkey	21'577	2.7%	18'564	3'013
Ukraine	16'416	6.9%		
United Kingdom	3'288	2.2%	3'252	36
United States of America	18'835	1.7%		
Zambia	30	0.05%		
Total	367'485	0.5%	254'455	32'858

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315
 Blank cells: No data available.

For some of the countries in this table, the organic dried pulses share was very high and not plausible; the corresponding figures were, therefore, eliminated.

› **Fruit: Temperate fruit**

The total area under organic temperate fruit production recorded here (over 188'000 hectares), is 1.5 percent of the total area of temperate fruit grown in the world (12.3 million hectares in 2013, according to FAOSTAT).¹

Of the seven most important temperate fruit growing countries in the world (China, India, Turkey, Serbia, Iran, Russia, and the United States) only five (China, Turkey, Serbia, Russia, and the United States), provided data on the area of organic temperate fruits in 2014. It can, therefore, be assumed that the organic temperate fruit area is higher.

The countries with the largest organic temperate fruit areas are Poland (41'300 hectares), China (25'300 hectares), the United States (18'000 hectares), Italy (almost 18'000 hectares), Turkey (almost 15'000 hectares), and France (11'000 hectares) (Table 29).

Since 2004, when data on land use and crops were collected for the first time (almost 97'000 hectares), the temperate fruit area has than doubled. However, some of the increase must be attributed to the continuous improvement in improving availability of crop data.

The key temperate fruits are apples, with almost half of the temperate fruit area, followed by apricots, pears, plums and cherries (Table 28). Poland has one-third of the total organic apple area.

The available data on the conversion status indicate that a more than 21 percent of the total temperate fruit area is in-conversion. If this is indicative, there could be a considerable increase in the supply of organic temperate fruit in the near future.

Table 28: Temperate fruit: Organic area by crop 2014

Main crop	Area [ha]
Apples	87'128
Apricots	20'978
Cherries	10'706
Fruit, temperate, no details	19'294
Fruit, temperate, other	8'569
Nectarines	956
Peaches	4'027
Peaches and nectarines, no details	2'332
Pears	16'493
Plums	11'671
Pome fruit, no details	763
Quinces	19
Stone fruit, no details	5'267
Total	188'201

Source: FiBL survey 2016

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org › Agri-Environmental Indicators › Download › <http://faostat3.fao.org/download/R/RL/E>

Temperate fruit: Use of organic temperate fruit area 2014

Source: FiBL survey 2016

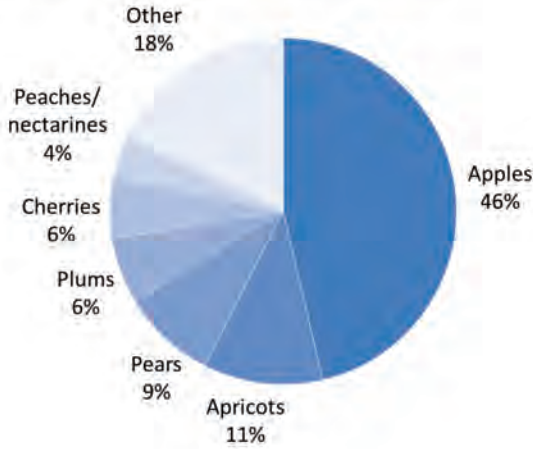


Figure 35: Temperate fruit: Distribution of global organic area by crop 2014

Source: FiBL survey 2016

Temperate Fruit: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

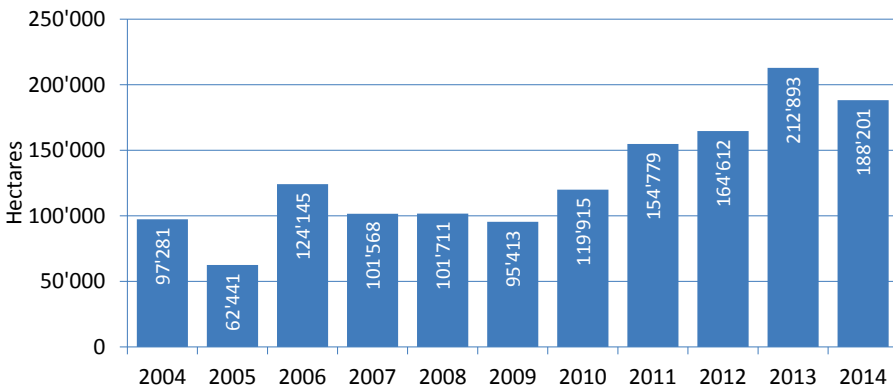


Figure 36: Temperate fruit: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016

Table 29: Temperate fruit: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Albania	123	0.8%		
Argentina	3'056	2.5%		
Australia	805	1.4%		
Austria	2'318	7.1%		
Azerbaijan	754	1.5%	112	642
Belgium	473	2.6%	250	42
Bhutan	0.1	0.003%	0.1	
Bosnia and Herzegovina	10	0.01%		10
Bulgaria	2'043	7.8%	1'015	1'028
Canada	906	4.2%	906	
Chile	1'389	1.4%	1'389	
China	25'266	0.4%	17'832	7'434
Colombia	1	0.02%		1
Croatia	1'248	6.6%	653	595
Cyprus	99	4.2%	77	22
Czech Republic	4'845	30.0%	4'398	448
Denmark	355	11.5%	327	28
Estonia	391	10.9%	338	53
Finland	49	7.0%	43	6
France	11'210	11.5%	8'757	2'454
Georgia	541	1.7%	541	
Germany	7'000	15.4%		
Greece	633	0.8%	483	150
Hungary	1'511	2.2%	1'070	442
Ireland	47	2.6%	46	2
Israel	54	0.6%	53	2
Italy	17'889	7.8%	13'525	4'363
Kyrgyzstan	0.1	0.0002%	0.1	
Latvia	616	18.2%	521	95
Lebanon	26	0.1%	23	3
Lesotho	560	-	560	
Liechtenstein	2	-	2	
Lithuania	1'214	6.5%	1'080	133
Macedonia, FYROM	154	0.6%	27	127
Madagascar	5	0.1%		
Malta	0.1	0.1%		0
Mexico	108	0.1%	108	
Moldova	1'326	-		
Morocco	100	0.2%	100	
Netherlands	401	2.3%		
New Zealand	477	4.0%		
Norway	185	9.0%	176	9
Oman	4	-		
Palestine, State of	1	-	1	
Peru	768	4.2%	692	
Poland	41'326	15.1%	32'928	8'398
Portugal	1'086	2.7%	779	307
Republic of Korea	130	0.2%		
Romania	6'035	4.3%	1'962	4'073
Russian Federation	31	0.01%		31
Serbia	1'397	0.4%	963	434

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Slovakia	907	10.2%	683	224
Slovenia	139	1.6%	111	28
South Africa	318	0.6%	196	45
Spain	4'571	2.2%	3'604	967
Sweden	198	10.4%	172	25
Switzerland	570	8.4%		
Tunisia	7'141	12.6%	242	
Turkey	14'808	3.7%	7'391	7'417
Ukraine	980	0.5%		
United Kingdom	1'454	7.6%	1'386	68
United States of America	18'147	6.3%		
Total	188'201	1.5%	105'522	40'103

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.
 For detailed data sources see annex, page 315
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Further reading

Granatstein, David, Elizabeth Kirby, Harold Ostenson, and Helga Willer (2015) Global situation for organic tree fruits. *Scientia Horticulturae*. Available online 18 December 2015 doi:10.1016/j.scienta.2015.12.008

› Fruit: Tropical and subtropical fruit

The total area under organic tropical and subtropical fruit production recorded here (233'000 hectares) is 1 percent of the total area of tropical and subtropical fruit grown in the world (23.6 million hectares in 2013, according to FAOSTAT data).¹

Of the five most important tropical and subtropical fruit growing countries in the world (India, China, Uganda, Brazil, and the Philippines, all with more than one million hectares), only China and the Philippines provided data on the area under organic tropical and subtropical fruit grown in 2014.

The largest organic growers for which data on the organic area was available (Mexico, Dominican Republic, China, and Turkey) all have more than 20'000 hectares. Mexico, the Dominican Republic, and Turkey also have very high shares of tropical and subtropical fruit, more than the ten percent of their countries' total for these crops. In the case of the Dominican Republic, this is mainly due to a high share of bananas, and in the case of Mexico, mangoes and avocados. The largest proportions of organic tropical and subtropical fruit area are in Niue (44 percent), Burkina Faso (36.5 percent), and the Dominican Republic (27 percent). By area, the key tropical and subtropical fruits are bananas, avocados, and mangos (Figure 37).

Since 2004, when data on land use and crops was collected for the first time, the tropical fruit area has increased fivefold (Figure 38). However, some of the increase must be attributed to the continually improving data availability.

The available data on the conversion status indicate that, at least, almost 15 percent of the total tropical and subtropical fruit area is in-conversion. This suggests that an increase in the supply in the near future may be expected.

For information on bananas certified by other sustainability standards, see page 118.

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org › Agri-Environmental Indicators › Download › <http://faostat3.fao.org/download/RL/RL/E>

Table 30: Tropical and subtropical fruit: Organic area by crop 2014

Main crop	Area [ha]
Avocados	43'955
Bananas	60'432
Camu camu	140
Carobs	1'513
Cashew apples	907
Dates	10'669
Figs	16'167
Fruit, tropical and subtropical, no details	25'650
Fruit, tropical and subtropical, other	37'369
Guava	60
Kiwis	680
Litchi	645
Mamey	0
Mangos	27'719
Noni	463
Papayas	1'143
Passion fruit	82
Persimmons	283
Pineapples	3'883
Pitaya	280
Pomegranate	1'107
Total	233'143

Source: FiBL survey 2016

Tropical and subtropical fruit: Distribution by crop 2014

Source: FiBL survey 2016

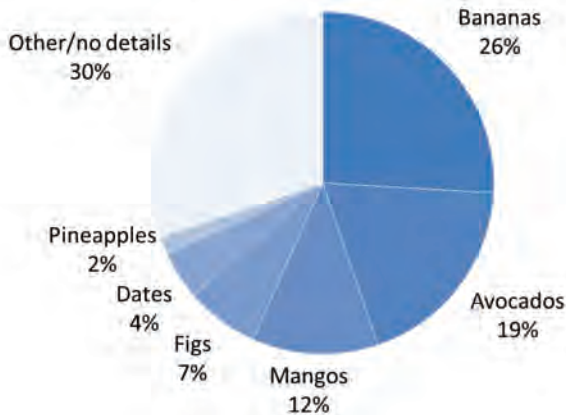


Figure 37: Tropical and subtropical fruit: Distribution of global organic area by crop 2014

Source: FiBL survey 2016

Tropical and subtropical fruit: Development 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

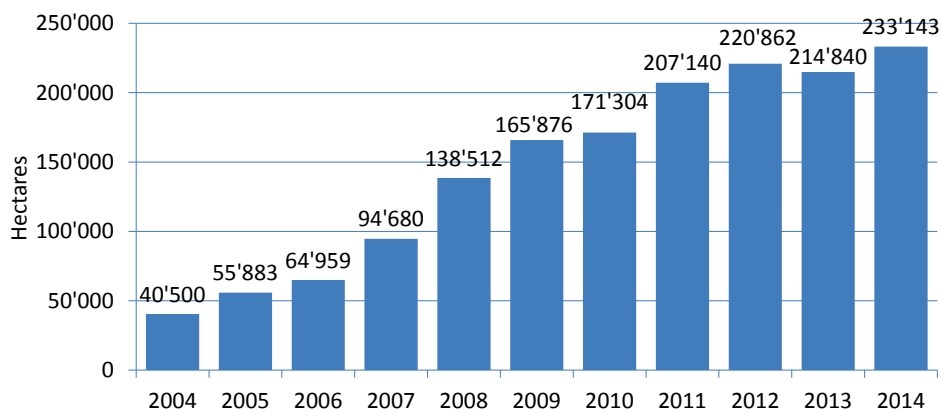


Figure 38: Tropical and subtropical fruit: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016

Table 31: Tropical and subtropical fruit: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Algeria	502	0.2%	496	6
Argentina	32	0.3%		
Australia	228	0.6%		
Azerbaijan	495	4.8%	180	315
Bangladesh	10	0.003%		
Bolivia	40	0.1%	38	2
Bulgaria	57	-	44	14
Burkina Faso	6'111	36.5%	6'009	73
Cambodia	122	0.3%	122	
Cameroon	304	0.1%	304	
Canada	0	4.0%	0	
Chile	522	1.1%	522	
China	27'452	0.9%	15'722	11'729
Colombia	1'746	0.3%	1'723	22
Cook Islands	10	10.8%	10	
Costa Rica	5'642	5.1%		
Côte d'Ivoire	506	0.1%	501	
Croatia	83	10.3%	56	26
Cuba	897	0.7%		
Cyprus	51	2.4%	28	23
Dominican Republic	30'104	27.0%	29'894	210
Ecuador	18'650	5.5%	14'512	4'139
El Salvador	1'164	7.0%	1'164	
Estonia	0	-	0	0
Fiji	710	63.7%	710	
France	38	0.9%	27	11

Statistics: Crops - Tropical and Subtropical Fruit

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
French Guiana (France)	83	-	37	30
French Polynesia	58	12.4%	58	
Ghana	224	0.1%	86	25
Greece	675	3.5%	499	176
Grenada	19	1.3%		
Guadeloupe (France)	3	-	3	
Guatemala	35	0.03%	35	
Guinea-Bissau	200	1.1%	200	
Indonesia	808	0.2%	579	
Iran	1'955	1.0%	1'858	97
Israel	864	3.3%	843	21
Italy	4'811	13.6%	3'656	1'155
Jordan	16	0.5%		
Kenya	1'621	1.2%	1'500	121
Lebanon	4	0.1%		
Madagascar	1'250	0.6%		
Mali	553	1.1%	530	23
Martinique (France)	68	-	37	30
Mexico	57'266	11.6%	57'266	
Montenegro	3	0.2%		
Morocco	1'682	1.3%	1'482	200
Mozambique	91	0.1%	1	
Myanmar	190	0.3%	190	
Niue	112	44.2%	112	
Pakistan	878	0.2%	878	
Palestine, State of	0	-	0	
Peru	7'297	2.6%	1'236	
Philippines	5'858	0.5%	5'857	
Portugal	397	0.4%	245	151
Réunion (France)	153	-	103	45
Rwanda	153	0.04%	59	2
Saudi Arabia	12'979	7.7%	10'487	2'492
Senegal	1'051	4.6%	841	210
Serbia	0	-	0	
Slovenia	24	29.3%	12	12
South Africa	1'187	3.3%	695	214
Spain	2'310	2.9%	1'521	788
Taiwan	833	-	833	
Tanzania	422	-		422
Togo	369	17.3%	351	1
Tunisia	912	1.1%		
Turkey	23'162	23.5%	8'861	14'301
United Arab Emirates	377	0.8%	377	
United States of America	6'716	16.8%		
Total	233'143	1.0%	174'575	37'085

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Blank cells: No data available.

> Grapes

Almost 316'000 hectares of organic grapes are grown, which constitutes 4.5 percent of the world's grape growing area (6.8 million hectares in 2013, according to FAOSTAT).¹ In Europe, 266'000 hectares (6.8 percent of the harvested grape area) are organic.

Not all of the grape area listed in the table is used for wine grapes. The production of table grapes and raisins is important in many countries, for example, Turkey. All of the five most important grape growing countries in the world (Spain, France, China, Italy, and Turkey) provided data on the area under organic grapes in 2014.

The countries with the largest organic grape areas are Spain, Italy and France; each with more than 60'000 hectares of organic grapes. Some of the highest organic shares are also in these countries (Table 32). Over 80 percent of the world's organic grapes area is in Europe, the rest is distributed equally between Asia, North America, and Latin America.

Since 2004, when data on land use and crops were collected for the first time, the organic grape area has more than tripled. However, some of the increase must be attributed to the continually improving availability of crop data.

The available data indicate that a large part of the total grape area (at least 20 percent) is in conversion. Thus, a considerable increase in the supply of organic grapes may be expected, particularly from Italy, Spain, and France.

Grapes: Development 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

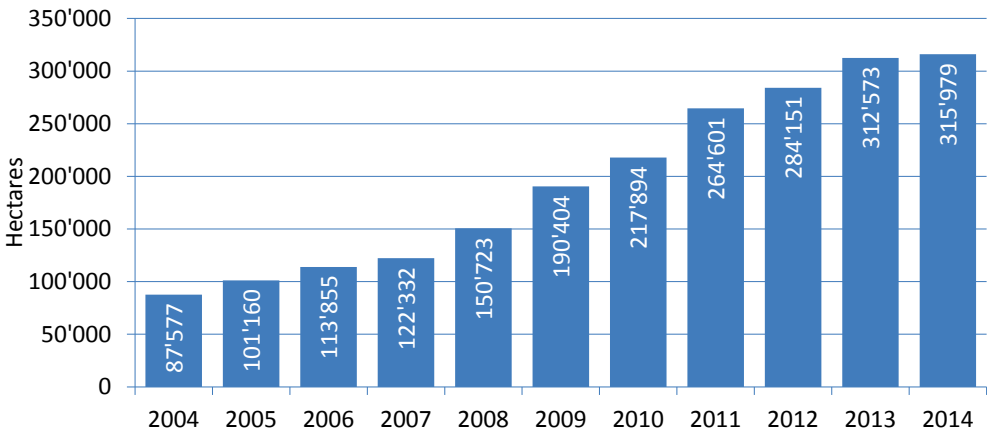


Figure 39: Grapes: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Table 32: Grapes: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Albania	14	0.2%		
Algeria	205	0.3%	205	
Andorra	2	-	2	0
Argentina	3'466	1.5%		
Australia	282	0.2%		
Austria	4'677	10.7%		
Azerbaijan	41	0.3%	1	40
Belgium	18	-	2	16
Bulgaria	2'914	5.8%	1'061	1'853
Canada	447	3.9%	447	
Chile	3'740	1.7%	3'740	
China	15'729	2.1%	11'493	4'236
Croatia	931	3.3%	521	410
Cyprus	201	3.0%	188	13
Czech Republic	881	5.6%	711	170
Denmark	14	-	9	5
Estonia	2	-	2	0
France	66'211	8.7%	54'688	11'523
Georgia	97	0.2%	55	42
Germany	7'500	7.5%		
Greece	4'388	4.3%	3'487	901
Hungary	1'198	1.7%	919	279
Iran	1'452	0.7%	1'452	
Israel	57	0.8%	56	1
Italy	72'361	10.3%	46'902	25'460
Jordan	250	6.6%		
Kazakhstan	20	0.1%	20	
Lebanon	367	3.9%	366	1
Liechtenstein	4	-	1	3
Luxembourg	96	7.7%	28	68
Macedonia, FYROM	42	0.2%	31	11
Malta	15	1.0%	3	11
Mexico	4'290	15.6%	4'290	
Moldova	4'641	-		
Montenegro	3	0.03%		
Morocco	55	0.1%	110	
New Zealand	2'500	6.7%		
Poland	246	-	187	59
Portugal	2'772	1.5%	2'128	644
Republic of Korea	70	0.4%		
Romania	2'089	1.2%	889	1'201
Russian Federation	16	0.03%		16
Serbia	14	0.03%	6	8
Slovakia	92	0.9%	67	25
Slovenia	422	2.6%	261	161
South Africa	1'056	0.8%	755	138
Spain	84'381	8.9%	71'684	12'697
Switzerland	638	4.3%		
Turkey	9'180	2.0%	3'877	5'303
Ukraine	140	0.2%		
United Kingdom	105	20.4%	101	4
United States of America	15'647	4.0%		
Total	315'979	4.5%	210'746	65'298

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

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› Oilseeds

An area of almost 984'000 hectares was reported to be used for growing organic oilseeds in 2014. This is approximately 0.5 percent of the world's total harvested oilseed area (more than 2103 million hectares according to FAOSTAT).¹

The main countries in which oilseeds are grown are the United States, India, Brazil, Argentina, and China (each with more than 20 million hectares). Data on organic production was available for all of these countries with the exception of Brazil.

The countries with the largest organic oilseed area are China, India, Kazakhstan, the United States, Ukraine, and Canada.

The highest organic shares are in Peru (20 percent: mainly sesame), Togo (16 percent: mainly soybeans), El Salvador (14 percent: mainly sesame), Austria (11 percent: mainly soya and sunflower seed), and Estonia (5.1 percent: mainly rapeseed).

Since 2004, when data on land use and crops was collected for the first time, the oilseed area (2004: almost 144'000 hectares) has increased more than fivefold. However, some of the increase must be attributed to the continually improving availability of crop data.

Almost forty percent of the organic oilseed area is for soybeans, and another twenty percent is for sunflower seeds and rapeseed (Figure 41).

The data available for a breakdown of the total fully converted and in-conversion area shows that, if the relative figures are indicative of the proportions of the total area, approximately 15 percent is in-conversion, and will be fully converted in the next few years. This has implications for the availability of organic oilseeds in the near future.

Table 33: Oilseeds: Organic area by crop 2014

Main crop	Area [ha]
Cotton seed	20
Jojoba	465
Linseed (oil flax)	67'490
Mustard	3'011
Oilseeds, no details	4'316
Oilseeds, other	171'181
Peanuts	79'171
Poppy seed	70
Pumpkin seeds	1'417
Rape and turnip rape	90'670
Sacha inchi	295
Safflower	4'812
Sesame	46'895
Soybeans	386'962
Sunflower seed	127'152
Total	983'926

Source: FiBL survey 2016

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org › Agri-Environmental Indicators › Download › <http://faostat3.fao.org/download/R/RL/E>

Oilseeds: Development 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

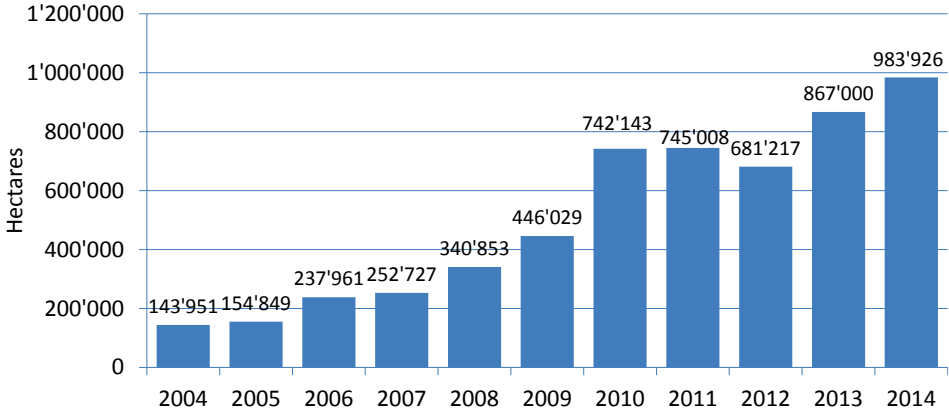


Figure 40: Oilseeds: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016

Oilseeds: Use of organic oilseeds area 2014

Source: FiBL survey 2016

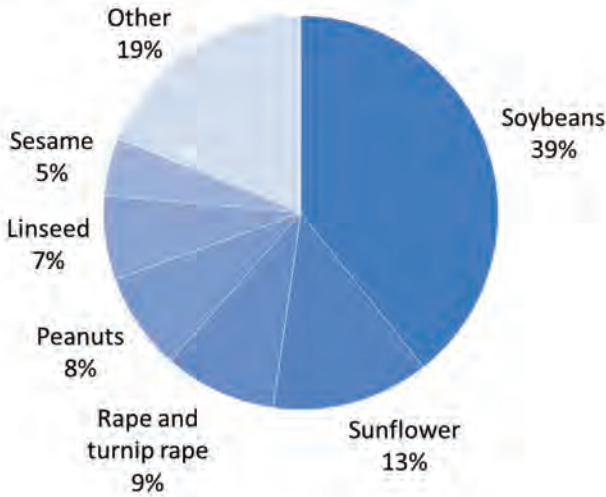


Figure 41: Organic oilseed area: Use of oilseed area by crop 2014

Source: FiBL survey 2016

Table 34: Oilseeds: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Argentina	23'135	0.1%		
Australia	217	0.01%		
Austria	16'109	11.0%		
Azerbaijan	126	0.7%	50	76
Belgium	63	0.3%	63	
Benin	278	0.1%	278	
Bolivia	4'038	0.3%	4'038	
Bosnia and Herzegovina	7	0.1%	7	
Bulgaria	4'294	0.4%	745	3'549
Burkina Faso	3'866	0.6%	3'660	
Canada	52'265	0.5%	52'265	
China	230'822	1.1%	105'640	125'182
Colombia	0.2	0.001%	0.2	
Côte d'Ivoire	14	0.01%	14	
Croatia	4'624	4.2%	2'244	2'380
Czech Republic	2'046	0.4%	1'898	148
Denmark	780	0.4%	771	9
El Salvador	839	14.2%	839	
Estonia	4'409	5.1%	3'630	779
Ethiopia	6'442	0.8%	6'257	185
Finland	2'641	5.0%	2'369	271
France	32'459	1.4%	26'986	5'472
Germany	7'300	0.5%		
Ghana	0	0.0001%	0	
Greece	1'369	2.2%	1'264	105
Guatemala	342	0.6%		342
Hungary	9'227	1.1%	8'856	371
India	130'000	0.5%		
Ireland	15	0.1%	15	
Israel	290	3.7%	276	14
Italy	11'206	3.4%	9'062	2'143
Kazakhstan	82'493	4.4%	66'227	16'266
Kyrgyzstan	25	0.05%	23	2
Latvia	381	0.3%	317	65
Liechtenstein	5	-	5	
Lithuania	3'848	1.4%	3'466	382
Luxembourg	16	0.3%	16	
Macedonia, FYROM	76	1.5%	36	40
Madagascar	2'500	4.0%		
Mali	9'945	2.5%	9'940	5
Mexico	2'265	0.6%	2'265	
Namibia	33	3.6%	33	
Nepal	122	0.03%		122
Netherlands	31	0.5%		
Nicaragua	2'500	4.4%	2'500	
Norway	3	0.1%	3	
Paraguay	12'022	0.4%	12'022	
Peru	1'442	20.2%	1'419	
Poland	1'032	0.1%	840	192
Romania	51'528	3.5%	36'346	15'182
Russian Federation	170	0.002%	4	166

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Senegal	1'312	0.2%	925	387
Serbia	1'200	0.3%	110	1'090
Slovakia	2'522	1.0%	1'923	599
Slovenia	260	3.9%	159	101
South Africa	228	0.02%	175	
Spain	8'686	1.0%	8'338	348
Sudan	86'000	-	3'000	83'000
Sweden	3'865	3.0%	3'418	447
Switzerland	569	2.0%		
Tanzania	455	-		455
Togo	12'503	16.0%	11'166	1'337
Turkey	3'788	0.5%	2'557	1'230
Ukraine	71'100	0.9%		
United Kingdom	74	0.01%	69	5
United States of America	71'636	0.2%		
Zambia	70	0.02%		
Total	983'926	0.5%	398'530	262'446

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315
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> **Olives**

More than 627'000 hectares of olives were reported to be under organic production in 2014. This represents 6.1 percent of the world's total harvested olive area (10.3 million hectares according to FAOSTAT).¹

The main countries, in which olives are grown, are the countries around the Mediterranean. Spain is by far the largest grower with 2.5 million hectares, followed by Tunisia (1.8 million hectares) and Italy (1.1 million hectares). Greece and Morocco, both with 0.9 million hectares, are also important producers. For all these countries, data for the organic area was available. Spain has the largest area of organic olives (more than 172'000 hectares), followed by Italy (170'000 hectares), and Tunisia (124'000 hectares). Almost 80 percent of the world's organic olive area is in Europe, followed by northern Africa with 20 percent of the world organic olive area.

In Italy, the percentage of area under organic production is relatively high (almost 15 percent). In Spain, almost 7 percent of the olive area is organic and in Tunisia 6.8 percent. France has the highest share of organic olives area, with 27.2 percent of all olives being organic.

Since 2004, when data on land use and crops were collected for the first time, the olive area doubled. However, some of the increase must be attributed to the continually improving availability of crop data. The available data indicate that a large part of the total olive area (over 20 percent) is in conversion. If this is indicative, an increase in the supply of organic grapes may be expected.

Olives: Distribution by continent and top 10 producing countries 2014

Source: FiBL survey 2016

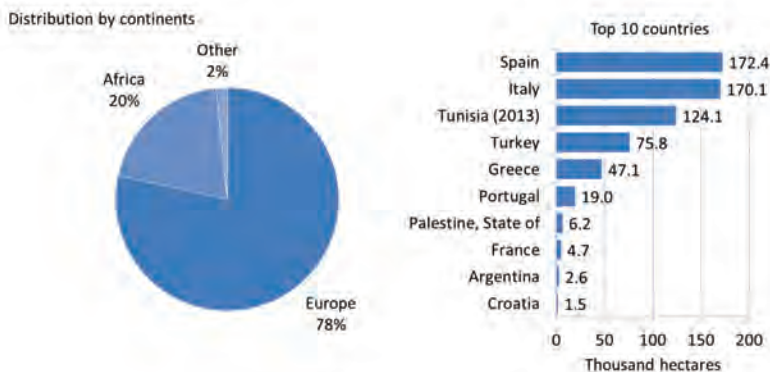


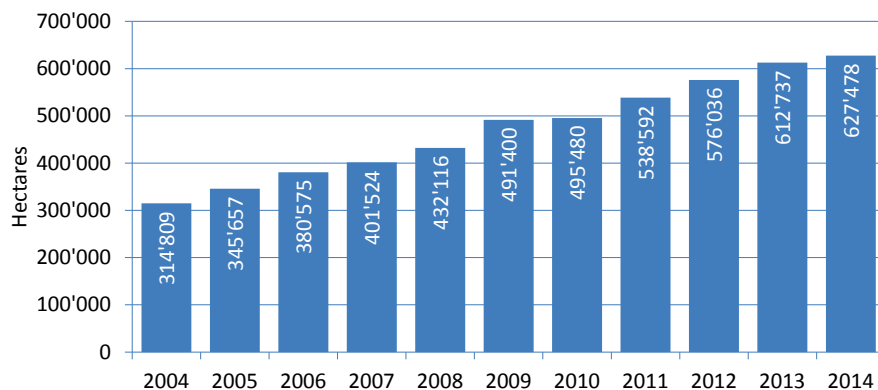
Figure 42: Organic olive area: Distribution by continent and top 10 producing countries 2014

Source: FiBL-survey 2016 based on national data sources and certifier data. For detailed data sources see annex, page 315

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Olives: Development 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016


Figure 43: Olives: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016 based on national data sources and certifier data. For detailed data sources see annex, page 315

Table 35: Olives: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Albania	198	0.4%		
Argentina	2'596	§4.1%		
Australia	470	1.1%		
Azerbaijan	13	0.8%	5	8
Chile	92	0.5%	92	
Croatia	1'472	7.9%	650	822
Cyprus	1'104	10.6%	997	107
France	4'671	27.2%	3'684	988
Georgia	70	-		70
Greece	47'059	5.1%	29'767	17'292
Iran	120	0.5%	120	
Israel	298	0.9%	295	3
Italy	170'067	14.8%	121'238	48'829
Lebanon	185	0.3%	176	1
Macedonia, FYROM	0.3	0.004%	0.3	
Malta	7	-	6	1
Montenegro	2	0.1%		
Morocco	1'198	0.1%	1'070	128
Palestine, State of	6'191	-	4'397	1'794
Peru	95	0.6%	89	
Portugal	19'024	5.5%	16'532	2'492
Slovenia	226	25.1%	92	134
South Africa	23	-	8	10
Spain	172'391	6.9%	150'397	21'994
Tunisia	124'123	6.8%	100'505	
Turkey	75'785	9.2%	23'707	52'078
Total	627'478	6.1%	453'826	146'750

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315
 Blank cells: No data available.

> Vegetables

The total area under organic vegetable production (290'137 hectares) is 0.5 percent of the total area of vegetables grown in the world (57 million hectares in 2013, according to FAOSTAT).¹

Of the four most important vegetable growing countries in the world (China, India, Nigeria, and Turkey), organic data was only available for China and Turkey.

The countries with the largest organic vegetable areas are the United States, Mexico, Poland, and Italy (each with areas over 20'000 hectares). The United States reported almost 60'000 hectares of organic vegetables.

The highest shares of the total vegetable areas are in Denmark, Austria, Poland, Switzerland, and Germany. These are also the countries in Europe, with the exception of Poland, that have the largest organic market shares for organic food.

Since 2004, when data on organic land use and crops were collected for the first time, the vegetable area has almost tripled from 105'000 to the current 290'000 hectares. However, some of the increase must be attributed to the continually improving availability of crop data.

A breakdown for individual vegetable groups is available for only half of the organic vegetable area. A large part (44'000 hectares) is for pulses (fresh beans and peas), followed by leafy and stalked vegetables (salads), and fruit vegetables. The data available for a breakdown of the fully converted and in-conversion area shows that more than three-quarters of the total organic vegetable area is fully converted. If the relative figures are indicative of the proportions of the total area, about 13 percent is in conversion.

Vegetables: Development 2004-2014

Source: FiBL-IFOAM-SOEL 2006-2016

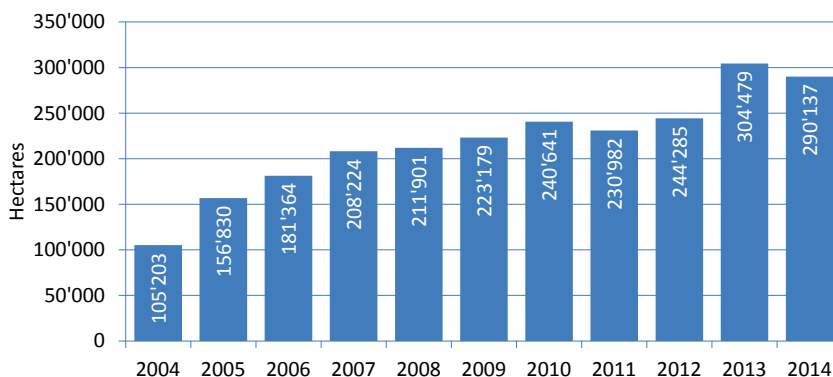


Figure 44: Vegetables: Development of the global organic area 2004-2014

Source: FiBL-IFOAM-SOEL surveys 2006-2016

¹ FAOSTAT, the FAO Homepage, FAO, Rome at faostat3.fao.org > Agri-Environmental Indicators > Download > <http://faostat3.fao.org/download/R/RL/E>

Table 36: Vegetables: Organic area by country 2014

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Albania	3	0.01%		
Argentina	1'548	0.9%		
Australia	1'388	2.5%		
Austria	2'819	21.3%		
Azerbaijan	213	0.2%	55	158
Bangladesh	157	0.03%		
Belgium	1'039	1.7%	954	84
Bhutan	76	0.7%	76	
Bosnia and Herzegovina	15	0.01%	2	13
Bulgaria	1'000	3.8%	529	470
Burkina Faso	4	0.01%		
Cambodia	38	0.04%	36	2
Canada	4'678	7.3%	4'678	
Chile	1'155	2.3%	1'155	
China	22'331	0.1%	5'062	17'269
Colombia	22	0.02%		
Costa Rica	352	2.5%		
Croatia	300	3.2%	90	210
Cyprus	30	1.1%	27	3
Czech Republic	110	0.9%	103	8
Denmark	2'015	25.3%	1'989	26
Dominican Republic	162	0.4%	162	
Ecuador	759	0.4%	746	13
El Salvador	34	0.7%	34	
Estonia	111	4.4%	104	8
Finland	176	3.7%	162	14
France	15'554	7.6%	14'630	924
French Guiana (France)	19	-	17	1
Georgia	8	0.04%	8	
Germany	10'392	8.9%		
Ghana	7	0.01%		7
Greece	1'124	1.3%	913	211
Guadeloupe (France)	2	-	2	
Guatemala	565	0.6%	485	80
Hungary	1'854	4.2%	1'510	345
Indonesia	443	0.05%	443	
Iraq	41	0.01%		
Ireland	213	4.6%	199	14
Israel	1'277	2.1%	1'253	24
Italy	25'930	5.2%	20'141	5'789
Jamaica	3	0.02%		3
Japan	1'088	0.3%	1'088	
Kenya	172	0.1%	146	26
Kyrgyzstan	389	0.7%	273	116
Lao P.D.R.	518	0.3%		
Latvia	262	3.5%	238	24
Lebanon	81	0.2%	79	2
Liechtenstein	14	-	14	
Lithuania	68	0.6%	61	7
Luxembourg	37	-	37	
Macedonia, FYROM	66	0.1%	34	32
Madagascar	34	0.1%		
Malta	3	0.1%	2	1
Martinique (France)	10	-	10	
Mexico	46'573	7.4%	46'573	
Moldova	221	-		
Morocco	970	0.5%	942	28
Namibia	73	1.1%	62	11
Netherlands	6'003	7.7%		
Nicaragua	1	0.01%	1	
Norway	223	4.5%	212	12
Oman	16	0.1%		
Palestine, State of	4	-	4	

Statistics: Crops - Vegetables

Country	Organic area [ha]	Organic share [%]	Area fully converted [ha]	Area under conversion [ha]
Panama	209	1.6%	20	
Paraguay	58	0.1%	58	
Peru	1'001	0.5%	45	
Philippines	111	0.02%	61	50
Poland	26'664	19.8%	20'154	6'511
Portugal	1'596	1.8%	1'475	121
Republic of Korea	310	0.1%		
Réunion (France)	158	-	154	4
Romania	1'913	0.7%	1'391	522
Russian Federation	96	0.01%	87	5
Saudi Arabia	4'047	4.3%	2'894	1'153
Senegal	168	0.4%	43	125
Serbia	142	0.1%	125	17
Slovakia	228	1.1%	224	4
Slovenia	209	4.4%	166	43
South Africa	1'714	1.4%	1'028	65
Spain	11'690	3.5%	9'789	1'901
Sweden	1'380	5.8%	1'363	18
Switzerland	1'974	14.8%		
Taiwan	1'957	-	1'957	
Tanzania	2'031	-	778	1'253
Thailand	858	0.2%		
Tunisia	76	0.1%	1	
Turkey	2'507	0.2%	1'688	820
Ukraine	8'014	1.5%		
United Kingdom	5'885	5.7%	5'803	82
United States of America	59'669	7.5%		
Viet Nam	151	0.02%		
Zambia	525	1.0%	225	300
Total	290'137	0.5%	154'869	38'928

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Commodity Case Studies

The State of Sustainable Markets: Statistics and Emerging Trends – 2015

JULIA LERNOUD,¹ JASON POTTS,² GREGORY SAMPSON,³ VIVEK VOORA,⁴ HELGA WILLER⁵ AND JOSEPH WOZNIAK⁶

The “State of Sustainable Markets: Statistics and Emerging Trends – 2015” report (Lernoud et al. 2015) offers a snapshot of production-related data (area, production, and producers) for key global sustainability standards across eight commodity sectors (bananas, cocoa, coffee, cotton, palm oil, soybeans, cane sugar, and tea) and forestry. It also gives an overview of each of the 14 Voluntary Sustainability Standards (VSS) covered: 4C Association, Better Cotton Initiative (BCI), Bonsucro, Cotton Made in Africa (CmiA), GLOBALG.A.P., Fairtrade International, Forest Stewardship Council (FSC), IFOAM – Organics International, the Programme for the Endorsement of Forest Certification (PEFC), ProTerra Foundation, the Roundtable on Sustainable Palm Oil (RSPO), the Round Table on Responsible Soy (RTRS), Rainforest Alliance/Sustainable Agriculture Network (RA/SAN), and UTZ Certified.

The report is the product of a partnership between the Research Institute of Organic Agriculture (FiBL), the International Institute for Sustainable Development (IISD) and the International Trade Centre (ITC) funded by the Swiss State Secretariat for Economic Affairs (SECO). It offers a pathway for formalizing the reporting process with a view to making data on sustainable markets more accessible to all. It builds on the respective efforts and capacities of each organization: ITC’s Trade for Sustainable Development (T4SD) database, FiBL’s well-established expertise on organic markets, and IISD’s expertise and series of publications on VSS system characteristics and market performance.

Data were collected for the years 2013 and 2014, and the data for 2008–2012 from the SSI Review 2014 (Potts et al., 2014) was also used, some of which were revised during the data collection process. The 2014 data collected was not consistent across all VSS (4C Association and organic did not yet have data, and Bonsucro and Fairtrade International did not have area and production disaggregated per country). At the time of the VSS survey (Mid 2015), the 2014 data were not yet available for organic. Therefore, the data in the following graphs differ from those presented in the crop chapters of this edition of “The World of Organic Agriculture.”

Market overview

Exceptional growth continues: Since 2008,¹ all standards included in the “State of Sustainable Markets” report have shown growth in standard compliant area. Roundtable

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on Sustainable Palm Oil (RSPO) has shown the greatest expansion, with an almost 30-fold increase of its area between 2008 and 2014. Better Cotton Initiative (BCI) area increased by 20-fold between 2010 and 2014. Rainforest Alliance/SAN's area grew more than 900 percent, and the UTZ Certified area increased by 650 percent over the same timeframe.

**Development of the VSS compliant area worldwide
2008-2013 (8 selected commodities, minimum possible)**

Source: FiBL-IISD-ITC survey 2015

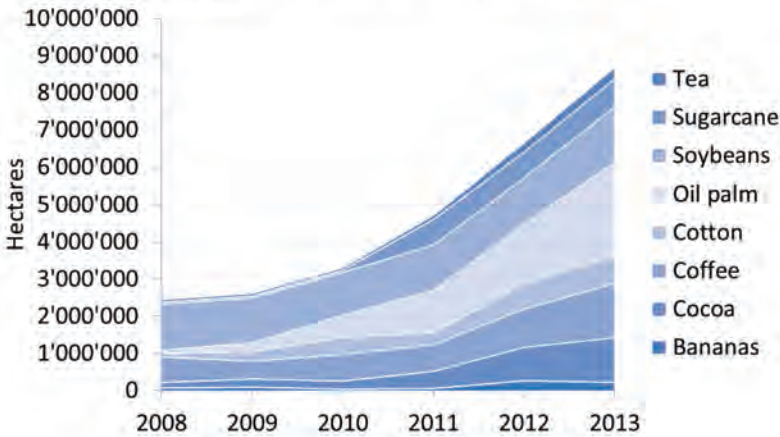


Figure 45: Development of the VSS compliant area worldwide, 2008-2013 (eight selected commodities, minimum possible)

Sources: FiBL-IISD-ITC survey, 2015; 4C Association, 2014 and 2015; Better Cotton Initiative (BCI), 2014 and 2015; Bonsucro, 2014 and 2015; Cotton Made in Africa (CmiA), 2014 and 2015; Fairtrade International, 2014 and 2015; GLOBALG.A.P., 2015; FiBL, 2015; ProTerra Foundation, 2014 and 2015; Rainforest Alliance/SAN, 2014 and 2015; Roundtable of Sustainable Palm Oil (RSPO), 2014 and 2015; Round Table for Responsible Soy (RTRS), 2014 and 2015; UTZ Certified, 2014 and 2015.

Please note that the data in Figure 45 were not adjusted for multiple certifications. The graph assumes that there is the maximum amount of multiple certification occurring within each commodity corresponding to the minimum amount of VSS-compliant area per commodity. Therefore, the total amount of VSS-compliant area corresponds to the VSS with the largest compliant area operating within a given commodity sector.

An examination of growth in the standard-compliant area for VSS within specific commodities shows that Rainforest Alliance/SAN tea experienced the most growth, expanding tenfold between 2010 and 2014. This was followed by UTZ Certified cocoa, which grew sevenfold in the same timeframe. Better Cotton Initiative (BCI) certified cotton grew by fourfold between 2011 and 2014. Furthermore, 4C Association-certified coffee increased 600 percent between 2008 and 2013, and in the last three years, has enjoyed a steady growth of 0.5 million hectares.

¹ The year 2008 is the first year for which data on all the Voluntary Sustainability Standards (with the exception of GLOBALG.A.P.) covered in this report were compiled by the International Institute for Sustainable Development (IISD).

Certified forest area expanded 41 percent between 2008 and 2014. The Forest Stewardship Council (FSC) grew by 82 percent (187 million hectares in 2014), while the Programme for the Endorsement of Forest Certification (PEFC) expanded by 21 percent to 263 million hectares in the same year.

Standards are expanding their agricultural land coverage: In 2013,

- in organic agriculture, more than 43 million hectares were certified (including in-conversion areas), representing 0.9 percent of the global agricultural land. Organic is the biggest sustainability standard in terms of area, and is the standard with the largest variety of commodities.
- Rainforest Alliance/SAN certified more than 3 million hectares, making it the standard with the second-largest area.
- GLOBALG.A.P. had more than 3 million hectares and is one of the biggest standards in terms of area certified, representing 0.06 percent of the global agricultural area.
- With 2.5 million hectares, Roundtable on Sustainable Palm Oil (RSPO) covers almost 15 percent of the global oil palm area.

Total certified area per VSS 2014

Source: FiBL-IISD-ITC survey 2015

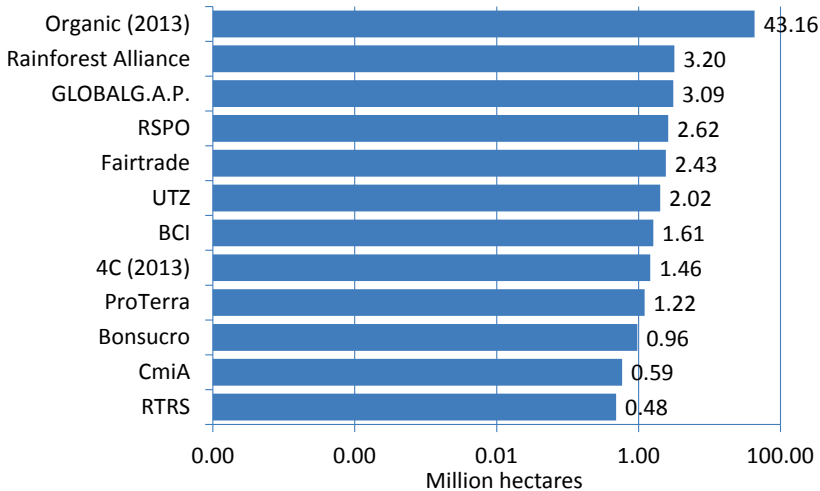


Figure 46: Total certified area per VSS, 2014 (only agriculture)

Sources: FiBL-IISD-ITC survey, 2015; 4C Association, 2014 and 2015; Better Cotton Initiative (BCI), 2014 and 2015; Bonsucro, 2014 and 2015; Cotton Made in Africa (CmiA), 2014 and 2015; Fairtrade International, 2014 and 2015; GLOBALG.A.P., 2015; FiBL, 2015; ProTerra Foundation, 2014 and 2015; Rainforest Alliance/SAN, 2014 and 2015; Roundtable of Sustainable Palm Oil (RSPO), 2014 and 2015; Round Table for Responsible Soy (RTRS), 2014 and 2015; UTZ Certified, 2014 and 2015.

The organic and 4C data are from 2013. For organic, please note that a large part of the organic agricultural land are permanent grassland areas (60 percent), which also includes extensive grazing areas.

Sector-specific highlights¹

Below, we present an overview of the key figures for each of the selected commodities (bananas, cocoa, coffee, cotton, oil palm, sugarcane, soybeans and tea) and for the forestry sector. As explained above, there is little information on the share of multiple-certification,² and we have therefore decided to provide an average between the minimum and the maximum area and production.

Bananas

Four of the Voluntary Sustainability Standards (VSS) covered in this survey – Fairtrade International, GLOBALG.A.P., Organic and Rainforest Alliance/SAN – certified banana production in 2013. Combined, they certified a minimum of 223'000 hectares and a maximum of 384'000 hectares (average 303'000 hectares). GLOBALG.A.P. had the largest VSS-certified banana area in 2013; the largest area growth (2008–2013) was noted for Fairtrade International.

Cocoa

Four of the VSS covered in this survey – Fairtrade International, Organic, Rainforest Alliance/SAN and UTZ Certified – certified cocoa production. Combined, they certified a minimum of 1.2 million hectares and a maximum of 2.7 million hectares in 2013 (average 2 million hectares). UTZ Certified has the largest VSS-certified cocoa area; the largest area growth (2008–2013) was noted for Rainforest Alliance/SAN.

Coffee

Five of the VSS covered in this survey – 4C Association, Fairtrade International, Organic, Rainforest Alliance/SAN and UTZ Certified – certified coffee production. Combined, they certified a minimum of 1.5 million hectares and a maximum of 3.9 million hectares in 2013 (average 2.7 million hectares). 4C Association had the largest VSS-certified coffee area and reported the largest area growth (2008–2013).

Cotton

Four of the VSS covered in this survey – Better Cotton Initiative (BCI), Cotton Made in Africa (CmiA), Fairtrade International and Organic – certified cotton production. Combined, they certified a minimum of 750'000 hectares and a maximum of 1.7 million hectares in 2013 (average 1.2 million hectares). BCI has the largest VSS-certified cotton area and experienced the largest growth (2008–2013). (See also page 127).

Oil palm

Three of the VSS covered in this survey – Organic, Rainforest Alliance/SAN and Roundtable on Sustainable Palm Oil (RSPO) – certified oil palm production. Combined,

¹ Please note that the organic area is the area harvested estimated by FiBL, assuming that 90% of the fully converted area is actually harvested. For the Rainforest Alliance/SAN, the area cultivated is shown.

² Multiple certification: It should be noted that many of the areas certified by VSS are multiple-certified. In our survey, we asked for the extent of multiple certification by countries and for the VSS in question. An average between the maximum and minimum area gives us an estimate of the possible VSS area for a given commodity. The maximum would be the sum of the total area/production provided by the individual VSS, and the minimum would be the area of the VSS with the largest area.

they certified a minimum of 2'504'000 hectares and a maximum of 2'545'000 hectares in 2013 (average 2'524'000 hectares). RSPO has the largest VSS-certified oil palm area and experienced the greatest area growth (2012–2013).

Soy

Three of the VSS covered in this survey – Organic, ProTerra Foundation and Round Table Responsible Soy (RTRS) – certified soybean production. Combined, they certified a minimum of 1.5 million hectares and a maximum of 2.2 million hectares in 2013 (average 1.85 million hectares). ProTerra Foundation has the largest VSS-certified soybean area; the largest growth (2011–2013) was noted for RTRS.

Sugarcane

Three of the VSS covered in this survey – Bonsucro, Fairtrade International and Organic – certified sugarcane production. Combined, they certified a minimum of 763'000 hectares and a maximum of 964'000 hectares in 2013 (average 863'000 hectares). Bonsucro has the largest VSS-certified sugarcane area; the largest growth (2010–2013) was noted for Fairtrade International.

Tea

Four of the VSS covered in this survey – Fairtrade International, Organic, Rainforest Alliance/SAN and UTZ Certified – certified tea production. Combined, they certified a minimum of 306'000 hectares and a maximum of 517'000 hectares in 2013 (average 411'000 hectares). Rainforest Alliance/SAN has the largest VSS-certified tea area and experienced the largest area growth (2011 to 2014).

Forestry

In 2014, an estimated 387 million hectares of certified forest were reported, representing 10 percent of the global forest area. It is estimated that a 15 percent certification overlap takes place in the forestry sector between the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC).

More information

The State of Sustainability Initiatives website: www.iisd.org/ssi/

FiBL's online database on organic agriculture worldwide: www.organic-world.net

ITC online database on Voluntary Sustainability Standards: www.standardsmap.org

FiBL's VSS website: www.vss.fibl.org/de/vss.html

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Lernoud, Julia, Jason Potts, Gregory Sampson, Vivek Voora, Helga Willer and Joseph Wozniak (2015) *The State of Sustainable Markets: Statistics and Emerging Trends 2015*. FiBL-IISD-ITC Report, International Trade Centre, Geneva.

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Potts, Jason; Lynch, Matthew; Wilkings, Ann; Huppé, Gabriel; Cunningham, Maxine and Voora, Vivek (Eds.) (2014): *The State of Sustainability Initiatives Review 2014*. Standards and the Green Economy. 1st edition. International Institute for Sustainable Development (IISD) and International Institute for Environment and Development (IIED), Winnipeg and London.

Willer, Helga. and Julia Lernoud (Eds.) (2015): *The World of Organic Agriculture. Statistics and Emerging Trends 2015*. Research Institute of Organic Agriculture (FiBL), Frick and International Federation of Organic Agriculture Movements (IFOAM – Organics International), Bonn, Germany.

Bananas: Development of the area by VSS 2008-2014

Source: Fairtrade International, 2015; GLOBALG.A.P., 2015; FiBL, 2015; Rainforest Alliance/SAN, 2014 and 2015



Figure 47: Bananas: Development of the area by VSS, 2008–2014

Source: Fairtrade International, 2015; GLOBALG.A.P., 2015; FiBL, 2015; Rainforest Alliance/SAN, 2014 and 2015

Cocoa: Development of the area by VSS 2008-2014

Sources: Fairtrade International, 2015; FiBL, 2015; Rainforest Alliance/SAN, 2014 and 2015; UTZ Certified, 2014 and 2015

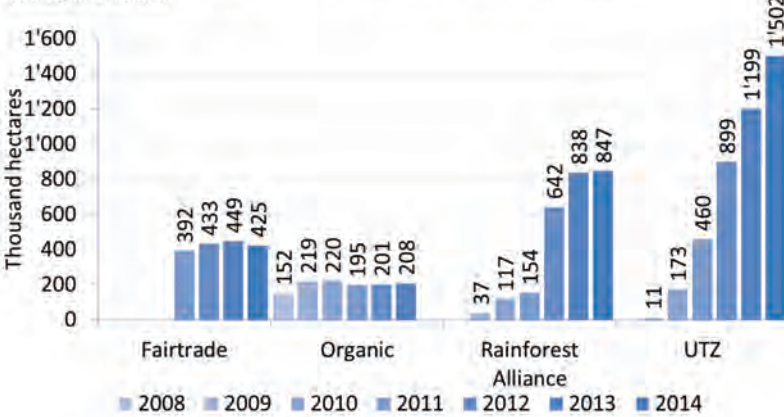


Figure 48: Cocoa: Development of the area by VSS 2008–2014

Sources: Fairtrade International, 2015; FiBL, 2015; Rainforest Alliance/SAN, 2014 and 2015; UTZ Certified, 2014 and 2015

Coffee: Development of the area by VSS 2008-2014

Sources: 4C Association, 2014 and 2015; Fairtrade International, 2015; FiBL, 2015; Rainforest Alliance/SAN, 2014 and 2015; UTZ Certified, 2014 and 2015

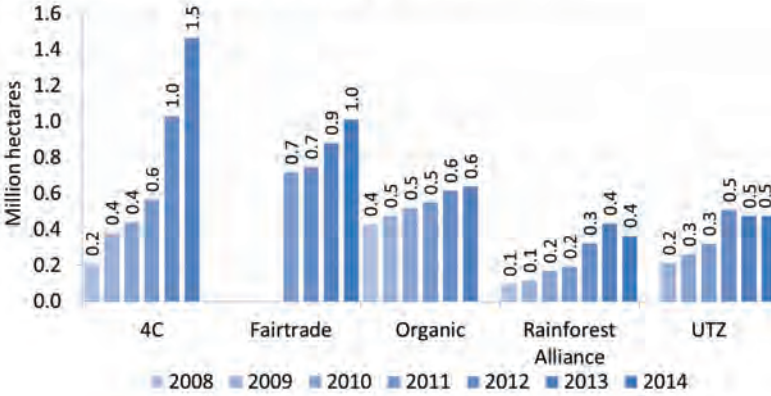


Figure 49: Coffee: Development of the area by VSS, 2008–2014

Sources: 4C Association, 2014 and 2015; Fairtrade International, 2015; FiBL, 2015; Rainforest Alliance/SAN, 2014 and 2015; UTZ Certified, 2014 and 2015

Cotton: Development of the area by VSS 2008-2014

Sources: Better Cotton Initiative, 2014 and 2015; Cotton Made in Africa, 2014 and 2015; Fairtrade International, 2014 and 2015 (2012 data is missing); Textile Exchange, 2014 and 2015

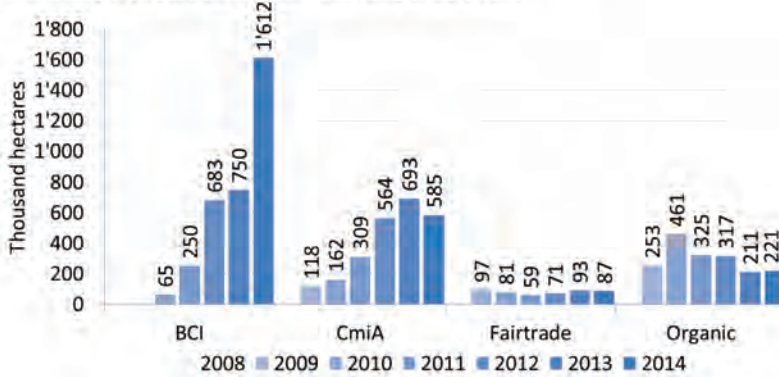


Figure 50: Cotton: Development of the area by VSS, 2008–2014

Sources: Better Cotton Initiative, 2014 and 2015; Cotton Made in Africa, 2014 and 2015; Fairtrade International, 2014 and 2015 (2012 data is missing); Textile Exchange, 2014 and 2015

Oil palm: Development of the area by VSS 2008-2014

Sources: FiBL, 2015; Rainforest Alliance/SAN, 2015; Roundtable on Sustainable Palm Oil (RSPO), 2014 and 2015

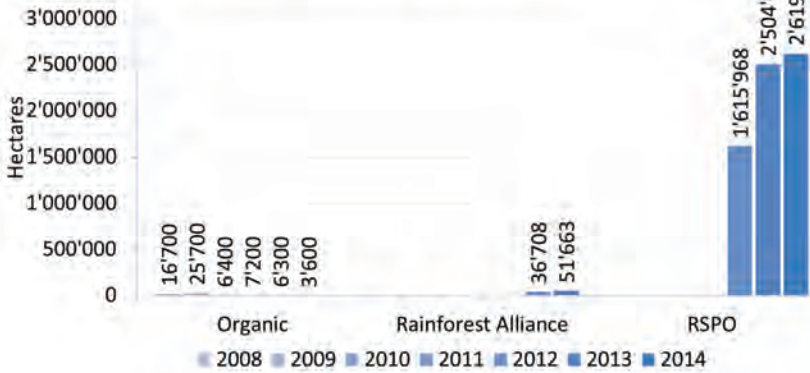


Figure 51: Oil palm: Development of the area by VSS, 2008–2014

Sources: FiBL, 2015; Rainforest Alliance/SAN, 2015; Roundtable on Sustainable Palm Oil (RSPO), 2014 and 2015

Soybeans: Development of the area by VSS 2008-2014

Sources: FiBL, 2015; ProTerra Foundation, 2015; Round Table on Responsible Soy (RTRS), 2014 and 2015

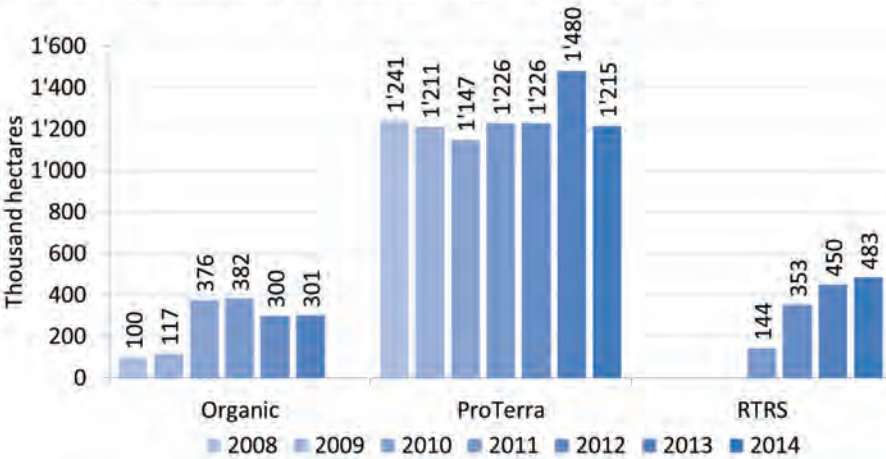


Figure 52: Soybeans: Development of the area by VSS, 2008–2014

Sources: FiBL, 2015; ProTerra Foundation, 2015; Round Table on Responsible Soy (RTRS), 2014 and 2015

Sugarcane: Development of the area by VSS 2008-2014

Sources: Bonsucro, 2014 and 2015; Fairtrade International, 2014 and 2015; FiBL, 2015

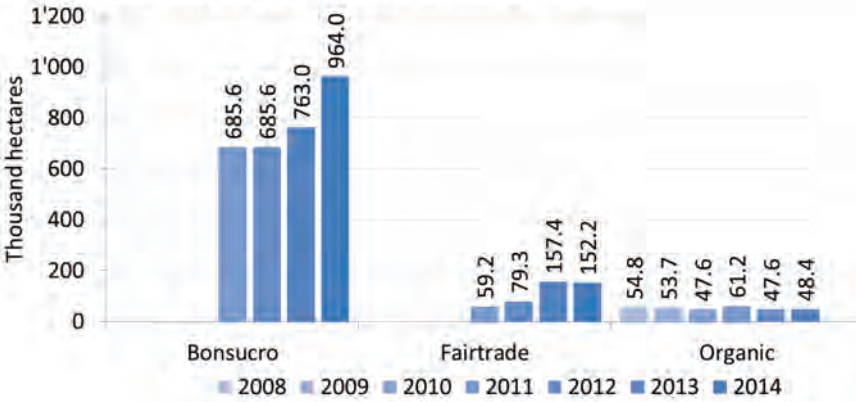


Figure 53: Sugarcane: Development of the area by VSS, 2008–2014

Sources: Bonsucro, 2014 and 2015; Fairtrade International, 2014 and 2015; FiBL, 2015

Tea: Development of the area by VSS 2008-2014

Sources: Fairtrade International, 2014 and 2015; FiBL, 2015; Rainforest Alliance/SAN, 2014 and 2015; UTZ Certified, 2014 and 2015

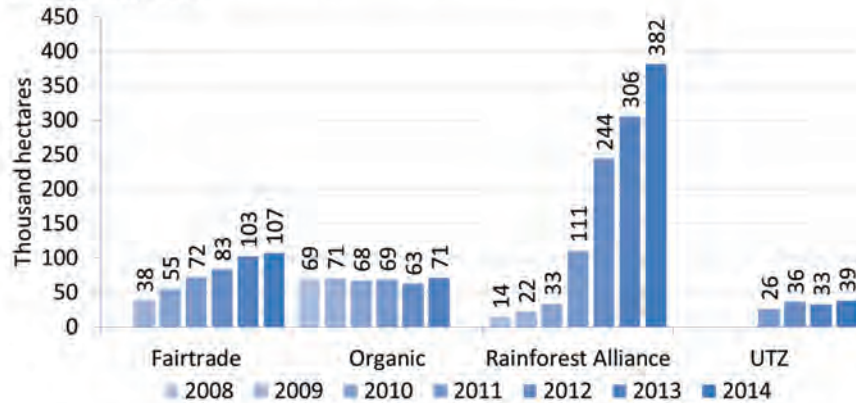


Figure 54: Tea: Development of the area by VSS, 2008–2014

Sources: Fairtrade International, 2014 and 2015; FiBL, 2015; Rainforest Alliance/SAN, 2014 and 2015; UTZ Certified, 2014 and 2015

Organic Cotton¹

LIESL TRUSCOTT,² EVONNE TAN,³ AND LISA EMBERSON⁴

In the 2013/14⁵ growing season, 116'974 metric tons of organic cotton fiber was produced globally by 147'971 farmers on 220'765 hectares of land.

There are currently 19 countries producing certified organic cotton, but 97 percent of the global supply comes from just five countries. India is by far the largest supplier, accounting for three-quarters of total production, followed by China, Turkey, Tanzania, and the USA.

Trends

The global fiber production in 2013/14 of 116'974 metric tons represented an overall growth rate of 10 percent over the previous year, signalling a turnaround for the sector after three years of decline.

The primary factors thought to be behind this turnaround are market demand (particularly in Europe), an increase in productivity in Benin and India, and sizeable quantities of in-conversion cotton coming on-stream, most noticeably in Turkey. In 2013/14, there were 37'883 hectares of land in conversion to organic, which will be fully certified within the next couple of years. (See Figure 55 for a breakdown of the growth rate by country for 2012/13 - 2013/14).

For these reasons, along with Ethiopia joining the list of producer countries, it is estimated that 2014/15 may have seen an even higher growth of around 15 to 20 percent (data to be published in 2016).

Figure 56 illustrates the trend in organic cotton production since 2004/05. Between 2004/05 and 2009/10, growth in production was nine-fold as interest in more sustainable textile production started to accelerate. However, in 2010/11, in connection with the financial crisis, production fell significantly and continued to decline for another two years. There are many factors attributing to the no-growth/low growth scenario we are experiencing, but the primary causes are thought to be the difficulty of finding good quality non-GMO seed, the continued complexities of supply chain management, volatile and uncertain cotton prices and trade restrictions, and the shift towards new sustainable cotton initiatives that offer a lower entry point.

¹ This article is a condensed version of the Organic Cotton Market Report 2014 produced by Liesl Truscott, Evonne Tan and Lisa Emberson, with production data collected by: Atila Ertem, Regional Ambassador for Turkey, Textile Exchange, Izmir, Turkey; Prabha Nagarajan, Regional Director for India, Textile Exchange, Chennai, India; Silvere Tovignan, Regional Ambassador for Africa, Textile Exchange, Abomey-Calavi, Benin; Allen You, Regional Ambassador for China, Textile Exchange, Beijing, China. More information about Textile Exchange's Organic Cotton Market Report 2014 is available here:

<http://www.textileexchange.org/resource-center/reports-and-publications/2014-organic-cotton-report>

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⁴ Lisa Emberson, Materials Platform Coordinator, Textile Exchange, London, UK farmhub.textileexchange.org

⁵ The International Cotton Advisory Council (ICAC) set the cotton-growing year from August, 1 to July, 31.

Organic cotton: Breakdown of growth rate of organic cotton area by country for 2012/13 – 2013/14

Source: Textile Exchange 2015

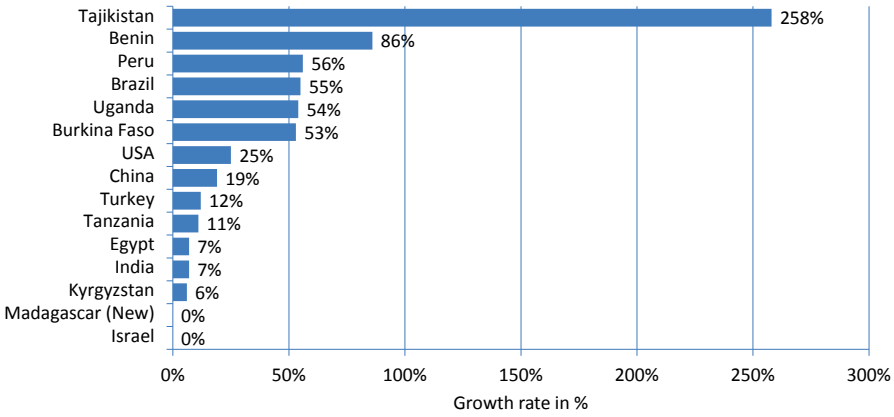


Figure 55: Organic cotton: Breakdown of growth rate of organic cotton area by country for 2012/13 – 2013/14

Not included in the graph are decreases of the cotton area in the following countries: Mali: -75%; Paraguay: -73%; Nicaragua: -7%; Senegal: -1%

Source: Textile Exchange 2015

Organic cotton fibre lint: Production trend since 2004/05

Source: Textile Exchange 2015

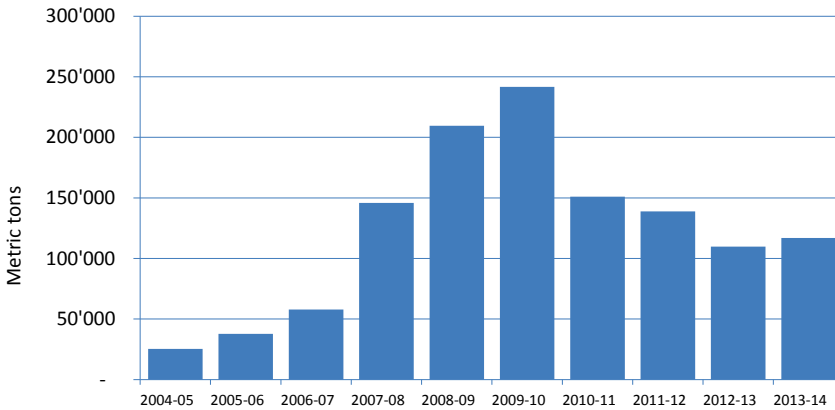


Figure 56: Organic cotton fibre lint: Production trend since 2004/05

Source: Textile Exchange 2015

Geography of production

As evident in Table 37, the top five organic cotton-producing countries account for 96.78 percent of total production and include India (74.25 percent), China (10.46 percent), Turkey (6.80 percent), Tanzania (3.21 percent), and the USA (2.07 percent). The remaining 3.22 percent is produced by Burkina Faso (0.74 percent), Uganda (0.60 percent), Peru (0.49 percent), Egypt (0.39 percent), Benin (0.36 percent), Kyrgyzstan (0.23 percent), Tajikistan (0.15 percent), Mali (0.11 percent), Nicaragua (0.05 percent), Israel (0.03 percent), Senegal (0.02 percent), Paraguay (0.02 percent), Brazil (0.01 percent), and Madagascar (0.004 percent).

Africa

The seven organic cotton-producing countries of Africa produced a combined total of 5'899 metric tons of organic cotton in 2013/14, an increase of 14 percent on the previous year. In total, there were 27'786 certified farmers (16 percent of which were women) active in producing organic cotton on 32'054 hectares of land. Tanzania is by far the largest producer in Africa, accounting for 64 percent of production. Madagascar is the newest producer in Africa, although there is also some cotton in conversion to organic currently growing in Ethiopia that will come online this year.

Table 37: Organic cotton producers, area and production 2013/2014

Country	No of farmers	Land area (ha)	Production seed cotton (MT)	Production fiber lint (MT)	Share of organic fibre lint production
Benin	2'254	1'834	1'032	424	0.36%
Burkina Faso	6'860	4'256	2'104	864	0.74%
Madagascar	15	35	12	5	0.004%
Mali	1'978	1'136	363	132	0.11%
Senegal	No data	No data	50	21	0.02%
Tanzania	4'179	17'218	9'589	3'752	3.21%
Uganda	12'500	7'575	1'750	700	0.60%
Africa total	27'786	32'054	14'900	5'899	5.04%
Kyrgyzstan	599	644	808	275	0.23%
Tajikistan	207	201	511	179	0.15%
Central Asia total	806	845	1'319	454	0.39%
China total	3'402	5'957	26'650	12'232	10.46%
India total	114'863	172'295	255'450	86'853	74.25%
Brazil	60	66	43	16	0.01%
Nicaragua	8	105	172	64	0.05%
Paraguay	40	50	53	20	0.02%
Peru	147	721	1'526	575	0.49%
Latin America Total	255	942	1'793	674	0.58%
Egypt	562	324	1'178	459	0.39%
Israel	1	20	90	30	0.03%
MENA Total	563	344	1'268	489	0.42%
Turkey total	258	4'140	20'127	7'958	6.80%
USA total	38	4'189	6'900	2'415	2.06%
Global total	147'971	220'765	328'407	116'974	100%

Source: Textile Exchange 2015

Central Asia

Production of organic cotton in Central Asia takes place in two countries: Kyrgyzstan and Tajikistan. In Tajikistan, cotton under conversion is starting to reach maturity, leading to a production increase of 258 percent in 2013/14, with 179 metric tons being produced by 207 farmers on 201 hectares of land. Over the next three years, Bio-Kishovarz, the primary producer group in Tajikistan, is converting an additional 1'500 hectares of land to organic. Not all of this will be cotton, but it is estimated that the country's total organic cotton production will rise to over 1'000 metric tons.

In Kyrgyzstan, production of organic cotton is growing at a much steadier pace of 6 percent, with 275 metric tons being produced in 2013/14 by 599 farmers on 644 hectares of land.

China

All of China's certified organic cotton is currently grown in the north western province of Xinjiang. In 2013/14, China produced 12'232 metric tons of organic cotton fiber on 5'957 hectares of land involving 3'402 farmers. This is an increase of 19 percent which, though impressive, is a smaller growth than was predicted. This could, in part, be a result of China ending its cotton stockpiling program in 2014, reducing cotton fiber prices and consequently making production of other crops more attractive.

However, production is expected to continue rising, one reason being the growing demand in China for organically certified cottonseed for use as livestock fodder in the production of organic milk.

Middle East and North Africa

In this region, production of organic cotton takes place in Egypt and Israel. In Egypt, organic cotton is grown to biodynamic standards with support from an organization called SEKEM. In 2013/14, farmers in Egypt produced 459 metric tons of extra-long staple organic/biodynamic cotton on 324 hectares involving 562 farmers.

In Israel, the Israeli Cotton Board reported that there were 30 metric tons of organic extra-long staple lint produced on approximately 20 hectares of land.

Latin America

In Latin America, certified organic cotton is currently grown in Brazil, Paraguay, Peru, and Nicaragua. Peru is by far the largest grower with production, which is located in the northwest of the country and covers 721 hectares of land, reaching 575 metric tons in 2013/14, a growth rate of 56 percent. This is thought to be in response to the market demand for high-quality organic cotton fiber as well as the long-standing integration into Peruvian textile value chains. A pilot project ran this year in Columbia, with 21 hectares of land now in conversion to organic.

South Asia

As previously mentioned, India is by far the largest producer of organic cotton globally, accounting for almost three-quarters of total production (74.25 percent). In 2013/14, India produced 86'853 metric tons of fiber on 172'295 hectares of land involving 114'863 farmers. This represents a seven percent growth over the previous year which,

although less dramatic than the rate in other countries, made a significant contribution to this year's turnaround in the global production trend.

Pakistan also has a history of organic cotton production, but doesn't currently report any certified organic. However, there is a new organic cotton project underway that currently involves 500 farmers and is in the process of becoming certified.

Turkey

Currently, Turkey produces 7'958 metric tons of organic cotton on 4'140 hectares of land, showing a 12 percent growth over the 2012-13 production year. However, this growth rate is set to increase dramatically over the next three years as large volumes of cotton currently in conversion come on-stream. By the 2014-15 production year, production is set to reach 17'000 metric tons, a growth of over 100 percent. The official ban on the use of GMO seeds in Turkey creates an important competitive advantage compared to other countries, where GMO contamination is a constant risk to organic growers.

USA

In 2013/14, the USA produced 2'415 metric tons of organic cotton fiber. The majority, 1'988 metric tons, is grown in Texas, with the remainder grown in Arizona and New Mexico. The production area totaled 4'189 hectares of land and involved 38 farmers, indicating the large-scale nature of these farms compared to other production regions. Yields in Texas have been relatively poor recently due to disturbed rain patterns (the organic cotton is rain-fed) but are expected to expand significantly in response to adequate water supply.

Market value

The organic cotton market value increased by 67 percent between 2013 and 2014, bringing the estimated value to 15.7 billion US dollars. Brands, of all sizes, are showing their commitment to organic cotton, encouraged by new Life Cycle Assessment (LCA) data and Environmental Profit & Loss accounting that proves the sustainability benefits of the fiber. The breakdown of companies using organic cotton by category is 81 percent Apparel, 14 percent home textiles, and 5 percent footwear.

Voluntary organic supply chain standards

Voluntary supply chain standards maintain the identity of cotton or other materials grown on an organic farm as they move through production and into a final product. The two leading standards are the Global Organic Textile Standard (GOTS) and the Organic Content Standard (OCS). GOTS covers the processing, manufacturing, packaging, labeling, trading and distribution of all textiles made from at least 70 percent certified organic natural fibers. OCS relies on third-party certification to verify that a final product contains the accurate amount of a given organically grown material. In 2013/14, both GOTS and OCS experienced a healthy growth in the number of certified facilities. The number of GOTS certified facilities grew by more than 18 percent, from 3'085 facilities in 2013 to 3'663 facilities in 2014. The number of OCS certified facilities increased by 26 percent, from 2'516 facilities in 2013 to 3'170 in 2014.

Organic cotton: Growth of GOTS and OCS certified facilities 2012/13 - 2013/14

Source: Textile Exchange 2015

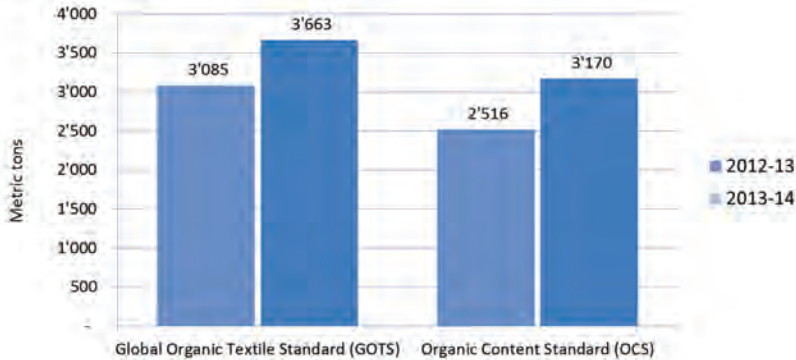


Figure 57: Organic cotton: Growth of GOTS and OCS certified facilities 2012/13 - 2013/14

Source: Textile Exchange 2015

Challenges for organic cotton

- Availability of good quality non-GMO seed continues to be a challenge – including the risk of contamination.
- Creating robust and pragmatic Internal Control Systems (ICS) that support farmer organization and integrity without creating burden.
- Ensuring all organic cotton products are segregated, tracked, and that integrity is preserved.
- Return on investment.
- Certifying supply chains and keeping track of Transaction Certificates.
- More sustainability claims and different labels in the marketplace can lead to consumer overload.

Opportunities for organic cotton

- Awareness is increasing and more research & development projects are underway to address concerns, such as GMO testing in the field. Ultimately, seed integrity is a whole industry issue (including the GMO seed community).
- Well-organized and authentic production that benefits farmers, adds value to the product, and is rewarded by the market.
- Preserving Integrity: Value-added product with identity and integrity preserved.
- Strong growth in facilities certified to voluntary standards.
- Transaction Certificate Management: Telling the story of the entire supply chain.
- Truth in labeling. Being able to tell the story!

Reference

Textile Exchange (2015): Organic Cotton Market Report 2014. Textile Exchange, Lubbock. Available at <http://www.textileexchange.org/resource-center/reports-and-publications/2014-organic-cotton-report>
For more information see <http://www.textileexchange.org>

The Global Market for Organic Food & Drink

The Global Market for Organic Food & Drink¹

AMARJIT SAHOTA²

Introduction

The global market for organic products continues to show positive growth. Retail sales of organic food & drink reached 80 billion US dollars³ in 2014.

North America and Europe generate most organic product sales. These two regions have about a third of global organic farmland, yet they comprise over 90 percent of organic food and drink sales. Much of the organic crops grown in other regions, especially Asia, Latin America and Africa, are destined for exports.

World: Growth of the global market for organic food & drink, 1999-2014

Source: Organic Monitor

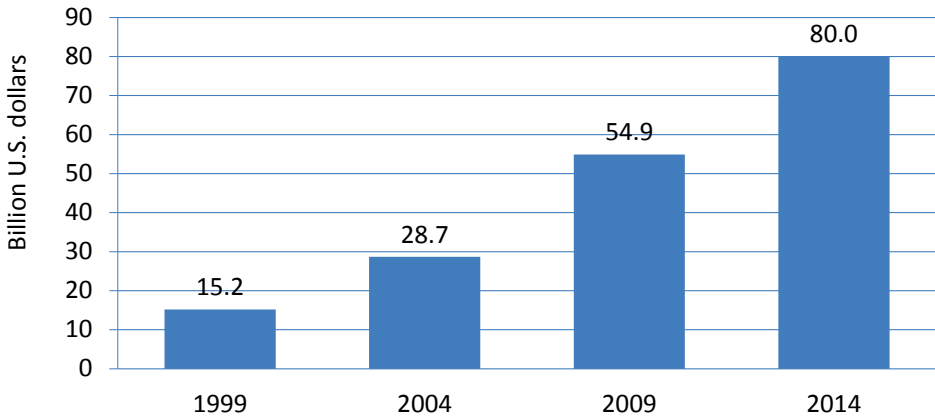


Figure 58: World: Growth of the global market for organic food & drink, 1999-2014

Source: The Global Market for Organic Food & Drink (Organic Monitor)

Note: All figures are rounded

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³ One euro was 1.3285 US dollars in 2014 (average annual exchange rate according to the European Central Bank).

North America

Organic food and drink sales in North America amounted to about 38.5 billion US dollars in 2014. The region has the largest market for organic products in the world, although it has less than a 7 percent share of global organic farmland.

The fresh produce categories comprise most sales: organic fruits, vegetables, and dairy products. North America, however, has some of the most extensive ranges of organic processed foods. Organic ready meals, frozen foods, carbonated drinks, confectionary, and related products are popular.

The sales shift from specialists (natural food shops) to mass market retailers is continuing. Over half of organic food sales are from mass market retailers, which include supermarkets, club & discount stores, and mass merchandisers. All leading food retailers are marketing organic foods under their private labels. O Organics (Safeway) and PC Organics (Loblaws) are the most successful in the US and Canada, respectively. Wal-Mart and Target are two large food retailers making commitments to organic foods in recent years.

To tackle growing competition from mainstream rivals, Whole Foods Market is planning to open a chain of low-cost natural food retailers. The stores will operate under the “365 buy Whole Foods Market” banner targeted at younger shoppers. Whole Foods Market and Trader Joe’s are the leading natural food retailers in the US, operating over 400 stores each.

The supply side is characterised by large companies. WhiteWave Foods has consolidated its position as the largest organic food enterprise by acquiring several companies. It moved into the fresh produce sector when it purchased Earthbound Farms in January 2014. Since then, it has acquired So Delicious, Vega, and Wallaby. Listed on the New York Stock Exchange, WhiteWave Foods reported sales of 3.4 billion US dollars in 2014. The natural and organic food company Hain Celestial has also grown by a series of acquisitions. General Mills became a major operator in the organic food industry when it purchased Annie’s in September 2014.

The US is one of the largest exporters of organic foods in the global arena. To facilitate exports, the US government has entered a number of organic equivalency agreements. Apart from the EU, agreements have been entered with Canada, Switzerland, Japan, and South Korea.

Europe

Europe has the second-largest market for organic food and drink, valued at roughly 35 billion US dollars. Germany has the second-largest market for organic products in the world, worth about 10.5 billion US dollars. The French market is the second-largest in Europe, followed by the UK and Italian markets. This quartet comprises about two-thirds of European sales. Other important markets for organic products are in Switzerland, Austria, Sweden, Denmark, and the Netherlands. As will be shown in later in this book, there are significant differences in Europe between market sizes and sales per capita.

The supermarkets are the most important sales channel for organic foods. Private labels are prominent; organic products are marketed under private labels of supermarkets, hypermarkets, discount stores, pharmacies, drugstores, and organic food shops. Two of the most successful private labels are Ånglamark (Coop Denmark) and Naturaplan (Coop Switzerland).

The number of organic food shops continues to grow in the region. Most developments are in Germany, where over 50 organic supermarkets open each year. The organic food company Dennree operates over 100 Denn's Bio stores in Germany and Austria. The Biocoop chain has over 320 organic food shops in France, whilst EcorNaturaSi operates over 100 organic supermarkets in Italy. Some large conventional supermarkets are also opening organic supermarkets such as Rewe with its Temma chain, and Auchan with its Coeur de Nature store.

Europe is a major producer and exporter of organic foods. A significant number of exporters are based in Germany, France and Benelux. Hipp, De Vau Ge, Rapunzel, Royal Wessanen, and the Lea Nature Group are some of the leading exporters on the continent.

Central & Eastern Europe (CEE) has a small but growing market for organic products. Important consumer markets are in the Czech Republic, Poland and Hungary. In general, this region is a big producer and exporters of organic primary crops like cereals and grains. Such organic crops are exported to Western Europe whilst finished organic goods are mainly imported in from the same region.

Other regions

Organic food sales in Asia, Australasia, and other regions were about 6.5 billion US dollars in 2014.

Asia has the third-largest market for organic products. Although the continent has over three million hectares, many organic food products are imported. China produces many organic crops for domestic consumption; however, other countries mainly export primary crops. Most countries, including Japan, Singapore, Taiwan, and South Korea, have import dependent organic food sectors.

China is a target market for many organic food exporters. The country has a strong appetite for organic products, partly because of a spate of food scandals. Demand for organic dairy products (especially infant formula) has rocketed since the melamine scandal in 2008. The Australian company Bellamy's Organic has set up a sales office in Shanghai to cater to the strong demand for its organic products. Organic Valley, Triballat Noyal, and Fonterra are some of the other companies exporting organic dairy products to China.

In Latin America, Brazil has the largest market for organic products. As in Europe, most sales are occurring from large food retailers like Pao du Azucar and Carrefour. Private labels are also slowly gaining popularity in the region. Argentina, Peru, Chile, and Colombia are important producers and exporters of organic crops.

Australia has a large and growing market for organic products. Distribution of organic foods is also increasing in supermarkets and major food retailers. Producers in Australia and New Zealand have a central focus on exporting, generally to Asian countries.

The Middle East has a small but growing market for organic foods. Most demand is concentrated in the big cities, such as Dubai, Abu Dhabi, Cairo, and Riyadh.

Challenges and growth outlook

Figure 58 shows that the global market for organic food and drink has expanded over fivefold between 1999 and 2014. Organic Monitor projects positive growth to continue, however, there are many challenges ahead.

Standards are a major challenge. The organic food industry is well regulated, with over 80 countries having national regulations on organic agriculture. Another 15 countries have national standards for organic production but no regulations (see article by Huber et al. on page 140). With a lack of harmonisation between standards, there are concerns about the proliferation of organic symbols and logos. Even within the EU and the US, it is common for organic products to have multiple logos and symbols. There are concerns that this proliferation of logos will create confusion among consumers and dampen demand.

Organic agriculture is practiced in about 170 countries. Much of the production outside Europe and North America is destined for export markets. The EU and US both have single standards for organic products. However, producers interested in exporting to Japan, China, Australia, or Brazil have to adopt the standards enforced on these country markets. The lack of a single unifying organic standard, or the presence of multiple organic standards, prevents global trade of organic products. Furthermore, meeting multiple standards involves higher inspection and auditing costs, raising production costs and thus consumer prices.

Organic equivalency agreements between trading partners (such as US-EU and US-Japan) are positive in that they prevent dual certification. However, such agreements also highlight differences in organic standards. For instance, the US-EU organic trade agreement does not cover organic livestock products because of variations in standards. In an ideal world, there would be uniform or similar organic standards to facilitate global trade.

Demand concentration is another challenge. Organic crops are grown in the four corners of the world, yet two regions comprise over 90 percent of sales. Consumers are seeking organic products; however, questions may be asked about the environmental footprint of imported products. For instance, significant volumes of organic apples and pears come to Europe from Chile and Argentina. Although one can argue the same is true for conventional apples and pears, these products also go into the local markets. The same cannot be said for organic apples and pears. Likewise, organic vegetables, fruits and herbs produced in Africa are almost exclusively for the export market. There need to be “local markets” for organic products if the industry is to be more sustainable.

Lastly, growth in the organic food market also hinges on economic conditions. This year (2016) is described as a precarious one for the global economy, with the IMF predicting 3.6 percent growth (December 2015 forecast). The slowdown in the Chinese economy and depreciation of currencies in developing countries will impact organic food sales.

However, if growth in the US economy continues at a healthy pace and many European countries continue coming out of the debt crisis, healthy growth in the organic products market will continue.

Standards, Regulations and Organic Policies

Standards and Regulations

BEATE HUBER,¹ OTTO SCHMID,² AND CAROLIN MÖLLER³

The dominating topic in 2015 in the European Union (EU) continued to be the European Commission's proposal for a new organic regulation. The proposal published by the European Commission in March 2014 foresaw a complete revision regulation, whereas many stakeholders believe that a revision of the existing regulation would have been more desirable and more feasible. Intensive negotiations within and among the European parliament, the EU Member States, and the European Commission have led to a consensus on some topics such as residue limits and the control system. However, on other topics such as the revision of the import system no agreement has been achieved so far.

Organic legislation worldwide: current situation

According to the FiBL survey on organic rules and regulations, the number of countries with organic standards is 87. Eighteen countries are in the process of drafting legislation. Data on regulations around the world was collected from various authorities and experts. The categorization of regulations as being “not fully implemented” or “fully implemented” was based directly on the feedback from the persons interviewed, and the information was not subject to verification. We received responses from experts and authorities from the majority of the countries. It is assumed that the non-responding countries had not passed legislation on organic production. It should be noted that some countries listed below as having regulations, do not enforce them, i.e., the indication “not fully implemented” relates to countries that have only recently adopted legislation and are still in the process of finalizing its implementation, as well as to countries that have adopted legislation but are not providing the resources necessary for its implementation.

Table 38 shows the list of countries that have regulations for organic agriculture or are in the process of drafting them. Please send comments or information on countries that are not listed to Beate Huber (beate.huber@fibl.org).

Some countries have not adopted organic legislation and neither do they have national production standards. Such standards provide a national definition of organic products and are a reference point for certification activities. They do not usually foresee adopting a national inspection and certification system, which would be supervised by the government.

Table 40 shows that at least fifteen countries, mostly in Asia and Africa, have adopted national standards for organic agriculture.

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² Otto Schmid, Research Institute of Organic Agriculture (FiBL), 5070 Frick, Switzerland, www.fibl.org

³ Carolin Möller, PhD student at FiBL at the Research Institute of Organic Agriculture (FiBL), in 2015

Table 38: Countries with regulations on organic agriculture 2015

Remark: Countries highlighted in blue have standards officially endorsed as organic by IFOAM – Organics International, based on their equivalence with the Common Objectives and Requirements of Organic Standards (COROS, www.ifoam.org/en/coros). Both private standards and government regulations are admissible for the IFOAM Family of Standards (see www.ifoam.org/ogs). A list of organic regulations is available on the Organic Trade Association (OTA) website at http://www.globalorganictrade.com/country_list.php.

Region	Country	Remark
EU Europe (28)¹	Austria	Fully implemented
	Belgium	Fully implemented
	Bulgaria	Fully implemented
	Croatia	Fully implemented
	Cyprus	Fully implemented
	Czech Republic	Fully implemented
	Denmark	Fully implemented
	Estonia	Fully implemented
	Finland	Fully implemented
	France	Fully implemented
	Germany	Fully implemented
	Greece	Fully implemented
	Hungary	Fully implemented
	Ireland	Fully implemented
	Italy	Fully implemented
	Latvia	Fully implemented
	Lithuania	Fully implemented
	Luxemburg	Fully implemented
	Malta	Fully implemented
	Poland	Fully implemented
	Portugal	Fully implemented
	Romania	Fully implemented
	Slovak Republic	Fully implemented
	Slovenia	Fully implemented
	Spain	Fully implemented
Sweden	Fully implemented	
The Netherlands	Fully implemented	
United Kingdom	Fully implemented	
Non EU Europe (11)	Albania	Fully implemented
	Iceland	Fully implemented
	Kosovo	Not fully implemented
	Macedonia, FYROM	Fully implemented
	Moldova	Fully implemented
	Montenegro	Fully implemented
	Norway	Fully implemented
	Serbia	Fully implemented
	Switzerland ²	Fully implemented
	Turkey	Fully implemented
	Ukraine	Not fully implemented
Asia & Pacific Region (25)	Armenia	Fully implemented
	Australia	Fully implemented
	Azerbaijan	Not fully implemented
	China	Fully implemented
	French Polynesia	Fully implemented
	Georgia	Fully implemented
	India ³	Fully implemented
	Indonesia	Fully implemented
	Iran	Fully implemented

¹ eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:189:0001:0023:EN:PDF

² www.admin.ch/ch/d/sr/c910_18.html

³ www.apeda.gov.in/apedawebsite/organic/index.htm

Standards and Regulations: Overview

Region	Country	Remark
The Americas & Caribbean (21)	Israel	Fully implemented
	Japan ¹	Fully implemented
	Jordan	Not fully implemented
	Kazakhstan	Not fully implemented
	Korea, South	Fully implemented
	Lebanon	Fully implemented
	Malaysia	Fully implemented
	New Caledonia	Fully implemented
	New Zealand ²	Fully implemented
	Philippines	Not fully implemented
	Saudi Arabia	Fully implemented
	Solomon Islands	Fully implemented
	Taiwan	Fully implemented
	Tajikistan	Fully implemented
	Thailand ³	Fully implemented
	United Arab Emirates	Fully implemented
	Argentina	Fully implemented
	Bolivia	Fully implemented
	Brazil	Fully implemented
	Canada	Fully implemented
	Chile	Fully implemented
Colombia	Fully implemented	
Costa Rica	Fully implemented	
Cuba	Not fully implemented	
Dominican Republic	Fully implemented	
Ecuador	Fully implemented	
El Salvador	Not fully implemented	
Guatemala	Fully implemented	
Honduras	Fully implemented	
Mexico	Fully implemented	
Nicaragua	Fully implemented	
Panama	Fully implemented	
Paraguay	Fully implemented	
Peru	Fully implemented	
Uruguay	Fully implemented	
USA	Fully implemented	
Venezuela	Not fully implemented	
Africa (2)	Morocco	Not fully implemented
	Tunisia	Fully implemented

Source: Survey by Carolin Möller and Beate Huber, October 2015

Table 39: Countries in the process of drafting regulations 2015

Region	Country
Europe (3)	Belarus
	Bosnia & Herzegovina
	Russia
Asia and Pacific Region (6)	Bangladesh
	Egypt
	Jordan
	Kyrgyzstan
	Nepal
	Pakistan

¹ JAS Standards for organic plants and organic processed foods: www.maff.go.jp/e/jas/specific/organic.html

² New Zealand Food Safety Authority (NZFSA) Official Assurance Programme for Organic Products: www.foodsafety.govt.nz/industry/sectors/organics

³ Homepage of the National Bureau of Agricultural Commodity and Food Standards, www.acfs.go.th/eng/index.php

The Americas & Caribbean (2)	Jamaica St. Lucia
Africa (7)	Algeria Egypt Kenya Namibia Senegal South Africa Sudan

Source: Survey by Carolin Möller and Beate Huber, October 2015

Table 40: Countries with a national standard but without a national legislation 2015

Region	Country
Asia and Pacific Region (9)	Bahrein Bhutan Brunei Hong Kong Kuwait Laos Oman Qatar Vietnam
Africa (6)	Burkina Faso Ghana Kenya South Africa ¹ Zambia Zimbabwe

Source: Survey by Carolin Möller and Beate Huber, October 2015

The Codex Alimentarius Guidelines: Recent developments²

The need for clear and harmonized rules has not only been taken up by private bodies, IFOAM – Organics International, and state authorities, but also by organizations of the United Nations, including the Food and Agriculture Organization (FAO), the World Health Organization (WHO), and the United Nations Conference on Trade and Development (UNCTAD). The Codex Alimentarius Commission approved plant production guidelines in June 1999 and animal production guidelines in July 2001. They also provide guidance to governments in developing national regulations for organic food. The latest update of the guidelines was done in 2013.³

The annex lists of the Codex Alimentarius Guidelines, which define the substances that can be used in organic food and farming systems, have been under revision since 2005, with a focus on substances for food processing and criteria for the use of new substances. A working group within the Codex Committee for Food Labelling (CCFL),

¹ http://www.afrisco.net/Html/Product_Standards.htm

² Information about Codex Alimentarius is available via <http://www.codexalimentarius.org/codex-home/en/>

³ Current version of Guidelines for organically produced food (2013, available in English, French, Spanish, Chinese): http://www.codexalimentarius.org/download/standards/360/cxg_032e.pdf

which was supported by the government of Canada, was appointed for this work. The Codex Commission adopted several amendments to the annex lists that were proposed by the CCFL in July 2009. Other substances discussed, such as nitrites and nitrates, ascorbates for meat processing, and phosphates as food additives, were not approved in the Codex Guidelines for organic food. In 2010, an amendment was made to increase restrictions on the use of rotenone for pest control: the substance should be used in such a way as to prevent it from flowing into waterways.

In 2011, the Codex Committee for Food Labelling agreed (as proposed by the European Union) on the inclusion of spinosad, copper octanoate, potassium bicarbonate, and uses of ethylene for the degreening of citrus for fruit fly prevention and flowering induction in pineapples. In May 2012, the committee decided that “Spinosad should only be used where measures are taken to minimize the risk to non-target species and to minimize the risk of development of resistance.” Potassium hydrogen carbonate, copper octanoate (with the same conditions as for other copper products), and ethylene for the degreening of citrus for fruit fly prevention and as a flowering agent for pineapples was included in the Annex 2 list of the Codex Guidelines of organically produced food.

In 2011, the Codex Committee for Food Labelling also agreed to re-establish the working group led by the United States, which deals with the revision of the regulation and the list of substances. At the meeting in 2012, a structured approach for a two-year cycle was decided upon.

Furthermore, in 2011 it was agreed to take up organic aquaculture and seaweed production as a new area. A first working paper was presented by the European Union. A re-drafted version by the EU was circulated for comments and was discussed at the meetings of the Codex Committee for Food Labelling in May 2012 and May 2013. At the meeting in October 2014, the CCFL noted that considerable work still needed to be done to improve the text and agreed to establish a physical working group led by the European Union, working in English, French, and Spanish, to be held immediately prior to the next session to consider comments received, resolve current differences and prepare proposals for consideration at the next session. In autumn 2015, several countries and the EU – but not IFOAM –Organics International - had sent detailed comments to be discussed in May 2016 in Canada. The most controversial issues are the use of juveniles, use or non-use of recirculation or containment systems, breeding techniques, feeding sources, the non-use or limited use of hormones, and conversion periods.

Import requirements of major economies

The major import markets for organic products are the European Union, the United States, Canada, and Japan. All of these markets have strict regimes for the importation of organic products. In the European Union, the United States, and Japan, products may only be imported if the certifying agency has been approved by the respective competent authority. The approval of certification bodies requires compliance or equivalency with the requirements of the importing countries, which can be achieved through (a) bilateral agreements between the exporting and the target import country, or (b) direct acceptance of the certifying agency by the target import country.

Bilateral agreements between the exporting and the target import country

Most importing countries, including the United States, the European Union, and Japan have options for bilateral recognition (i.e., the option to confirm that another country's control system and its standards are in line with domestic requirements and that the products certified in those countries can be sold on the national market). Bilateral agreements are largely political agreements that depend on political will and negotiations between the governments, but they are also based on technical assessments.

The United States and the European Union have also recognized each other's national organic standards and control systems, except for animal products from the European Union and apples and pears from the United States, which require extra verification. In addition, products from aquaculture and wine production are not yet included in this agreement. The formal arrangements came into effect in July 2012.

In 2009, the United States and Canada concluded their first bilateral agreement. Under a determination of equivalence, producers and processors, who are certified according to the U.S. National Organic Program (NOP)¹ standards by a certifying agent accredited by the United States Department of Agriculture, do not have to be certified to the Canada Organic Product Regulation (COPR) standards in order for their products to be represented as organic in Canada. Likewise, Canadian organic products certified to COPR standards may be sold or labelled in the United States as organically produced.² Subsequently, the United States and Japan subsequently came to an agreement that became effective on January 1, 2014. Canada has signed equivalency agreements with the European Union, Costa Rica, and Switzerland.

The European Union currently recognizes twelve countries³ as being equivalent to the European Union's system (known as the Third Country list). The latest change was by February 2015 when South Korea was listed based on a bilateral agreement concluded between South Korea and the European Union in 2014. Since February 1, 2015, Korea has accepted products certified in the European Union as equivalent.

The United States has accepted several foreign governments' accreditation procedures. Certification bodies accredited according to the US requirements by India, Israel, and New Zealand are accepted by the United States Department of Agriculture for certification according to the U.S. National Organic Program (NOP), even though they are not directly accredited by the United States Department of Agriculture. This level of recognition only covers accreditation procedures; the respective certification bodies still have to meet the requirements of NOP to issue certificates accepted by the US.

¹ National Organic Program (NOP) www.ams.usda.gov/AMSV1.0/NOP

² There are exemptions to the US COR agreements relating to sodium nitrate, hydroponics and livestock for the US and antibiotics for livestock in Canada.

³ Argentina, Australia, Canada, Costa Rica, India, Israel, Japan, New Zealand, Republic of Korea, Switzerland, Tunisia and US

Acceptance of the certifying agency by the target importing country

The United States, the European Union, and Japan have options for recognizing certification bodies operating outside of their countries. The technical requirements for achieving such recognition are difficult to meet, and the associated fees are high. Maintaining recognition and/or the necessary accreditation requires substantial financial capacity and personnel from the certification agency.

Products are only granted import into the European Union if they have been certified by an inspection body or authority recognized by the European Commission.¹ In updates to EU regulation 1235/2008, the European Union publishes the list of approved control bodies and authorities recognized for applying equivalent standards and control schemes in non-EU countries. Certification from recognized control bodies has been accepted for imports to the European Union since July 1, 2012. The system of import authorizations expired in July 2014. The U.S. National Organic Program (NOP) requires all products labelled as organic in the U.S. to meet the U.S. standards or the terms of an equivalency arrangement such as they have with the European Union, Canada, Korea (since July 1, 2014), Japan, and Switzerland (since July 10, 2015), including imported products. The U.S. system provides for the approval of certification bodies as agents to operate a U.S. certification program. Inspections have to be conducted by inspectors trained in NOP requirements using NOP-based questionnaires, and only certificates issued by certification bodies accredited by the U.S. Department of Agriculture (USDA) are accepted. It is not relevant whether the certification body is based in the US or elsewhere. Nearly 100 agents are currently authorized to certify farms and businesses to USDA organic regulations. Most USDA-accredited certifying agents are allowed to certify farms and businesses anywhere in the world.

Literature

Commission Regulation (EC) No 1235/2008 of 8 December 2008 laying down detailed rules for implementation of Council Regulation (EC) No 834/2007 as regards the arrangements for imports of organic products from third countries; Consolidated version: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02008R1235-20151106&from=EN>

Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control; Consolidated Version: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02008R0889-20150101>

Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91; Consolidated version: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02007R0834-20130701>

European Commission (2008) Guidelines on imports of organic products into the European Union. 15.12.2008. Rev.1.

European Commission, Brussels. Available at http://ec.europa.eu/agriculture/organic/files/news/download-material/guidelines_for_imports_en.pdf

¹ There are currently two different lists:

- › List of control bodies that apply a control system and production standards equivalent to the EU regulation on organic production (since July 1, 2012).
- › List of countries whose system of production complies with rules equivalent to the EU's production and inspection provisions (see EU Regulation 1235/2008).

Overview of Participatory Guarantee Systems in 2015

SIMONA D'AMICO¹ AND FLÁVIA CASTRO²

Participatory Guarantee Systems (PGS) are locally focused quality assurance systems. They certify producers based on active participation of stakeholders and are built on a foundation of trust, social networks and knowledge exchange (Definition by IFOAM – Organics International).

Over the years, PGS have proved to be an affordable alternative to third-party certification particularly appropriate for small-scale farmers who cannot cover the costs of other forms of certification. PGS open a way for them to access local markets for organically produced food.

PGS have spread impressively in the past few years. However, this has not come without challenges. Respondents to the Global PGS Survey 2015 issued by IFOAM – Organics International, have pointed the following as main issues they have been confronted with while developing PGS:

1. As far as the logistics are concerned, farmers are generally distant from each other and from the marketplace, organic inputs are not always easily available and accessible, and infrastructures (e.g., communication tools, transportation facilities) are not developed enough to ease interactions within the PGS and towards the market.
2. Lack of consumer awareness and lower visibility of PGS result in the limitation of market opportunities for the involved producers. This is also a consequence of difficulties faced in diversifying production and keeping it constant over the year. A further challenge exists in finding the human and financial resources to conduct field visits.
3. Finally, governments may have an adverse impact on the development of PGS when their organic regulations do not recognise PGS or when they over-bureaucratise the conditions for their recognition.

It is time to reflect on the challenges of PGS development as a way to identify the opportunities to increase the sustainability of PGS as certification systems and as tools for livelihoods improvement, on one hand, and for the development of the organic sector, on the other. To this end, the successful implementation of PGS in the Pacific region is reported as a showcase for the main dynamics behind the establishment of PGS.

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Map 5: Number of producers involved in PGS around the world in 2015

Source: IFOAM – Organics International, www.ifoam.bio/en/pgs-map

Establishment of PGS in the Pacific region¹

In the Pacific region, organic production is both traditional and new.² It is traditional in the sense that the majority of producers to this day use practices handed down from generation to generation that are generally in harmony with modern organic principles. And it is new in that in the past organic farming was predominantly for subsistence living while nowadays it is used as a way to generate cash income. Therefore, in the last years, farmers have shown a growing interest in accessing internal and external markets for organic products.

Certification has become increasingly important as a tool for accessing domestic and, especially, external markets. Farmers in the Pacific region are certified organic mostly by Australian and New Zealand third party certification bodies. This poses some challenges in terms of certification and, therefore, market access for small organic farmers.

To address this problem and enable a wider uptake of organic agriculture, the Pacific Organic and Ethical Trade Community (POETCom)³ started to promote PGS. The rationale behind this action was that - with PGS - farmers in the Pacific region could undertake their own organic certification, by peer reviewing each other's farming practices. The Food and Agriculture Organisation of the United Nations (FAO), the International Fund for Agricultural Development (IFAD), IFOAM – Organics International, and United Nations Development Programme (UNDP) supported POETCom with the introduction of PGS in the Pacific region.

¹ The experience and figures reported in this section concern the territories in the Pacific Community: American Samoa, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Federated States of Micronesia, Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Pitcairn Islands, Samoa, Solomon Islands, Tokelau, Tonga, Tuvalu, Vanuatu, Wallis and Futuna.

² For more information on organic farming in the Pacific Islands, see the chapter by Karen Mapusua on the Pacific Islands on page 273.

³ POETCom is a non-for profit membership organization born from the desire to contribute to the sustainable development of Pacific region starting from an effective development of the organic sector.

With assistance from IFAD, three pilot projects were established to develop models for PGS that are appropriate to the diverse situations in the Pacific. IFAD and IFOAM – Organics International provided financial and technical assistance for developing the Pacific Organic Standard (POS), which was approved during the 2008 annual meeting of the Pacific Islands Forum leaders in Niue. This regional organic standard is now used by PGS initiatives in the Pacific.

UNDP supported a series of organic training events, conducted by POETCom, with workshops in Vanuatu and Tonga. Their focus was on building capacity of young farmers and investing in the next generation of organic leaders.

FAO has provided technical assistance in developing governance models and frameworks for the regional certification scheme and also in supporting the assessment of the POS for equivalence with other internationally recognized organic standards. The standard is now approved in the IFOAM Family of Standards. In 2014, POETCom signed a Memorandum of Understanding with three internationally accredited certifying bodies to provide third party certification to the POS.

In 2010, the first PGS using the POS was established in New Caledonia. The PGS known as “BioCaledonia” was the first step in developing a regional certification and organic guarantee scheme. After that, other PGS initiatives started: Samoa PGS, SOPA - Sabeto Organic Producers Association, COMA Cicia Island, Solomon Islands PGS, PGS Bio Fetia, and Abaiang, Kiribati (see www.ifoam.bio/pgs).

Nowadays PGS initiatives are spread in seven out of the twenty islands, countries and territories that are part of the Pacific Community. It is estimated that these initiatives involve: 630 stakeholders, 270 producers not yet certified by the PGS and 171 producers certified by the PGS, with a total of 5'586 hectares of certified land (see www.ifoam.bio/pgs).

PGS worldwide: Figures and reflections on future development¹

Based on the data collected through the Global PGS Survey 2015 by IFOAM – Organics International, it is estimated that 123 PGS initiatives are now established on all continents, and another 110 are currently under development.



Figure 59: Logo used to identify PGS initiatives officially recognized by IFOAM – Organics International

www.ifoam.bio/en/ifoam-pgs-recognition

¹ Figures for most of the PGS are updated to October 2015. In the case of Brazil last updated figures date back to May 2015. In the case of the PGS belonging to the India Organic Council last update was in November 2014.

PGS are spread over 72 countries; of these 20 countries have both well-established and under development PGS, 33 countries show just cases of PGS under development, and 19 countries count just operational PGS. Some of the PGS are organized into networks. Thirty-eight new PGS initiatives emerged from the Global PGS Survey 2015, of which 16 are established and 22 under development. Eight new countries appeared on the Global PGS map of IFOAM – Organics International.

Some more specific figures are reported below:

- It is estimated that 109'317 small operators are currently involved in PGS worldwide, out of which 46'945 are certified through PGS. This includes mostly small farmers and a few small processors.
- The leading countries, in terms of producers involved in PGS, are India (23'317), Peru (21'460), Kenya (12'453), and the Philippines (10'756).
- Of the numbers of producers involved, only a certain percentage are already certified. India counts for the most producers certified through PGS (21'240) followed by Bolivia (5'560), Uganda (5'086), Peru (3'347), and Brazil (2'170).
- Asia is the leading region with 40'400 producers involved, 24'982 of which are certified. In Latin and Central America, 35'026 producers are involved in PGS, 11'809 of them are certified. Africa is a region of very recent and rapid PGS development: it is estimated that 30'137 producers are involved, 7'965 of whom are certified. In North America a total of 1'901 producers are involved in PGS, 882 producers are certified. In Europe 1'231 producers are involved in PGS, and 914 of them are certified. In Oceania, more than 622 producers are involved with 393 certified.
- It is estimated that PGS-certified producers are currently managing organically a total of at least 78'772 hectares of agricultural land. The leaders for which data is available are as follows: 23'022 hectares in Namibia, 13'315 hectares in Bolivia, 9'442 hectares in India, 8'440 hectares in the United States.

The number of PGS initiatives, the hectares of land, and the number of operators - both certified and non-certified - involved in PGS increased greatly compared to 2014.¹ Countries in Asia, Africa and Latin America continue leading the ranks. The specific countries, within the mentioned regions, that mostly contributed to the growth partially changed compared to last year. As an example, Bolivia and Peru overtook Brazil with respect to the number of certified producers involved in PGS.

Asia, Africa, and Latin America are the regions that most contributed to the increase in the number of operators and lands involved in PGS compared to last year. By contrast, North America and Europe showed the lowest figures for both number of operators and certified land as well as lowest increases compared to 2014. The former are also the

¹ The reasons for this increase are both empirical and methodological. On the one hand, the year 2015 has been characterized by the emergence of several new PGS initiatives as well as by the increase in the number of operators and hectares of land involved in already existing PGS, especially in Asia. On the other hand, the methodology used by IFOAM – Organics International to implement the Global PGS Survey 2015 has allowed reaching out more people and, therefore, more information compared to the previous year. Moreover, it has granted to obtain more complete data - especially with respect to the figures for involved operators and hectares of land - filling out some gaps of information left open from the results of last year survey.

regions whose governments are taking more actions towards recognizing or – at least - not obstructing the development of PGS. For North America and Europe, the opposite holds true, with both regions having regulations unfavorable to PGS. This shows that governments play a decisive role in the further dissemination and maintenance of PGS and herewith in the uptake of organic agriculture amongst small farmers.

Online references

- The PGS website of IFOAM – Organics International: www.ifoam.bio/pgs
- The Organic Pasifika website: www.spc.int/lrd/

The Case for Public-Private Collaboration on Organic Agriculture

DIANE BOWEN¹

The need for collaboration between governments and the organic sector

Today's organic value chains depend on standards, conformity assessment, identity preservation and labeling – and mostly, these are regulated by governments. Reasons for governments to regulate the sector have varied. The first regulations were in highly developed countries with well-developed organic sectors. Regulatory objectives in these countries have included consumer and producer protection, and facilitating trade. In developing countries, organic regulations were originally driven by the aim of facilitating exports to the European and North American markets, but increasingly, these governments have recognized the potential of organic agriculture to contribute toward their sustainability goals and objectives. Therefore, they are supporting the development of organic agriculture through a variety of government policies and programs such as targeted subsidies, market development, capacity building, and research support.

Whether undertaking regulation of organic production and labeling or playing other roles to support organic agriculture, government collaboration with organic sector stakeholders is no longer exceptional although it is variable. Most governments that develop technical organic regulations have consulted the public and, in particular, the organic sector at some stage in the process. Beyond that, government and organic sector engagement has grown and diversified as a result of increasing acceptance by governments of organic agriculture as offering solutions for sustainability, and also with the organic sector's increasing capacity to interact successfully with government institutions and processes.

Three factors underlie the need for public-private collaboration to support the organic sector. These are shared goals, respective assets and complementary roles and risk-management in making organic policies.

Shared goals

In many countries, there is now a confluence of the goals of the private organic sector to develop organic agriculture and markets and of governmental goals with respect to economic prosperity and sustainability. Shared goals have not only the capacity to catalyze collaboration, but they also potentially function to address tensions and resolve conflicts that naturally arise in public-private collaborative activities such as standards setting, policy prioritization, or allocation of roles. Governments that regulate organic agriculture and labeling share with the private organic sector the goals of expanding agricultural markets for their countries, including facilitation of trade and support for domestic market development. These market regulations may not be the only instrument for policy related to organic agriculture. Legislation or other government

¹ Diane Bowen, Project Manager, IFOAM – Organics International, Bonn, Germany, www.ifoam.bio

instruments for policy on agriculture may support organic agriculture to achieve a broad range of goals, especially those related to sustainability. These may include health of soil, water, air, climate change mitigation and adaptation, biodiversity, rural development, food security, and poverty reduction. Governments and private sector stakeholders would do well to clearly identify and periodically review the goals that underlie their mutual support for organic agriculture.

Assets and complementary roles

Government roles

There are widely divergent political philosophies and attitudes about the role that governments should take in society. Historically and to the present, governments have taken on significant policy roles for agriculture with a variety of objectives (e.g. efficiency, income distribution, food security), and, through these interventions, have greatly influenced the structure and function of agriculture and its markets. A premise of this article is that both governments and the private sector have important roles to play in the further development of organic agriculture and markets. Governments have unique roles in this regard. They are the final determinants of public policy, including allocations of funds from the public purse that can facilitate and support the sector. Invested with legal authority, governments alone can exercise authoritative controls in organic production and along supply chains. This authority is exercised where mandatory regulations on organic agriculture and trade are established and enforced.¹

Private sector roles

The private sector is where virtually all the practice of organic production, processing and trading resides, and, therefore, a repository of most of the knowledge and expertise as well as the zeal for organic principles and practices. The production and value chain system operated by the private sector achieve the objectives of government policies towards organic agriculture. This includes primary production, input production (seeds, plant protection products, feed additives), manufacturing, ingredient sourcing, handling and trade, retailing, and certification. It is in the private sector that the impacts of specific policy towards organic farming and markets are felt, as are general government agricultural policies that discriminate against organic agriculture and markets.² The private sector can offer perspectives on the feasibility and impact of implementing government policies and programs in the sector.

The private sector has produced the main innovations sustaining the sector in response to changing needs, including the original systems of standards, certification, and labels, and more recently group certification of smallholders and participatory guarantee systems for local markets. In a dynamic environment, the private sector is able to react more quickly to change, challenge and opportunity than government institutions and

¹ Governments, in cooperation with the private sector, may consider the most appropriate options for regulation including: no regulation, regulation using consumer protection laws, voluntary regulations, regulations for export only, full regulation. (CBTF 2008).

² Examples of such policies are fertilizer subsidies, which exclude organic inputs, ineligibility of diverse, research and promotion support favoring conventional agriculture, subsidy payments that favor large-scale monocultures.

can point the way to new solutions and innovations. It is the leading edge for identifying and embracing issues that need to be addressed, for example, evaluating the consistency of nanotechnology with organic principles and identifying how organic agriculture should respond and adapt to the sustainability discourse on such topics as climate change and animal welfare.

Risk management

In the scope of regulations, collaboration of the organic sector with government reduces the risk that regulations will be infeasible or create undue hardship in the sector. Collaboration also reduces the risk that policies and programs intended to support organic agriculture will be ineffective in achieving goals and objectives. Dialogue and consultation are needed to ensure that the best ideas for effectively supporting organic agriculture are given priority in government agendas and that they are implemented in an optimal way, including the option for private sector implementation of some programs.

Trends in collaboration

A new wave of collaboration on service delivery to the organic sector is emerging wherein the public and private actors jointly implement regulatory or other support programs with shared goals and benefits.

An example of collaboration in the regulatory dimension is **Malaysia**: Here, the Department of Agriculture has been providing no-cost certification, but as government capacity is relatively low, an arrangement with the national association, Organic Alliance Malaysia, has been made, appointing it to handle fee-based applications and inspections for organic processors while the Department of Agriculture continues to manage the no-cost producer certification program. Certification decision for all operations remains with the Department of Agriculture. Organic Alliance Malaysia is also appointed to verify the certification of imports and recommend to the Department of Agriculture if they were produced under equivalent systems according to a mutually agreed set of equivalence criteria. Expertise in the private sector can be employed while retaining the authority of government and the cost benefits to producers.

Collaborative service delivery also characterizes the **Danish initiative on public procurement** or organic food for government canteens. The government funds the sector organization, Organic Denmark, to facilitate linkage of the purchasing function with the supply, and an educational component for kitchen staff and customers of the canteens.

In the **United States**, there is a public-private collaboration between the United States Department of Agriculture (USDA) and the Organic Trade Association (OTA) on delivering export development services to United States organic businesses.

Similar models for export assistance are found in other countries, such as Brazil and **Canada**. Canada also provides an example of collaboration on promotion of organic food and agriculture. With funding from the Canadian government, public and private partners on the Organic Value Chain Roundtable jointly developed a Canada Organic

brand concept and strategy. Implementation of the brand program is done by the private sector.

The possibilities for joint regulatory and service arrangements exist in other areas including agricultural extension, market development, and regulatory surveillance and enforcement. These “smart” collaborations will be custom tailored. The nature and degree of collaborative arrangements will depend on the goals of the government with respect to organic agriculture, the capacities in the public and private sectors, and the strength of the relationship between them.

Public-private collaboration at the international level

In addition to cooperating with their domestic organic sector, governments can look to the international level for collaboration on organic regulations and support programs. IFOAM – Organics International seeks dialogue and collaboration with governments on their regulations and support policies. Collaboration may be implemented at the level of its self-organized groups, such as the IFOAM EU Group, or at the global level through the Head Office and World Board of IFOAM – Organics International.

Development and Implementation of regulations

IFOAM – Organics International offers several tools and services to assist governments in designing and implementing their regulations and support policies and programs for organic agriculture. For governments and sector organizations that want to develop or improve their national organic standard and regulation, there is the Organic Regulation Toolkit. The Toolkit contains a number of templates and other tools which governments can use as a basis for their drafting process.

A particular interest of IFOAM – Organics International is to support workable mechanisms for approving imports of organic products. A policy brief, *How Governments can Regulate Imports of Organic Products Based on the Concepts of Harmonization and Equivalence*, offers regulatory language on imports and describes some services that can assist governments with their import program. The IFOAM Family of Standards is comprised of 50 government and private standards which IFOAM – Organics International has assessed and recognized as having sound and credible requirements for defining organic agriculture. A list of credible conformity assessment requirements for the organic sector complements the list of organic standards. Governments are invited to make use of these tools to recognize standards and certification governing products considered for import approval. Several governments are either using the IFOAM – Organics International system or are in the process of including it in their organic regulatory programs. Governments may also use the online Global Organic Certification Directory of IFOAM – Organics International and bioC in their surveillance and enforcement programs. This is a service for the benefit of the entire organic sector and is designed to operate efficiently at low cost to all users.

Development and implementation of supportive policies for organic agriculture

A new initiative of IFOAM – Organics International will enable it to serve as the global repository of information on effective government policies and programs to support organic sector development. A comprehensive overview of these policies and programs is in preparation, and related materials are being compiled and analyzed. By the end of

2016, a Toolkit on Policies Supporting Organic Sector Development will be released and promoted to governments and their organic sector stakeholders.

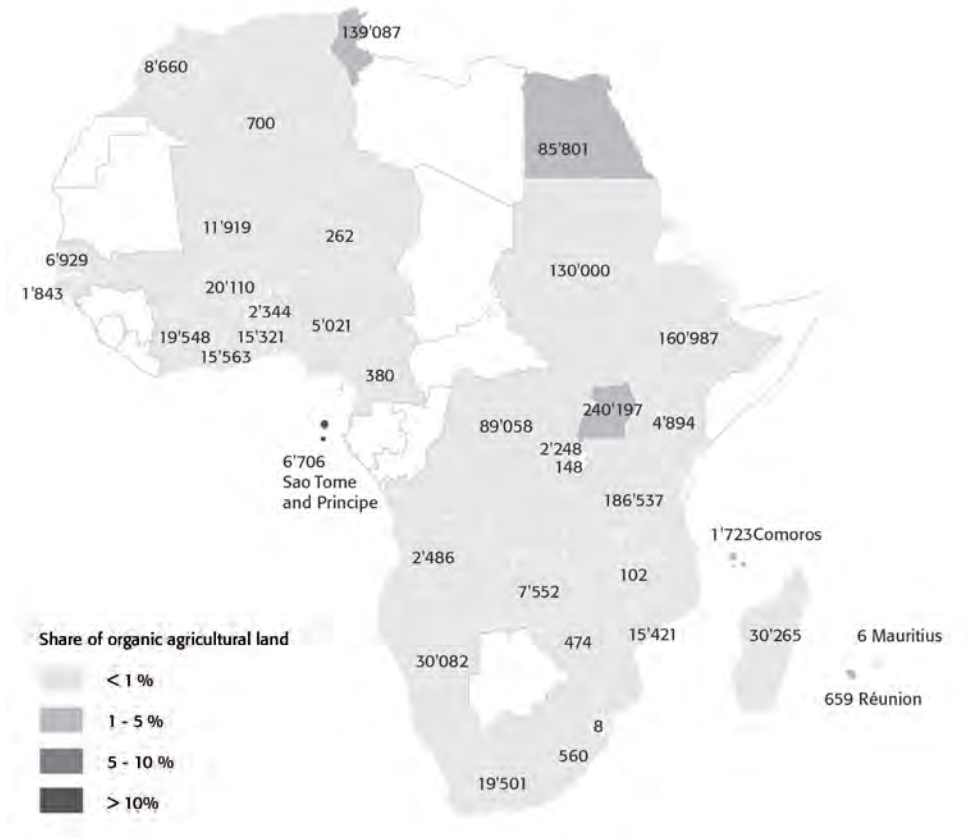
Governments wanting a deeper level of expert assistance may consider engaging IFOAM – Organics International to provide individual consultation for their policy and program development.

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Africa



Map 6: Organic agricultural land in the countries of Africa 2014

Source: FiBL survey 2015; based on information from the private sector, certifiers, governments and, for North Africa, the Mediterranean Organic Agriculture Network (MOAN). For detailed data sources see annex, page 315

Latest Developments in Organic Agriculture in Africa

JORDAN GAMA¹

Organic agriculture in Africa is gaining momentum, and 2015 saw the growing recognition among policymakers that organic agriculture has a significant role to play in addressing food insecurity, land degradation, poverty, and climate change in Africa. It offers a valuable tool-kit of affordable and people-centred production practices, as well as high-yielding systems and both local- and export-focused marketing models. In the context of low carbon, resilient, and inclusive sustainable development, organic agriculture is an increasingly relevant and attractive proposition for many stakeholders.

The African Organic Network (AfrONet)

There has been significant achievement in 2015 in the institutionalization of the African Organic Network (AfrONet).² AfrONet is the organic umbrella organization, which was established during the Second African Organic Conference in 2012, in Lusaka, Zambia. It unites and represents African ecological/organic stakeholders (Gama 2015). In terms of achievements, AfrONet stands out as an important body for the future of the African organic movement and sector.

AfrONet aims to strengthen and support regional networks and the Ecological Organic Agriculture Initiative for Africa.³ Importantly, in Southern Africa, the Southern African Network for Organic Development (SANOD) and IFOAM's Southern African Network (ISAN) were formed to unite the stakeholders and further develop the organic agriculture in the region.

Organic conferences in Eastern, Western, Central and Southern Africa have become a success. For example, successful Western African organic conferences were held in Benin in August 2014 and in Lagos, Nigeria, in October 2015 (linked to the Third African Organic Conference, see next section). The most recent Eastern Africa conference was held in 2013, in Dar es Salaam. These conferences marked significant milestones for mainstreaming Ecological Organic Agriculture (EOA)⁴ in the regions and member

¹ Jordan Gama, President AfrONet, Tanzanian Organic Network (TOAM), Dar es Salaam, Tanzania, africanorganicnetwork.org/ct-menu-item-3

² Information about AfrONet is available at africanorganicnetwork.org.

³ The aim of EOAI, the Ecological Organic Agriculture Initiative for Africa is to mainstream Ecological Organic Agriculture into national agricultural production systems by 2025 in order to improve agricultural productivity, food security, access to markets, and sustainable development in Africa. It promotes ecologically sound strategies and practices among diverse stakeholders in production, processing, marketing and policy making to safeguard the environment, improve livelihoods, alleviate poverty and guarantee food security.

⁴ According to the EAO Initiative (2015) Ecological Organic Agriculture is a "holistic system that sustains the health of ecosystems and relies on functional cycles adapted to local conditions, rather than the use of synthetic inputs which have adverse effects on total health (human, animal, plant and environmental). Africa continues to face the biggest challenge of feeding its citizens and populations in a contaminated and quickly deteriorating biodiversity. With a rapidly growing population, worsening effects of climate change, effects of globalisation, rising food prices and the diminishing health of Africa's biodiversity, the Ecological Organic Agriculture (EOA) brings in dimensions of agricultural practices that embrace sustainability, biodiversity, ecosystems while producing food for the populations.

countries' policies, strategies, and programmes. AfrONet led the multi-stakeholder organizing committee of the Third African Organic Conference in Lagos and was instrumental in the coordination and preparation of this event. Furthermore, at this conference, AfrONet organized a policy forum as a side event and supported NOARA, the Network of Organic Agriculture Research in Africa, to stage a side-event.

Furthermore, AfrONet actively participates in the events of the Forum for Agricultural Research in Africa (FARA, www.fara-africa.org), the Organic World Congresses of IFOAM - Organics International, as well as in projects such as the Productivity and Profitability of Organic and Conventional Farming Systems (ProEcoOrganicAfrica),¹ PROGROV,² the Ecological Organic Agriculture Initiative (see above), and Organic Trade Development in East Africa (OTEA).³ AfrONet has a permanent seat in the Continental Steering Committee (headed by the African Union) and Regional/Cluster Steering Committees of the Ecological Organic Agriculture Initiative (EOAI). The AfrONet General Assembly was held on October 8th, in Lagos, Nigeria (alongside the 3rd African Organic Conference) and included the election of a new leadership for the next three years.

In collaboration with the African Union Commission (AUC), training on organic standards and certification is provided to stakeholders in the member countries of the Common Market for Eastern and Southern Africa (COMESA), (www.comesa.int), the Economic Community of West African States (ECOWAS, www.ecowas.int), and the East African Community (EAC), (www.eac.int). Furthermore, the Kasisi training centre in Zambia was identified by the AUC as one of the satellite centres for organic training on the continent, and the African Union Commission has approved the continent-wide Organic Product Standard for Africa.

The Third African Organic Conference 2015 in Nigeria

The African organic movement and its partners and stakeholders gathered in Lagos from October 5-9, 2015 under the topic "Achieving Social and Economic Development through Ecological and Organic Agricultural Alternatives." The conference was coordinated by the Association of Organic Agriculture Practitioners of Nigeria (NOAN), the African Organic Network (AfrONet) and the Ministry of Agriculture and Rural Development of the Federal Republic of Nigeria. The conference had 220 participants from 28 countries (22 from Africa) and four continents, including the participation of the African Union, which constitutes a remarkable support. The African Organic Network (AfrONet) secretariat moderated the conference, which was supported by IFOAM – Organics International, the African Union Commission (AUC), the Food and

¹ Information about the ProEcoOrganicAfrica is available at www.ProEcoAfrica.net

² Productivity and Growth in Organic Value-chains (ProGrOV) is led by the International Centre for Research in Organic Food Systems (ICROFS), Denmark. It has the following partners: Makerere University, Faculty of Agriculture, Department of Animal Science, Uganda; University of Nairobi, Faculty of Agriculture, Department of Animal Production, Kenya; Sokoine University of Agriculture, Department of Crop Science and Production, Tanzania; University of Copenhagen (UCPH), Denmark. More information is available at <http://drp.dfcentre.com/project/productivity-and-growth-organic-value-chains-progrov>.

³ OTEA is the Organic Trade and Value Chain Development project-run by IFOAM – Organics International <http://www.ifoam.bio/en/organic-trade-and-value-chain-development-otea>

Agriculture Organization of the United Nations (FAO), the United Nations Conference on Trade and Development (UNCTAD), the Forum for Agricultural Research in Africa (FARA), the International Society of Organic Agriculture Research (ISOFAR), the Nigerian government and like-minded organizations, including the Alliance for Food Sovereignty in Africa (AFSA) and development partners.

The conference was a follow-up to the Second African Organic Agriculture Conference in Lusaka, Zambia, in 2012, where participants agreed on promoting the concept of ecological organic agriculture. In the previous year, the heads of African states had already decided to promote organic agriculture and to mainstream it into national policies, programmes, and plans by 2020.

Thirty-four farmers and a rich and diverse community of young scientists presented interesting research results and contributed to fruitful discussions as well as knowledge and exchange. The International Society of Organic Agriculture Research (ISOFAR) presented the proceedings at the conference (see Rahmann et al. 2015), which was greatly appreciated.

The Lagos Declaration¹ calls for more support from the African states for the Ecological Organic Agriculture Initiative and its 10-year strategic plan (from 2015 to 2025, Ecological Agriculture Initiative 2015).

At the conference, a Public-Private Partnership Platform (PPPP) of Ecological Organic Farming Actors was established. This platform was developed in response to the decision of the African Union on organic farming (African Union 2011). It will firmly complement the Continental efforts spearheaded by the Department of Rural Economy and Agriculture (DREA) of the African Union and the Comprehensive African Agriculture Development Programme (CAADP) of the African Union Commission. A directory for EOA actors and other like-minded stakeholders across Africa is being developed and will be shared widely via different networks and alliances. This will create open and easy avenues for sharing important information including case studies, success stories and challenges among stakeholders across Africa.

The fourth Conference is to be held in Cameroon in 2018 in the heart of Africa and, for the first time, in a francophone country.

Strategic Plan (2015-2025) for the Ecological Organic Agriculture Initiative (EOAI) for Africa

The Continental Steering Committee of the Ecological Organic Agriculture Initiative (EOAI-CSC) endorsed the EOA Continental Strategic Plan, which was approved unanimously by the African Union Ministerial Council at its special meeting held on October 5 and 6, 2015 in Addis Ababa, Ethiopia. The Strategic Plan (2015-2025) provides a visionary direction for the development of Ecological Organic Agriculture on the African continent and serves as a tool for fundraising. This is a significant milestone towards implementing the decision of African heads of state and governments on organic farming.

¹ The Lagos declaration is available on the website of UNCTAD at http://unctad.org/meetings/en/Contribution/ditc_tedb2015_LagosDeclaration_en.pdf

The Ecological Organic Agriculture Initiative, which started as a pilot programme in 2012, was launched as a full-fledged programme in 2014 and will end in 2018, has experienced encouraging growth over the past few years.¹ Organic land continues to increase as the statistics indicate in this volume, whilst the eating habits of our populations are changing and health consciousness is growing. The demand for healthy organic products on the national, regional and continental markets has grown and surpassed the supply. The voices of EOA stakeholders are being heard in Africa and beyond and international support steadily increasing. Approval of the EOA Strategic Plan by the African Union Ministerial Council has come at the very right moment as there could not be a better time than now, to plan and develop strategies to guide this growth and reap the maximum impact and benefits from organic farming in a sustainable way.

Outlook

Organic growth projections show a substantial increase in organic production in Africa, with the potential for millions of smallholder farmers and their families to move out of poverty and hunger and enjoy a better quality of life. The fact that traditional African agriculture is based on low external inputs provides an excellent foundation upon which organic agriculture can enhance productivity, resilience, and the profitability of smallholder farming in Africa. It is, therefore, an ideal development option for Africa. Organic farming practices integrate traditional farming methods and the use of affordable, locally available resources. As such, they are highly relevant to a majority of African farmers. Therefore, the necessary intensification of agricultural production in Africa can and should be ecological, maintain ecosystem services, and be based on restoring, building, and maintaining the natural resource base, particularly soil, water, and biodiversity. Therefore, local communities, farmers, and their sustainable practices need to be supported and enhanced so that the potential benefits of improved agricultural systems, based on the principles of organic agriculture, can be unleashed and disseminated throughout the continent.

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¹ IFOAM – Organics International, in collaboration with the African Union (AU) and other agencies, has played a significant role in the framework of its Organic Alternative for Africa Initiative to facilitate the integration of organic agriculture into the core of African policies and the agricultural development agenda including the Comprehensive African Agriculture Development Programme (CAADP). The Organic Alternative for Africa Initiative identifies, promotes, and nurtures the uptake of organic agriculture practices, markets, and policies in the context of sustainable development and poverty reduction. IFOAM – Organics International works with many stakeholders, both within and outside the organic movement to create opportunities and facilitate the growth of organic agriculture-based development in the continent. Information on CAADP, the Comprehensive African Agriculture Development Programme, is available at www.nepad-caadp.net. The report “The Potential Contribution of Organic Agriculture to the Realization of the Objectives of the CAADP – A Guide for Stakeholders” is available at www.ifoam.org/en/osea-ii-project.

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Africa: Current Statistics

JULIA LERNOUD¹, HELGA WILLER² AND BERNHARD SCHLATTER³

The organic agricultural land in Africa has increased by over 54'000 hectares or 4.5 percent compared to 2013. There were almost 1.3 million hectares of agricultural land in 2014, which is 0.1 percent of the continent's total agricultural area and 3 percent of the global organic agricultural area. In 2014, 39 countries reported data on organic farming. The area of organic agricultural land has increased by more than 1 million hectares from the 52'000 hectares in 2000. Uganda is the country with the largest organic area, with more than 240'000 hectares and with the largest number of organic producers. The country with the highest proportion of organic agricultural land is the island state Sao Tome and Principe with 12 percent of its agricultural area being organic, followed by Egypt with 2.3 percent and Uganda with 1.7 percent.

Land use

Land use details were available for almost three-quarters of the organic agricultural land. In 2014, 47 percent of all organic farmland was used for permanent crops (more than 600'000 hectares), almost 19 percent was used for arable crops (241'500 hectares), and five percent (71'000 hectares) was grassland/grazing area. Ethiopia (154'000 hectares), Tunisia (135'000 hectares), and the United Republic of Tanzania (over 124'000 hectares) had the largest *permanent crop areas*. The key permanent crop is coffee, amounting to over 201'500 hectares. As no crop details were available for some of the largest African coffee producers, it can be assumed that the total figure for organic coffee is higher. The largest organic coffee areas are in Ethiopia and the Democratic Republic of Congo. Nineteen percent of the organic farmland was used for *arable crops*, most of which are oilseeds (almost 124'000 hectares) and textile crops (almost 68'000 hectares), and aromatic and medicinal plants. Aromatic and medicinal plants were grown on almost 21'000 hectares in 2014; the key producing countries were the United Republic of Tanzania (10'000 hectares), Madagascar (almost 5'000 hectares), and South Africa (almost 3'000 hectares).

Producers

There were at least 590'000 organic producers in Africa. The countries with the most organic producers are Uganda (190'000), the United Republic of Tanzania (148'000), and Ethiopia (almost 136'000). It can be assumed that the number of producers is higher because some countries only report the number of farm enterprises/companies.

Wild collection

Wild collection has an important role in Africa, with almost 12 million hectares certified as organic. Zambia is the country with the largest beekeeping area with almost 7 million hectares, followed by Namibia (2.4 million hectares), and Morocco (861'000 hectares). Medicinal plants such as devil's claw (*Harpagophytum procumbens*) play the most important role in wild collection.

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Organic Agriculture in Africa: Graphs

Africa: The ten countries with the largest organic area 2014

Source: FiBL survey 2016

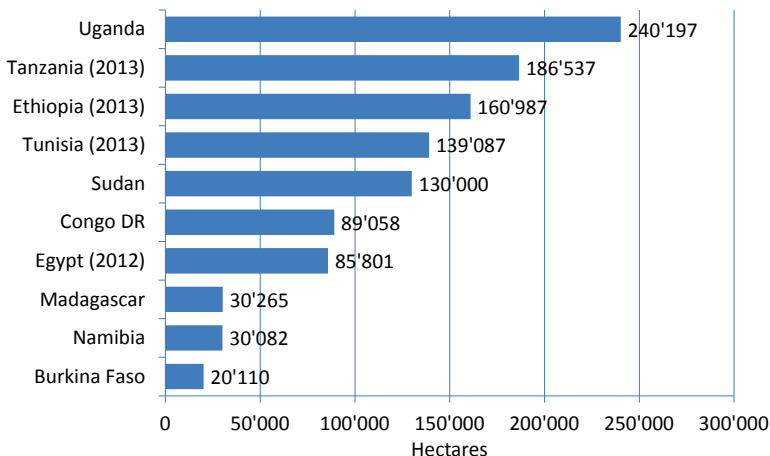


Figure 60: Africa: The ten countries with the largest organic agricultural area 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Africa: The countries with the highest share of organic agricultural land 2014

Source: FiBL survey 2016

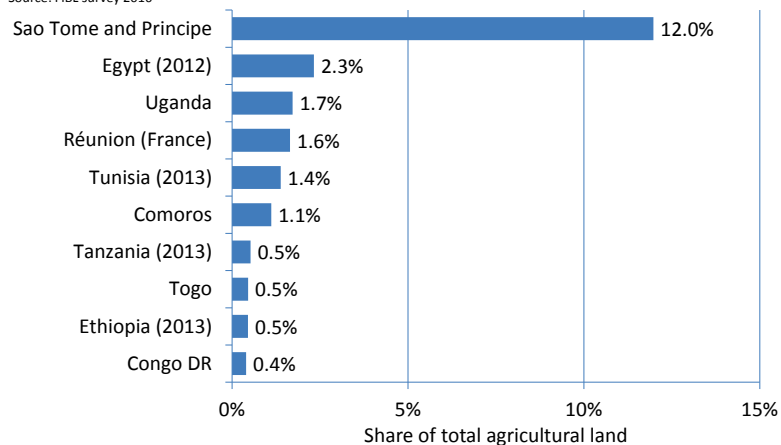


Figure 61: Africa: The countries with the highest share of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Africa: Development of organic agricultural land 2000 to 2014

Source: FiBL-IFOAM-SOEL 2001-2016

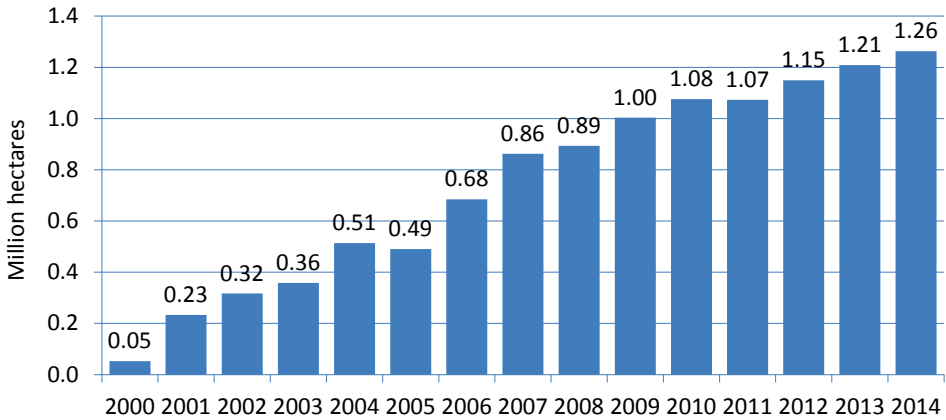


Figure 62: Africa: Development of organic agricultural land 2000 to 2014

Source: FiBL-IFOAM-SOEL-surveys 2000-2016

Africa: Use of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.

Land use types 2014

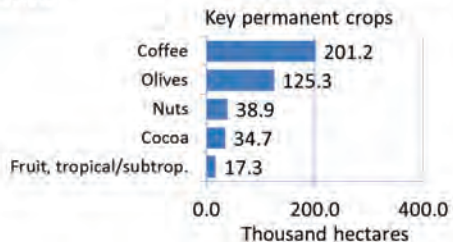
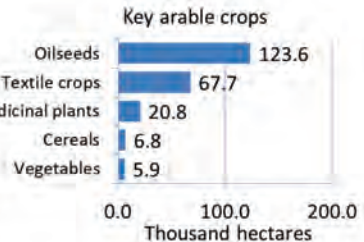
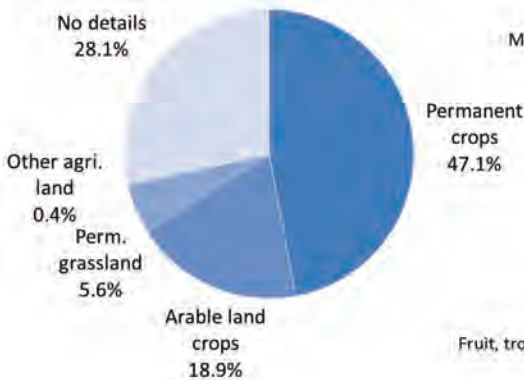


Figure 63: Africa: Use of agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Africa: The ten countries with the largest number of organic producers 2014

Source: FiBL survey 2016

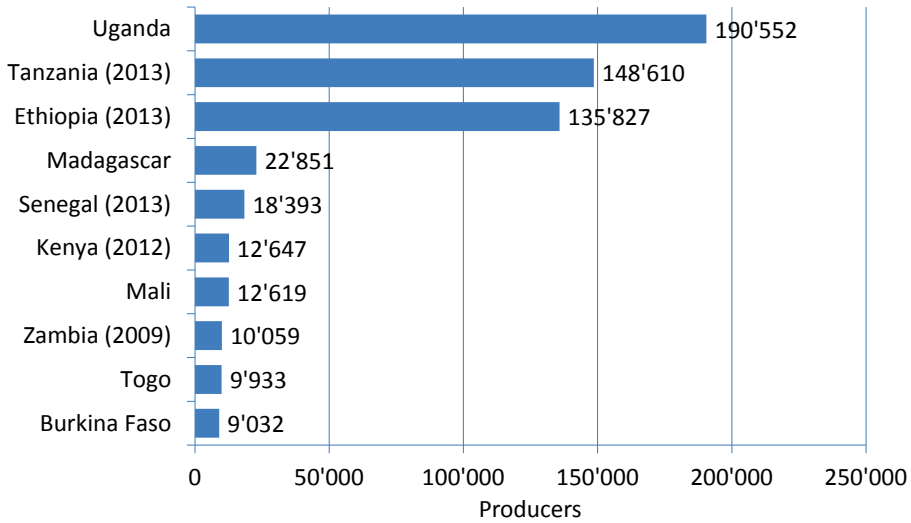


Figure 64: Africa: The ten countries with the largest number of organic producers 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Organic Agriculture in Africa: Tables

Table 41: Africa: Organic agricultural land, share of total agricultural land and number of organic producers 2014

For information on data year, see page 311.

Country	Area [ha]	Share of total agr. land [%]	Producers [no.]
Algeria	700	0.002%	57
Angola	2'486	0.004%	
Benin	2'344	0.1%	3'159
Burkina Faso	20'110	0.2%	9'032
Burundi	148	0.01%	34
Cameroon	380	0.004%	193
Chad		Wild collection only	
Comoros	1'723	1.1%	1'558
Côte d'Ivoire	19'548	0.1%	490
Congo, D.R.	89'058	0.4%	1'122
Egypt	85'801	2.3%	790
Ethiopia	160'987	0.5%	135'827
Ghana	15'563	0.1%	1'588
Guinea-Bissau	1'843	0.1%	
Kenya	4'894	0.02%	12'647
Lesotho	560	0.02%	2
Madagascar	30'265	0.1%	22'851
Malawi	102	0.002%	2
Mali	11'919	0.03%	12'619
Mauritius	6	0.01%	18
Mayotte	5	0.04%	2
Morocco	8'660	0.03%	120
Mozambique	15'421	0.03%	5
Namibia	30'082	0.1%	12
Niger	262	0.001%	
Nigeria	5'021	0.01%	101
Réunion (France)	659	1.7%	154
Rwanda	2'248	0.1%	3'952
Sao Tome and Principe	6'706	12.0%	3'738
Senegal	6'929	0.1%	18'393
South Africa	19'501	0.02%	259
Sudan	130'000	0.1%	354
Swaziland	8	0.001%	
Tanzania	186'537	0.5%	148'610
Togo	15'321	0.5%	9'933
Tunisia	139'087	1.4%	2'810
Uganda	240'197	1.7%	190'552
Zambia	7'552	0.03%	10'059
Zimbabwe	474	0.003%	2'003
Total	1'263'105	0.1%	593'050

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 42: Africa: All organic areas 2014

Country	Agriculture [ha]	Forest [ha]	Wild collection [ha]	Total [ha]
Algeria	700			700
Angola	2'486			2'486
Benin	2'344		4'505	6'849
Burkina Faso	20'110		80'068	100'178
Burundi	148			148
Cameroon	380		360'000	360'380
Chad			11'000	11'000
Comoros	1'723		70	1'793
Côte d'Ivoire	19'548		344	19'892
Congo, D. R.	89'058			89'058
Egypt	85'801			85'801
Ethiopia	160'987		3'107	164'094
Ghana	15'563		35'695	51'258
Guinea-Bissau	1'843			1'843
Kenya	4'894		130'903	135'797
Lesotho	560		50'000	50'560
Madagascar	30'265		91'239	121'504
Malawi	102		4'995	5'097
Mali	11'919		8'146	20'065
Mauritius	6			6
Mayotte	5			5
Morocco	8'660		861'690	870'350
Mozambique	15'421		31'400	46'821
Namibia	30'082		2'400'000	2'430'082
Niger	262			262
Nigeria	5'021	150	1'000	6'171
Réunion (France)	659			659
Rwanda	2'248		80	2'328
Sao Tome and Principe	6'706			6'706
Senegal	6'929		22'000	28'929
South Africa	19'501		60'579	80'080
Sudan	130'000		84'130	214'130
Swaziland	8			8
Tanzania	186'537		15'040	201'577
Togo	15'321		242	15'563
Tunisia	139'087	42'646		181'733
Uganda	240'197		158'328	398'525
Zambia	7'552		6'826'424	6'833'976
Zimbabwe	474		549'645	550'119
Total	1'263'105	42'796	11'790'631	13'096'531

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 43: Africa: Land use in organic agriculture 2014

Land use	Crop group	Area [ha]
Agricultural land, no details		343'858
Arable crops	Arable crops, no details	14'911
	Cereals	6'845
	Dried pulses	354
	Flowers and ornamental plants	360
	Green fodders from arable land	394
	Medicinal and aromatic plants	20'817
	Oilseeds	123'646
	Root crops	531
	Seeds and seedlings	1
	Sugarcane	42
	Textile crops	67'694
	Vegetables	5'932
	Arable crops, other	32
<i>Arable crops total</i>		<i>241'560</i>
Other agricultural land	Other agricultural land, no details	1'013
	Fallow land, crop rotation	3'515
	Home gardens	2
	Unutilised land	247
<i>Other agricultural land total</i>		<i>4'777</i>
Permanent crops	Berries	146
	Citrus fruit	6'263
	Cocoa	38'609
	Coconut	8'501
	Coffee	223'351
	Fruit, temperate	8'124
	Fruit, tropical and subtropical	17'289
	Grapes	1'316
	Medicinal and aromatic plants, permanent	16'917
	Nuts	38'930
	Olives	125'344
	Tea/mate, etc.	5'140
	Permanent crops, other	111'977
<i>Permanent crops total</i>		<i>601'907</i>
Permanent grassland		71'003
Total		1'263'105

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 44: Africa: Use of wild collection areas 2014

Land use	Area [ha]
Apiculture	6'217'191
Forest honey	360'000
Fruit, wild	1'185
Medicinal and aromatic plants, wild	3'092'891
Nuts, wild	101'605
Oil plants, wild	1'371'486
Wild collection, no details	458'729
Wild collection, other	187'544
Total	11'790'631

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.
For detailed data sources see annex, page 315

Asia



Map 7: Organic agricultural land in the countries of Asia 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, governments and the Mediterranean Organic Agriculture Network (MOAN) for the Mediterranean countries. For detailed data sources see annex, page 315

Organic Asia 2015

ONG KUNG WAI¹

With input from Kesang Tshomo, Bhutan; Bhola Shrestha, Nepal; Manoj Menon, India; Thilak Kariyawasam, Sri Lanka; Zhou Zejiang, China; Katsushige Murayama, Japan; Thavisith Bounyasouk, Lao PDR; Vitoon Panyakul, Thailand; Pham Minh Duc & Nhung Tu Tuyet, Vietnam

Overview summary

Respondents reported 2015 was a fair to good year for organic farming. Organic production and domestic markets have established themselves throughout the region. Whilst domestic organic sectors may be small in some place, governments are encouraging development.

On the Himalayan plateau, the Bhutan government endorsed a plan for the production and supply of bio-inputs and initiated the Bhutan Organic domestic assurance system. After some years of piecemeal support, Nepal incorporated the promotion of organic agriculture in its Agricultural Perspective Plan framework with several supportive measures in the latest Agricultural Development Strategy 2015. The new central government of India is providing 64 million US dollars to two organic development initiatives. The state of Meghalaya plans to convert 200'000 hectares to organic farming by 2020 and Sikkim is aiming for 100 percent organic production. Towards the northeast, China has expanded its list of products allowed for organic certification and streamlined certification rules. Mongolia hosted consultation missions under an FAO project for development of an organic law and establishment of a national participatory guarantee system and certification for organic exports. Feedback from Japan was not as positive, despite equivalency agreements reached with EU, USA and Canada, there was limited growth, reflecting the general economic stagnation of the country. JAS² organic is undertaking its third 5-year revision cycle. Whilst grassroots organisations are still troubled by Fukushima, businesses are looking towards the Tokyo Olympics in 2020 for a boost.

In ASEAN,³ the Department of Agriculture of Lao PDR prepared a draft National Organic Agriculture development strategy. The strategy is being finalised and sets directions for organic agriculture development in Laos up to 2020. Malaysia is working to resolve issues of implementing its national organic labelling regulation. Organic agriculture was listed in the top five “urgent agenda” of the revamped Ministry of Agriculture and Cooperative in Thailand, who also considered legislation to allow GMO crops. However the GMO crop legislation initiative was dropped following strong opposition from the

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² JAS is the Japanese Organic Standard. Information about the JAS standard can be found at <http://www.maff.go.jp/e/jas/specific/organic.html>

³ ASEAN is the Association of Southeast Asian Nations. Information about ASEAN is available at <http://www.asean.org>.

organic sector, environmentalists, consumers, and NGOs. A national organic market study of Thailand, the first in the region, was completed. The debate over whether or not to have an organic labelling regulation continues, although public and private certification schemes are well established in Thailand. It appears that the Vietnamese government has not taken an active role in promoting the organic sector, nevertheless, the domestic market is striving, and the private sector is generating solutions to address the authenticity of organic claims in the country.

A key reason for consumer interest in organic products in the region is food safety. At the workshop on "Developing an Agricultural Value Chain in the Mekong Region" co-organised in December 2015 by the Vietnam Ministry of Industry & Trade and ERIA (Economic Research Institute for ASEAN and East Asia) food safety was a primary concern, and the ability to ensure food safety in production, processing, and handling, including transportation was regarded as value addition, even as many will argue it is not. Participants included the deputy directors of three government departments (agriculture, commerce/trade, and transport) from Lao PDR, Cambodia, Myanmar, and Vietnam as well as attendees from Thailand, Malaysia, Singapore, and Japan. Supermarket procurement policy in the region such as the supermarket chain AEON in Vietnam requires national G.A.P.¹ or organic certificates where available.

The challenge of providing assurance without disrupting supply chains

As domestic markets establish and grow in the region, both authorities and the private sector face the question of how to manage assurance of organic claims (see Ong 2015). For many, the quick response is to enact organic labelling regulations, however this can be difficult to implement, particularly in emerging markets whose organic sectors include a high level of exports and/or imports. Implementation through government systems can be complicated as product supply chains (from primary production to retail) often extend across the jurisdiction of multiple ministries. Moreover, government certification cannot facilitate certification to export markets until government-to-government recognition is established with export markets. This can take a long time, and furthermore, inspection of foreign operations to national standards is problematic for countries where national, competent authorities are not ready to handle registration and oversight of foreign certification bodies to work in and outside of the country. As such, enforcement of national, organic labelling regulations can disrupt existing organic supply chains and devastate an emerging organic sector, instead of providing assurance and support. Hence, to date there is no full enforcement in Malaysia, Indonesia, and the Philippines.

Fortunately, smart public-private partnerships models have emerged in Malaysia and Lao PDR, where private sector agents are appointed to handle applications and inspection, including verification of imports for decision by competent authorities. This arrangement also allows the private agents to arrange and inspect for export certifications, allowing application and inspection for domestic and export certifications to be undertaken as an integrated process, saving time and cost.

¹ For information about GlobalG.A.P. see http://www.globalgap.org/uk_en/index.html

This approach adopted in one of many projects by the Asia Development Bank (ADB) Technical Assistance Project, “Implementing the Greater Mekong Sub-Region Core Agriculture Support Program (Phase 2),” was implemented in Cambodia, Lao PDR, Myanmar, and Vietnam. Private sector agents identified in the project were invited to collaborate with others within the Certification Alliance (CertAll) arrangement. The platform, including the Organic Agriculture Certification Thailand (ACT) based in Bangkok (providing EU-equivalent, Canadian, and IFOAM-accredited certifications), the Organic Farming Development Centre (OFDC) based in China (providing certification to China), and Quality Certification Services (QCS) based in Florida, USA (providing EU-equivalent and NOP certifications), now also include an arrangement with Australia Certified Organic (ACO) to offer certifications to Japan and South Korea.

Whilst progress is being made, implementation of certification complexities to meet user-friendly expectations can take longer than planned. The CertAll decision in December 2014 to work on an integrated inspection checklist and allow a single inspection reporting entry for multiple certifications amongst partners based on the ECert software¹ has not materialised, but efforts will continue in 2016.

Community Supported Agriculture (CSA) and Participatory Guarantee Systems (PGS) are developing as alternatives to third-party certification. Unfortunately, national authorities (except for Bhutan, India, and Mongolia) are not paying due attention to them as effective, low-cost community-based solutions, even as they struggle to implement high-cost third-party certification. Clearly, for organic products to be mainstream there must be cost-effective systems to serve traditional markets, where the majority of working class consumers in emerging economies buy their food.

Towards an ASEAN & Global Organic Economic Community

Having completed the ASEAN Standard for Organic Agriculture (ASOA) in 2014, the ASOA Task Force received a mandate to follow up with the development of certification and recognition arrangements in 2015. Workshops to develop explanatory notes, equivalence assessments, and peer reviews of member states’ national organic standards against the ASOA were undertaken in Bali, Indonesia, and Bacolod, Philippines. A draft Strategic Action Plan (2016 – 2020) was developed for completion and endorsement in 2016.

Whilst operators in the European Union, USA, Canada, and Japan need just a single certification to their respective national organic schemes to trade amongst each other, operators in other places need multiple certifications (at least three) to trade in the four markets. As much as the organic sector needs an international system, there is no interest in establishing one. Recognition arrangements are bilateral to-date. As ASEAN brings ten member states into a multilateral recognition arrangement, let us hope that the arrangement arising from ASEAN can serve as a model for an arrangement to encompass the rest of the world.

¹ ECert is a software for audit management and certification. More information is available at <http://www.intact-systems.com/compliance-management-software/audit-management>.

Bhutan takes steps toward 100% organic

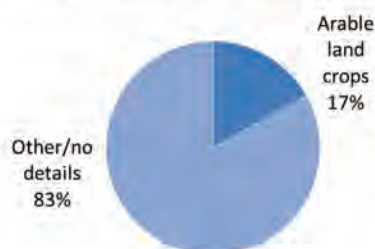
Organic Bhutan's commitment to a 100 percent organic target has made significant progress. The Ministry of Agriculture and Forests has endorsed a plan for the production and supply of bio-inputs, including facilitating distribution through the government system to ensure organic growers in the whole country will have access to the bio-inputs they need. On December 5, 2015, the government initiated the Bhutan organic domestic assurance system. Currently Bhutan is reviewing its national organic standard in collaboration with IFOAM – Organics International to qualify for international recognition, with plans to develop a certification system.

More significantly, organic is seen as an attractive and better way of farming, with high school and college graduates choosing organic farming as a livelihood and a business opportunity. Entrepreneurs are inquiring about operating organic businesses including production, processing and marketing. The Business Opportunity Information Centre, which provides information on the government economic stimulus, plans to boost the local economy through low-interest financial support to businesses based on local production using local materials, and reported 97 percent rate of project approvals were for agriculture, with a significant number of those for organic projects.

The government is also considering assigning a research and development centre to focus on organic research work and the development of technologies for organic production and marketing. Opportunities for organic sector development in Bhutan are good whilst constraints, if any, would be shortcomings of human resources to support the growing interest from farmers and entrepreneurs.

Bhutan: Organic land use 2014

Source: Helvetas Laos and private control body



Bhutan: Development of organic agricultural land 2011 to 2014

Source: Ministry of Agriculture



Figure 65: Bhutan: Organic land use in 2014

Figure 66: Bhutan: Development of the organic agricultural land 2011-2014

Source: Ministry of Agriculture 2016. For detailed data sources see annex, page 315

Nepal formally incorporates promotion of organic agriculture

After some years of ad hoc piecemeal support for organic agriculture, the Nepal government has now incorporated the promotion of organic agriculture as part of its Agricultural Perspective Plan framework. The Agricultural Development Strategy 2015 includes several supportive measures for organic agriculture development

- Revision of the 2014 policy to provide a subsidy to establish organic fertilizer factories to subsidize farmers with 10 Nepali Rupee per kg for the purchase of organic fertilizer.
- Support for cattle housing improvement has been included in the national programme and extended to 60 of 75 districts of Nepal.
- An additional 25 percent of the budget was allocated to Village Development Committees (VDCs) adopting organic agriculture practices, i.e., implementing “organic pockets” within their villages. □
- Continuation of the subsidy for the cost of certification for the export market and subsidy support for establishing internal control systems (ICS).

The National Organic Agriculture Accreditation Board (NOAAB) started accreditation of Certification Agencies and one organisation, the Organic Certification Nepal (OCN), is accredited. Demand for organic coffee and tea in the international and domestic markets is reportedly good. More than 90 percent of smallholder coffee is organic by default because, earlier, coffee planting was promoted for erosion control and not as a commercial, cash crop. Helvetas, a development funding organisation that works in Nepal, revised its coffee policy in 2014 to include promotion of certified organic coffee for export. Today, up to 50 percent of coffee is estimated to be certified organic.

India aims high

Despite limited growth in area, India has experienced good growth in the organic business sector. Exports reportedly grew between 25 and 30 percent, whilst domestic markets grew even faster at about 40 percent. The year saw two major initiatives from the central government: An announcement of an allocation of 1 billion rupees (16 million US dollars) for organic market development in India's Northeast region (8 states), and the launched of the government's participatory guarantee scheme (PGS) program in a big way with a pledge of 3 billion rupees (48 million US dollars) for 2015-16.

Among the states, Meghalaya announced a commitment to have 200'000 hectares of certified organic land by 2020, beginning with 40'000 hectares for 2015. ICCOA, (the Indian Competence Centre of Organic Agriculture), is a key partner in this program. Sikkim is aiming to become 100 percent organic, with the Prime Minister and the Chief Minister of State expected to make an official announcement in early 2016, followed by a state-sponsored conference in the first half of 2016. Opportunities abound, with encouraging growth inside and outside India, but there is some concern that central and state governments may be too exuberant with market expectations and output target, and may not have fully realised the complexities of implementation.

India: Development of organic agricultural land 2005 to 2014

Source: Agricultural and Processed Food Products Export Development Authority

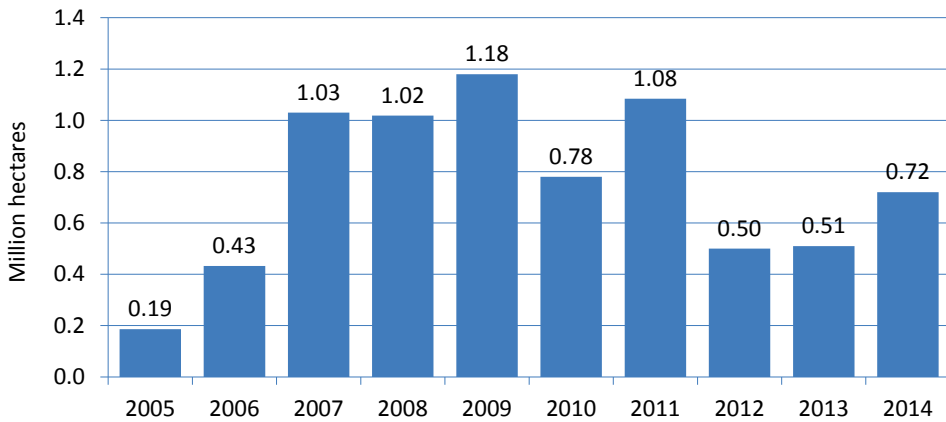


Figure 67: India: Development of the organic agricultural land 2005-2014

Source: Agricultural and Processed Food Products Export Development Authority 2016. For detailed data sources see annex, page 315

Sri Lanka offers support for domestic development besides export

For years, the Export Development Board of Sri Lanka has promoted organic products from Sri Lanka and assisted exporters with seeking new markets for organic products. Now, other government agencies are also promoting organic agriculture production. In 2015, the organic sector also benefited from the new government's policy to ban the use of glyphosate and from the implementation of a government fertilizer subsidy as cash payments to farmers, including for organic fertilizers.

Whilst the bulk of organic exports are still shipped to the USA, Canada, EU, Japan, and Australia, exports to the Middle East are growing. The domestic market for organic is expanding from urban communities to rural areas, where organic production has taken root as local communities take up consumption of organic foods.

All four major supermarket chains in the country are interested in marketing organic foods, and two have already started. Good Market, a newly established and popular Saturday vendor market platform, features organic products verified under a Participatory Guarantee Systems (PGS). A contributing factor for domestic market development has been the availability of local certification, providing market assurance and developing consumer confidence. Besides third party certification, PGS initiatives are also starting up. The Lanka Organic Agriculture Movement (LOAM), the national organic association, is involved in the development of both assurance systems for the domestic market.

The latest survey conducted by the Lanka Organic Agriculture Movement (LOAM) indicates that 78'502 hectares of land were under organic management at the end of

2015. This includes PGS-managed and in-conversion lands. In total, 62'560 hectares were certified. Total organic acreage now represents 4 percent of the total agricultural land area. There are about 1'213 organic farms, of which 524 are certified, and 62 farmer organizations. There were 223 exporters exporting 1'346 metric tons of organic products valued at USD \$228 million.

China streamlines and sends more inspectors out

In China, more than 30 products were added to the “National List of Products Allowed for Organic Certification.” In view of public comments, authorities may now switch to using a negative list instead of a positive list, meaning they will only list products that are not approved for organic certification. More Chinese inspectors are conducting inspections outside of China to ensure imports meet Chinese organic standard outside China for products to be labelled as organic.

Registration rules for organic certification bodies have been streamlined and organic inspectors now only need to attend an examination to be registered. Previously, they were required to attend a mandated training and interview as well. Chinese certification bodies can now take on inspection and certification work for foreign organic certifications without prior approval from the national, competent authority. The reporting requirement of activities remains.

Grassroots activism continues to be strong. The sixth Community Supported Agriculture (CSA) World Conference and the seventh National CSA Conference, held in November 2015 in Beijing, gathered more than 700 participants. Membership subscription to IFOAM – Organics International is on a continuous increase.

Japan prepares for Tokyo Olympics 2020

Similarly, to the previous report (Ong 2015), there was no significant growth in the number of certified organic operations in Japan. Violations were also low with only two reported for the year. The five-year revision cycle of the JAS Organic Standard, which started early in 2015, is still in process. Fukushima remains a rallying point and five organic-related national organizations gathered at Fukushima last August for follow-up action against the incident and nuclear power. The IFOAM Japan delegation to the World Congress and General Assembly of IFOAM – Organics International included Fukushima producers.

The Tokyo Olympics in 2020 may herald a brighter future. Organic marketing organizations have started a plan to continue to promote organic products at every Olympic-related event up to 2020. Malaysian suppliers to the Japanese supermarket chain AEON in Malaysia were briefed to prepare certified halal and organic products for the Olympic Games in 2020.

Malaysia to resolve certification implementation

Just as issues related to the verification of equivalent certification of imports and the certification of processors and import-distributors were resolved for implementation by Organic Alliance Malaysia (OAM), which handles the application and inspection of processors and import-distributors, the Ministry of Health introduced its organic

certification scheme for processed products and imports. Whilst the intention was to address what it thought was a gap, the initiative caused confusion in the industry. It gave rise to a scenario of two government organic certification schemes (one for primary production and another for processed products), operated by two different Ministries under two different names and using two different logos. The DoA scheme also went through a rebranding exercise at the same time. Full implementation stalled as operators held back their applications, adopting a wait-and-see position whilst dialogue between the two Ministries and private sector representatives took place. The private sector-preferred scenario of one national scheme, operated by one or many government agencies with private sector agents, so that organic operators need only apply through one agency, which can facilitate export certification if required, has been noted but is still not formally resolved. Meanwhile, as implementation is stalled, enforcement cannot ensue.

Thailand maps its market and organic made top five agenda

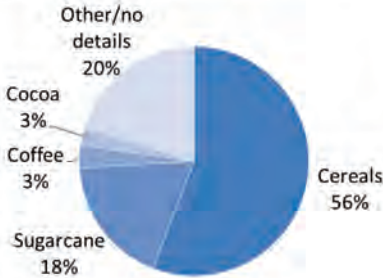
The main event in the Thai organic calendar is the Ministry of Commerce's Organic and Natural Expo, which continues to be the largest gathering of Thai organic businesses. The Ministry of Commerce, a long-standing "patron" for Thai organic businesses also funded the national organic market study conducted by the Organic Development Center (Sukhothai Thammathirat Open University) and Earth Net Foundation. It is the first time in ASEAN where a national market has been mapped with clear criteria, and national market figures have been made available (see accompanying article on page 289).

The newly revamped Ministry of Agriculture and Cooperative now includes organic agriculture development as one of the Ministry's top five "urgent agendas." It also considered legislation to allow for GMO crops. However, the GMO crop legislation initiative was dropped following strong opposition from the organic sector, environmentalists, consumers, and NGOs.

The government has not given up on the initiative to regulate organic labelling, and the debate continues regarding the pros and cons of enacting an organic labelling regulation. The Thai Organic Trade Association maintains there is no need for regulation, highlighting how neighbouring countries face difficulties with implementation. Moreover, the sector is well-served by existing government and private sector organic certification schemes in the country. Interest in the participatory guarantee system (PGS) has consolidated and 2015 saw the launch of the Thai PGS Organic Plus logo scheme. The PGS groups will use the PGS logo plus their own group logo as one seal. This adds another assurance option to the existing government and private sector third party organic certification schemes.

Thailand: Distribution of the organic area by key crops 2014

Source: Green Net, Organic Farming in Thailand



Thailand: Development of organic agricultural land 2005 to 2014

Source: Green Net, Organic Farming in Thailand

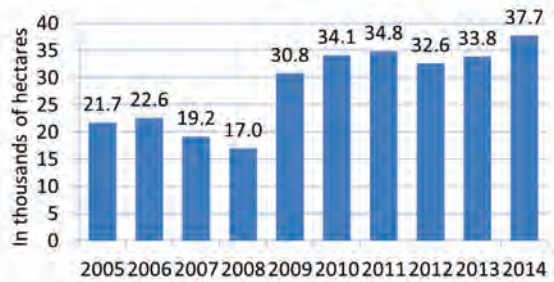


Figure 68: Thailand: Organic land use in 2014

Figure 69: Thailand: Development of the organic agricultural land 2011-2014

Source: Green Net 2016. For detailed data sources see annex, page 315

Vietnam goes private

Vietnam is experiencing strong demand from overseas. Many companies inquired about organic certification for exports, especially for tea, spices, and essential oils. A slowdown in the conventional tea market is also leading companies to seek other options. Food safety continues to be a high public concern. Organic has received high press coverage and domestic demand for organic products, particularly tea, and vegetables is growing. Many "organic" retail shops handling tea and vegetables opened in Hanoi. However, the authenticity of organic products is now an issue and the organic standards and regulations that have been under development by the Ministry of Agricultural and Rural Development (MARD) since 2014, are still a work in progress. The foreign certification bodies active in Vietnam are expanding and focused on providing export certifications. Participatory guarantee systems (PGS) are expanding and are now present in six provinces from the north to the south of Vietnam. There is a window of opportunity to establish a local organic certification scheme coupled with an inspection service for export certification. A team of four young professionals reportedly seized the moment to establish the certification body, Mekong Cert, in November 2015

Vietnam: Development of organic agricultural land 2007 to 2014

Source: ADDA Vietnam

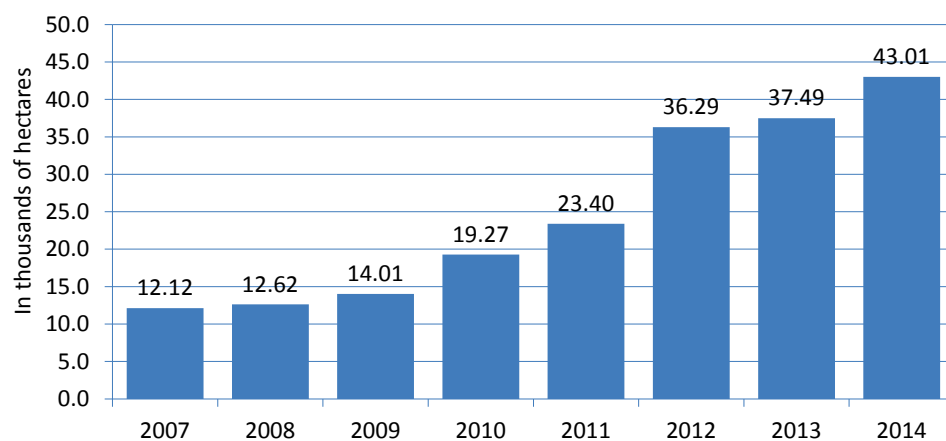


Figure 70: Vietnam: Development of the organic agricultural land 2007-2014

Source: ADDA Vietnam 2016. For detailed data sources see annex, page 315

Reference

Ong, Kung Wai (2015): Organic Asia 2014. In: Willer, H. and J. Lernoud (Eds): (2015): The World of Organic Agriculture 2015. Statistics and Emerging Trends. Research Institute of Organic Agriculture (FiBL), Frick, and IFOAM – Organics International, Bonn.

Asia: Current statistics

JULIA LERNOUD,¹ HELGA WILLER,² AND BERNHARD SCHLATTER³

The area of organic agricultural land in Asia is almost 3.6 million hectares, which is 0.3 percent of the total agricultural area in the region. Eight percent of the global organic agricultural land is in Asia. Compared with 2001 (420'000 hectares), organic land has increased almost eightfold. Between 2013 and 2014, the organic area in Asia increased by 158'500 hectares or 4.7 percent, continuing to recover after the loss of half a million hectares in India in 2012. The country with the largest organic agricultural area is China (1.9 million hectares), and the country with the most producers is India (650'000 producers). The countries with the highest shares of organic agricultural land are Timor-Leste (6.8 percent) and Sri Lanka (2.3 percent).

Land use

Land use details were available for a third of the organic agricultural area. In 2014, 45 percent of all organic farmland was used for arable crops (1.6 million hectares), 1 percent for grassland/grazing areas (almost 28'000 hectares), and 15 percent (541'000 hectares) for permanent crops. Detailed information was not available for 37 percent of the agricultural land, so we can assume that each category has a far larger share of the total organic land than what was reported.

The key *arable crop* group is cereals (mainly wheat and rice), with over 755'000 hectares reported in total. Most cereals were grown in China (almost 566'000 hectares) and Kazakhstan (130'000 hectares). Oilseeds (mainly soybeans) are also an important crop group grown on at least 443'000 hectares, mainly in China and India. Almost fifteen percent of the organic farmland was used for *permanent crops*; most of this land was used for coconuts (almost 122'000 hectares, mainly in the Philippines), coffee (113'000 hectares, mainly in Indonesia and Timor-Leste), and tea (at least 58'000 hectares, almost all of this in China).

Market

Market data are not available for all countries, but we can assume that the market is continually growing. Eight countries provided retail sales values (Table 12, page 66). For China 3.7 billion euros were reported for 2014, making the country the world's fourth biggest market for organic products. More information about the Asian market is available in the chapter about the global market from Amarjit Sahota (page 134).

For more information about the Asian figures, see data tables for Asia, page 185.

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Organic Agriculture in Asia: Graphs

Asia: The ten countries with the largest organic area 2014

Source: FiBL survey 2016

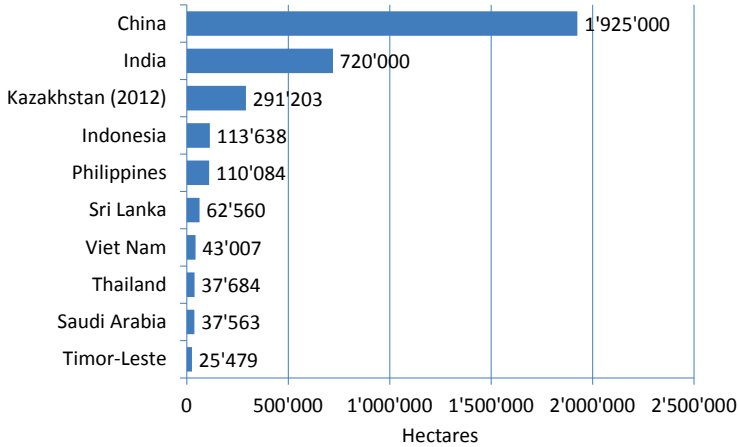


Figure 71: Asia: The ten countries with the largest organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Asia: The countries with the highest share of organic agricultural land 2014

Source: FiBL survey 2016

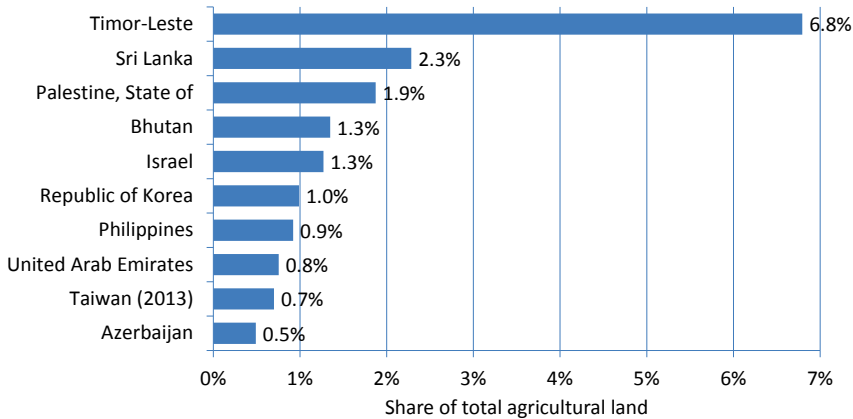


Figure 72: Asia: The countries with the highest share of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Asia: Development of organic agricultural land 2000 to 2014

Source: FiBL-IFOAM-SOEL 2002-2016

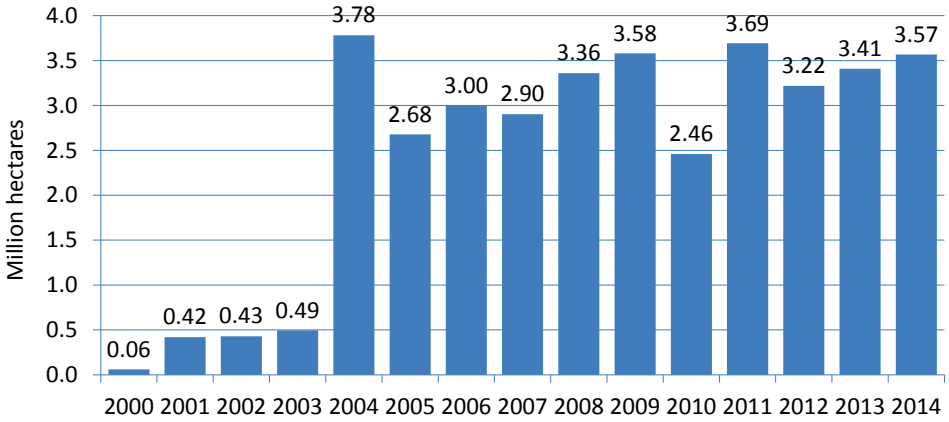


Figure 73: Asia: Development of organic agricultural land 2000 to 2014

Source: FiBL-IFOAM-SOEL survey 2002-2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Asia: Use of agricultural organic land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.

Land use types 2014

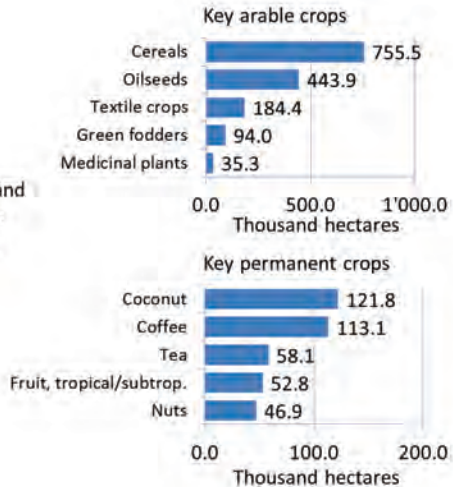
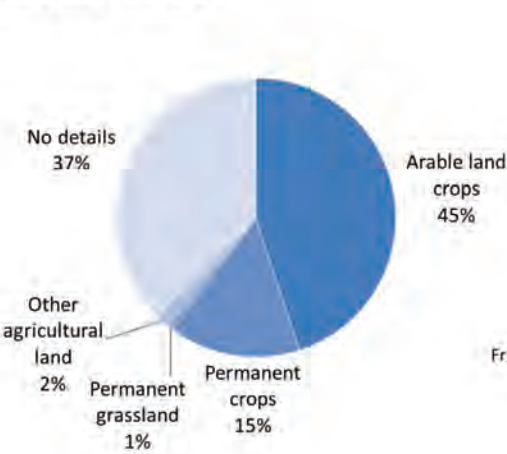


Figure 74: Asia: Use of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Organic Agriculture in Asia: Tables

Table 45: Asia: Organic agricultural land, share of total agricultural land and number of producers 2014

For information on data year, see page 311.

Country	Area [ha]	Organic share [%]	Producers [no.]
Armenia	1'000	0.1%	17
Azerbaijan	23'331	0.5%	288
Bangladesh	6'860	0.1%	9'335
Bhutan	6'829	1.4%	2'680
Cambodia	9'889	0.2%	6'753
China	1'925'000	0.4%	9'990
Georgia	1'292	0.1%	159
India	720'000	0.4%	650'000
Indonesia	113'638	0.2%	5'700
Iran	11'601	0.02%	2'554
Iraq	51	0.002%	
Israel	6'640	1.3%	391
Japan	9'889	0.3%	2'130
Jordan	2'371	0.2%	27
Kazakhstan	291'203	0.1%	
Kyrgyzstan	6'929	0.1%	1'035
Lao P.D.R.	6'275	0.3%	1'342
Lebanon	1'079	0.2%	93
Malaysia	603	0.01%	119
Myanmar	5'320	0.04%	5
Nepal	9'361	0.2%	687
Oman	38	0.002%	38
Pakistan	23'828	0.1%	108
Palestine, State of	6'896	1.9%	1'096
Philippines	110'084	0.9%	165'974
Republic of Korea	18'306	1.0%	11'633
Saudi Arabia	37'563	0.02%	145
Singapore		Processing only	
Sri Lanka	62'560	2.3%	524
Syrian Arab Republic	19'987	0.1%	2'458
Taiwan	5'937	0.7%	2'988
Tajikistan	12'659	0.3%	10'486
Thailand	37'684	0.2%	19'240
Timor-Leste	25'479	6.8%	73
United Arab Emirates	4'286	0.8%	52
Uzbekistan		Wild collection only	
Viet Nam	43'007	0.4%	2'721
Total	3'567'474	0.3%	910'841

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 46: Asia: All organic areas 2014

Country	Agriculture [ha]	Aqua-culture [ha]	Forest [ha]	Wild collection [ha]	Other non agri. land [ha]	Total [ha]
Armenia	1'000			11'250		12'250
Azerbaijan	23'331		123	937		24'391
Bangladesh	6'860	9'338				16'198
Bhutan	6'829			6'315		13'144
Cambodia	9'889					9'889
China	1'925'000			1'144'326		3'069'326
Georgia	1'292			215	1'507	3'014
India	720'000			3'990'000		4'710'000
Indonesia	113'638	3'320		10'730		127'688
Iran	11'601			22'850		34'451
Iraq	51					51
Israel	6'640					6'640
Japan	9'889					9'889
Jordan	2'371					2'371
Kazakhstan	291'203			863		292'066
Kyrgyzstan	6'929	2'359		71		9'359
Lao P.D.R.	6'275			16'786		23'061
Lebanon	1'079			163		1'242
Malaysia	603					603
Myanmar	5'320					5'320
Nepal	9'361			24'422		33'783
Oman	38					38
Pakistan	23'828					23'828
Palestine, State of	6'896					6'896
Philippines	110'084					110'084
Republic of Korea	18'306					18'306
Saudi Arabia	37'563					37'563
Singapore			Processing only			
Sri Lanka	62'560					62'560
Syrian Arab Republic	19'987			8'000		27'987
Taiwan	5'937					5'937
Tajikistan	12'659			1'055'890		1'068'549
Thailand	37'684					37'684
Timor-Leste	25'479					25'479
United Arab Emirates	4'286					4'286
Uzbekistan				5'000		5'000
Viet Nam	43'007	20'030		2'200		65'237
Total	3'567'474	35'047	123	6'300'019	1'507	9'904'170

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 47: Asia: Land use in organic agriculture (fully converted and in conversion) 2014

Land use	Crop group	Area [ha]
Agricultural land, no details		1'285'280
Arable crops	Arable crops, no details	8'382
	Cereals	755'473
	Dried pulses	18'532
	Flowers and ornamental plants	8'985
	Green fodders from arable land	94'048
	Industrial crops	164
	Medicinal and aromatic plants	35'306
	Mushrooms and truffles	46
	Oilseeds	443'878
	Root crops	11'597
	Seeds and seedlings	68
	Strawberries	38
	Sugarcane	8'604
	Textile crops	184'401
	Vegetables	34'114
	Arable crops, other	6
<i>Arable crops total</i>		<i>1'603'641</i>
Cropland, no details		50'072
Other agricultural land	Other agricultural land, no details	315
	Fallow land, crop rotation	59'245
	Home gardens	55
	Unutilised land	27
	Other agricultural land, other	-97
<i>Other agricultural land total</i>		<i>59'545</i>
Permanent crops	Berries	120
	Citrus fruit	8'311
	Cocoa	3'282
	Coconut	121'781
	Coffee	113'061
	Flowers and ornamental plants, permanent	22
	Fruit	22'678
	Fruit, temperate	26'777
	Fruit, tropical and subtropical	52'842
	Grapes	18'083
	Medicinal and aromatic plants, permanent	9'146
	Nurseries	0
	Nuts	46'857
	Olives	6'876
	Tea/mate, etc.	58'084
	Permanent crops, other	53'318
<i>Permanent crops total</i>		<i>541'238</i>
Permanent grassland		27'699
Total		3'567'474

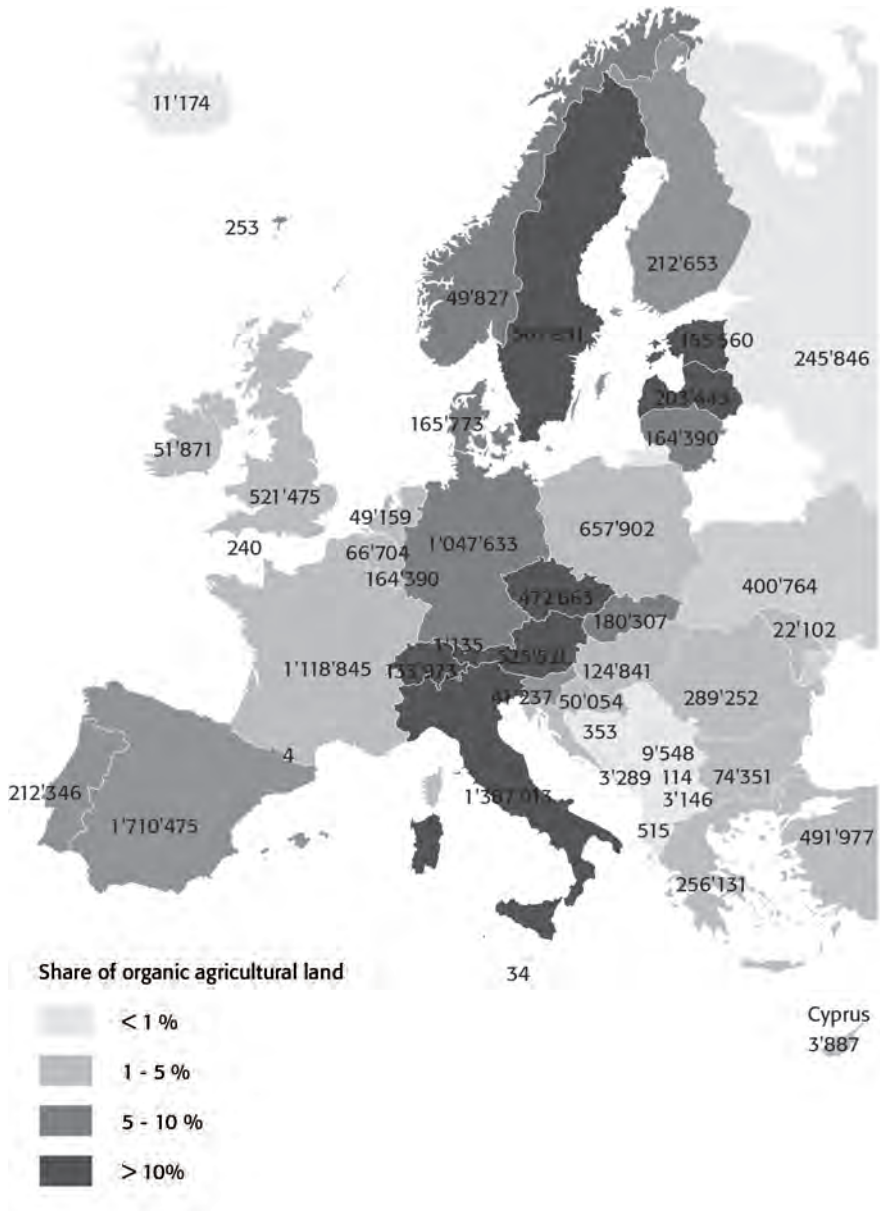
Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 48: Asia: Use of wild collection areas 2014

Land use	Area [ha]
Apiculture	16'857
Berries, wild	161
Fruit, wild	432'969
Medicinal and aromatic plants, wild	18'415
Mushrooms, wild	91'272
Nuts, wild	5'169
Nuts, wild, other	7'807
Oil plants, wild	44'743
Palm sugar	1'431
Wild collection, no details	5'456'982
Wild collection, other	224'213
Total	6'300'019

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.
For detailed data sources see annex, page 315

Europe



Map 8: Organic agricultural land in the countries of Europe 2014

Source: FiBL-AMI survey 2016; based on information from the private sector, certifiers, governments, Eurostat and the Mediterranean Organic Agriculture Network. For detailed data sources see annex, page 315

Organic Farming in Europe

HELGA WILLER¹ AND STEPHEN MEREDITH²

In 2014, the area of organic land, the number of organic farmers, and, in particular, the organic market continued to grow in Europe. Based on these current figures, the agricultural area under organic management in Europe covers 11.6 million hectares (EU: 10.3 million), constituting 2.4 percent of the total agricultural land (EU: 5.7 percent). This represents a 2 percent increase compared to 2013 figures. There are almost 340'000 producers (European Union: almost 260'000). The value of the European organic market in 2014 was 26.2 billion euros (EU: 23.9 billion euros) - an increase of 7.6 percent on 2014. All countries, for which new data was available, reported growing retail sales, with the most spectacular growth occurring in Sweden at 40 percent. For more details, please view the chapter on European organic farming statistics (see page 190).

Country highlights

Retail sales in **Germany**, a market with a high diversity of marketing channels, grew by 4.8 percent in 2014. In terms of absolute numbers, sales of organic food and beverages increased from 7.55 to 7.91 billion euros. According to the Arbeitskreis Biomarkt (organic market working group), the highest growth rate was noted for the specialised trade. Compared with other marketing channels, this channel grew by 9 percent in 2014 to 2.6 billion euros, and the share of the specialised trade of total organic retail sales increased to 33 percent. As in previous years, the highest organic sales were achieved by general retailers. In 2014, their sales stood at 4.21 billion euros; however, their share of the organic market decreased slightly to 52 percent. Other important sales channels in Germany are bakeries, butcher shops, weekly markets, smaller farm stores, box schemes, mail orders, filling stations and health food stores, which together accounted for a value of 1.09 billion euros. In the first three quarters of 2015, the expenditure by private households on fresh organic products and selected organically processed products (selection criteria not known) increased by 10 percent compared to the same period in 2014. The most dynamic sales channels in 2015 were the discounters (+16 percent) that have put many new products on their shelves. There are chances that the total organic market will exceed 8 billion euros in 2015 are good (Biofach 2015).

In 2014, the **Swedish** organic market exploded. It increased by more than 40 percent and, with 1.4 billion euros, reached an overall market share of 6 percent (up from 4.3 percent). The largest demand was for fruits and vegetables. Swedish market experts expect the strong growth to continue (see page 226).

Denmark continues to have the highest organic market share in the world, and in all Nordic countries the market developed positively in 2014. With retail sales of 912

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million, 7.6 percent¹ of the Danish food market is organic, and every fourth carrot and litre of milk is organic (Biofach 2015). Denmark is also a large exporter of organic products to countries such as Germany, Sweden, France and the Netherlands, generating revenue of 231 million euros in 2014 (Figure 75).

Denmark: Development of organic exports and imports 2003-2014

Source: Statistics Denmark

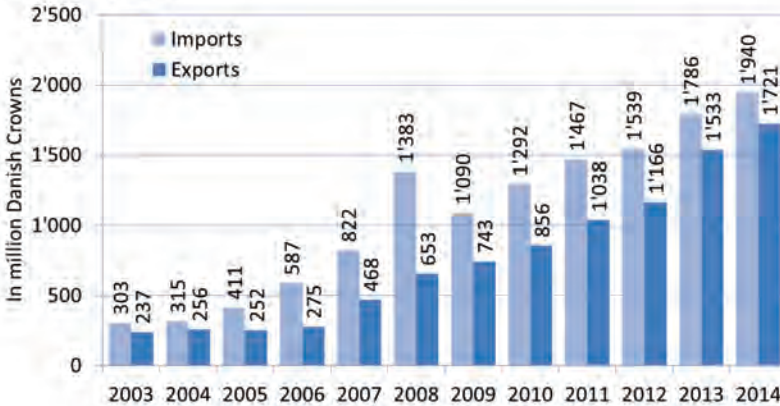


Figure 75: Denmark: Development of organic exports and imports 2003-2014²

Source: Statistics Denmark

In **France**, demand for organic food continues to be high, and the market is experiencing continual growth. Compared to 2013, organic sales in 2014 increased by ten percent – to almost five billion euros. An increasing number of farmers are converting to organic. Data for 2015 confirms this positive trend: final figures for 2015 are expected show an increase of ten percent of organic producers (Verdura 2015).

The **Czech Republic** is an example of a Central Eastern European country from the EU-13 demonstrating strong development of the organic sector. The total organic farmland area has steadily grown from 254'982 hectares in 2005 to 472'663 hectares in 2014. Retail sales of organic food have increased dramatically over the last decade from 510 million Czech Crowns in 2005 to 1'945 million Czech Crowns in 2013. The Czech Republic has an ongoing Action Plan from 2011 to 2015, with a new plan for 2016 to 2020. The background analysis for the new plan showed that legislation, government grants, system of inspection and certification, labelling organic food are well established through government action, but that the training of farmers and research are not sufficiently developed, and that market development (particularly for domestic products) should be supported, and consumers should be better informed about organic products.

¹ Please note that this figure (which related to retail sales only) is lower than the one that was previously communicated. This is due to the fact that the data on the overall market have been revised; therefore, the percentage of the organic market has changed.

² 1 Danish Crown (DKK) corresponds to 0.13 euros (average exchange rate 2014).

Czech Republic: Development of organic retail sales 2004-2014

Source: Green marketing 2005-2008, ÚZEI 2009-2013

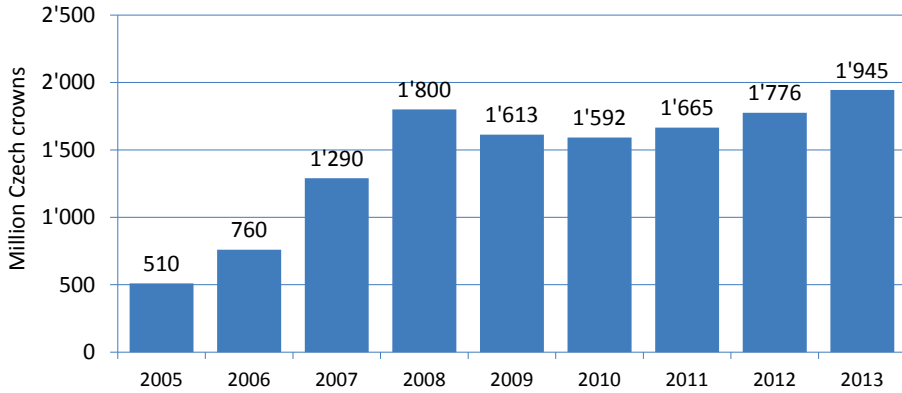


Figure 76: Czech Republic: Development of organic retail sales 2005-2014

Source: Green marketing 2005-2008, ÚZEI 2009-2013

Switzerland continues to have the highest organic per capita consumption in the world, and in 2014, the Swiss organic market increased by 7.5 percent. Sales of organic products rose to 2.2 billion Swiss Francs (1.8 billion euros) and per capita consumption reached 221 euros. The majority of the organic products in Switzerland are sold through two major retail chains. The market leader is the Coop, accounting for approximately half of the organic sales in Switzerland, followed by Migros (approx. one quarter of all sales) (Figure 77). The share of organic farmland also increased slightly in 2014 and now stands at 12.7 percent. In the canton of Graubünden, more than half of the agricultural land is organic.

Switzerland: Growth of organic retail sales 1995-2014

Source: Bio Suisse

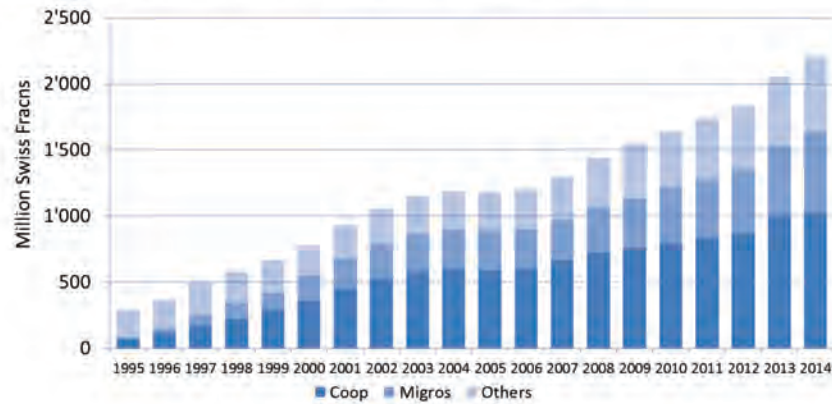


Figure 77: Switzerland: Development of organic retail sales by channel 1995-2014

Source: Bio Suisse

EU policy and regulatory framework on organic farming

The EU policy and regulatory framework continues to influence the development of the organic sector across Europe. Recognition amongst policymakers is based on the dual societal role of organic food and farming in meeting consumer demand for high-quality food and delivering a number of public goods. The on-going review of the Organic Regulation remains a major issue for the organic sector following the launch of new a legislative proposal by the European Commission March 2014 (European Commission, 2014a). It is anticipated to have a significant impact on the development of the organic sector over the next decade. The proposal is currently under negotiation between the European Commission, European Agriculture Council, and European Parliament with a final agreement on the basic legislation foreseen in 2016. The revised regulatory framework is expected to come into force in 2018 following the adoption of implementing acts accompanying the basic legislation.

Under the new Common Agricultural Policy 2014-2020, organic farming is supported under both Pillar 1 (direct payments) and Pillar 2 (Rural Development Programmes) (RDPs). Certified organic farmers automatically qualify for the new “Greening” payment (which constitutes 30 percent of the CAP direct payments). The implementation of the new policy began in 2015 with the majority of EU Member States offering organic area payments for conversion to and maintenance of farmland under organic management under CAP’s RDPs. As of the end of 2015, all 118 RDPs have been adopted. Currently, European Commission figures project that over 10 million hectares of farmland will be supported under the new RDPs. In terms of total spending, organic area payments will account for 6.4 percent of EU public expenditure for RDPs to 2020 (including EU and national co-financing).

The outlook for the future development of the organic sector will be largely influenced by how well the new CAP is implemented at the national and regional level. Indeed, the most recently published figures show that about 10.3 million hectares of land were managed organically in 2014 in the European Union (although not all organic farmland is under support schemes). These projections suggest that more ambitious efforts could still be made by the Member States to stimulate the growth of organic food and farming. In 2017, Member States will also be able to opt to review their RDP spending with the option to move up to 15 percent of their Pillar 1 budget to Pillar 2 for the years 2018 and 2019. New RDPs also combine organic farming support with other measures related to farm investments, diversification, advisory services, and information and promotional activities. These additional support options vary from Member State to Member State.

Research

Today, organic farming research is funded under national research programs or national organic action plans as well as through European programs.¹ Even though there are no figures available for all European countries, it is known that the funds of the eleven

¹ For a list of organic farming research projects funded by the European Commission, see <http://www.organic-research.org/european-projects.html>

countries that were part of the ERA-Net¹ project CORE Organic I² amounted to more than 60 million euros in 2006 (Lange et al. 2007). Newer data is currently being compiled by the Research Institute of Organic Agriculture (FiBL) and will be released in 2016. Increasing investment in research for organic farming will help provide answers to many environmental and social issues faced by Europe’s farming systems, says a new study (Barret et al. 2015). According to the study, scientific evidence shows that organic farming is placed well to address sustainability challenges. However, organic farming only receives 1 to 5 percent of national budgets for agricultural research. More research funding would enable organic to perform even better and help the EU to make food systems more sustainable.

European Union: Funding of organic farming research in the EU’s framework programmes (FP)

Source: CORDIS database, organic projects as listed here <http://www.organic-research.net/transnational-projects/european-projects.html>

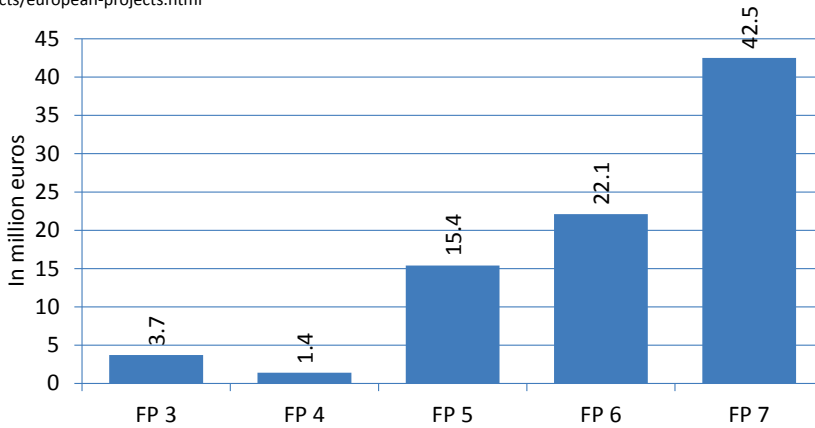


Figure 78: European Union: Funding of organic farming research in the EU’s framework programmes (FP)

Source: CORDIS database using data for projects listed by FiBL (2015) at the Organic Research website.

Several organic farming research projects have been funded under the framework programs of the European Union since the mid-1990s (Figure 78). Furthermore, there are several European projects that do not have organic farming as their focus, but they carry out related research. In the Seventh Framework Programme for Research and Technological Development, which was launched in 2008, there were 14 projects

¹ The objective of the ERA-NET scheme is to step up the cooperation and coordination of research activities that are carried out at the national or regional levels in the Member States and Associated States.

² CORE Organic (Co-ordination of European Transnational Research in Organic Food and Farming), www.coreorganic.org. CORE Organic was a three-year coordination action in organic food and farming (2004 to 2007). The overall objective was to gather a critical mass and enhance the quality, relevance, and utilization of resources in European research in organic food and farming. It was succeeded by the CORE Organic II and the CORE Organic PLUS projects.

focusing on organic farming. In the meantime, the first calls for projects for the succeeding Horizon 2020 programme were launched.

TP Organics¹ unites large companies, small & medium enterprises, researchers, farmers, consumers and civil society organisations.

The top research and innovation priorities of the European organic sector until 2020 are described in TP Organics' new Strategic Research and Innovation Agenda, which was presented at the BioFach Science Day 2015 – a joint event of TP Organics and TIPI – the Technology Innovation Platform of IFOAM – Organics International. The new Strategic Research and Innovation Agenda (Beck et al. 2014) is used to influence funding priorities of EU and national research programmes, in order to solve current challenges and further drive the development of the sector and strengthen its competitiveness.

Based on the Strategic Research and Innovation Agenda, TP Organics published priority topics for the Horizon 2020 Work Programme 2016/2017. According to TP Organics, the topics will contribute to the implementation of the European Union's Organic Action Plan as well as leverage the organic sector's contribution to sustainable food security, resilient food systems and the renaissance of rural areas.

On 13 October 2015, the European Commission officially adopted its Work Programme for 2016/2017 as part of the EU's framework programme for Research and Innovation, Horizon 2020. With a value of more than 200 million euro, 19 research calls in the Work Programme specifically address the organic sector or ask for organic agriculture to be included as part of larger projects. The presence of organic farming in the new Work Programme shows that the expertise provided by TP Organics is well appreciated by the European Commission and Member States.

At Science Day 2015, the international counterpart of TP Organics, the Technology Innovation Platform of IFOAM – Organics International (TIPI) discussed its draft of a global vision and research strategy for organic farming (Niggli et al. 2014). It is expected that the final version is ready in 2016. TIPI's action plan and the proposed goals for TIPI include (Baker 2015):

- Facilitate global access to information on organic farming and food systems;

¹ The TP Organics vision paper, published in December 2008, reveals the huge potential of organic food production to mitigate major global problems, from climate change and food security, to the whole range of socio-economic challenges in the rural areas (Niggli et al. 2008). In February 2010, the Strategic Research Agenda (SRA), the second major document of the Technology Platform TP Organics (www.tporganics.eu) was finalized, underlining research priorities and a number of suggestions for research projects (Schmid et al. 2009). The Implementation Action Plan explains how the research priorities and research topics, identified in the Strategic Research Agenda, can be implemented. A focus is laid on funding instruments, research methods, and communication of results (Padel et al. 2010). Many of the topics covered in these documents were taken into consideration in recent European calls.

- Facilitate interactions between researchers and the beneficiaries of research, development, and technology transfer;
- Assist IFOAM – Organics International and the entire organic movement with scientific-evidence-based advocacy;
- Capacity Building: Increase the number of researchers, educators and extensionists working with organic farming systems;
- Developing global organic research agenda: priorities and establish a program to address those priorities.

Vision and strategy for European organic agriculture

An organic vision for Europe in 2030 was launched at the ninth European Organic Congress, which took place in June 2015 in Riga, Latvia. The common vision of the European organic sector was the result of one-and-a-half year participatory vision process with contributions from more than 300 stakeholders. This vision calls for the wide adoption of a fair, environmentally conscious, healthy and caring farming system in Europe by 2030; continued leadership to promote change in food and farming systems; holistic approaches; and thriving interactions with other like-minded initiatives, including fair trade, agroecology and urban agriculture. The Vision looks to achieving more than half of Europe's agricultural land managed according to organic principles by 2030 (Barabanova et al. 2015).

Further reading

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- europa.eu.int/comm/agriculture/qual/organic/index_en.htm: The European Commission's organic farming website
- ifoam-eu.org: European Union Group of the International Federation of Organic Agriculture Movements - IFOAM EU Group
- organic-europe.net: Organic Europe, maintained by FiBL: Country reports, address database, statistics
- organic-market.info: Organic Market Info: Market News and updates: www.organic-market.info
- tipi.ifoam.org: Technology Innovation Platform of IFOAM (TIPI)
- tporganics.eu: European Technology Platform TP Organics

Europe: Key indicators

Indicator	Europe	European Union	Top countries
Organic farmland	11.6 million hectares	10.3 million hectares	Spain (1.7 million ha), Italy (1.4 million ha), France (1.1 million ha)
Organic share of total farmland	2.4 %	5.7 %	Liechtenstein (30.9%), Austria (19.4%), Sweden (16.4%)
Growth 2013/2014	2.3%	1.1%	Russian Federation (+70%), Bulgaria (+31%) and Croatia (+23 percent)
Land use	Arable land: 5.1 million ha Permanent crop: 1.4 million ha Permanent grassland: 4.8 million ha	Arable land: 4.1 million ha Permanent crops 1.2 million ha Permanent grassland: 4.6 million ha	
Top arable crops	Green fodder: 2 million ha Cereals: 1.9 million ha Dried pulses: 0.3 million ha	Green fodder: 1.82 million ha Cereals :1.53 million ha Dried pulses: 0.26 million ha	Largest arable areas: France (0.6 million ha) Italy (0.57 million ha) Germany (0.44 million ha)
Top permanent crops	Olives: 0.5 million ha Grapes: 0.27 million ha Nuts: 0.2 million ha	Olives: 0.41 million ha Grapes: 0.25 million ha Nuts:0.18 million ha	Largest permanent crop areas Spain (0.54 million ha) Italy (0.34 million ha) France: (0.1 million ha)
Wild collection area	16.3 million hectares	11.7 million ha	Finland (9.1 million ha) Romania (1.8 million ha) Bulgaria: (0.7 million ha)
Producers	339'824	257'525	Turkey: 71'472 Italy 48'662 Spain 30'602
Processors	51'495	49'968	Italy (12'641), France (11'198), Germany (9'497)
Importers	1'847	1'650	Germany (326), Italy (259), Sweden (247)
Retail sales	26.1 billion euros	23.9 billion euros	Germany (7'910 million euros), France (4'830 million euros), United Kingdom (2'307 million euros)
Growth of retail sales 2014	7.6%	7.4%	Sweden (45 %), Norway (25%), France and Netherlands (10 %)
Organic share of total market	No data	No data	Denmark (7.6 %), Switzerland (7.1 %), Austria (6.5%, data from 2011).
Per capita consumption	34 euros	37 euros	Switzerland (221 euros), Luxembourg (164 euros), Denmark (162 euros).

Source: FiBL-AMI survey 2016

Organic Farming and Market Development in Europe

HELGA WILLER¹ AND DIANA SCHAACK²

Key data for the organic sector 2014

Organic agricultural land is now at 11.6 million hectares in Europe, constituting 2.4 percent of the continent's agricultural land. In the European Union, 10.3 million hectares of farmland were organic, with a share of 5.7 percent of its agricultural land being organic in 2014. In eight European countries (European Union: six countries), ten percent or more of the agricultural land is organic. Growth of organic agricultural land has been substantial in Europe and in the European Union over the last decade, the organic area has almost doubled since 2004, when most of the new member states (EU-13)³ became part of the European Union.

Land use data show that organic agriculture produces a wide range of products according to the demand of the markets. Organic production in the EU-13, the EU candidate and potential candidate countries (CPC),⁴ and other European countries fills many gaps for the EU-15⁵ countries, where production volumes of raw materials are insufficient.

Producer numbers have also grown significantly (almost 260'000 in the European Union and almost 340'000 in Europe), and since 2004, growth rates in the new Member States have been considerably higher than in the EU-15. A large proportion of the more than 51'000 processors and the 1'850 importers are located in the EU-15 and Switzerland.

With retail sales in 2014 valued at 23.9 billion euros, the European Union is the second largest single market for organic products in the world after the United States. The market showed a growth rate of almost eight percent. The European market for organic products was valued at approximately 26.2 billion euros (North America was almost 29.8 billion euros). European countries have the top rankings for market share and per capita consumption worldwide: three countries have an organic food market share of more than five percent (Denmark: 7.6 percent, Switzerland: 7.1 percent, and Austria 6.5 percent in 2011), with individual products and product groups reaching even higher shares. Eggs, for instance, can constitute more than 20 percent of all eggs sold in some countries. Six countries had a per-capita consumption of more than 100 euros in 2014 with Switzerland taking the lead (221 euros). Almost no data is available on exports and imports, but it may be assumed that, with the growing domestic markets, international trade activities will increase for both intra-EU trade as well as exports and imports to and from the European Union.

¹ Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org

² Diana Schaack, Agrarmarkt Informations-Gesellschaft mbH, Bonn, Germany, www.ami-informiert.de

³ EU-13 refers to the 13 member states that became members of the EU in or after 2004.

⁴ CPC refers to EU Candidate Countries – Albania, Iceland, Montenegro, Serbia, Macedonia (FYROM) and Turkey – and Potential Candidates – Bosnia & Herzegovina and Kosovo – as categorised by the European Union. More information available at: www.europa.eu/about-eu/countries.

⁵ EU-15 refers to the 15 member states that were members of the European Union before 2004.

Table 49: Europe: Key indicators by country and country group 2014

For information on data year, see page 311.

	Country	Area [ha]	Share of all agr. land [%]	Producers [no.]	Retail sales [Million €]	€/person	Retail sales: Organic share [%]
EU 16]	Austria	525'521	19.4%	22'184	1'065	127	6.5%
	Belgium	66'704	4.9%	1'648	435	39	1.8%
	Denmark	165'773	6.3%	2'565	912	162	7.6%
	Finland	212'653	9.4%	4'247	225	41	1.7%
	France	1'118'845	4.1%	26'466	4'830	73	2.6%
	Germany	1'047'633	6.3%	23'398	7'910	97	4.4%
	Greece	256'131	3.1%	20'186	60	5	
	Ireland	51'871	1.3%	1'275	105	23	
	Italy	1'387'913	10.8%	48'662	2'145	35	2.2%
	Luxembourg	4'490	3.4%	79	90	164	3.4%
	Netherlands	49'159	2.5%	1'706	965	57	3.0%
	Portugal	212'346	6.3%	3'029	21	2	0.2%
	Spain	1'710'475	6.9%	30'602	998	21	1.0%
	Sweden	501'831	16.4%	5'406	1'402	145	6.0%
United Kingdom	521'475	3.0%	3'526	2'307	36		
Total EU 15	7'832'820	6.1%	194'979	23'471			
EU 13	Bulgaria	74'351	2.4%	3'893	7	1	
	Croatia	50'054	3.8%	2'194	99	23	2.2%
	Cyprus	3'887	2.7%	743	2	2	
	Czech Republic	472'663	11.1%	3'866	77	7	0.7%
	Estonia	155'560	16.2%	1'542			
	Hungary	124'841	2.7%	1'672	25	2	0.3%
	Latvia	203'443	11.2%	3'497	4	2	0.2%
	Lithuania	164'390	5.7%	2'445	6	2	0.2%
	Malta	34	0.3%	10			
	Poland	657'902	4.3%	24'829	120	3	0.2%
	Romania	289'252	2.1%	14'159	80	4	0.7%
	Slovakia	180'307	9.5%	403	4	1	0.2%
	Slovenia	41'237	8.9%	3'293	49	27	1.8%
Total EU-13	2'417'922	4.7%	62'546	472			
CPC	Albania	515	0.04%	39			
	Bosnia and Herzegovina	353	0.02%	24	2	0	
	Kosovo	114	0.03%	10			
	Macedonia, FYROM	3'146	0.3%	382			
	Montenegro	3'289	0.6%	167	0	0	
	Serbia	9'548	0.2%	1'281			
	Turkey	491'977	2.0%	71'472	4	0	
	Total CPC	508'942	1.5%	73'375	5	1	
EFTA	Iceland	11'174	0.5%	34			
	Liechtenstein	1'135	30.9%	39	5	130	
	Norway	49'827	4.6%	2'232	278	54	1.5%
	Switzerland	133'973	12.7%	6'195	1'817	221	7.1%
Total EFTA	196'108	4.4%	8'500	2'100			
Other European countries	Andorra	4	0.02%				
	Belarus		0.0%				
	Channel Islands	240	2.7%				
	Faroe Islands	253	8.4%				
	Moldova	22'102	0.9%	172			
	Russian Federation	245'846	0.1%	68	120	1	
	Ukraine	400'764	1.0%	182	15	0	
	Total other	669'209	0.2%	424	135		
	Total Europe	11'625'001	2.4%	339'824	26'183		
	Total EU	10'250'742	5.7%	257'525	23'943	47	

Source: FiBL-AMI survey 2016, based on Eurostat and national data sources
For detailed data sources see annex of this volume, page 315

Organic agricultural land and conversion status

In 2014, 11.6 million hectares were farmed organically in Europe and almost 10.3 million hectares in the European Union.

The countries with the largest areas of organic land are Spain, Italy, France, and Germany. Approximately 27.6 percent 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.

Of the 11.6 million hectares of organic agricultural land in Europe, 7.7 million hectares were fully converted, and 1.6 million were under conversion. Not all countries provided data on their fully converted and in-conversion areas (Austria, Germany, and Switzerland). Particularly in Italy, Poland, Spain, and Turkey, large areas are under conversion, and therefore, a major increase in the supply may be expected from them in the near future.

Europe: Distribution of organic farmland 2014 (Total organic farmland: 11.6 million hectares)

Source: FiBL-AMI 2016

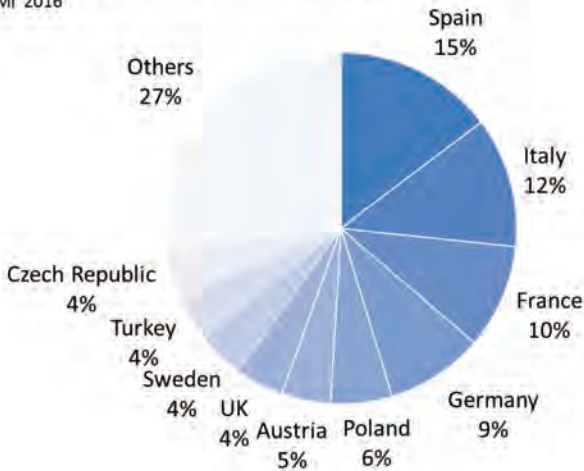


Figure 79: Europe: Distribution of organic farmland 2014 (11.6 million hectares)

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

Europe: Organic agricultural land by country 2014

Source: FiBL-AMI Survey 2016

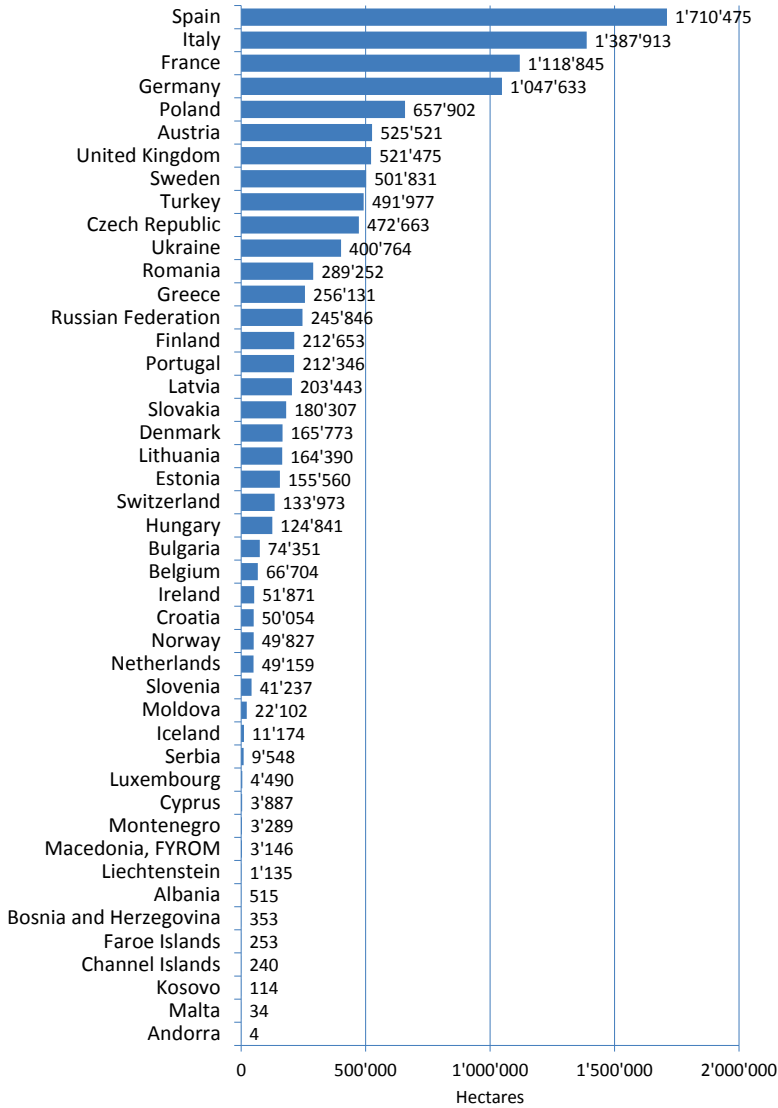


Figure 80: Europe: Organic agricultural land by country 2014

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

Shares of organic agricultural land

In Europe, 2.4 percent of the agricultural land was organic and in the European Union 5.7 percent (see Table 49).

In eight countries, more than 10 percent of the agricultural land is organic (Figure 81). The countries with the highest organic shares are Liechtenstein, Austria, Sweden, and Estonia.

The country with the highest share in Europe (and the second-highest in the world) was Liechtenstein (see Figure 82). In the EU-15,¹ 6.1 percent of the agricultural land was organic, thus representing a higher share than in the EU-13 (4.7 percent). In the new member states, Estonia, the Czech Republic, and Latvia have more than 10 percent organic land. For EU candidates and potential candidates, shares of the total organic agricultural land are still low, whereas two EFTA countries, Switzerland (12.7 percent) and Liechtenstein (31 percent), have very high shares (see Table 49).

Europe: Distribution of organic farmland shares 2014

Source: FiBL-AMI survey 2016

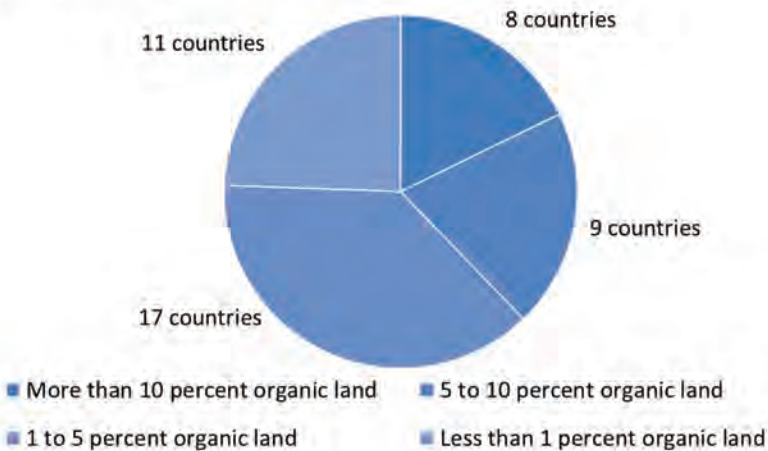


Figure 81: Europe: Distribution of the organic shares of all farm land 2014

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

¹ EU-15 refers to the 15 member states that were members of the European Union before 2004.

Europe: Shares of organic agricultural land by country 2014

Source: FiBL-AMI Survey 2016

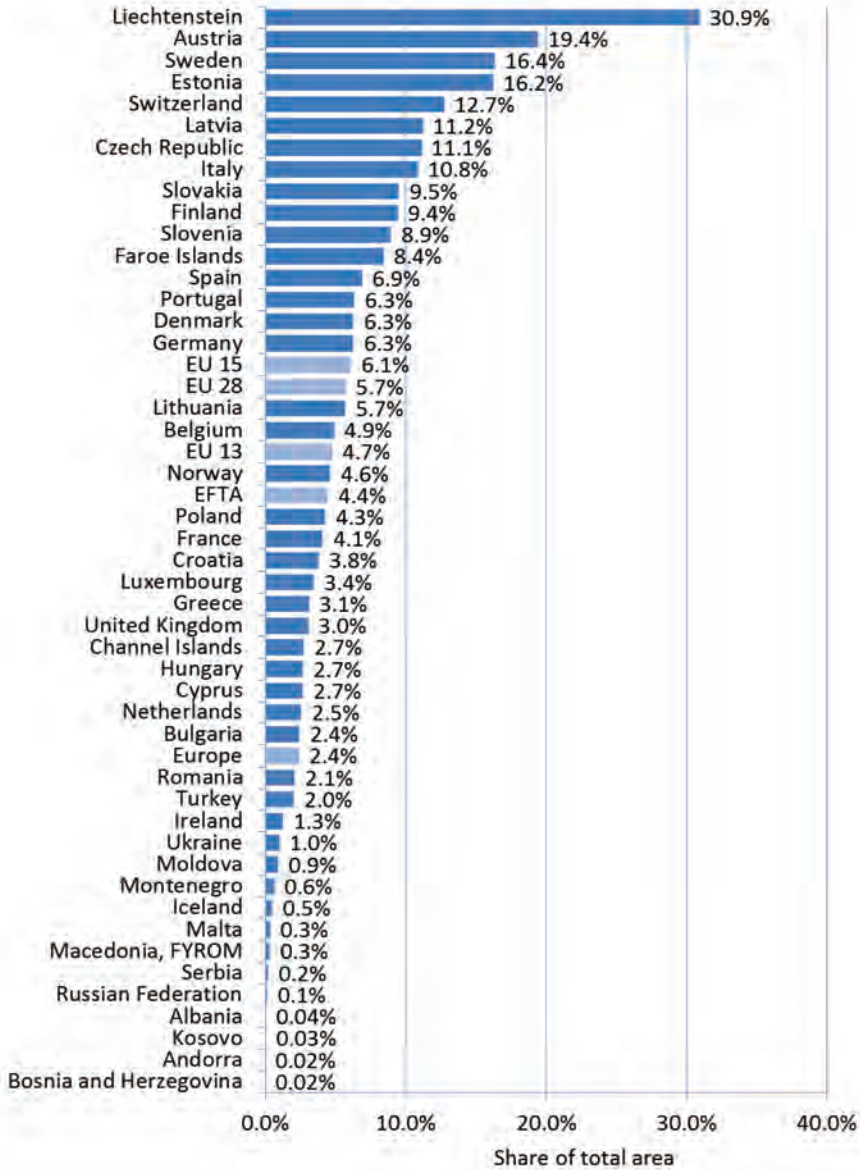


Figure 82: Europe: Shares of total organic agricultural land 2014

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

Growth of the organic land

In 2014, the organic agricultural land in Europe increased by 260'000 hectares (European Union: 113'000 hectares) or 2 percent.

The countries with the largest growth of organic land were the Russian Federation¹ (+101'000 hectares), Spain (+100'000), and Italy (+70'000).² The highest relative increases were in the Russian Federation (+70 percent) Bulgaria and Croatia (+32 and +23 percent respectively).

Since 2004, when 10 new member states joined the European Union, organic agricultural land has increased by 72 percent in the EU (Europe: 78 percent) – from 5.9 million hectares in 2004 to 10.3 million hectares in 2014. In the EU-15, growth was slower (+51 percent), whereas in the new member states, the area trebled. In many EU-15 countries, organic farmland had already grown before 2004 to a comparatively high level. For EU candidates and potential candidates, high growth (almost 400 percent) was noted, and most of the growth in the past years was in Turkey. In the EFTA countries, growth was modest.

Europe: Development of organic agricultural land 1985-2014

Source: Lampkin, Nic, FiBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

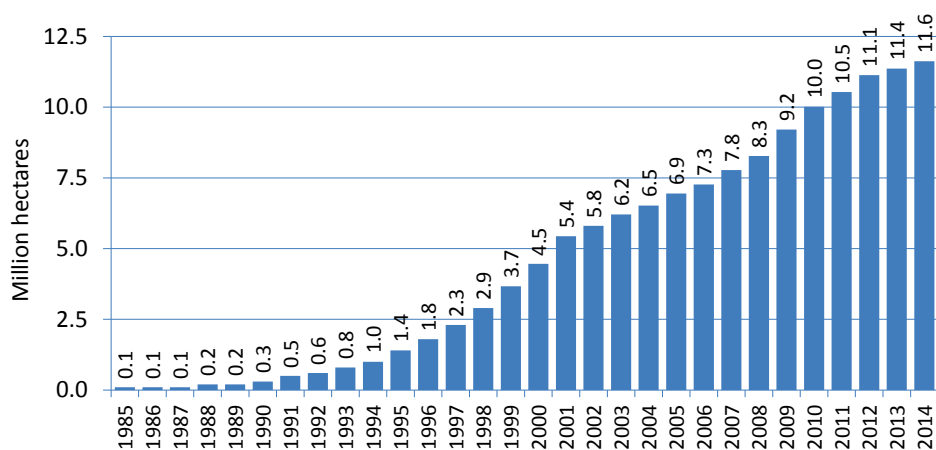


Figure 83: Europe: Development of organic agricultural land 1985-2014

Source: Lampkin, Nic, FiBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

¹ We assume that the growth in the Russian Federation is partly due to the fact that one of the certifiers among who the data was collected had not provided data updates for a couple of years.

² It should be noted that for Portugal that we listed among the three countries with the largest area increase in 2013 (Willer/Schaack 2015), the data were revised. In 2013, there were 197'000 hectares (2014: 212'000 hectares and 2012: 200'000 hectares).

Europe: Growth of organic farmland by country group 2000-2014

Source: Lampkin, Nic, FiBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

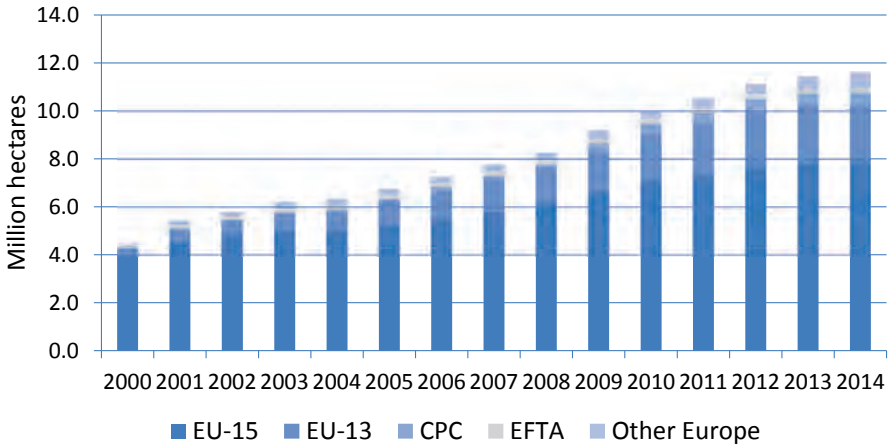


Figure 84: Europe: Growth of organic agricultural land by country group, 2000-2014

Source: Lampkin, Nic, FiBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

Europe: The 10 countries with the highest growth of organic agricultural land in 2014

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

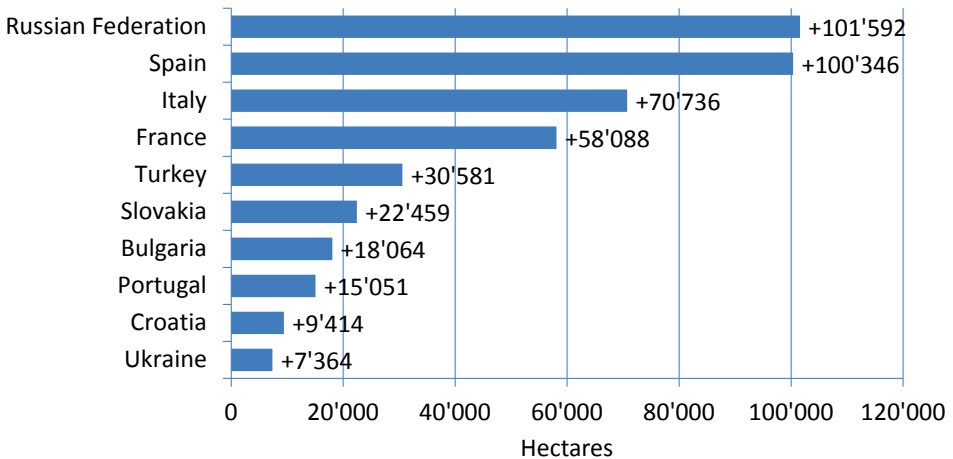


Figure 85: Europe: The 10 countries with the highest growth of organic agricultural land in 2014

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

Organic land use and crops

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 supplied. Arable land constituted the largest area of the organic land in the Europe with 5.1 million hectares (4.1 million hectares in the European Union), followed by 4.8 million hectares of permanent grassland (4.6 million hectares in the European Union), and 1.4 million hectares of permanent crops (1.2 million hectares in the European Union). Cereals were the largest crop group covering 1.5 million hectares in the EU (1.9 million hectares in Europe) (see Table 50).

Table 50: Europe: Organic agricultural land by land use type (in million hectares) 2014

Main use [Mio ha]	EU [EU15]	EU [EU13]	European Union [EU 28]	CPC	EFTA	Other non EU	Europe
Arable crops	3.0	1.1	4.1	0.3	0.06	0.5	5.1
Permanent crops	1.1	0.1	1.2	0.2	0.002	0.01	1.4
Permanent grassland	3.4	1.2	4.6	0.02	0.1	0.05	4.8
Total	7.8	2.2	10.3	0.5	0.2	0.7	11.6

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

Note: Total includes other agricultural land, land for which no further details were available, and correction values for double-cropped areas.

Europe: Use of agricultural organic land 2014

Source: FiBL-AMI Survey 2016

Land use types 2013

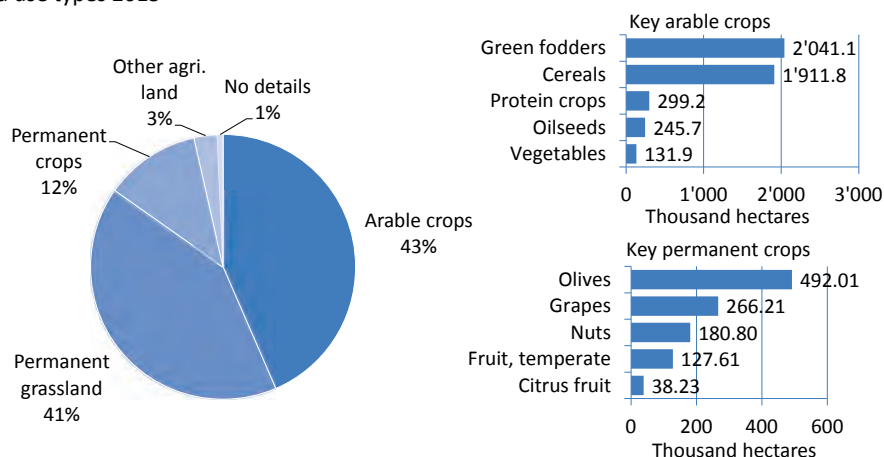


Figure 86: Europe: Land use in organic agriculture 2014

Source: FiBL-AMI survey 2016

More than half a million hectares of grassland (permanent and temporary, as well as green fodder) are under conversion, as well as 0.23 million hectares of cereals, 0.14 million hectares of olives, 61'000 hectares of grapes, and 37'000 hectares of nuts.¹

The area for all land use types has grown steadily since 2004, even though there was a slight decrease for permanent grassland in 2014. The largest increase was for permanent crops, which have almost tripled since 2004 (Figure 87). In 2014, even though the organic area did not increase much, a clear tendency for arable land and permanent cropland to increase was noted. By country, the largest permanent grassland or grazing areas are in Spain, followed by Germany and the UK. The largest cropland areas (i.e. arable and permanent crops together) are in Italy (0.9 million hectares), Spain (0.8 million hectares), and France (0.7 million hectares).

Europe: Growth of area by land use type 2004-2014

Source: FiBL-AMI Surveys 2006-2016, OrganicDataNetwork Surveys 2013-2015

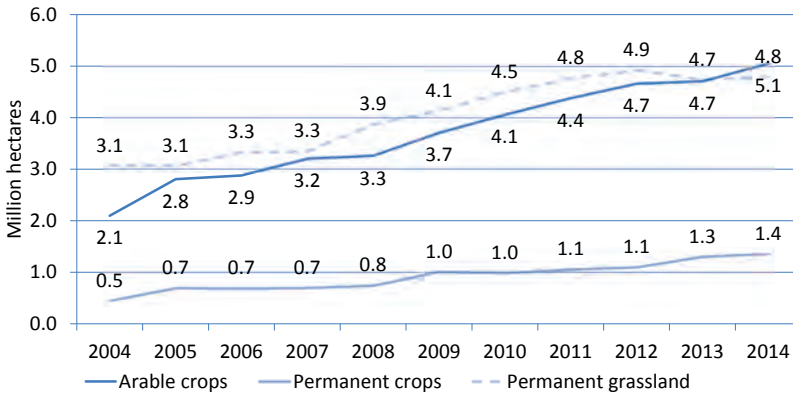


Figure 87: Europe: Growth of organic agricultural land by land use type 2004-2014

Source: FiBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

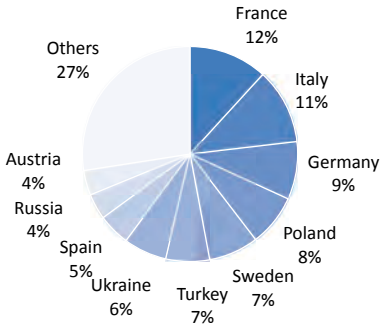
Arable and permanent crops

In Europe, 5.1 million hectares were categorised as arable land in 2014. The countries with the largest arable crop areas were Italy, France, and Germany. The key arable crop group was green fodder (2 million hectares), followed by cereals (1.9 million hectares). In Europe, 11 percent of the agricultural land was used to grow permanent crops (1.4 million hectares; 8.6 percent of all permanent crops) (Table 53). Apart from the agricultural land, there are large areas of wild collection in Europe, 16.3 million hectares in total (up from 13.4 in 2013). The largest are is in Finland (berries) followed by a number of South Eastern European countries.

¹ For more data on crops and conversion areas by country see the OrganicDataNetwork database at <http://www.organicdatanetwork.net/odn-statistics/odn-statistics-data/odn-statistics-data-crops.html>

Europe: Distribution of organic arable land by country 2014
(Total: 5 million hectares)

Source: FiBL-AMI survey 2016



Europe: Distribution of organic arable land by crop group 2014
(Total: 5 million hectares)

Source: FiBL-AMI survey 2016

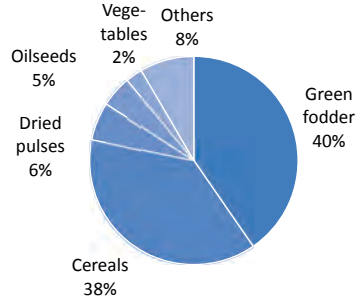
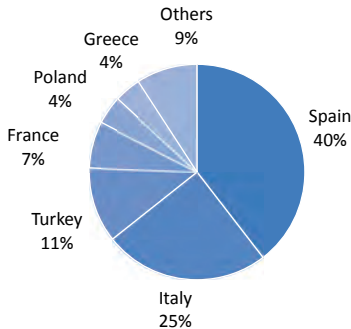


Figure 88: Europe: Distribution of organic arable land by country 2014
Figure 89: Europe: Distribution of organic arable land by crop group 2014
Source: -FiBL-AMI survey 2016

Europe: Distribution of organic permanent cropland by county 2014
(Total 1.4 million hectares)

Source: FiBL-AMI survey 2016



Europe: Distribution of organic permanent cropland by group 2014
(Total 1.4 million hectares)

Source: FiBL-AMI survey 2016

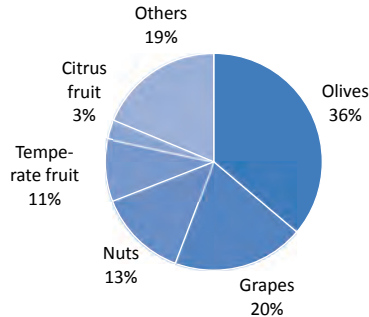


Figure 90: Europe: Distribution of organic permanent cropland by country 2014
Figure 91: Europe: Distribution of organic permanent cropland by crop group 2014
Source: -FiBL-AMI survey 2016

Development of selected crop groups 2004-2014

Source: FiBL-AMI Surveys 2006-2016, OrganicDataNetwork Surveys 2013-2015

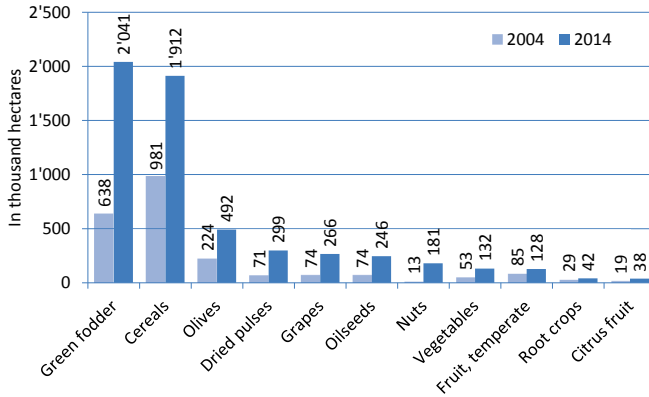


Figure 92: Europe: Growth of selected arable and permanent crop groups in Europe 2004 and 2014

Source: FiBL-AMI survey 2016

Producers, processors and importers

In 2014, there were 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) (Figure 93). 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 percent and in Europe by 81 percent. Fifteen percent of the world's organic farmers are in Europe (Willer and Lernoud 2016). The number of processors and importers increased in almost all European countries in 2014. In the EU, there were almost 50'000 processors (over 51'000 in Europe) and almost 1'700 importers (almost 1'900 in Europe). 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 EU-15 and Switzerland (Table 55, Figure 95).

Europe: Organic producers by country 2014

Source: FiBL-AMI Survey 2016

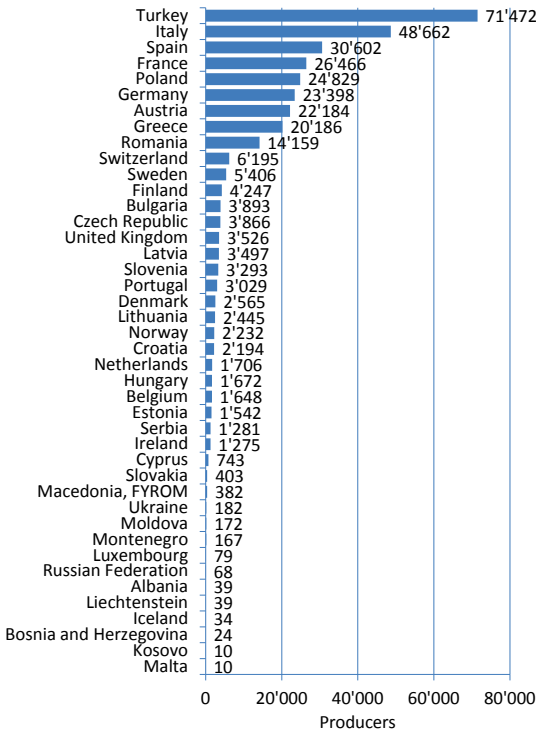


Figure 93: Europe: Numbers of producers by country 2014

Source: FiBL-AMI survey 2014 based on national data sources and Eurostat. Only countries with ten and more producers

Europe and European Union: Development of organic producers 2000-2014

Source: Lampkin, Nic, FiBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

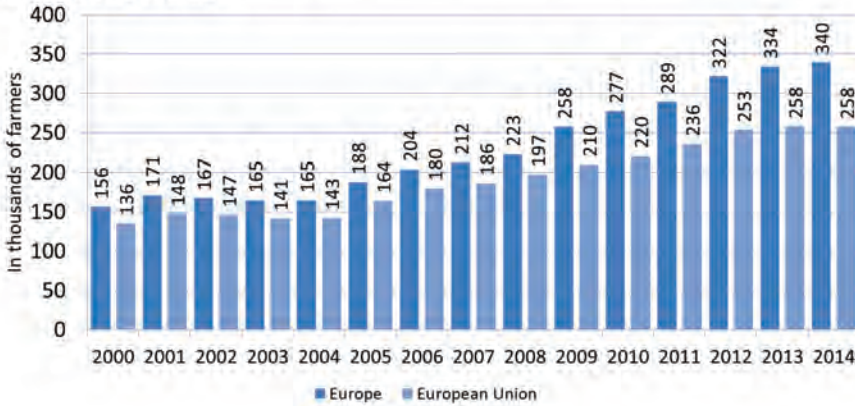
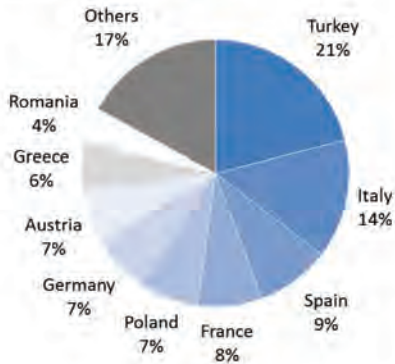


Figure 94: Europe: Growth of the number of producers in Europe and the European Union 2000-2014

Source: Lampkin, Nic, FiBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015, based on national data sources and Eurostat

Europe: Distribution of producers 2014

Source: FiBL-AMI survey 2016



Europe: Distribution of organic processors 2014

Source: FiBL-AMI survey 2016



Figure 95: Europe: Distribution of organic producers and processors by country 2014

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

Domestic market development

Retail sales by country

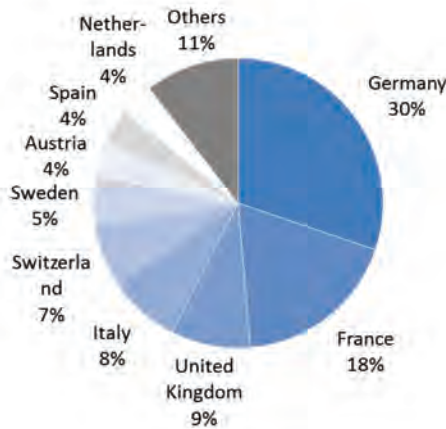
The organic market in Europe increased by 7.6 percent to 26.2 billion euros (EU: 23.9 billion euros, +7.4 percent). Unfortunately, not all countries provide data on their domestic markets on a regular base (Table 56, Figure 97).

Germany is the largest market in Europe (7.9 billion euros), and after the United States it is the second biggest organic market in the world. France held second place with 4.8 billion; it is a market that has shown very dynamic growth in the past couple of years. The UK is in third place (2.3 billion euros), followed by Italy (2.1 billion euros) (Figure 96).

Comparing organic markets worldwide by a single market, the United States has the lead: 43 percent of global retail sales of organic products are in this country (27.1 billion euros), followed by the European Union. Comparing retail sales by continent, North America continues to be the largest market (29.8 billion euros) (Figure 96 and Figure 12).

Europe: Distribution of retail sales 2014

Source: FiBL-AMI survey 2016



World: distribution of retail sales by single market 2014

Source: FiBL-AMI survey 2016

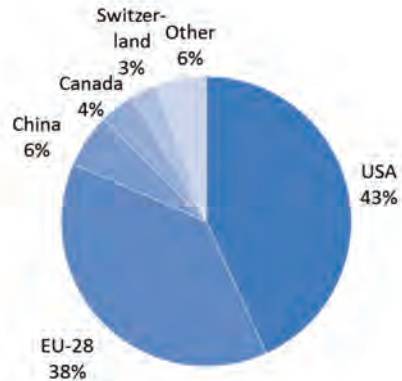


Figure 96: Europe: Distribution of retail sales 2014; Right: Distribution of retail sales by single market worldwide 2014

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

Europe: Organic retail sales value by country 2014

Source: FiBL-AMI Survey 2016

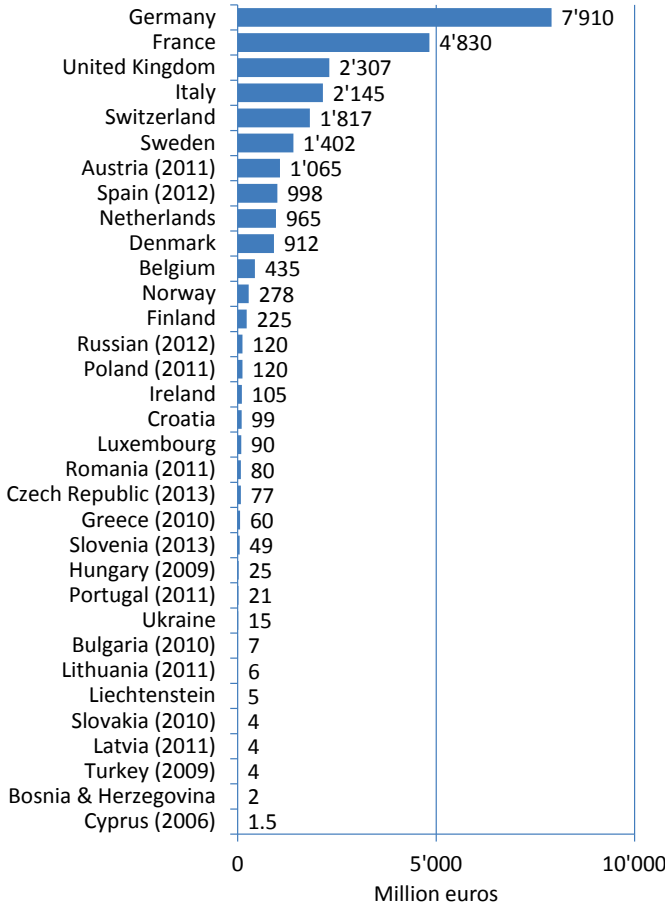


Figure 97: Europe: Retail sales by country 2014

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

Market growth

The organic market in Europe and the European Union increased by approximately 7.6 percent in 2014. All countries, for which new data was available, showed growth. Germany, the largest market in Europe, had a growth rate of 4.8 percent; in France, the second largest market, growth was by 10 percent. Exceptional growth was noted for Sweden, where the market grew by more than 40 percent, an extraordinary growth rate for a mature market (see page 226).

In the United Kingdom, where retail sales had decreased for a number of years, a growth of 3.8 percent was noted. In 2015, in many European countries, the market experienced further significant growth, and growth rates were similar to those in 2014 (final figures are expected to be available in the first months of 2016).

Consumer interest in organic products remains high, even though organic products have to compete more and more with sustainability and regional labels (Figure 98).

Europe and European Union: Market development 2004-2014

Source: FiBL-AMI Surveys 2006-2016, OrganicDataNetwork Surveys 2013-2015

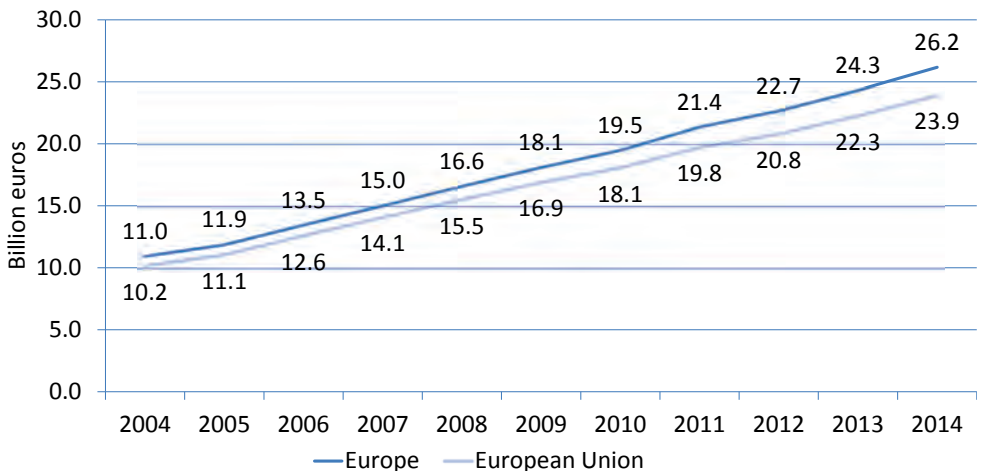


Figure 98: Europe: Growth of organic retail sales in Europe and the European Union, 2004-2014

Source: FiBL-AMI Surveys 2006-2016, and OrganicDataNetwork Surveys 2013-2015

Market shares and per capita consumption

The share that organic retail sales have of all retail sales is an important indicator of the importance the organic market has in a given country. As in the past, the highest market shares were reached in Denmark (7.6 percent),¹ Switzerland (7.1 percent), and Austria (6.5 percent in 2011) (Figure 99, Table 56). The highest per-capita consumption of organic food in 2014 was in Switzerland (221 euros), Luxembourg (164 euros), and Denmark (163 euros). However, care must be taken in interpreting these figures, as the costs of living differ quite considerably across countries.

Europe: The eleven countries with the highest shares of the total market 2014
 Source: FiBL-AMI Survey 2016

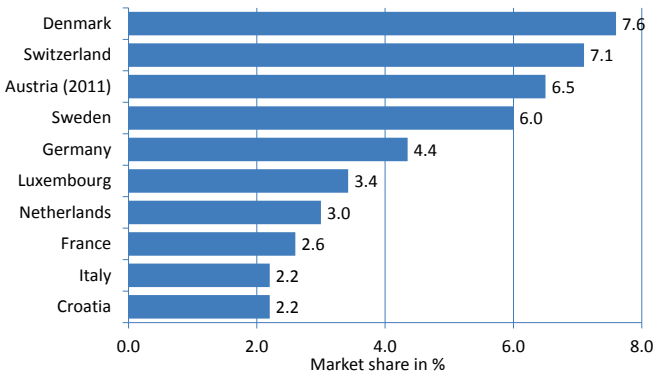


Figure 99: Europe: The ten countries with the highest market shares of the total retail sales 2014

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

Europe: The countries with the highest per-capita consumption 2014
 Source: FiBL-AMI Survey 2016

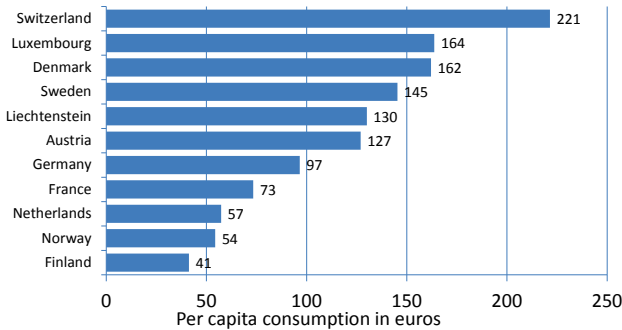


Figure 100: Europe: The 12 countries with the highest per capita consumption 2014

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

¹ Please note that the figure for Denmark is lower than the one communicated in 2013. This is due to the fact that the figure for the overall market in Denmark was revised.

Comparison of organic products and product groups with the total market

- In many countries, organic eggs are one of the success stories within the total retail market. Table 51 shows that Switzerland and France, for example, reach market shares in value of over 20 percent.
- 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 percent and 15 percent of the sales value of all vegetables sold in Switzerland, Austria, and Germany. Fresh carrots alone, for example, have a 30 percent market share in Germany.
- In some countries, organic dairy products reach market shares of about 5 percent of all dairy products in overall sales value. In Switzerland, they even reach 11 percent.
- Individual products can reach much higher market shares. Organic baby food (over 40 percent in Germany) or organic meat substitutes (60 percent in Germany) 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.

Table 51: Europe: Shares of organic products and product groups of their respective total markets for selected countries 2014

Product group	Austria	Belgium	Finland	France (2013)	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 (bread)	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%	22.1%	16.7%	12.7%	7.5%	22.7%
Fruit	10.7%	3.5%		4.3%	6.7%		1.7% ⁴⁾	10.1%
Meat and meat products	3.5% ⁵⁾	1.3%	0.6%	1.60%	2.1%	2.8%	0.3%	4.8% ⁶⁾
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% ⁷⁾	4.0%	8.6%	3.9% ⁷⁾	3.6%	14.6%

Compiled by: FiBL-AMI 2016; Sources: Austria (only general retailers): RollAMA/AMA Marketing; Belgium (only general retailers): GfK Panel services Benelux; Finland: Pro Luomo, France: Agence Bio; Germany: AMI based on GfK household panel data; Netherlands: Bio Monitor; Norway: Norwegian Agriculture Agency (only general retailers); Switzerland (only general retailers): Bio Suisse

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 the 2013; 4) Fruit, berries and nuts; 5) Meat only; 6) Includes fish; 7) Fruit and vegetables

Note: Due to classifications and nomenclatures differing from country to country, it is not possible to supply data for all product groups, even if data for individual products may be available. Not all countries have data on the market shares of organic products.

Marketing channels

Some countries are in a position to break down their retail sales data by marketing channel. Some are even able to provide a breakdown by product and marketing channel. Some countries have data for catering sales, and some countries provide data for direct marketing and box schemes. Wherever possible, the figure for the catering sales was deducted from the figure for the total organic market (see Table 56).

Figure 101 on the marketing channels shows that the importance of the various marketing channels differs from country to country. In the past, countries with a strong involvement by general retailers showed a strong growth of their organic markets (e.g. Austria, Denmark, Switzerland, and the United Kingdom). However, the financial crisis showed the danger of a strong dependence on supermarkets. In those years, in the UK, the market decreased, and in Germany, stagnation was noted for general retail sales, whereas it continued to grow in the specialized channels. France, Italy, and Germany are good examples of countries with strong market growth, while, at the same time, specialized retailers play a very important role.

Retail sales by channel in selected European countries 2014, based on retail sales value (million euros)

Source: FiBL-AMI survey 2016

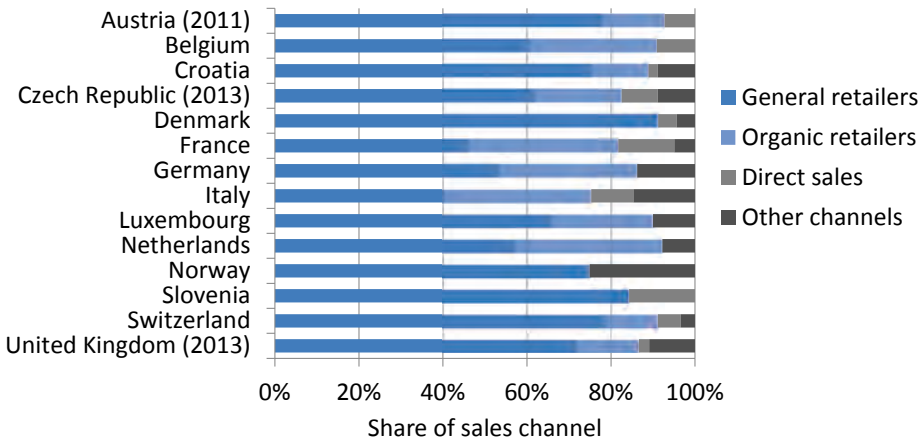


Figure 101: Europe: Marketing channels for organic products in selected countries 2014

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

Conclusion

Current available data on organic farming and the market in Europe and globally show that, in an international context, the European organic sector is well-developed. Relatively high shares of agricultural land, a continual growth of the area and number of operators, as well as a fast-growing market, show the exceptional dynamics that this market has.

For many countries, the market is growing faster than production and domestic supply cannot meet demand. Therefore, many organic organisations or market actors are calling for more farmers to convert to organic.

The short data analysis provided in this report shows that there are still large discrepancies among European countries. Even though some countries in Central Eastern Europe have reached high shares of organic agricultural land, consumer spending, - although growing - remains low as a proportion of total spending on food in these countries.

Another issue that needs to be solved is data availability. For instance, imports and exports play a very important role in trade within the European Union and with external partners, but almost no relevant data exists. Furthermore, whilst the availability of domestic market data is improving, it is collected with a wide range of methods and, strictly speaking, is not accurately comparable. While the OrganicDataNetwork online database improves the availability and accessibility of organic market data, it also clearly shows the current shortcomings. Therefore, we recommend that data availability and accessibility be increased, that classifications, nomenclatures, and definitions, in particular, for organic market data, be harmonized, and that data quality be improved (Willer and Schaack 2014a).

Acknowledgements

This article gives an overview of results of the market data collected by FiBL and AMI in 2015/2016. The data collection was co-financed by the European Commission, Directorate General for Agriculture and Rural Development, and it builds on the activities of the OrganicDataNetwork project, which was funded by the European Union (EU) under its 7th framework programme for research, demonstration and technological development and ended in 2014.¹ Under this project, for the first time, detailed organic market data for all European countries was collected² and stored in one single database, which is available online.³ In order to present these data, the statistical report for Europe is more comprehensive than for the other continents. 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.

References and further reading

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¹ The project "Data network for better European organic market information" (OrganicDataNetwork) has received funding from the European Union's Seventh Framework Programme for Research, Technological Development and Demonstration under grant agreement no 289376.

² The data was collected by the Research Institute of Organic Agriculture (FiBL), Switzerland and the Agricultural Market Information Company (AMI), Germany, among the partners of the OrganicDataNetwork. In addition, further data sources were used.

³ This database is available at <http://www.organicdatanetwork.net/odn-statistics.html>

Organic Agriculture in Europe: Tables

Table 52: Europe: Organic agricultural land 2013 and 2014, growth and share of total agricultural land
Not for all countries 2014 data was available. For information on data year, see page 311.

	Country	Area 2013 [ha]	Area 2014 [ha]	Share of total agr. land [%]	Change 2013-2014 [%]
EU [EU15]	Austria	526'689	525'521	19.4%	
	Belgium	62'529	66'704	4.9%	+7%
	Denmark	169'298	165'773	6.3%	-2%
	Finland	206'170	212'653	9.4%	+3%
	France	1'060'756	1'118'845	4.1%	+5%
	Germany	1'044'955	1'047'633	6.3%	
	Greece	383'606	256'131	3.1%	-33%
	Ireland	53'565	51'871	1.3%	-3%
	Italy	1'317'177	1'387'913	10.8%	+5%
	Luxembourg	4'447	4'490	3.4%	+1%
	Netherlands	49'394	49'159	2.5%	
	Portugal	197'295	212'346	6.3%	+8%
	Spain	1'610'129	1'710'475	6.9%	+6%
	Sweden	500'996	501'831	16.4%	
	United Kingdom	558'718	521'475	3.0%	-7%
EU [EU15] Total		7'745'723	7'832'820	6.1%	+1%
EU [EU13]	Bulgaria	56'287	74'351	2.4%	+32%
	Croatia	40'641	50'054	3.8%	+23%
	Cyprus	4'303	3'887	2.7%	-10%
	Czech Republic	474'231	472'663	11.1%	
	Estonia	151'256	155'560	16.2%	+3%
	Hungary	131'018	124'841	2.7%	-5%
	Latvia	200'433	203'443	11.2%	+2%
	Lithuania	166'330	164'390	5.7%	-1%
	Malta	7	34	0.3%	+381%
	Poland	669'863	657'902	4.3%	-2%
	Romania	301'148	289'252	2.1%	-4%
Slovakia	157'848	180'307	9.5%	+14%	
Slovenia	38'665	41'237	8.9%	+7%	
EU [EU13] Total		2'392'029	2'417'922	4.7%	+1%
CPC	Albania	515	515	0.04%	
	Bosnia and Herzegovina	292	353	0.02%	+21%
	Kosovo	114	114	0.03%	
	Macedonia, FYROM	3'146	3'146	0.3%	
	Montenegro	3'068	3'289	0.6%	+7%
	Serbia	8'228	9'548	0.2%	+16%
	Turkey	461'396	491'977	2.0%	+7%
	CPC Total		476'759	508'942	1.5%
EFTA	Iceland	9'710	11'174	0.5%	+15%
	Liechtenstein	1'137	1'135	30.9%	
	Norway	51'662	49'827	4.6%	-4%
	Switzerland	128'140	133'973	12.7%	+5%
EFTA Total		190'649	196'108	4.4%	+3%
other European countries	Andorra	1	4	0.02%	+208%
	Belarus		Wild collection only		
	Channel Islands	240	240	2.7%	
	Faroe Islands	253	253	8.4%	
	Moldova	22'102	22'102	0.9%	
	Russian Federation	144'254	245'846	0.1%	+70%
	Ukraine	393'400	400'764	1.0%	+2%
other European countries Total		560'250	669'209	0.2%	+19%
Total Europe		11'365'411	11'625'001	2.4%	+2%
Total European Union		10'137'753	10'250'742	5.7%	+1.11%

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources. For data sources see annex, page 315

CPC: Candidates and Potential Candidates for the European Union; EFTA: European Free Trade Association; EU-13: The countries that became a member of the European Union in or after May 2004; EU-15: Member countries in the European Union prior to the accession of ten candidate countries on 1 May 2004

Table 53: Europe: Land use and crop groups in organic agriculture 2013 and 2014

Land use	Crop group	Area 2013 [ha]	Share of all agr. land [%]	Area 2014 [ha]	Share of all agr. land [%]	Change 2013/2014 [%]
Arable land crops	Arable crops, no details	112'242	No Data	205'936	No Data	+83.5%
	Cereals	1'854'727	1.4%	1'911'845	1.5%	+3.1%
	Dried pulses	239'406	5.8%	299'229	7.3%	+25%
	Flowers and ornamental plants	622	No Data	222	No Data	-64.3%
	Hops	220	0.7%	226	0.8%	+2.6%
	Industrial crops	12'378	No Data	13'373	No Data	+8%
	Medicinal and aromatic plants	41'684		48'398		+16.1%
	Mushrooms and truffles	181	5%	586		+222.9%
	Oilseeds	196'336	0.6%	245'700	0.8%	+25.1%
	Plants harvested green	1'988'288	12.7%	2'041'149	13.1%	+2.7%
	Root crops	40'830	0.4%	41'676	0.4%	+2.1%
	Seeds and seedlings	3'918	No Data	15	No Data	-99.6%
	Strawberries	3'696	2.1%	3'639	2.1%	-1.5%
	Textile crops	9'223	0.9%	10'711	1.1%	+16.1%
	Tobacco	1'150	0.4%	1'867	0.7%	+62.4%
	Vegetables	120'596	2.4%	131'882	2.7%	+9.4%
	Arable crops, other	85'271	No Data	98'881	No Data	+16%
Arable land crops total		4'710'773	2.4%	5'055'335	2.6%	+7.3%
Permanent crops	Berries	30'284	10.7%	31'440	11.2%	+3.8%
	Citrus fruit	37'486	5.6%	38'232	5.7%	+2%
	Fruit, temperate	139'412	4.7%	127'611	4.3%	-8.5%
	Fruit, tropical and subtropical	24'743	6.8%	31'643	8.7%	+27.8%
	Fruit, no details	2'030	No Data	No Data	No Data	
	Grapes	259'330	6.6%	266'208	6.8%	+2.7%
	Medicinal and aromatic plants, permanent	302	0.6%	457	0.9%	+51.2%
	Nurseries	720	No Data	550	No Data	-23.6%
	Nuts	188'640	11.5%	180'802	11.1%	-4.2%
	Olives	479'729	8.2%	492'006	8.4%	+2.6%
	Tea	34	0%	3'897	5.1%	+11465.2%
Permanent crops, other	140'389	No Data	186'647	No Data	+32.9%	
Permanent crops total		1'303'110	8.2%	1'359'534	8.6%	+4.3%
Total		6'013'883	2.8%	6'414'868	3%	+6.7%

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources. For data sources see annex, page 315

Table 54: Europe: All organic areas 2014

Country	Agriculture [ha]	Aqua-culture [ha]	Forest [ha]	Grazed non agri. Land [ha]	Wild collection [ha]	Total [ha]
Albania	515				467'783	468'298
Andorra	4					4
Austria	525'521					525'521
Belarus					11'494	11'494
Belgium	66'704				3	66'707
Bosnia and Herzegovina	353				124'141	124'494
Bulgaria	74'351				679'845	754'196
Channel Islands	240					240
Croatia	50'054				8	50'062
Cyprus	3'887					3'887
Czech Republic	472'663					472'663
Denmark	165'773				2'648	168'421
Estonia	155'560				40'579	196'139
Faroe Islands	253					253
Finland	212'653				9'100'000	9'312'653
France	1'118'845				2'809	1'121'654
Germany	1'047'633					1'047'633
Greece	256'131					256'131
Hungary	124'841					124'841
Iceland	11'174				214'524	225'698
Ireland	51'871					51'871
Italy	1'387'913				62'647	1'450'560
Kosovo	114					114
Latvia	203'443					203'443
Liechtenstein	1'135					1'135
Lithuania	164'390	5'049				169'438
Luxembourg	4'490					4'490
Macedonia, FYROM	3'146			8'112	556'600	567'858
Malta	34					34
Moldova	22'102					22'102
Montenegro	3'289				139'809	143'097
Netherlands	49'159					49'159
Norway	49'827					49'827
Poland	657'902					657'902
Portugal	212'346		19'533		26	231'905
Romania	289'252				1'787'548	2'076'800
Russian Federation	245'846				1'835'383	2'081'229
Serbia	9'548					9'548
Slovakia	180'307					180'307
Slovenia	41'237					41'237
Spain	1'710'475				38'184	1'748'659
Sweden	501'831					501'831
Switzerland	133'973					133'973
Turkey	491'977				685'528	1'177'505
Ukraine	400'764				530'000	930'764
United Kingdom	521'475					521'475
Total	11'625'001	5'049	19'533	8'112	16'279'559	27'937'253

Source: FiBL-AMI survey 2016 based on Eurostat and national data sources For data sources see annex, page 315

Table 55: Europe: Organic producers, processors and importers by country group 2014

For information on data year, see page 311.

	Country	Producers [no.]	Processors [no.]	Importers [no.]
EU [EU15]	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	
EU [EU15] total		194'979	47'636	1'382
EU [EU13]	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
EU [EU13] total		62'546	2'332	268
CPC	Albania	39	22	4
	Bosnia and Herzegovina	24	8	
	Kosovo	10	10	
	Macedonia, FYROM	382	7	2
	Montenegro	167	9	
	Serbia	1'281	16	30
	Turkey	71'472	839	34
CPC total		73'375	911	70
EFTA	Iceland	34	26	2
	Liechtenstein	39		
	Norway	2'232	490	65
	Switzerland	6'195		
EFTA total		8'500	516	67
other European countries	Andorra			
	Belarus			
	Faroe Islands			
	Moldova	172		
	Russian Federation	68	36	
	San Marino		2	
Ukraine	182	59	60	
other European countries total		424	100	60
Europe total		339'824	51'495	1'847
European Union total		257'525	49'968	1'650

Source: FiBL-AMI survey 2016, based on Eurostat and national data sources. For data sources see annex, page 315

CPC: Candidates and Potential Candidates for the European Union; EFTA: European Free Trade Association; EU-13: The countries that became a member of the European Union in or after May 2004; EU-15: Member countries in the European Union prior to the accession of ten candidate countries on 1 May 2004

Table 56: Europe: The market for organic food 2014

	Country	Data year	Retail sales [Mio €]	€/person	Retail sales: growth 2013/2014 [%]	Retail sales: Share value [%]	Catering [Mio €]
EU [EU15]	Austria	2011	1'065	127		6.5%	64
	Belgium	2014	435	39	3.8%	1.8%	
	Denmark	2014	912	162	6.3%	7.6%	175
	Finland	2014	225	41	4.6%	1.7%	
	France	2014	4'830	73	10.2%	2.5%	191
	Germany	2014	7'910	97	4.8%	4.4%	
	Greece	2010	60	5			
	Ireland	2014	105	23	7.0%		
	Italy	2014	2'145	35	6.2%	2.2%	
	Luxembourg	2014	90	164		3.4%	
	Netherlands	2014	965	57	9.9%	3.0%	175
	Portugal	2011	21	2		0.2%	
	Spain	2012	998	21		1.0%	
	Sweden	2014	1'402	145	45.0%	6.0%	
United Kingdom	2014	2'307	36	4.0%		21 (2013)	
EU [EU15] total			23'471	58			626
EU [EU13]	Bulgaria	2010	7	1			0.05 (2009)
	Croatia	2014	99	23		2.2%	
	Cyprus	2006	2	2			
	Czech Republic	2013	77	7		0.7%	
	Estonia						
	Hungary	2009	25	3		0.3%	
	Latvia	2011	4	2		0.2%	
	Lithuania	2011	6	2		0.2%	
	Poland	2011	120	3		0.2%	1
	Romania	2011	80	4		0.7%	
	Slovakia	2010	4	1		0.2%	
Slovenia	2013	49	27		1.8%		
EU [EU13] total			472	4			1
CPC	Bosnia and Herzegovina	2014	2	0.4			
	Montenegro	2010	0	0.2			
	Turkey	2009	4	0.1			
CPC total			5	0.1			
EFTA	Liechtenstein	2014	5	130			
	Norway	2014	278	54	25.0%	1.5%	
	Switzerland	2014	1'817	221	7.5%	7.1%	
EFTA total			2'100	154			
other European countries	Ukraine	2014	15	0.3			
	Russian Federation	2012	120	1			
other European countries total			135				
Europe total			26'183	34	7.6%		
European Union total			23'943	47	7.4%		

Source: FiBL-AMI survey 2016. For details on data sources see annex, page 315

Note on table

- › Blank cells: no information available
- › Where no published data exists, best estimates from a range of experts have been used, but these were not available for all cases, so sometimes earlier estimates are shown.
- › Values published in national currencies were converted to euros using the 2013 average exchange rates according to the Central European bank.
- › Please note that due to fluctuating exchange rates it is not possible to make a year-to-year comparison for countries that do not have the Euro as their currency.
- › For details on data sources please see annex.
- › Corrections, revisions and updates should be sent to helga.willer@fibl.org
- › Corrections and revisions will be posted at www.organic-world.net

Sources for retail sales value

Austria: Organic Retailers Association; Belgium: Bioforum, VLAM and GfK; Bosnia and Herzegovina: Ecozept; Bulgaria: Bioselena; Croatia: Darko Znaor, private consultant; Cyprus: Ecozept; Czech Republic: UZEI; Denmark: Danish Agriculture & Food Council/Organic Denmark/Statistics Denmark; Estonia: Centre of Ecological Engineering; Finland: Pro Luomo; France: Agence Bio; Germany: AMI; Greece: N. van der Smissen; Hungary: Biokorsar Survey; Ireland: Bord Bia; Italy: AssoBio; Latvia: Ekoconnect; Liechtenstein: KBA; Lithuania: Ekoconnect; Luxembourg: Biogros estimate; IBLA; Montenegro: Ecozept; Netherlands: Bionext, Bio-Monitor; Norway: Norwegian Agricultural Authority SLE; Poland: IFOAM EU estimate; Portugal: Interbio; Romania: BCG-Global Advisors; Russian Federation: Eco-Control; Serbia: Ecozept; Slovakia: Ecozept; Slovenia: ISD; Spain: MAGRAMA; Sweden: SCB; Switzerland: Bio Suisse; Turkey: MARA; Ukraine: Organic Federation of Ukraine; United Kingdom: Soil Association

Organic Boom in Sweden in 2014 and 2015

Johan Cejje¹

In 2014 and 2015, the Swedish organic market experienced an unprecedented growth, increasing in value by more than 40 percent – a rate which is very remarkable for an already well-established market. In this article, the reasons behind this development are explained.

Market structure

Since the late 1980s and 1990s, the Swedish market has developed in such a way that organic products are present in more or less all retail outlets. For many years the range was limited in most stores, but between 2007 and 2009, Sweden experienced a sharp increase in sales value of organic products. This period can be seen as an “awakening” for the organic retail industry. At this point in time, major investments were made in private organic labels and developing an increased range of organic products. This made it much easier for the consumer to choose organic as when they decided to look for organic products, they did not have to change their shop or even the section in the shop. Thus, this period put in place important retail infrastructure that could quickly be scaled-up.

In 2010, the market slowed down again, but by now, farmers had started to convert. Foremost, the dairies had signed contracts with many farmers. This resulted in a big surplus of organic beef and milk in the following years and at a considerable financial loss. However, this also meant that, when the market improved in 2013, it was not a big problem to provide the market with dairy and beef products, allowing rapid market growth.

Socioeconomic conditions

Sweden escaped the financial crisis of 2008 and the Euro turbulence in recent years and has enjoyed growth and stability from 2006 onwards. Parliament also made changes in the tax system, which resulted in lower taxes for large income groups, who thus had more money to spend. There was also a general growth in rising household debts (for real estate), which improved the liquidity of consumers. By 2013, many people in Sweden felt financially safe and feel they can afford the food they want. They do not feel they have to cut back on things and look for discount prices.

Tipping point in 2013

In surveys, Swedish consumers have proven to be more altruistic in their shopping than most other European consumers (e.g. Ruiz de Maya et al, 2011). Research has shown that the LOHAS group² is large in Sweden, with around 35 to 37 percent of consumers

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² The Lifestyles of Health and Sustainability (LOHAS) is a particular market segment related to sustainable living, "green" ecological initiatives, and generally composed of a relatively upscale and well-educated population segment. Source: Wikipedia entry on LOHAS, available at <https://en.wikipedia.org/wiki/LOHAS>.

belonging to that group. LOHAS are individuals that look for quality, taste, and health when they shop food. Often they have above-average incomes, and thus belong to the layers of society who feel secure. In 2013 many of the LOHAS group in Sweden were aware that organic is the better choice, but they had not yet been persuaded to change their shopping habits.

In late 2012 and during all of 2013 a number of media events and campaigns, had an effect on the organic market. These included:

- The pan-European horse meat scandal made consumers look for more credible alternatives such as organic.
- An analysis showed for the first time that pesticide residues were not only present on the banana peel but also in the banana flesh. Bananas are really popular among parents, and this analysis struck a very sensitive health chord (Radio Sweden 2013, Testfakta 2013).
- A campaign by the Swedish Society for Nature Conservation showed shocking results on pesticide residues in grapes and in wines. This struck the gourmet loving LOHAS in particular. Suddenly the grapes and wine were not so good any more.

Also during 2013, KRAV¹ had some successful media work on various issues; probably the most important was showing school kitchens that they could cook using 100 percent organic for the same budget, (about 1.20 euros per serving) as other schools. The message KRAV aimed to convey was that organic is not expensive; the price it is rather an issue of how you cook and what dietary choices you make.

As a result of all these developments, in October/November 2013, organic sales started to rise very abruptly. Nobody expected this, and suddenly there were signals of eggs, milk, bananas, and meat being sold out. It is probably not possible to single out one factor that is responsible for this development, but it is more an issue of a tipping point or a critical mass having been reached.

2014

During 2014, most actors in the market were mainly concerned with providing the products to the market. This is where the milk and beef surplus mentioned previously came in useful; as large volumes could be supplied without the time delay of having to convert new farms. Another big increase in demand was for fruit and vegetables, for whom many products could be relatively easily sourced via international markets. The press attention to the boom was intense, and further fuelled the interest in organic products.

During the second half of 2014, the retail chains had largely resolved supply and demand issues, rolling out marketing materials and some very smart campaigns. However, large campaigns were still not possible because of sourcing problems.

¹ KRAV has been a key player in the organic market in Sweden since 1985. It develops organic standards and promotes the KRAV label, which is well-known among Swedish consumers. For more information see <http://www.krav.se/english>.

Sweden: Growth of organic retail sales 2004-2014

Source: Statistics Sweden

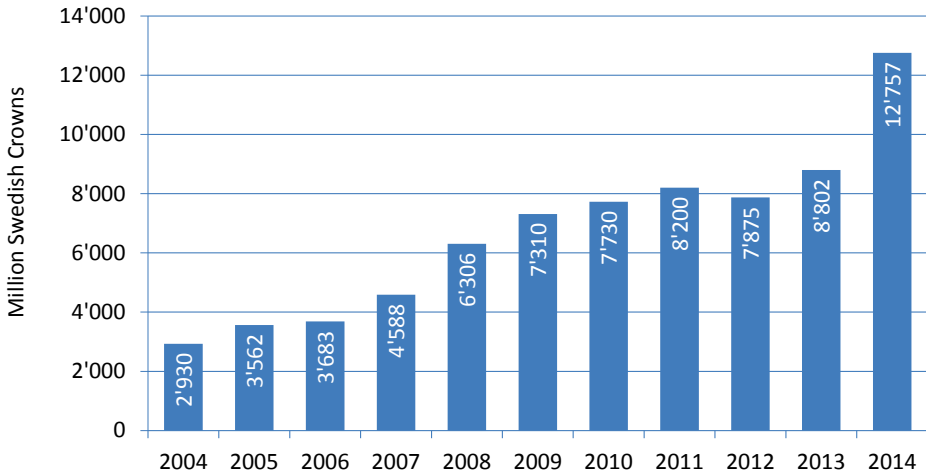


Figure 102: Sweden: Growth of organic retail sales 2004-2014

Source: Statistics Sweden

2015

2015 started with large campaigns for organic products by retail chains. Two chains that have been very visible are Willy’s and COOP. This was possible as the retailers had been able to secure sufficient sourcing of products needed.

There has also been a sharp increase in the range of products available on the market. For example the number of KRAV-certified organic products increased from about 6’500 to more than 8’000, an increase of about 25 percent. This implies that the market is preparing to go to a new level of expansion, but the access to raw materials is insufficient; 75 percent of concerned food processing companies report temporal or permanent shortage of raw materials (Swedish Food Federation 2015’).

For the first time since 2009, dairies and meat companies are looking for new farmers again. The price premium for organic milk at farm gate was also rising by the end of the year.

At the third quarter, the leading retailer ICA reported an increase in organic sales of 56 percent for 12 months rolling (ICA Gruppen 2015), and they are now talking about organic moving away from being a trend to a permanent shift in consumer behaviour. The alcohol monopoly reports an increase of 78 percent of organic sales for the first nine months, compared to same period in 2014.¹

¹ Statistics at the website of Systembolaget. Available at <http://www.systembolaget.se/om-systembolaget/om-foretaget/forsaljningsstatistik>

Outlook

As 2016 begins it seems most retailers have secured products for continued growth in the organic market. However, the major restriction is still access to raw materials, but one should not be surprised to see growth of 20 to 30 percent in 2016.

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Latin America and the Caribbean



Map 9: Organic agricultural land in the countries of Latin America and the Caribbean 2014
 Source: FiBL survey 2016; based on information from the private sector, certifiers, governments. For detailed data sources see annex, page 315

Organic Agriculture in Latin America and the Caribbean

PATRICIA FLORES¹ AND MAURICIO SOBERANES²

Introduction

The development of the organic sector in Latin America is linked to the wider context in which organic agriculture is embedded: the general agricultural sector. It is widely known that the agricultural sector is of major importance for the regional economy. The annual growth rate of the agricultural sector of Latin America and the Caribbean was 2.9 percent in the last three years, which is higher than the 2.6 percent growth for the wider economy. According to the Economic Commission for Latin America and the Caribbean CEPAL (2015), the outstanding performance of agriculture is due to higher productivity. Higher productivity, diversification, and adding value were the main recommendations to achieve a steady and sustained growth (FAO, CEPAL, IICA 2015).

Sustainability approaches are increasingly being widely adopted. Originally, the voluntary sustainability standards and seals were more focused on a limited range of products such as coffee, cocoa, or bananas. Nowadays, these voluntary seals are being applied to other foods and beverages, too. This is in response to the demand of a more sensitized consumer and because farmers themselves have become more aware of climate change and of the need to produce using more environmentally friendly methods. This has resulted in greater use of biological inputs and seems to be one of the trends of the coming years. On the other hand, the higher demand for biocontrol inputs can turn out to be a constraint for a truly sustainable agriculture if used under a reductionist system with an input substitution approach. Major challenges for all organic operators will soon emerge unless the uptake of a holistic production system is promoted, in which biocontrol agents inputs are applied under the concept of an integrated management of the agroecosystem. Concerning biocontrol inputs, there is more need for scientific and applied research, knowledge sharing, and traceability. It is not only important to know the origin and composition of the input as well as its carbon footprint, but also under what conditions it has been produced or extracted.

Healthy products and the gastronomy sector have also been drivers of the organic sector in many countries in the region with value-added products and visible marketing processes such as highly nutritious or gourmet fruits and vegetables. Organic is essential for many of these superfoods³ and the gourmet sector, for which the differentiation by origin, type of technologies employed, people involved in the production process, and environmental impact are important. An example is Peru with the mark *Cocina Peruana* (Peruvian Kitchen) promoted by APEGA (the Peruvian Association of Gastronomy).

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² Mauricio Soberanes, General Manager, METROCERT, Morelia, Michoacan, Mexico, www.metrocert.com

³ Editors' note: According to the Oxford dictionaries superfood is "a nutrient-rich food considered to be especially beneficial for health and well-being." The Oxford dictionaries website, available at <http://www.oxforddictionaries.com/definition/english/superfood> (download of December 28, 2015). For more information see also Wikipedia at <https://en.wikipedia.org/wiki/Superfood>

Cocina Peruana proves that the organic sector in alliance with other sectors, public and private, cooks and farmers, has gained more visibility among policymakers in several countries in the region.

The International Year of Family Farming in 2014 with civil society mobilization on national and international platforms has shown the results of this extraordinary work in 2015. Many initiatives, measures, and legal devices to build an enabling framework for family farming were announced in 2015. This is strengthening the foundation of the organic movement with smallholders aiming at producing highly nutritious organic food for the local and domestic markets.

To make smallholders producing organic and sustainable food more competitive, a major step forward needs to be undertaken, to foster national innovation systems that will provide access to scientific evidence and knowledge sharing. In a region where most of the governmental services leading innovation and research are reduced to a minimum and only one out of ten farmers receives some kind of technical assistance, advice, or training; the technological gap cannot be reduced, and the introduction of improvements and smart new technologies will have little opportunity for testing and validation.

Few countries invest in innovation, research, and development, though some efforts were undertaken in the coffee value chain, and they have now been extended to the cacao chain. In November 2015, the Autonomous University of Chiapas in Mexico announced the results of 20-years of research identifying and reproducing an antagonistic fungus to combat rust in coffee. This could be a major contribution for the organic coffee sector, but institutional support is required to ensure this form of technology is available. At the Sustainable Coffee Conference (Lima, Peru), September 2015, specialists remarked that the technological gap is more critical than climate change, highlighting the good progress that Brazil has made in this field so far.

Countries in the region should foster a regionally integrated policy to learn and exchange knowledge with each other in order to overcome the many challenges that farmers have to face on a daily basis, especially in the process of transitioning to a more sustainable production. The region has an outstanding landscape on which innovation systems can be developed, deeply rooted in their culture, territories and institutions. The efforts of INTA, the Argentinian agricultural research organization, deserve special mention: It is now shifting to an agroecological vision and strategy. Moreover, technological development for ecological intensification is a response to the demand from Argentinean society to the institution. Pablo Titonell, the coordinator of the Natural Resources and Environment Program of INTA, is one of the leaders promoting this technological shift in Argentina. He supports the idea that farmers need intellectual challenges for motivation. Thus, they can develop an agriculture that will require more knowledge rather than more inputs, and that includes the social and economic system surrounding production.

In December 2015, the PGS¹ Latin-American Forum met in Quito, Ecuador, for its third regional meeting. This initiative was organized by Colectivo Agroecológico (Ecuador) with the facilitation of Laercio Meirelles from Centro Ecologico (Brazil), and supported by IFOAM - Organics International, the Agroecological Movement of Latin America and the Caribbean MAELA, Forty people from eleven countries discussed the main challenges and opportunities for PGS development and how to strengthen it in every Latin American country. PGS is a tool to give more visibility to organic smallholders on local and domestic markets, but it also delivers a significant contribution to the five dimensions of agroecology: economy, ecology, society, culture, and accountability (SOAAN 2013). The main topics addressed were related to public policies and how to interact with governments to promote organic agriculture, including PGS, the building of local, autonomous and decentralized networks to strengthen grassroots organizations, and a deep reflection and analysis on the future of the PGS movement from national initiatives to global outreach.

The region of Latin America and the Caribbean is a fertile ground for innovation systems, from a technological and social perspective, enabling the eco-intensification of the agricultural and food system in the region, in each country, starting in the local community.

Mexico

Thirty years have passed since the first certified organic coffee was traded in Mexico. In the past fifteen years, Mexico has developed a very comprehensive organic regulation framework at three levels of governance: municipalities, states, and the federal level. The states of Chiapas, Oaxaca, Michoacán, Jalisco and the federal district of Mexico City have mainly subsidized organic certification, the distribution of organic products, and the production of organic inputs. With less intensity, they have also supported training and sector development. Chiapas, Oaxaca and the federal district of Mexico City have local laws establishing programs to promote organic agriculture. In Michoacán and Jalisco, there are regulation initiatives: a state council in Michoacan and the first committee of organic production in Jalisco. Several organic expos have been organized in Guanajuato and Querétaro, but not on a regular basis.

The Agriculture, Fisheries and Food Secretariat SAGARPA of the federal government is in charge of the organic sector through two offices: the General Direction of Agrifood Standards DGNA of the Food and Competitiveness Sub-Secretary and the General Direction of Agrifood and Fisheries Food Safety DGIAAP of the National Agricultural Health and Food Safety Service SENASICA. Apart from these governmental agencies, the National Council on Organic Production has been fundamental in integrating the contributions of the organic movement and sector to develop and finalize the organic regulatory framework and the program to promote and develop organic agriculture.

Regarding data and trends, the organic movement is working on data collection, processing, and analysis. The National Association for Organic Production SOMEXPRO and institutions of the Autonomous University of Chapingo (CIESTAAM, PAO, and

¹ PGS are Participatory Guarantee Systems. For more information, see the chapter by Simona D'Amico and Flávia Castro in this book, page 167.

CIIDRI) have been working on a database integrating the organic regulation and the data on organic production at the national level. A first map of the Mexican states with organic production can be viewed on SOMEXPRO's web page (somexpro.org), based on information provided by four certification bodies: Certimex, Mayacert, Agricert, and Metrocert.

The Mexican organic sector is aware of the issue of organic inputs, as organic input materials are fundamental to organic crop production. This is a shared issue in all organic regulations in the region. The lack of effective regulation of inputs negatively affects every stakeholder in the industry as well as organic farmers regardless of their farm size. In August 2015, an important agreement was signed with the aim of cooperating with organic certification bodies to evaluate and approve organic inputs. This agreement was signed by Certimex, Metrocert, IMO Latin America, Mayacert, and TCO Cert Mexico. This is a sign of better cooperation among organic certification bodies willing to tackle the lack of regulation of inputs.

The program to promote organic agriculture in Mexico includes partial financial support. Allocation of resources are based on the need to assist farmers and operators in less developed areas and cover the costs of:

- Training and plans for the transition to organic production;
- Technical assistance for the development of a management plan for organic production.
- Acquisition of organic inputs;
- Organic certification;
- Conformity assessment;
- Printing and labeling using the official national seal of Mexican organic produce.

Organic regulation in Mexico accepts Participatory Guarantee Systems as an alternative organic certification system for local markets. In Mexico, the Tianguis Network and Organic Markets (Red de Tianguis y Mercados Organicos) has developed an outstanding decentralized network of fairs throughout the Mexican territory. They have the same opportunities and access to the promotion tools that the Government provides.

Brazil

Brazil has a very comprehensive organic agriculture regulation and promotion framework, the Brazilian System of Organic Quality Assessment (SisOrg) and the Organic Production and Agroecology National Policy (PLANAPO - National Plan for Agroecology and Organic Production), launched by President Dilma Rousseff in November 2013.

SisOrg (discussed in previous chapters of “The World of Organic Agriculture”) basically concerns the control and auditing system of accredited bodies by the Brazilian competent authority COAGRE (certification bodies, PGS, and social control bodies).

Regarding PLANAPO, some of the planned actions include loans with a low interest rate differentiated credit, funding for the activities of research institutes and universities, technical assistance focusing on agroecology and organic farming, and government procurement of certified products with an organic premium payment.

Across Brazil there are successful examples of organic production and agro-ecological transition. Recently, in September 2015, the first Indigenous PGS in Brazil, “Terra Indígena do Xingu“, was accredited by COAGRE. It is an interesting development and highlights how indigenous people can reach mainstream markets with high-quality products, in this case with organic honey, by empowering themselves with PGS as a tool. The Xingu Indigenous Land Association (ATIX) initiated its PGS process and succeeded. It is expected that additional indigenous groups will become enthusiastic and start their own processes, as it is part of their cultural values and organization dynamics.

Peru

Peru has shown an interesting and significant increase in the organic production area. This positive trend relies on the efforts of organic operators in reaching international markets with better prices for quality products. Globally speaking, Peru has an extraordinary opportunity to introduce and position Peruvian organic produce thanks to the recognition of the Peruvian cuisine as one of the best cuisines in the world. This diverse cuisine, which is a mix of cultures and family traditions, has helped to make organic production more visible, especially the produce of smallholders.

The domestic market has steadily increased in the last five years; in Lima, there are fifteen different organic street fairs every weekend. These are initiatives originating from the private sector, grassroots organizations, and the agroecological movement and have grown due to a very loyal and educated consumer. The main challenge for these fairs, organic sales points, and even supermarket chains offering organic products, is to meet the demand for organic food that meets the necessary requirements.

The public sector, mainly the Ministry of Agriculture, does not support the local organic market and only partially addresses specific needs of the organic agroexport sector. A weak extension and research service was replaced by paid services that only cooperatives or companies exporting organic products can afford to use. However, public policies promoting organic agriculture and sector strengthening were developed by the Ministry of Environment with the Peru Eco Trade Project operating for the last two years. The Ministry of Development and Social Inclusion (MIDIS) with Jaku Wiñay of FONCODES, have also undertaken a special program aiming to alleviate hunger in vulnerable populations in rural areas.

The Expoalimentaria is an international business platform of the food and beverage sector, but it also covers farming and processing equipment, inputs, packing, services, and gastronomy sectors. It is one of the most important fairs in the region. It has more than 43'500 visitors registered and over 650 exhibitor companies. Organized by the National Exporters Association (ADEX) every year since 2011, this fair has increased in size and sales. Within the Expoalimentaria an organic agriculture meeting is held and organic products are important flagships of the fair, including organic coffee, cacao, bananas, mangos, Andean cereals, and roots.

Although the most known Peruvian organic products are bananas, coffee, cacao, and quinoa, demand and supply of maca, jojoba oil, ginger, and all sorts of fruits, vegetables, Andean grains and cereals, legumes, medicinal plants, fungi and meat are increasing. Peru has an outstanding agricultural biodiversity due to its microclimate diversity, which makes it possible to grow a wide range of organic food. Organized smallholders in

cooperatives and associations are emerging as competitive organic stakeholders taking the lead in organic production in the international markets. However, they need institutional support and public policies to promote and develop organic agriculture throughout the country.

The Free Trade Agreement between Peru and the European Union signed on March 1, 2013, has increased the trade of Peruvian products, especially organic products, which have shown the highest increase, as declared by the European Union's Ambassador in Peru. Between 2013 and 2015, for some commodities, organic exports have increased between 200 and 1'000 percent.

Peru: Top 9 crops by area 2014

Source: SENASA Peru

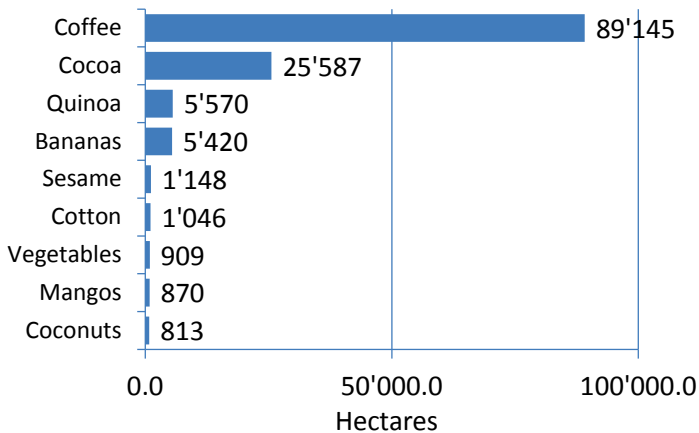


Figure 103: Peru: Top 9 crops by area 2014

Source: SENASA Peru 2016. For detailed data sources see annex, page 315

Ecuador

On the international market, Ecuador is mostly known for its organic bananas and chocolate, but Ecuador has more to offer: There is an extraordinary social movement promoting a deep transformation of Ecuadorian society towards a more sustainable agricultural and food system based on agroecology. Since the constitution proclaimed the Sumak Kawsay (Good Living) and Food Sovereignty defence, hundreds if not thousands of smallholder and indigenous people have mobilized to become more visible and seek support from the government (national and local).

Organizations such as Colectivo Agroecológico are giving visibility to several networks, associations, as well as farmer and consumer groups in favour of agroecology and food sovereignty. Organizations such as the Federation of Agriculture Centers and Peasant Organizations of Ecuador FECAOL, the Organic Producers of Ecuador PROBIO, Red Mar Tierra y Canasta, Red Guardianes de Semillas, Movimiento Utopía, Red Agroecológica del Austro y de Loja, and other organizations are articulating collective efforts to open a dialogue and advocate at the different levels of the government. This is not an easy task, as the Government strongly backs conventional agriculture, which diminishes or puts

the possibility of an emerging agroecology at a serious risk. Agroecology is not yet seen as a viable solution in indigenous territories of Ecuador.

From the government side, the Commercial Networks Unit of the Ministry of Agriculture (MAGAP) is implementing several studies and tools to promote organic production in short value chains for the domestic market. At the level of the provinces, some milestones were achieved for the agroecological movement; municipal ordinances, e.g. Pichincha, to promote agroecology or Cayambe with marketing support for organic farmers for local fairs, etc.

Another major achievement in Ecuador is the GMO labeling within the food and beverage sector. Since 2008, a GMO ban has been included in the constitution, and it was only in 2013 that the highest authority in the Ecuadorian food administration made it compulsory for the food industry to label their products containing GMOs.

Women have important leadership roles in rural organizations. The most recent PGS Latin American Forum in Quito showed the relevant role and presence of women leaders advocating for agroecology and public policies to support their work at the farm level and in the local fairs they organize.

Ecuador: Distribution of organic key crops 2014

Source: Ministry of Agriculture, livestock, aquaculture and fishery - Agrocalidad

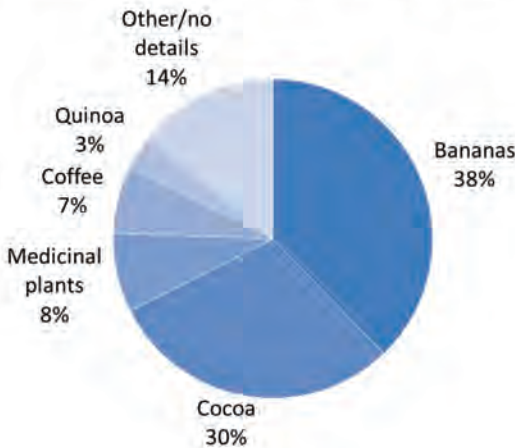


Figure 104: Ecuador: Distribution of organic key crops 2014

Source: Ministry of Agriculture, livestock, aquaculture and fishery – Agrocalidad 2016. For detailed data sources see annex, page 315

Argentina

Argentina is a leading country in the organic sector in terms of land under organic management, globally speaking. The majority of its high-quality organic products have been exported, but in recent years, demand from local consumers has increased. Organic fairs are increasing in the city of Buenos Aires and in Mendoza, Misiones, Corrientes, and other provinces. Family agriculture is promoted at the highest level of public policy. The Secretariat of Family Agriculture was created, and many services, programs, and

funds are now directly addressing this sector, where the organic approach has a unique opportunity to be implemented and promoted.

INTA, the national agricultural research agency, has shifted towards a more sustainable approach through its national coordination of the Natural Resources and Environment Program, with Pablo Tiftonell, an expert in fertility, agroecology, biodiversity, and farming systems as coordinator.

The organic movement is anticipating that Argentina can support its organic farmers not only in the international but also in the domestic markets, fostering PGS and organic research and strengthening family farming.

Argentina: Distribution of organic land use 2014

Source: SENASA Argentina 2015

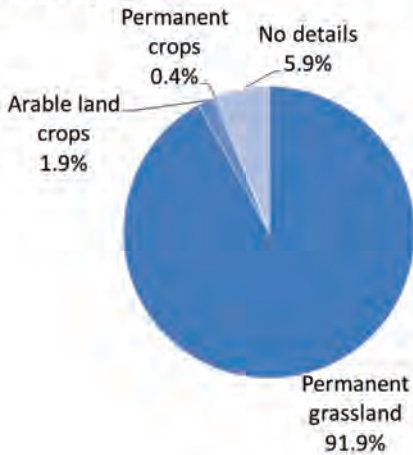


Figure 105: Argentina: Distribution of organic land use 2014

Source: SENASA Argentina 2016. For detailed data sources see annex, page 315

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Country Report: Organic Agriculture in Brazil

LAÉRCIO MEIRELLES¹

Brazil has been the largest consumer of pesticides in the world since 2009, consuming 5.2 liters of agro-toxics per inhabitant per year (INCA 2015). There are many causes for this high use of pesticides, including i) reductionist and compartmentalized production processes and ii) the effective marketing of pesticides by large corporate organisations.

In this context, it is necessary to seek out more environmentally harmonious and socially balanced production methods. The first attempts at organic agriculture in the country, here understood as a socio-environmental reaction to the misnamed “Green Revolution,” appeared in the 1970s, grew in the 1980s and 1990s, and were consolidated in the first decade of this century. Thousands of families in the countryside chose organic agriculture as their production method, and it has even become a way of life for some. It is widespread throughout the Brazilian territory of 8.5 million square kilometres. A processing and trade sector has evolved, and today, it is visible in hundreds of street fairs, small shops, government procurement, and numerous supermarket chains.

According to the Ministry of Agriculture, the National Register of Organic Producers includes 11’650 producers, and the total organic production area in the country covers nearly 750’000 hectares. Data from the Brazilian Institute of Geography and Statistics (IBGE) (2015) show that 72 million hectares are cultivated in Brazil. From these figures, we can see that little more than one percent of the cultivated area in Brazil is certified as organic, close to the global organic share.

The Brazilian System of Organic Quality Assessment (SisOrg) became effective in 2010, when the legal framework for organic agriculture came into force. One of its characteristics is its diversity of mechanisms to assess organic production. Under the SisOrg, the Participatory Guarantee Systems (PGS) have the same status as audit certifications. The SisOrg seal, mandatorily used for all organic produce, has a small difference: it allows the consumer to choose the compliance assessment method of his or her preference. The Brazilian law provides, in addition to the PGS and audit certification, organic compliance assessments through Social Control Bodies (OCS), which should be taken as simplified PGS and are used strictly by small farmers for direct marketing to consumers.

A significant event in the development of organic agriculture in Brazil was the signing of the Presidential Decree No. 7794 on August 20, 2012, which established the National Policy for Organic Production and Agroecology.² PLANAPO, the National Plan for

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² Regarding the difference between agroecology and organic agriculture, it is worth mentioning that in Brazil, but not only in Brazil, the diversity of contexts and perceptions leads different groups to seek a more socially

Agroecology and Organic Production, which was launched by President Dilma in November 2013, is derived from this policy and is still operating. PLANAPO contains a series of actions that seek to promote the practice of agroecology and organic production in the country. Some of the planned actions include subsidized credit, activities with research institutes and universities, technical assistance focusing on agroecology and organic farming, and government procurement of certified products with an organic premium payment. Agroecology and organic farming have been present in the Brazilian social scene at their own expense, despite the historical lack of policy support. PLANAPO, even if it is short of the historical demands of this field, should be valued as a significant step forward, since there is now recognition and government support for initiatives that were previously invisible.

Across the country, there are concrete, successful examples of organic production and agroecological transition. These include various agroecological and solidarity/fair trade marketing networks such as the *Ecovida* Network in southern Brazil, the *Xique-Xique* Network of solidarity marketing in the northeast, and the *Cerrado* Network in the central region, which are all members of the National Articulation of Agroecology (ANA). They consist of thousands of farmers' families, families engaged in wild collection ("extrativismo"), and traditional communities.

In the near future, the outlook is for the continuation of the framework described. On one hand, there is a constant growth of initiatives in the areas of agroecology and organic production. On the other hand, we see the strengthening of the agro-export model, with its high use of pesticides and GMOs. This contradiction does not give signs of abating. Therefore, there are two tasks to deal with at the moment. One is the multiplication of existing experiences, with mutual strengthening between them. The other is the expansion of dialogue with society, demonstrating the advantages of agroecology and organic production with a consistently greater support of public policies, and encouraging a wider range of producers and consumers to choose this path.

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and environmentally balanced agricultural production process to identify themselves with one of these concepts. In fact, there are more similarities than differences between them.

Latin America and the Caribbean: Current statistics

JULIA LERNOUD¹, HELGA WILLER² AND BERNHARD SCHLATTER³

Organic agricultural land

In 2014, 6.8 million hectares were reported as being under organic production, which is 1.1 percent of the total agricultural land in Latin America and the Caribbean. Sixteen percent of the world's organic agricultural land is in Latin America and the Caribbean. Almost 30'000 hectares fewer were reported than in 2013. This can be partly attributed to a major decrease, mainly of grassland/grazing areas, in Argentina (over 200'000 hectares less). However, in some countries, there was a big increase of organic agricultural land in 2014: In Uruguay –where new data was made available after many years without an update– the area increased by more than 370'000 hectares. The organic area has increased by over 70 percent since 2000 (3.9 million hectares). The country with the largest organic agricultural area was Argentina with 3 million hectares (Figure 106), and the country with the largest number of producers is Mexico with more than 169'000 (Table 57). The highest proportion of the total agricultural area was reached in the Falkland Islands (more than 36.3 percent), which is the country with the highest share of organic land worldwide.

Land use

Land use details were available for more than 80 percent of the agricultural land. In 2014, only five percent of all organic farmland was utilised for arable crops (almost 328'000 hectares), while almost 70 percent was grassland/grazing areas (4.5 million hectares), and 12 percent (almost 798'000 hectares) was used to grow permanent crops (see Figure 109). Argentina (2.8 million hectares), Uruguay (1.3 million hectares) and the Falkland Islands/Malvinas (0.4 million hectares) had the largest permanent grassland/grazing areas. The key arable crops are cereals, representing almost 40 percent of the Latin America and Caribbean organic arable area and amounting to more than 123'000 hectares. Most of the cereals were grown in Bolivia (87'000 hectares, mainly quinoa and amaranth), Argentina (21'354 hectares, mainly wheat) and Peru (6'000 hectares, mainly quinoa). Organic sugarcane was grown on more than 61'000 hectares in 2014 with the key producing countries being Paraguay (40'000 hectares) and Argentina (11'000 hectares). The main permanent crops were coffee (over 400'000 hectares), cocoa (206'000 hectares), and tropical and subtropical fruits (almost 124'000 hectares).

Wild collection

Wild collection plays an important role in Latin America and the Caribbean. There are than 3 million hectares of wild collection areas. They are mainly used for the collection of nuts (more than 1 million hectares), palmito (almost 64'000 hectares), rose hips (58'000 hectares), and berries (almost 18'000 hectares). Information on wild collection is not available for many countries, so it can be assumed that the total wild collection area is higher than that presented in this report.

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Organic Agriculture in Latin America and Caribbean: Graphs

Latin America and Caribbean: The ten countries with the largest organic area 2014

Source: FiBL survey 2016

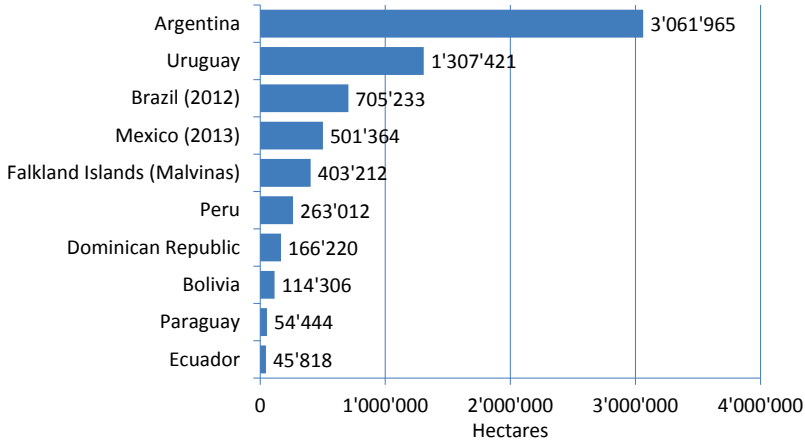


Figure 106: Latin America and Caribbean: The ten countries with the largest areas of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Latin America and Caribbean: The countries with the highest share of organic agricultural land 2014

Source: FiBL survey 2016

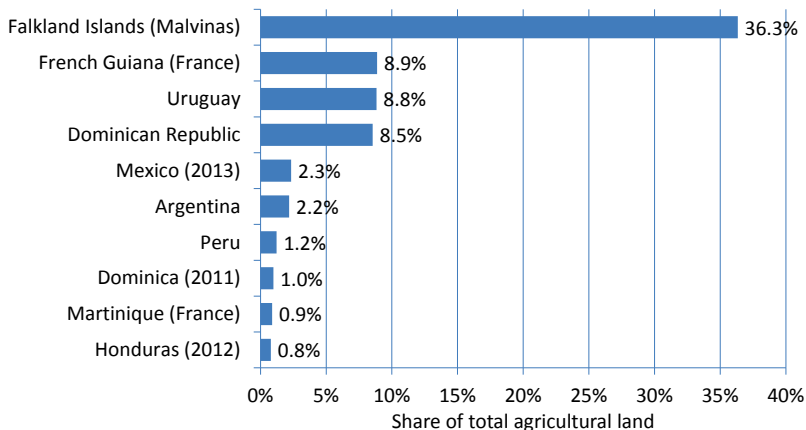


Figure 107: Latin America and Caribbean: The ten countries with the highest shares of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Latin America and Caribbean: Development of organic agricultural land 2000 to 2014

Source: FiBL-IFOAM-SOEL 2002-2016

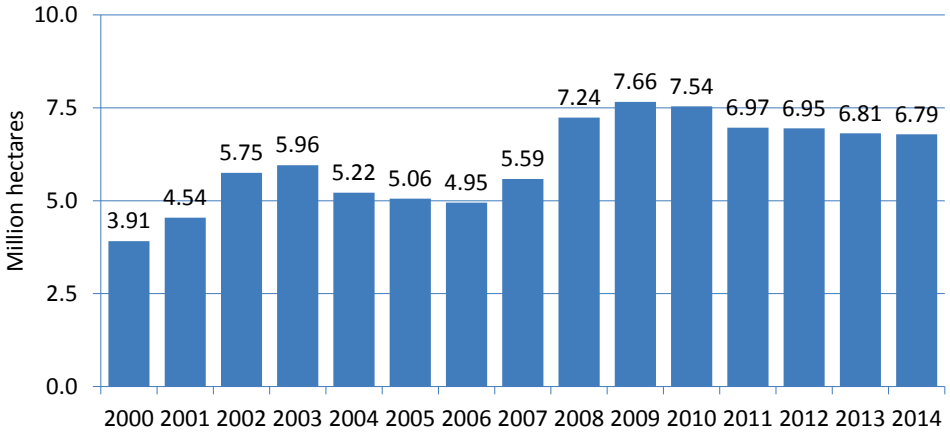


Figure 108: Latin America and Caribbean: Development of organic agricultural land 2000-2014

Source: FiBL-IFOAM-SOEL surveys 2000-2016

Latin America and Caribbean: Use of agricultural organic land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.

Land use types 2014

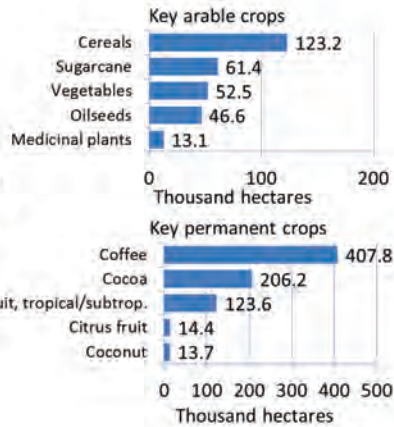
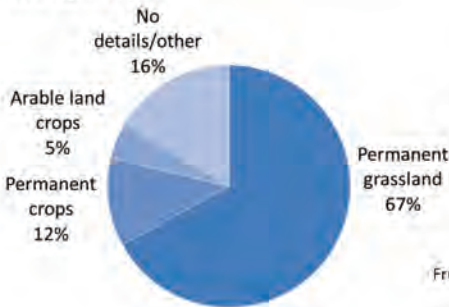


Figure 109: Latin America and Caribbean: Land use in organic agriculture 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Organic Agriculture in Latin America and Caribbean: Tables

Table 57: Latin America: Organic agricultural land, share of total agricultural land and number of producers 2014

For information on data year, see page 311.

Country	Area [ha]	Organic share [%]	Producers [no.]
Argentina	3'061'965	2.2%	1'018
Bahamas	49	0.5%	
Belize	892	0.6%	721
Bolivia	114'306	0.3%	12'114
Brazil	705'233	0.3%	12'526
Chile	19'932	0.1%	446
Colombia	31'621	0.1%	4'775
Costa Rica	7'832	0.4%	3'000
Cuba	2'979	0.04%	3
Dominica	240	1.0%	
Dominican Republic	166'220	8.5%	26'423
Ecuador	45'818	0.6%	10'287
El Salvador	6'736	0.4%	2'000
Falkland Islands (Malvinas)	403'212	36.3%	8
French Guiana (France)	2'014	8.9%	44
Grenada	85	0.7%	3
Guadeloupe (France)	69	0.1%	30
Guatemala	13'380	0.3%	3'008
Guyana	Wild collection only		
Haiti	2'878	0.2%	1'210
Honduras	24'950	0.8%	4'989
Jamaica	27	0.01%	80
Martinique (France)	248	0.9%	39
Mexico	501'364	2.3%	169'703
Nicaragua	33'621	0.7%	10'060
Panama	15'183	0.7%	1'300
Paraguay	54'444	0.3%	58'258
Peru	263'012	1.2%	65'126
Puerto Rico	Area data not available		5
Suriname	39	0.1%	
United States Virgin Islands	26	-	2
Uruguay	1'307'421	8.8%	4
Venezuela	Processing only		
Total	6'785'796	1.1%	387'184

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 58: Latin America: All organic areas 2014

Country	Agriculture [ha]	Aquaculture [ha]	Wild collection [ha]	Total [ha]
Argentina	3'061'965		458'601	3'520'566
Bahamas	49			49
Belize	892			892
Bolivia	114'306		922'991	1'037'297
Brazil	705'233		1'209'773	1'915'006
Chile	19'932		81'054	100'986
Colombia	31'621		7'320	38'941
Costa Rica	7'832			7'832
Cuba	2'979			2'979
Dominica	240			240
Dominican Republic	166'220		3'845	170'065
Ecuador	45'818	3'123	1'260	50'201
El Salvador	6'736			6'736
Falkland Islands (Malvinas)	403'212			403'212
French Guiana (France)	2'014			2'014
Grenada	85			85
Guadeloupe (France)	69			69
Guatemala	13'380		5	13'385
Guyana			54'000	54'000
Haiti	2'878			2'878
Honduras	24'950			24'950
Jamaica	27		36	63
Martinique (France)	248			248
Mexico	501'364		30'364	531'727
Nicaragua	33'621		11'463	45'084
Panama	15'183			15'183
Paraguay	54'444		3'067	57'511
Peru	263'012	4	223'590	486'606
Puerto Rico		Area data not available		
Suriname	39			39
United States Virgin Islands	26			26
Uruguay	1'307'421			1'307'421
Venezuela		Processing only		
Total	6'785'796	3'127	3'007'369	9'796'292

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 59: Latin America: Land use in organic agriculture 2014

Land use	Crop group	Area [ha]
Agricultural land, no details		903'783
Arable crops	Arable crops, no details	16'303
	Cereals	123'223
	Dried pulses	105
	Flowers and ornamental plants	4
	Industrial crops	11'586
	Medicinal and aromatic plants	13'109
	Oilseeds	46'583
	Root crops	1'034
	Seeds and seedlings	65
	Strawberries	334
	Sugarcane	61'356
	Textile crops	1'101
	Tobacco	35
	Vegetables	52'474
	Arable crops, other	649
<i>Arable crops total</i>		<i>327'961</i>
Cropland, no details		201'661
Other agricultural land	Other agricultural land	1'668
	Fallow land, crop rotation	1'501
	Unutilised land	4'499
<i>Other agricultural land total</i>		<i>7'668</i>
Permanent crops	Berries	4'863
	Citrus fruit	14'403
	Cocoa	206'242
	Coconut	13'689
	Coffee	407'776
	Flowers and ornamental plants, permanent	2
	Fruit, no details	1
	Fruit, temperate	5'321
	Fruit, tropical and subtropical	123'568
	Grapes	11'496
	Medicinal and aromatic plants, permanent	1'876
	Nurseries	93
	Nuts	1'260
	Olives	2'782
	Tea/mate, etc.	1'903
	Permanent crops, other	2'593
<i>Permanent crops total</i>		<i>797'867</i>
Permanent grassland		4'546'856
Total		6'785'796

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.
For detailed data sources see annex, page 315

Table 60: Latin America: Use of wild collection areas 2014

Land use	Area [ha]
Apiculture	473'282
Berries, wild	17'708
Fruit, wild	6'032
Medicinal and aromatic plants, wild	60
Mushrooms, wild	1'260
Nuts, wild	1'078'211
Palmito, wild	63'867
Rose hips, wild	58'440
Wild collection, no details	1'291'108
Wild collection, other	17'401
Total	3'007'369

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.
For detailed data sources see annex, page 315

North America



Map 10: Organic agricultural land in Canada and the US 2014

Source: Canada Organic Trade Association (COTA) and United States Department of Agriculture (USDA, data 2011). For detailed data sources see annex, page 315

U.S. organic industry continues to grow

BARBARA FITCH HAUMANN¹

Sales of organic food and non-food products in the United States set another record in 2014, reaching 39.1 billion US dollars,² up 11.4 percent from 2013, according to the Organic Trade Association's (OTA's) *2015 Organic Industry Survey*.

Despite tight supplies of organic ingredients, organic food sales posted an 11 percent increase to reach 35.9 billion US dollars, while organic non-food sales, at nearly 3.2 billion US dollars, jumped almost 14 percent for the biggest annual increase in six years. Organic food sales represented nearly 5 percent of total U.S. food sales, and its 11 percent growth rate once again outshone the 3 percent growth pace for total U.S. food sales.

For the first year ever, 50 percent of organic food sales occurred in mainstream grocery stores. Another trend was the growth of organic usage in food service, including for fast casual operations. Examples of this include the success of Elevation Burger—an organic burger chain—and the opening of Amy's Drive Thru in 2015.

Organic produce still is the biggest selling category. In fact, organic produce makes up 12 percent of all produce now sold in the United States.

Numbers for 2015 sales are now being collected and compiled for the 2016 Organic Industry Survey, which will not be available before May. However, the 2015 survey projected that organic food sales could jump by another 11 percent in 2015, while organic non-food sales would probably grow by around 14.5 percent

Meanwhile, according to OTA's *U.S. Families' Organic Attitudes & Belief 2015 Tracking Study*, 83 percent of families in 2015 purchase organic products at least sometimes, up from 73 percent six years earlier. In addition, the demographics of organic buyers reflect the demographics of the U.S. population, cutting across all ages, income levels, and ethnic groups. The majority of households in all regions of the country made organic a part of their shopping purchases.

More certified organic operations

In April, the U.S. Department of Agriculture (USDA) announced that the organic industry had reached 19'474 certified organic operations in the United States and 27'814 certified organic operations around the world. According to data released by USDA's National Organic Program (NOP), the number of domestic certified organic operations increased by more than 5 percent over the previous year. Since the count

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² One euro was 1.3285 US dollars in 2014 according to the Central European Bank (average annual exchange rate).

began in 2002, the number of domestic organic operations has increased by over 250 percent.¹

Administering cost-share programs to offset the costs of organic certification for U.S. producers and handlers nationwide, USDA offered approximately 11.9 million US dollars in organic certification assistance through state Departments of Agriculture in 2015. It was distributed by two programs: the national certification cost-share program (11 million US dollars) and Agricultural Management Assistance Organic Certification - Share Program (900'000 US dollars) to 15 states.

Improving federal crop insurance coverage for organic farmers, USDA expanded the number of crops with organic price premiums and strengthened the organic safety net.

In addition, USDA used other funding from the 2014 Farm Bill to develop the Organic Integrity Database, a modernized certified organic operations database to provide accurate information about all certified operations on a regular basis. Before the end of 2015, NOP made the first release of this database, which replaces the annual list of certified operations.

Meanwhile, USDA's Agricultural Marketing Service posted a new NOP Compliance & Enforcement/Appeals Summary report for Fiscal Year 2015 highlighting the number of incoming and completed complaints, initial actions, and case dispositions, including settlements made and penalties levied for NOP. The agency plans to provide quarterly updates.

USDA's National Agricultural Statistics Service (NASS) in mid-September reported that certified and exempt U.S. organic farms in 2014 sold a total of 5.5 billion US dollars in organic products, up 72 percent since 2008. Exempt farms are those whose practices meet organic standards but have annual sales less than 5'000 US dollars. Releasing its finding from its *2014 Organic Survey*, NASS reported that the number of certified organic farms has increased almost 16 percent to 12'634 in 2014. However, it is critical to note that NASS did not break down all of its survey findings into the certified organic and exempt organic categories, which confuses analysis on the growth of certified organic farming in the United States.

In other statistics gathered, 5'300 U.S. organic producers reported they intend to increase organic production over the next five years, and close to 170'000 acres of additional U.S. farmland are currently in the process of transitioning to organic agricultural production.

Certified organic products sold by U.S. farms are diverse, ranging from dairy and proteins, to fruits, vegetables, and grains. The top five commodities in organic sales were milk, eggs, broiler chickens, lettuce, and apples. The survey, which is part of the U.S.

¹ Please note that these figures are different from those that are communicated in the tables of this book. The numbers mentioned in the text above are the official numbers released by the U.S. Department of Agriculture's National Organic Program (NOP) in March 2014 based on data collected on the number of operations certified to USDA organic regulations in 2013. The 18'513 certified organic operations included organic farms and processing facilities.

USDA's NOP at that time had showed over 25'000 certified organic operations (meeting USDA organic regulations) in 2013 in more than 120 countries around the world.

Census of Agriculture program, was conducted by NASS in conjunction with USDA’s Risk Management Agency.

Tight organic supplies

Tight supplies are the biggest hurdle limiting U.S. organic sales. Organic acreage has posted a fivefold increase since 1990, but still amounts to less than 1 percent of the nation’s more than 900 million acres of crops and pastures. In the meantime, demand for organic products has soared more than 30 times, to reach almost 40 billion US dollars in 2014, and still growing.

Domestic organic production simply can’t keep up with the robust demand. The U.S. increasingly must import organic food to feed the nation’s growing appetite. The consensus: there is a need more organic farmers and more production.

Through its Farmers Advisory Council which provides input from small- and medium-sized organic farmers, ranchers and growers, OTA is planning on filing paperwork early in 2016 for a “transitional” organic designation at the USDA that would benefit farmers going through the three-year process of converting a conventional farm to organic production. The aim of the program would be to provide economic incentives for farmers to go organic at a time when demand is growing strongly but supplies still fall short, spurring greater imports.

U.S.: Growth of retail sales of organic food 2004-2014

Source: Organic Trade Association (OTA), various years

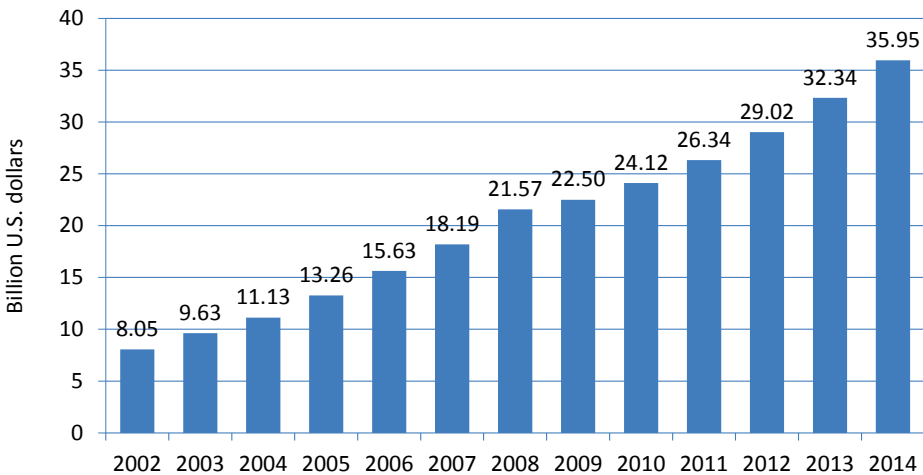


Figure 110: United States: Growth of organic retail sales 2002-2014

Source: Organic Trade Association, various years

International trade

During 2015, the European Commission reviewed the operation of the EU-US organic equivalence arrangement established in 2012 and found it has been instrumental in

increasing market access for producers, expanding consumer choices, and facilitating regulatory cooperation. In a letter sent to Miles McEvoy, Deputy Administrator of NOP, the European Commission in May re-affirmed its commitment to the organic equivalence arrangement.

On July 9 2015, officials from the United States and Switzerland signed an organic equivalency arrangement marking the final step in further opening the valuable European market to the U.S. organic sector. This joins the arrangements the U.S. has with Canada (2009), the European Union (2012), Japan (2014), and South Korea (2014). The U.S. also has a one-way equivalency arrangement with Taiwan (2009).

During 2015, OTA commissioned two studies on organic trade in effort to build a sound set of data for organic stakeholders and policymakers when they make their business decisions and design policy. The first, released in April, revealed key insights into organic global trade by compiling for the first time the officially tracked organic food products sold by U.S. exporters and bought by U.S. importers. This study revealed a robust global appetite for U.S. organic products, and strong evidence of American farmers losing out on some key markets by not growing more organic. A subsequent study, released in December, found that the trade arrangements collectively have increased annual U.S. organic exports by 58 percent during 2011-2014 over what exports would have been without any agreements in place, and have a net positive impact for all parties.

In 2011, USDA began to track a number of organic exports and imports with a special harmonized system trade code, known as an HS code. There are now 34 export and 40 import codes for organic products. At this point, annual U.S. organic exports are estimated at 3.2 billion US dollars. Since the implementation of the trade equivalency arrangements, U.S. organic exports to the EU have risen by 44 percent, to Japan by 17 percent, and to Canada by 14 percent. In dollar value, organic apples, lettuce, grapes, spinach and strawberries are the top five organic exports, and organic coffee and soybeans are the top organic imports.

Holding strong on standards

Charged with keeping organic standards strong, the National Organic Standards Board—a voluntary advisory committee to USDA and NOP, which meets publicly twice a year to discuss and vote on subcommittee proposals related to the National List of Allowed and Prohibited Materials and other organic standards issues—spent countless hours in 2015 reviewing materials for their five-year “Sunset Review.” This process determines whether to renew or revoke a material’s presence on that list.

This round of Sunset Review resulted in the unprecedented removal of 11 inputs from the National List, the denial of two petitions to add synthetic crop inputs to the National List, and the approval of one petition to further restrict the use of natural flavors in organic processed products. NOSB’s actions reflected the innovations made in organic practices that have enabled the use of fewer and fewer synthetic inputs. Once the recommendations are approved by the National Organic Program, these materials will no longer be allowed in producing, processing or handling organic food.

Meanwhile, the unique needs and practices of organic agriculture were recognized by federal policy and rulemakers in critical new regulations. In its final rules to implement

the historic Food Safety Modernization Act, the U.S. Food and Drug Administration revised earlier proposals regarding compost and manure handling and other proposed rules that otherwise would have negatively impacted organic.

A possible organic check-off?

During 2015, USDA acted on a provision included in the 2014 Farm Bill by proposing a rule allowing U.S. organic farmers and handlers to choose whether to pay into and participate in conventional commodity check-off programs¹ or opt out to decide where to spend their dollars. Under the rule, the exemption from paying into conventional check-offs for organic farmers, handlers, marketers or importers with the 100 percent organic label would be extended to the Organic label (at least 95 percent organic) and to those who produce, process, handle and import both organic and conventional products. The final rule allowing this was published December 31, and goes into effect February 29, 2016.

Meanwhile, in a ground-breaking move for the U.S. organic sector, OTA in May petitioned USDA to begin steps to conduct a vote on a proposed Generic Research and Promotion Order (GRO organic) for organic in the United States. As 2015 drew to a close, the organic sector awaited an announcement from USDA to post the proposal and gather public comments.

Work on the proposed organic check-off has taken over three years of outreach, gathering feedback, and shaping the provisions it contains. One impetus has been the ongoing need to educate the public about organic—its benefits and what differentiates the organic label from other labels such as “Natural” and “Non-GMO.” Currently, a substantial number of consumers wrongly attribute organic benefits to unregulated products.

Perhaps even more important is the need for more research devoted to organic agriculture. Organic research has historically been underfunded. While the 2014 Farm Bill expanded its organic research budget to 100 million US dollars over five years, that is just a small amount compared to the total 1.2 billion US dollars allocated for all federal agricultural research. Research for organic seed breeding is starving for funds, research on long-term organic farm system trials are few and far between, and research into organic alternatives to control crop diseases and agricultural pests is rare. Supporters of an organic check-off see that will make possible research that will help organic farmers be successful, and will nurture new organic producers.

If U.S. organic stakeholders approve the check-off, the move to collectively invest in its future represents a game-changing move, and would enable the sector to raise funds to boost organic research, promote the organic brand, and increase organic acreage in the United States. This will be perhaps the most important question to be acted on in 2016.

¹ Check-off program: Usually, a reference to the generic research and commodity promotion programs for farm products that are financed by assessments applied to sales of those products by producers, importers, or others in the industry. Quoted in: Womach, Jasper (2005) *Agriculture: A Glossary of Terms, Programs, and Laws*, 2005 Edition = CRS Report for Congress, Washington. Available at <http://www.cnie.org/NLE/CRSreports/05jun/97-905.pdf>

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Canada

MARIE-EVE LEVERT¹ AND MATTHEW HOLMES²

After a period of retraction in organic production in Canada, there has been noticeable growth in both the number of organic producers and the area under organic production. This is a positive development, as demand in the Canadian market continues to expand rapidly, while organic offerings broaden into every-day life. Privileged market access into Europe, the United States, and, more recently, Japan, along with steep premiums for organic commodities against conventional pricing, have supported the case for more producers to consider conversion to organic.

A note on data collection

Canada's organic sector continues to rely on the voluntary disclosure of data by certifiers and provincial organizations, which all have their own data classification and reporting systems. Data inconsistencies and harmonization are the main challenges encountered in the annual data collection. It will remain a weakness until a mandatory national data system is prioritized and implemented by authorities. In 2015, there was almost universal participation from certifiers, resulting in the most rigorous data collection ever carried out. The province of Quebec did not have updated and accurate acreage data available for 2014; instead, the 2013 acreage data were used.

Producers

In 2014, Canada had 3'780 organic producers, an increase of 7 percent compared to 2013. All the Canadian provinces have seen a growth in their number of primary producers, with the exception of the Atlantic provinces where the numbers have remained stable. Two provinces stood out in 2014: British-Columbia gained 70 new producers in 2014, and Saskatchewan saw an increase in the number of primary producers for the first time since 2012.

At least 300 operations are currently transitioning to organic in the country. Therefore, we can estimate that the number of primary producers will be back to the same level it was before the 2008-09 recession (3'900 producers) within the next couple of years.

Land under production

The gain in the number of primary producers translated into 100'000 new hectares under organic management in 2014 for a total of 903'948.48 hectares. However, a portion of the increase can be explained by better reporting, and notably for pasture where existing hectares were reported in 2014, but not in 2013. In fact, reported pastureland increased in 2014 by 250'000 hectares compared to the previous year, while

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the field crop area declined slightly. Fresh vegetable, root crop, fruit, and nut hectares remained stable.

Canada: Development of organic agricultural land organic share

2000-2014

Source: COG-COTA 2000-2016

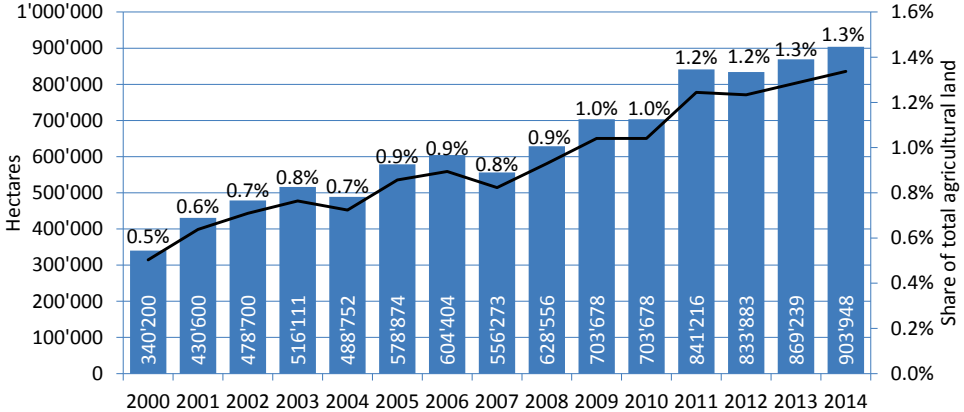


Figure 111: Canada: Development of organic agricultural land and organic share 2000-2014

Source: COG-COTA 2000-2016. For detailed data sources see annex, page 315

Processors/handlers

An additional 135 new processors/handlers were certified organic in 2014, for a total of 1'582 across the country. The three Prairies provinces (Alberta, Saskatchewan, and Manitoba) have gains in processors/handlers in the last year while Ontario has seen a 13 percent drop. It is important to note that processors/handlers can also be classified as growers if they perform both functions, which can explain the sudden 24 percent rise in Quebec's operators since 2013. Therefore, the total number of certified operations in Canada (4'817) cannot be calculated by the addition of the processors/handlers and producers' operation numbers.¹

Livestock

Livestock data has been inconsistent over the past few years. Some data included all age classes, while other data contained breeding animals only.

However, organic dairy production is accurately monitored due to the supply management system implemented across the country. The production of organic milk has been growing steadily since 2005. There are currently 218 dairy farms in Canada that produce approximately 1'033'416 hectolitres, which represents an increase of almost 60'000 hectolitres compared to 2013. British Columbia and Quebec are the provinces that sustained the largest portion of this growth in production with an

¹ Editors' note: Please note that this applies also to the data from other countries.

additional 25'000 hectolitres produced per province. Almost 40 percent of the organic milk is produced by Quebec's dairy farms. However, even though Quebec has the highest number of organic dairy farms in Canada (109), the average milk production per farm is 2.5 times higher in other provinces, notably Alberta and British Columbia.

Canada: Production of certified organic milk

Source: B.C. Milk Marketing Board, Dairy Farmers of Manitoba, Dairy Farmers of Ontario, Fédération des producteurs de lait du Québec, Alberta Milk and the Nova Scotia Agricultural College

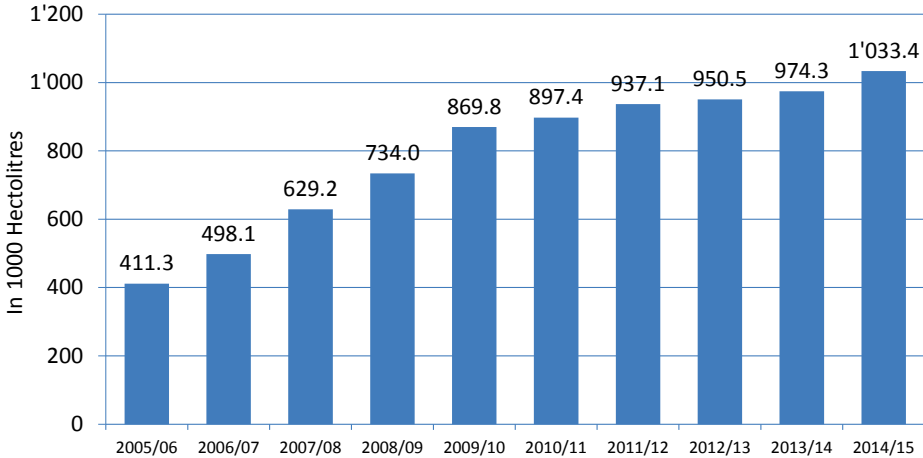


Figure 112: Canada: Production of certified organic milk

Source: B.C. Milk Marketing Board, Dairy Farmers of Manitoba, Dairy Farmers of Ontario, Fédération des producteurs de lait du Québec, Alberta Milk and the Nova Scotia Agricultural College

Market

Canada's market continues to see strong demand from consumers across the country. In 2015, organic sales were estimated at 4 billion Canadian dollars,¹ with continued double-digit growth. Ontario is still the largest-volume market, representing about 30 percent of national sales, while British Columbia has the strongest consumer preference for organic, and Alberta is considered the fastest growing consumer market. A number of major mainstream, specialty and independent retailers made announcements indicating their plans for significant investment in new locations and a broadening of organic offerings to meet growing demand for organic.

Bill C-18

In 2014, consultations were held nationally on the major changes to agriculture legislation in Canada. The omnibus bill (Bill C-18, which came into force in early 2015) amended nine acts relating to Agriculture and Agrifood, and also amended the "Plant

¹ One euro corresponded to 1.4661 Canadian dollars in 2014 (Average annual exchange rate according to the European Central Bank).

Breeders' Act" (PBR) to bring Canada into UPOV '91 (The International Union for the Protection of New Varieties of Plants), with important consequences for organic and conventional growers in the country.

Many organizations, led by the Canada Organic Trade Association (COTA) during its annual Parliament Organic Policy Conference, called on the government to amend the bill to protect farmers' rights to save seeds better. As a result of expert testimony by a variety of organizations and COTA's research on the seed market and practices in Canada, the government agreed to introduce key amendments to the final bill, which clearly stipulate a farmer's right to store, condition, and grow their own seed. However, the final law also allows for government authorities to withdraw or restrict this privilege (on a crop-by-crop basis) following a regulatory consultation and process. As a result of the strong stance taken on this issue, COTA was appointed by the Minister of Agriculture as the first organic representative on the Plant Breeders Rights Advisory Committee, a legislated expert advisory to the government.

More regulatory changes are expected in Canada over the next two years which will also have an impact on the organic sector, as consultations are ongoing regarding legislation relating to food safety, traceability, labelling, and production—and organic is increasingly being internalized into new or existing regulations rather than being housed separately.

Ontario first to regulate neonicotinoids in North America

Following consultations in 2014, a landmark regulatory decision by Ontario to limit neonicotinoid use in the province, went into effect on July, 2015. This move made Ontario the first North American jurisdiction to regulate and heavily restrict these pesticides, which are widely blamed for a negative impact on bee populations. The province has set a bold goal of an 80 percent reduction in use by 2017.

By August 2016, any person who purchases neonicotinoid-treated seeds will be required to have completed and become certified under a provincial integrated pest management course. The course includes training on the importance of pollinators for the ecosystem and how to protect them from pesticide exposure. Requirements for vendors include notifying purchasers seeds are neonicotinoid-treated, ensuring that untreated seeds are available for purchase, and reporting the sale of neonicotinoid-treated and untreated seeds to the Ministry of the Environment and Climate Change, with heavy fines for those who fail to follow the new rules.

Subsequent to the Ontario announcement, the province of Quebec announced it will begin consultations in 2015 on limiting farmers' use of neonicotinoids and other pesticides such as atrazine. Quebec plans to have the new regulations to be in place by the fall of 2016.

New standards

After three years of meetings of technical experts, Canada's revised and updated organic standards were published in late 2015—the first comprehensive revision since the regulations were introduced in 2009. The new version of Canada's organic standards will become mandatory for any new operations immediately, and for all operators within one year of publication. The revised standard includes easier-to-understand language and

clarifications on ambiguities, changes to the Permitted Substances List (PSL), and updates to ensure the standards remain true to organic principles—including the adoption of the four principles of organic agriculture.¹

The new standards also include new language on mitigating the risk of GMO contamination to tighten the process on-farm and off. The Canadian standards now include a new section for organic insect production, as well as updates to sections on maple and birch syrup, sprouts, shoots and microgreens, honey, and mushroom production. The standards for organic aquaculture production were not integrated into the general standards during this process but continue to be housed in their own standards. The process to update Canada's organic standards was overseen by the Organic Federation of Canada and a representative volunteer group of producers, processors, consumer groups, and industry leaders.

Two major federal investments supporting organic

In the spring of 2015, the federal government announced two major multi-year funding programs to support the growth and development of the Canadian organic sector.

Over 785'000 Canadian dollars were provided through the AgriMarketing Program to the Canada Organic Trade Association (COTA) as part of a 1.57 million Canadian dollar project. COTA's project will continue to support and build export markets, with a focus on Japan, Europe, the United States, and emerging markets, while also increasing the amount of marketing available for Canadian organic products in the domestic market.

A further 1.2 million Canadian dollar investment was announced under the Western Diversification Program (WDP) to help Prairie organic grain growers expand into growing international markets. The Prairie Organic Grain Initiative (POGI) addresses the shortage of organic grain growers by initiating several programs that will entice conventional growers to transition, as well as developing and transferring the knowledge that producers need to produce competitive crop yields and build profitability. The project also contains measures to build the profile and brand the Prairie organic grain sector as the destination for quality organic grains.

The Prairie Organic Grain Initiative (POGI) is a pan-western partnership between the Organic Alberta Council, the Saskatchewan Organic Directorate, the Manitoba Organic Alliance, and the Certified Organic Associations of British Columbia. The project has also received funding from a number of industry partners, including USC Canada, Dave's Killer Bread, Nature's Path, and Grain Miller's Inc. COTA is an official partner in the POGI initiative and is providing insights into international markets and development of detailed data on the Prairie sector.

¹ IFOAM – Organics International (2015) Principles of Organic Agriculture brochure. Bonn. Available at <http://www.ifoam.bio/en/organic-landmarks/principles-organic-agriculture>

Research

The Organic Science Cluster II (OSCII), an industry-led research and development endeavors initiated by the Organic Agriculture Centre of Canada at Dalhousie University, is currently in its third year of operation. It is supporting 37 research activities across the country in organic agriculture, livestock management and the processing sector. The federal government of Canada recently announced an investment of eight million for the continuation of the cluster until 2018.

North America: Current statistics

JULIA LERNOUD¹, HELGA WILLER² AND BERNHARD SCHLATTER³

Organic agricultural land and producers

North America's organic agricultural land was almost 3.1 million hectares in 2014, which is 0.8 percent of the total agricultural area. The area under organic cultivation has almost trebled from the million hectares in 2000 and now represents seven percent of the global organic agricultural land. Between 2013 and 2014, the area increased by almost 35'000 hectares or 1.1 percent, due to an increase in the organic agricultural land in Canada. Data for the United States has not been updated since 2011. More than 1.3 percent of the farmland in Canada is organic, and the proportion in the United States is 0.6 percent. There is a total of 16'660 producers in North America; most of them are in the United States (almost 80 percent).

Land use

Detailed land use information was available for both countries. The organic agricultural area was mainly used for arable crops and permanent grassland/grazing areas, which constituted 82 percent of the organic agricultural land. Only two percent (67'525 hectares) was used to grow permanent crops.

The key *arable crop* group is cereals, which represent almost 50 percent of the organic arable area and are grown on over 557'000 hectares. Wheat was the main cereal grown, with more than a 40 percent of the total arable area, almost 240'000 hectares, followed by maize and oats. The key *permanent crops* were temperate fruits (more than 19'000 hectares), followed by grapes (almost 16'000 hectares), and nuts (9'460 hectares).

Market

In 2014, the organic market continued to grow in North America, reaching almost 28 billion euros. In Canada, the organic market grew by over 20 percent in 2014, and in the United States the organic market grew by 11 percent. The United States is the largest single organic market in the world and North America continues to be the continent with the largest organic market.

For more information about the North American figures, see data tables, page 265.

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Organic Agriculture in North America: Graphs

Organic Agriculture in North America 2014

Source: COTA and USDA

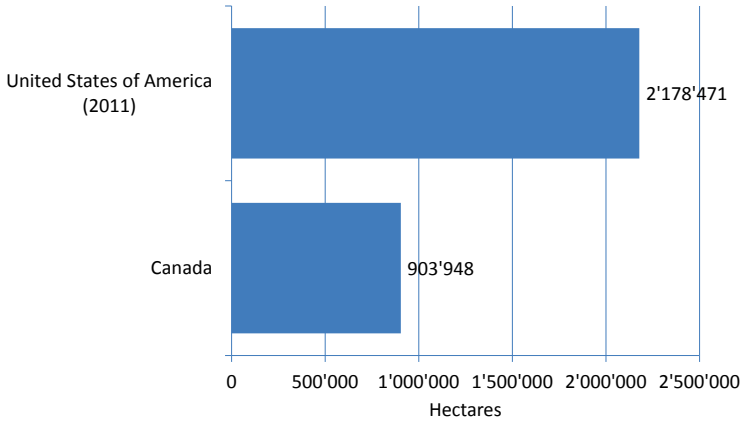


Figure 113: North America: Organic agricultural land in Canada and the United States 2014

Source: Canada Organic Trade Association and United States Department of Agriculture. US data from 2011

North America: Organic share of total organic agricultural Land 2014

Source: COTA and USDA

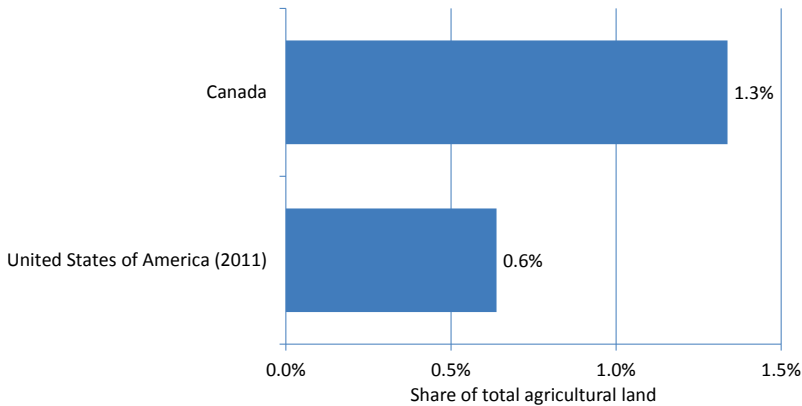


Figure 114: North America: Organic share of total organic agricultural land in Canada and the United States 2014

Source: Canada Organic Trade Association and United States Department of Agriculture. US data from 2011

North America: Development of organic agricultural land 2000-2014

Source: COG-COTA and USDA

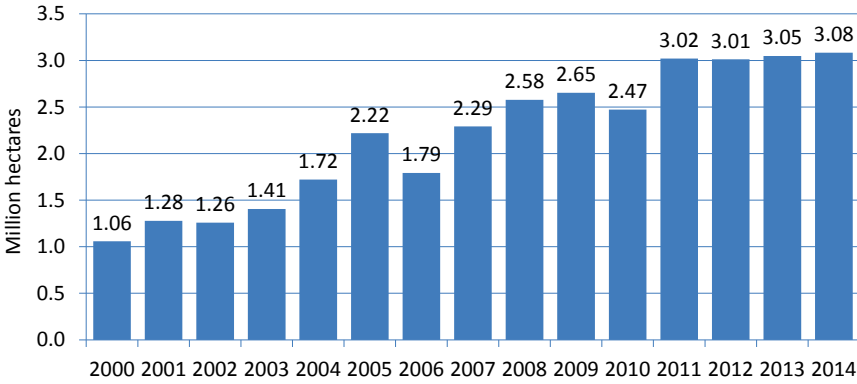


Figure 115: North America: Development of organic agricultural land 2000-2014 (for the US the latest available data are from 2011)

Source: Canada Organic Trade Association and United States Department of Agriculture

North America: Land use in organic agriculture 2014

Source: COTA and USDA

Land use types 2014

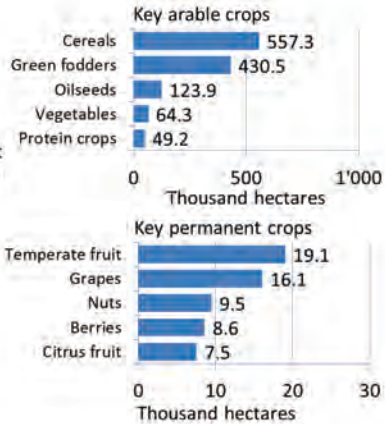
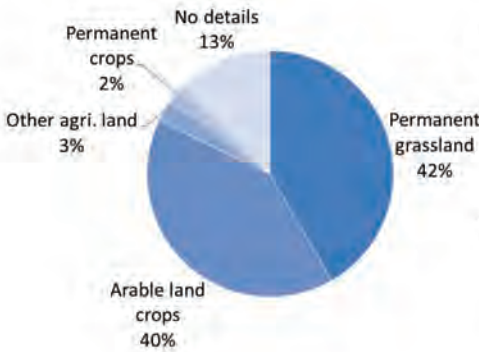


Figure 116: North America: Land use in organic agriculture 2014 (for the US the latest available data are from 2011)

Source: Canada Organic Trade Association and United States Department of Agriculture

Organic Agriculture in North America: Tables

Table 61: North America: Organic agricultural land, share of total agricultural land and number of producers 2014

Country	Area [ha]	Share of total agr. land [%]	Producer [no.]
Bermuda		Processing only	
Canada	903'948	1.3%	3'780
United States of America	2'178'471	0.6%	12'880
Total	3'082'419	0.8%	16'660

Source: Canadian Organic Growers (2014) and United States Department of Agriculture (2011); FiBL survey 2016

Table 62: North America: All organic areas 2014

Country	Agriculture [ha]	Forest [ha]	Wild collection [ha]	Total [ha]
Bermuda			Processing only	
Canada	903'948	137	63'954	968'039
United States of America	2'178'471			2'178'471
Total	3'082'419	137	63'954	3'146'510

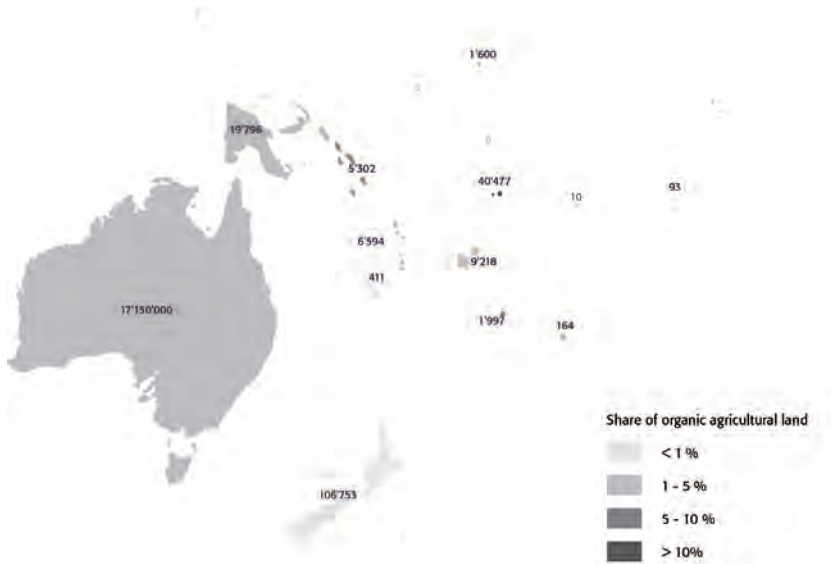
Source: Canada Organic Trade Association (2014) and United States Department of Agriculture (2011); FiBL survey 2016

Table 63: North America: Land use in organic agriculture 2014

Land use	Crop group	Area [ha]
Agricultural land, no details		14'318
Arable crops	Arable crops, no details	5'268
	Cereals	557'329
	Dried pulses	49'248
	Flowers and ornamental plants	6
	Green fodders from arable land	430'457
	Hops	8
	Medicinal and aromatic plants	433
	Mushrooms and truffles	55
	Oilseeds	123'902
	Root crops	7'006
	Strawberries	39
	Textile crops	7'377
	Vegetables	64'348
<i>Arable crops total</i>		<i>1'245'479</i>
Cropland, no details		378'920
Other agricultural land	Fallow land, crop rotation	43'163
	Other agricultural land, other	1'697
	Unutilised land	47'021
<i>Other agricultural land total</i>		<i>91'881</i>
Permanent crops	Berries	8'576
	Citrus fruit	7'528
	Fruit, temperate	19'053
	Fruit, tropical and subtropical	6'717
	Fruit/nuts/berries	98
	Grapes	16'094
	Nuts	9'460
<i>Permanent crops total</i>		<i>67'525</i>
Permanent grassland		1'284'296
Total		3'082'419

Source: Canada Organic Trade Association and United States Department of Agriculture. For the US, the latest available data are from 2011.

Oceania



Map 11: Organic agricultural land in the countries of Oceania 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Australia

ANDREW MONK¹ AND ANNABELLE BUSHELL²

History and legislation

The main legislative framework supporting the Australian organic industry remains the Export Control Act, which defines organic food products as prescribed goods; therefore, they require certification by a Department of Agriculture accredited certification agency. This unifies the sector under one National Standard (NS) with a regulating framework using Administrative Arrangements (AAs) for third party certification. This is currently being revised to meet the current needs of Australian organic exporters more effectively.

Australia has no specific domestic legislation articulating the criteria for the production and marketing of organic products. The introduction of new consumer laws in 2010 provided the Australian Competition and Consumer Commission (ACCC) additional scope to pursue and prosecute businesses attempting to misuse the organic label, either wilfully or inadvertently. This has led to a number of high-level examples of companies having to remove references to “organic” in the domestic marketplace where such use does not accord with industry-recognised and accepted organic standards.

The Department of Agriculture developed the National Standard for Organic and Biodynamic Produce in 1991 (this was last updated in 2015), which is administered through the use of third-party certification within a co-regulatory regime. This government standard is managed by the Organic Industry Standards and Certification Council (OISCC), and its application is marketplace driven with major supermarket chains in Australia requiring this certification or recognised equivalent certifications for imported products. The Australian Certified Organic (ACO) certification agency works closely with the major supermarkets to ensure that the products on their shelves comply with industry-recognised standards for domestically and internationally produced goods.

Since 2007, the industry has spent considerable time and resources developing a parallel national organic standard: the AS 6000 (Australian Standard for Organic and Biodynamic Products). However, the National Standard for Organic and Biodynamic Produce managed by OISCC remains the certification standard utilised by the trade within Australia for the domestic market as well as for export of products from Australia. At the time of this writing, the AS 6000 and the NS organic standards were effectively identical. The industry is currently deliberating, via the peak Council of OISCC, which standard will be utilised in the future. There is full industry intent to move back to having only one national forum for organic standards in the future to reduce time and resource demands as well as unnecessary doubling up of standards activities at the national level.

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Similar to “private” (or industry organisation owned) organic standards, the National Standard or the AS 6000 may, in the future, be used by the ACCC or other parties to prosecute a case against a producer or marketer of products that are not being produced or marketed in accordance with those industry standards or label use requirements. This presence of the federal government regulator, along with certification agency vigilance and reaction to market non-compliance (via testing, spot audits, and market tip-offs), delivers a relatively uniform application of standards requirements at the domestic level within the formal market channels (traditional retail), in the absence of specific legislation for organic.

Certifying agencies

Australia currently has six Australian government-accredited certification agencies. Since the export program was initiated in the 1990s, there have been between five and seven accredited agencies at any point in time. One agency, Australian Certified Organic (previously BFA Co-op Ltd) has integrated prior certifiers (Organic Vignerons of Australia, Organic Growers of Australia; and Tasmanian Organic-Dynamic Producers (TOP)) over the past decade to currently represent the majority of organic labelled products in the Australian marketplace. The TOP integration was finalised in 2014, with Tasmanian producers maintaining their access to their Tasmania-specific logo in addition to the mandatory Australian Certified Organic “Bud” logo.

The first formal industry association with its own standards was the Bio-Dynamic Research Institute (BDRI), which was established in 1952. Other industry associations were formalised in the 1980s (National Association for Sustainable Agriculture, Australia (NASAA) Ltd. and BFA Ltd.), and they developed their own private industry association standards and certification programs. In 1991, the creation of the Federal Government Export Program brought all of these (and some other) groups together under the one National Standard. Currently these accredited agencies are:

- ACO – Australian Certified Organic
- AUSQUAL
- BDRI – Bio-Dynamic Research Institute
- NCO – NASAA Certified Organic
- OFC – Organic Food Chain
- SFQ – Safe Food Production Queensland

Institutional support, research and development

The organic industry is overseen by the peak association Organic Industry Standards and Certification Council (OISCC), which advises the National Standards Sub-Committee (NSSC), which, in turn, advises the Federal Government on matters pertaining to the National Standard as well as the Export Control Act 1982 (Export Control Orders – Organic Produce Certification – 2005).

Currently, there is little direct Federal Government support for the organic sector since the Rural Industry Research and Development Corporation (RIRDC) disbanded its organic program worth approximately 300'000 Australian dollars per annum in the last decade.

The Western Australian Government has invested 4.5 million Australian dollars in a three-year Food Industry Innovation project to assist premium domestic and export market opportunities, and it is expected that some of this funding will specifically assist the organic industry in that state. Currently, no other state or territory government has specific organic programs in place although most profess to support the organic sector via related departmental work.

Horticulture Innovation Australia (HIA) is a national commodity group for that sector. Through a co-contribution funding agreement with ACO’s parent company, Australian Organic Ltd., they have invested some of the 1.2 million Australian dollars joint commitment to oversee market analysis (the Australian Organic Market Report), industry development work, and related communication to the industry over a three-year program. This builds on prior research grants to the Australian Organic Ltd. group.

Market sectors, trends and outlook

As of June 2014 (the last formal reporting of this measurement), the area of land under certification was over 22 million hectares. This includes land under full organic certification (17.15 million hectares), in conversion (1.19 million hectares), and precertification (4.3 million hectares). These figures are known and verified declarations, with the recognition that there are some (smaller certifier) gaps in reporting the full figure with increases likely due to new land being assessed for certification and conversion timeframes. Hence, this is likely to be a conservative figure with the next formal area validation of certified organic land to be calculated by the Australian Bureau of Statistics (ABS) in 2016.

Table 64: Australia: Organic retail sales by market channel in Australia 2014, based on retail sales value (AUD)

Sales channel	Share of total organic retail sales (%)	Retail sales (Million Australian dollars)
Supermarkets	69%	954.16
Discounters	2%	24.39
Convenience stores	3%	44.72
Independent grocers	16%	211.41
Online retailers	4%	51.50
Other retail outlets	7%	101.65
Total	100%	1'387.83

Source: Mascitelli et al. 2014

The most recent benchmarking in the Australian Organic Market Report (Mascitelli et al., 2014) valued the organic industry in Australia at 1.72 billion Australian dollars (retail sales + exports) with exports more than doubling in value since 2012. Domestically, the sector continuing to hold the greatest share in the Australian organic market is dairy (at 22.3 percent), which is closely followed by the meat industry, at 16.2 percent. The fruit and vegetable and processed foods sectors sit at over 11 percent each.

Sixty-nine percent of consumers shop for their organic fruit and vegetables at major retail stores including Coles, Woolworths, IGA and ALDI (Table 64).

Considering the increasing value of the organic retail industry, coupled with additional competition (due to the extension of ALDI stores across Australia), it is expected that this sector will continue to drive the market and influence the increase of commercial-scale production systems to meet supply challenges.

Australian organic retail sales 1990-2014

Source: Australian Organic 2014

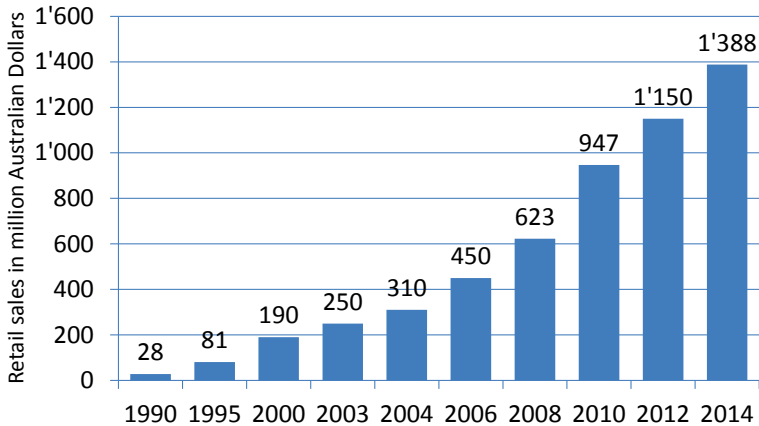


Figure 117: Australia: Growth of organic retail sales 1990-2014 (including non-food products)

Source: Australian Organic 2014

The Australian Organic Market Report (Mascitelli et al., 2014) provides the most recent industry research. Survey responses indicate a very positive outlook, with most individual sectors experiencing significant annual growth, and the overall industry performing at a compound annual growth rate of 15.4 percent.

The horticulture sector requires coordinated development to identify the gaps in production and address these strategically to minimise oversupply. It is expected that as this sector matures it will supply a broadening variety of market outlets from large retail home delivery to exports and processing.

Organic grain for human (and livestock) consumption remains significantly undersupplied due to significant areas of traditional organic farmland production losing access to licenced water rights and considerable industry demand growth in the past years. Organic grain supply capacity is currently estimated at one-third of what is claimed to be required by millers and processors on the east coast of Australia. Until there is surety in the supply of organic grain into the longer term, this sector will be significantly constrained. This has a coupling effect on the price of organic grain, with millers and stock feed processors directly competing against each other for contracts, pushing prices to around three times the conventional grain prices. This has had significant downstream impacts on the Australian dairy, poultry, egg and pork industries, with the limited supply directly impacting the current volume of production.

Recent industry workshops have been aimed at reversing this grain shortage – expected to last for some time into the foreseeable future.

Two sectors that are commercial and traditionally conventional production systems in Australia that feature little to not at all for organic production are wool and cotton. While there is a growing demand for these in the Australian market now, this is being served by imported, ready-processed product. Organic certification for the textile industry is only offered by one agency in Australia, Australian Certified Organic (ACO). They are also the only agency accredited by the Australian Government providing certification services to the cosmetic industry-specific COSMOS standard, a sector experiencing annual growth rates of 18 percent.

Overall, the value of the organic industry (both export and retail) in Australia is approximately one percent of the overall Australian food and beverage market. Given international examples of market share across Northern America and Europe, it is expected that there is considerable scope for future growth and development of the Australian organic industry. Outside of production and supply constraints and economic conditions globally, this growth is expected to continue unabated over the medium term with compound growth rates of around 15 percent per annum.

References and further reading

Mascitelli et al. (2014): Australian Organic Market Report 2014. Australian Organic Ltd, Nundah, Brisbane, Australia. Available from <http://austorganic.com/ao-market-report/>

Monk et al. (2012) Australian Organic Market Report 2012, BFA Ltd, Chermside, Brisbane, Australia

Weblinks

- › Australian Organic Ltd – www.austorganic.com
- › Australian Organic Schools - www.organicsschools.com.au
- › Organic Industry Standards and Certification Council (OISCC) - www.oiscc.org
- › Department of Agriculture - www.agriculture.gov.au/ag-farm-food/food/organic-biodynamic

The Pacific Islands

KAREN MAPUSUA¹

Recent important developments

Interest in Participatory Guarantee Systems (PGS) in the Pacific Islands continued to expand through 2014–2015 as market opportunities for PGS-certified products evolved and examples were generated addressing how organic and PGS can be tools for holistic and sustainable social and economic development. The Pacific Organic and Ethical Trade Community (POETCom) with support from the International Fund for Agricultural Development (IFAD) began in 2013 developing models for Participatory Guarantee Systems tailored to the diverse situations of Pacific organic growers. With learning from the first Pacific PGS BioCaledonia and BioFetia in New Caledonia and French Polynesia respectively, three pilot PGS were established in Fiji and Kiribati focusing on specific products (virgin coconut oil, coco sap sugar, and papaya).

The island communities of Cicia, Fiji, and Abaiang, Kiribati, fully embraced the idea of organic and PGS. The traditional leadership engaged in both islands and decided that they would declare their whole islands organic. The PGS then put form and rigour around that declaration, providing systems for verifying compliance with the Pacific Organic Standard (POS). In these cases, the PGS is greatly strengthened by the support and direction of the traditional leadership. In Abaiang, Kiribati, a bylaw has been established, and the island development plan is framed around maintaining the organic status of the island. Abaiang is the focus of many development projects due to its vulnerability to climate change impacts (it is a low coral atoll less than one metre above sea level). The organic bylaw and PGS now form a framework giving the community a valuable tool for managing these different interventions and deciding what will benefit their community in the long run.

In Cicia, the local high school is fully involved in the PGS, participating in a reforestation programme and producing food organically for the schools' boarding students. Organics is also integrated through the agriculture curriculum. The PGS also galvanised the community when there was an offer to bring in a sawmill and timber treatment plant to log the pine forest on Cicia. The timber treatment plant would have meant the island risked its organic status, and the community decided not to accept the mill as they were committed to the long-term benefits of organics.

A PGS training package has been developed, and that is now being utilised to assist further development. The Solomon Islands have established a PGS through the respected, local NGO Kustom Gaden Association with the first local group established in remote Rendova Province. Fiji has established two more PGS groups, one through the NGO Foundation for Rural Enterprises and Development (FRIEND), and

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another known as Bula Coffee. The Bula Coffee PGS adds a new dimension to PGS in the Pacific as it builds on a wild harvest system.

A unique aspect of PGS in the Pacific is the regional PGS mark, “Organic Pasifika Guaranteed.” PGS can apply to the Pacific Organic and Ethical Trade Community (POETCom) to be licensed to use this mark, which facilitates not only the recognition of organic products in the local market but is recognized across the 22 Pacific Island countries and territories facilitating intra-regional trade in organic products. This trade is in its infancy, but already, small quantities of organic products such as forest nuts, virgin coconut oil, and cocosap sugar are being exported to other Pacific Island countries for their developing organic markets.



Figure 118: Organic Pasifika logo

Third-party organic certification continues also to grow in the Pacific; however, costs remain high and, in some cases, prohibitive for smallholder producers. A significant proportion of the costs relates to travel expenses as inspectors have to be flown in from usually Australia or New Zealand, and often, due to flight logistics, geographic spread, or locations of grower groups, inspectors are required to stay on the island for a considerable amount of time. Aware of the steep costs, POETCom initiated the training of organic inspectors based in the Pacific Islands. With assistance from Agrana Fiji Limited, an organic exporter, and two European Union-funded programmes, the Pacific Agriculture Policy Project and the Increasing Agricultural Commodities Trade Project, seventeen trainees from seven Pacific Island countries have begun the process of training to be organic inspectors.

Training was delivered by the International Organic Inspectors Association together with the National Association of Sustainable Agriculture Australia (NASAA) and with the support of the certifiers Biogro and Bioagricert. The aim is to build a pool of locally based inspectors that POETCom’s partner certifying bodies can contract to undertake inspections on their behalf, reducing travel costs to operators.

Awareness of the role and potential of organic agriculture in the Pacific expanded on social media and through public events in 2015. POETCom launched the Organic Pasifika Facebook page, Twitter account, and its own website, greatly expanding the

information reach for organics in the region. The region's first large-scale public awareness event was held at the University of the South Pacific, Fiji, and live-streamed across the world. The debate "Organics Can Feed the Pacific" attracted almost 200 to the event and was widely shared through social media with an estimated 100'000 Tweets and numerous media articles published. Connected to this event was the launch of a pesticide awareness campaign in Fiji calling for the stronger regulation of pesticides in the country.

History

Today, current farming practices in many Pacific communities are largely organic, based on age-old systems that are free from the residues of agrochemicals and where environmental integrity remains largely intact. In the past, farming was predominantly for subsistence living, but in the cash-driven societies that we live in today, there is now a need for overseas markets to ensure that products being labeled and sold as "organic" meet international standards. While third-party certification began in the Pacific in the late 1980s, it has been slow to develop.

The organic movement in the Pacific recognized that one of the major challenges facing Pacific Island organic producers is the high cost of certification, auditing, and compliance involved in meeting and importing country organic standards and/or international standards. In order to address this issue, two projects commencing in 2007 were undertaken, funded by the International Fund for Agricultural Development and implemented by the IFOAM – Organics International and the Secretariat of the Pacific Community (SPC), respectively. The main outcomes of these projects were an analysis of the existing situation of organic agriculture and fair trade production in the Pacific islands and the creation of a set of Pacific regional standards for organic agriculture products, which was developed through a locally owned process and multi-sector participation. These projects also facilitated the development of a regional strategy and national plans to lay the foundation of sustainable organic agriculture development in the region. Two key groupings that were tasked with driving organics forward in the Pacific were formed: the first, the Regional Organic Task Force (ROTF), is a technical group representing all sectors and countries involved in organics. This group was charged with developing the Pacific standard and was responsible for implementing the initial regional action plan. The second group, the Pacific High Level Organics Group (PHLOG), consists of Pacific leaders who have shown a commitment to organics development in the region and provided high-level political support and advocacy.

The first Pacific organic standard was officially launched by the chair of the PHLOG and prime minister of Samoa at the Ministers' of Agriculture and Forestry Conference in Apia, Samoa, in September 2008. This now provides a platform for further regional policy development around organics.

In 2009, the ROTF recognized the need to evolve from a technical body to a representative peak body for organics and fair trade in the region, and so the Pacific Organic and Ethical Trade Community (POETCom) was formed.

POETCom established its secretariat in the Land Resources Division of the Secretariat of the Pacific Community in Suva Fiji in 2012, with funding support from the European Union, funding the Increasing Agricultural Commodities Trade (IACT) Project. This has

enabled steady progress with coordinated development across the region. The year 2012 also saw the Pacific Organic Standard (POS) welcomed into the IFOAM Family of Standards.

Another significant development in 2012 was the resolution of the Heads of Agriculture and Forestry Services (HOAFS) for the Pacific Islands¹ at its biannual meeting to “promote and mainstream organic agriculture into SPC and national agriculture strategies in recognition of its role in food and nutritional security, climate change adaptation and mitigation, enhancement of biodiversity and the livelihood opportunities it can provide.”

The Ministers of Agriculture then endorsed this resolution in the Communiqué following their meeting in Nadi in September 2012.

The year 2013 saw the implementation of the export support scheme as part of the Pacific Organic Guarantee Scheme with a Memorandum of Understanding signed between POETCom and three certifying bodies, Bioagricert (Italy), Biogro (New Zealand), and the National Association of Sustainable Agriculture Australia (NASAA), to provide certification services to the Pacific Organic Standard, allowing Pacific producers to export for the first time under the Pacific Organic Standard and allowing the commencement of the marketing of a regional organic brand “Organic Pasifika.”

Pacific Islands: Development of organic agricultural land 2008 to 2014

Source: FiBL-IFOAM survey 2010-2016

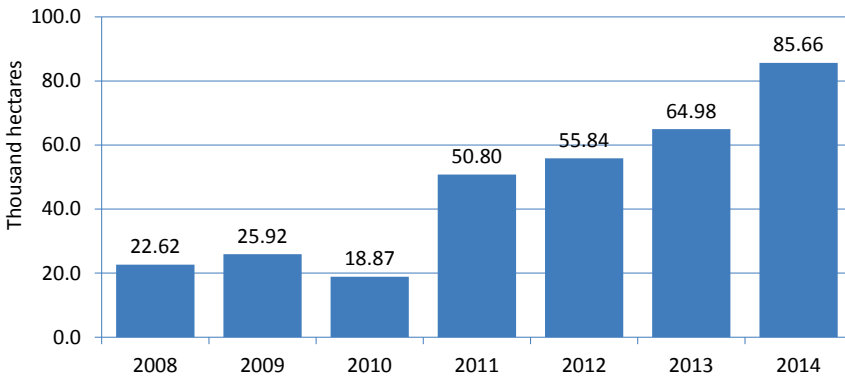


Figure 119: Pacific Islands: Development of the organic agricultural land 2008-2014

Source: FiBL survey 2010-2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

¹The Heads of Agriculture and Forestry Services (HOAFS) meet every two years and consists of the Agriculture departments heads from the 22 SPC island countries and territories. The Ministers of Agriculture and Forestry (MOAF) meet every 4 years.

Key actors

Developments in organic agriculture are being spearheaded by the PHLOG, SPC, POETCom, and the POETCom Focal Points in each Pacific Island country, including:

- BioCaledonia, New Caledonia
- Bio Fenua, French Polynesia
- Farm Support Organisation, Vanuatu
- Fiji Organic Association, Fiji
- Kustom Gaden Association, Solomon Islands
- Zai Na Tina Organic Demonstration Farm, Solomon Islands
- Niue Organic Farmers Association
- Palau Organic Farmers Association, Palau
- Chamber of Agriculture Wallis and Futuna
- Titikaveka Growers Association, Cook Islands
- Tonga National Youth Congress, Tonga
- Women in Business Development Incorporated, Samoa

The movement remains farmer and farm support organization-driven with support building from national governments as awareness of the potential for organics increases. Regional research and academic institutions are also engaged, including the University of the South Pacific and the National Agricultural Research Institutes of Papua New Guinea.

Pacific Islands: Top five countries with the largest growth of organic agricultural land in 2014

Source: FiBL-IFOAM survey 2016

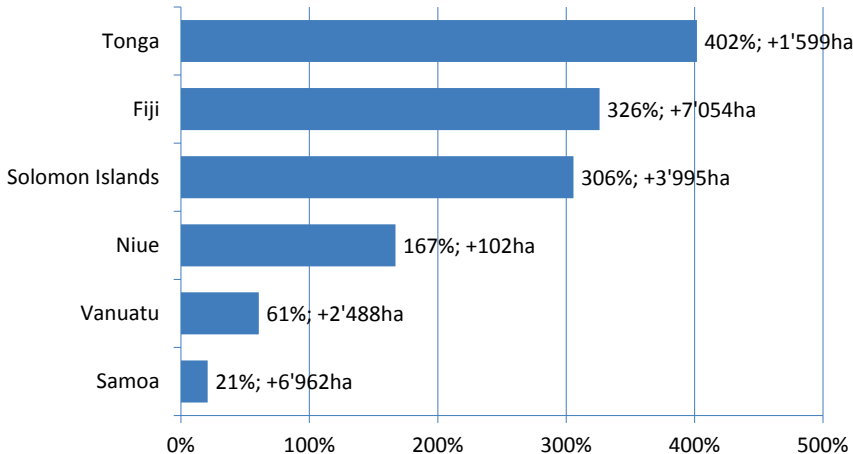


Figure 120: Pacific Islands: Top five countries with the largest growth of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Market & trade: Domestic market, export, import

Most of the organically certified products from the region are for export, but there are indications of growing local markets through box schemes, unverified organic claims on labels, PGS development, and increased awareness. As yet, however, there are no mechanisms for collecting local organic market data.

The following table is a summary table listing the main crops which are currently organically certified in the Pacific region:

Table 65: Pacific Islands: Organic Products

Products	Countries
Vanilla, ginger & other spices	Fiji, Vanuatu, Niue, Samoa
Cocoa	Vanuatu, Samoa, Papua New Guinea
Virgin coconut	Samoa, Fiji, Solomon Islands
Coconut meal	Vanuatu
Nonu /noni (Morinda citrifolia)	Cook Islands, Samoa, Fiji, Niue, French Polynesia
Honey	Niue
Bananas	Fiji, Papua New Guinea, Samoa
Coffee	Papua New Guinea, Samoa
Livestock (beef, goats and sheep)	Vanuatu, Fiji
Fruit & vegetables	Fiji, New Caledonia, Samoa, French Polynesia
Forest nuts	Solomon Islands

Spring water and salt have also been certified as approved inputs (non-agricultural) in Fiji.

International markets

The main international markets for the listed products are Australia and New Zealand, representing the main destinations for the export of organic products due to the proximity. Japan is a growing market, and other markets include China, North America, and the European Union.

Fair trade programmes

There is growing interest and activity in the area of fair trade programmes and certification, and efforts are being made by POETCom to link organic producers into these systems as a way of adding further value to products and ensuring maximum benefits to the farmers. There is also interest in the region in identifying trading models, outside the well-known fair trade certifications, that may be better suited to Pacific communities and producers.

Domestic markets

Generally, the domestic markets for organic-certified products are slowly developing, but in some cases, they are virtually non-existent. Organic products are commonly sold as conventional without premium prices or any acknowledgement of the organic status of the product. Some initiatives are ongoing or are in the pipeline to promote consumer awareness about organic products, in particular in linking the concept of organic food with local food consumption as part of strategies to reduce non-communicable

diseases, which are a major health issue in the Pacific Islands. Interesting opportunities are now being explored within the tourist structures of several countries that have larger tourism industries (e.g. Fiji, Vanuatu, Cook Islands and Samoa), focusing on development of Pacific cuisine and linking smallholder organic farmers directly with tourism and hospitality providers. There are now several up-market island based resorts in Fiji that have their island organically certified and that commit to serving guests organic produce from their land. To support this, in 2015, POETCom began developing an “Organic Tourism Standard,” which will provide a way for hospitality providers to be certified under “Organic Pasifika” and include their organic status and values as part of their brand. It is envisioned that the tourism standard will provide a range of options from whole destination certification through to a food outlet or menu item.

The growth in interest in PGS in several counties also implies that there is an opportunity for further development of domestic markets, and the acceptance of PGS certification across the region has stimulated initial regional trade in organic goods.

Legislation

The Secretariat of the Pacific Community (SPC) developed a policy brief on organic agriculture in 2009. The policy brief aims to assist governments and others in the region develop relevant policy and focuses on how organic agriculture can assist in meeting regional challenges. It outlines seven initial policy recommendations. Until very recently, there were no significant changes in legislation in the region, and no indication governments were considering policy in the area of organic agriculture, but, in the last two years, organic is gaining mention and recognition in national policy and planning documents, such as the recent “over arching sector plan for productive industries” in Vanuatu and the Solomon Islands organic policy. POETCom has also been approached to provide some policy advice to governments in the region and, in response, is developing an organic policy toolkit to assist governments in developing policies supportive of organic. This will be available in 2016.

Government and international support

The Secretariat of the Pacific Community as a regional intergovernmental organization continues to provide support for organic development and now houses the POETCom secretariat, but as current project funding cycles come to an end, the need for bridging finances and developing a longer-term financing strategy to support the organic movement is critical.

POETCom national affiliates continue to receive assistance from partners such as OXFAM New Zealand, Canada Fund, United Nations Development Programme (UNDP) small grants programmes, and bilateral donor assistance from Australia and New Zealand. In a few cases, national governments also provide financial support for organic certification costs as in the cases of Samoa, Tonga, and Niue, where the national governments cover certification fees for large national grower groups.

Outlook

Sustainable resourcing for the secretariat and core services of POETCom presents a challenge, and beyond June 2016, funding is uncertain. However, as governance and

management structures are strengthened and with the implementation of the Pacific Organic Guarantee System, in particular the elements of PGS, the export certification scheme and regional organic branding, growth, and momentum are likely to continue. The development of cost recovery mechanisms for services is likely to be an element of ongoing funding strategies.

A growing understanding of the role and potential of organic agriculture in adaptation to climate change will provide a basis for incorporating organics as a development tool in Pacific agriculture and climate change policies, but financial support will be required to undertake the necessary trials and demonstrations required for farmers and policymakers to adopt them widely. There is also an expectation that the local market for organic products will start to expand as the tourism and hospitality industries start to look towards organic and sustainability as part of the Pacific Islands' brand.

Links/Further reading

Pacific Organic and Ethical Trade Community www.organicpasifika.com

Secretariat of the Pacific Community (2008) Pacific Organic Standard, Secretariat of the Pacific Community's headquarters, Noumea, New Caledonia, 2008. Available at <http://www.organicpasifika.com/poetcom/wp-content/uploads/sites/2/2014/08/POS.pdf>

Pacific Organic and Ethical Trade Community (POETCom) (2012): Growing Our Future POETCom Strategic Plan 2013 – 2017. Secretariat of the Pacific Community, Suva, Fiji. Available at <http://www.organicpasifika.com/poetcom/wp-content/uploads/sites/2/2014/08/POETCom-Strategic-Plan.pdf>

Oceania: Current statistics

JULIA LERNOUD¹, HELGA WILLER² AND BERNHARD SCHLATTER³

Organic agricultural land

In 2014, the organic agricultural land in Oceania reported was 17.3 million hectares, which constituted 4.1 percent of the total agricultural area in the region. Forty percent of the world's organic agricultural land is in Oceania. The area under organic production has more than trebled since 2000 (5.3 million hectares). Between 2013 and 2014, the area increased in further countries such as Fiji (7'054 hectares more), Samoa (almost 7'000 hectares more), and the Solomon Islands (almost 4'000 hectares more). This increase can partly be attributed to better data availability.

The country with the biggest organic agricultural area is Australia with 17.2 million hectares, and the highest proportion of organic agricultural land is in Samoa, with more than 10 percent of all farmland under organic cultivation.

Land use

In 2014, almost 96 percent of all organic farmland in Oceania was grassland/grazing areas (16.7 million hectares). Detailed data on land use categories and arable and permanent crops were, however, not available for most of the countries.

Producers

There were more than 22'000 producers in the region, with the largest number of producers in Papua New Guinea (over 13'000 producers), Australia (1'707 producers), and Tonga (1'326 producers).

Market

For 2014, new data on the organic market was not available. In 2013, total organic market value (data only available for Australia and New Zealand) was almost 1.1 billion euros. The largest market was Australia with almost 1 billion euros. The annual organic consumption was 41 euros per person in Australia and 19 euros per person in New Zealand.

For more information, see the data tables on page 284.

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³ Bernhard Schlatter, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org

Organic Agriculture in Oceania: Graphs

Oceania: Organic agricultural land by country 2014

Source: FiBL survey 2016

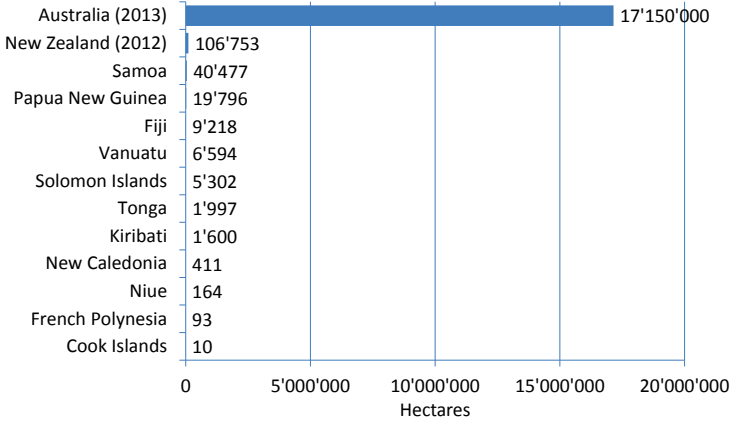


Figure 121: Oceania: Organic agricultural land by country 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Oceania: Share of organic agricultural land 2014

Source: FiBL survey 2016

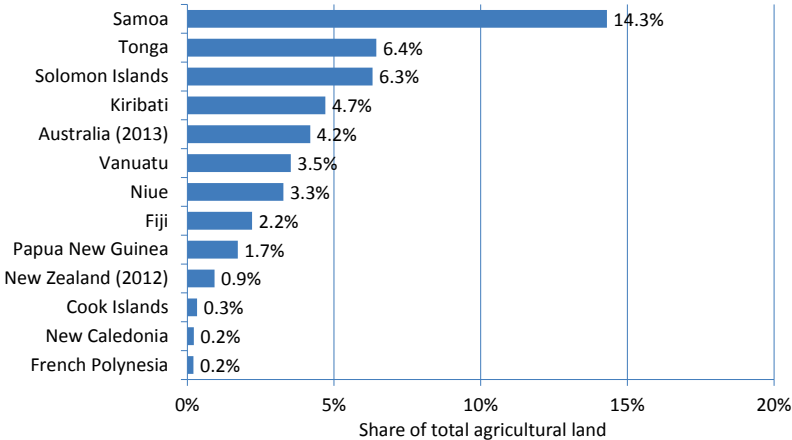


Figure 122: Oceania: Share of organic agricultural land 2014

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Oceania: Development of organic agricultural land 2000-2014

Source: FiBL-IFOAM-SOEL 2002-2016

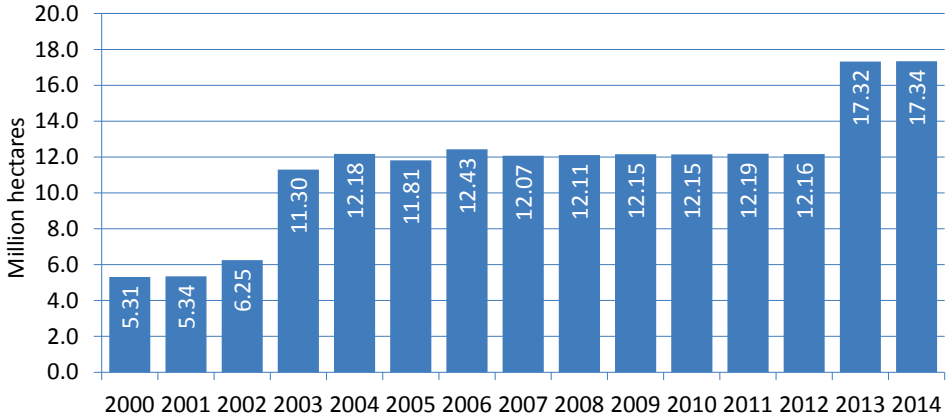


Figure 123: Oceania: Development of organic agricultural land 2000-2014

Source: FiBL-IFOAM-SOEL 2000-2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Organic Agriculture in Oceania: Tables

Table 66: Oceania: Organic agricultural land, share of total agricultural land and number of producers 2014

For information on data year, see page 311.

Country	Area [ha]	Organic share [%]	Producers [no.]
Australia	17'150'000	4.2%	1'707
Cook Islands	10	0.3%	50
Fiji	9'218	2.2%	627
French Polynesia	93	0.2%	133
Kiribati	1'600	4.7%	900
New Caledonia	411	0.2%	75
New Zealand	106'753	0.9%	987
Niue	164	3.3%	52
Papua New Guinea	19'796	1.7%	13'356
Samoa	40'477	14.3%	658
Solomon Islands	5'302	6.3%	1'018
Tonga	1'997	6.4%	1'326
Vanuatu	6'594	3.5%	1'226
Total	17'342'416	4.1%	22'115

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 67: Oceania: All organic areas 2014

Country	Agriculture [ha]	Wild collection [ha]	Total [ha]
Australia	17'150'000		17'150'000
Cook Islands	10		10
Fiji	9'218	653	9'871
French Polynesia	93		93
Kiribati	1'600		1'600
New Caledonia	411		411
New Zealand	106'753		106'753
Niue	164	112	276
Papua New Guinea	19'796		19'796
Samoa	40'477		40'477
Solomon Islands	5'302		5'302
Tonga	1'997		1'997
Vanuatu	6'594		6'594
Total	17'342'416	765	17'343'181

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments. For detailed data sources see annex, page 315

Table 68: Oceania: Land use in organic agriculture 2014

Land use	Crop group	Area [ha]
Agricultural land, no details		486'561
Arable crops	Arable crops, no details	32'843
	Cereals	2'724
	Dried pulses	18
	Medicinal and aromatic plants	192
	Oilseeds	217
	Strawberries	15
	Sugarcane	2
	Vegetables	1'388
<i>Arable crops total</i>		<i>37'399</i>
Cropland, no details		41'739
Permanent crops	Berries	15
	Citrus fruit	480
	Cocoa	1'060
	Coconut	12'401
	Coffee	18'728
	Fruit, temperate	1'282
	Fruit, tropical and subtropical	1'117
	Grapes	2'782
	Medicinal and aromatic plants, permanent	7
	Nuts	8'800
	Olives	470
	Permanent crops, other	1'552
<i>Permanent crops total</i>		<i>48'695</i>
Permanent grassland		16'728'022
Total		17'342'416

Source: FiBL survey 2016; based on information from the private sector, certifiers, and governments.
For detailed data sources see annex, page 315

Better Data

Introduction

The section “Better data” is a new addition to “The World of Organic Agriculture”. For this edition, we received two contributions that deal with data collection methods and suggestions for the improvement of data collection – Vitoon Panyakul reports about a study that was carried out in Thailand (page 289), and Els Wynen takes a closer look at the challenges related to the data released by the Australian Bureau of Statistics (ABS) (page 292).

In this context we would like to draw your attention to the results OrganicDataNetwork project,¹ which was funded by the European Union and was concluded in 2014. The project resulted in a number of interesting reports designed to help improve the data collection on organic markets in Europe.

The key outputs of the project were

- The recommendations of the OrganicDataNetwork project (OrganicDataNetwork 2014a)
- The synthesis report of the OrganicDataNetwork project (OrganicDataNetwork 2014b)
- The OrMaCode – ORganic Market data MAnnual and CODE of Practice - Manual and Code of Practice for the initiation and maintenance of good organic market data collection and publication procedures (OrganicDataNetwork 2014c)

We hope to continue this series of reports that deal with the improvement and methodology of organic data collection, processing, and analysis. Suggestions for contributions should be sent to helga.willer@fiBL.org.

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¹The project “Data network for better European organic market information” (OrganicDataNetwork) has received funding from the European Union’s Seventh Framework Programme for Research, Technological Development and Demonstration under grant agreement no 289376.

Thailand: Organic Market Study: Methodology and Results

VITON PANYAKUL¹

Despite the increase in organic production in Thailand, so far there has been no study dedicated to the Thai organic market as such. Until recently, the guesstimates of the Thai market were based on the calculation of production values. In mid-2014, the Thai Ministry of Commerce decided to fund a comprehensive market study; however, due to problems with the bidding procedure the study was delayed until early 2015. With less than 6 months to complete the task, the study was jointly conducted by the Organic Development Center (Sukhothai Thammathirat Open University) and the Earth Net Foundation (2015).

Definition of “organic”

The study first defined which organic products and markets should be covered because in the market place, there are many products, which are sold under labels such as “natural farming products“, “chemical-free products“, “sustainable agriculture products“. Therefore, only those products and markets that clearly use the term “organic” in Thai or English and have some kind of certification or guarantee system (e.g. third party certification according to national or international standards or a local participatory guarantee system) would be within the scope of this study.

Selection criteria for marketing channels

The next step was to define the marketing channels. Aside from exports, the domestic channels chosen were those with a focus on organic retailing. This means that producers and traders focusing on wholesale with only few retailing activities were excluded from the survey. Similarly, shops or supermarkets that retailed only a few products in their stores were also not included as organic marketing channels and were thus excluded from the survey. Table 69 shows the detailed criteria used to decide which sales points were to be included in the survey.

Inventory of sales points and data collection methodology

As part of the study, a nationwide survey was conducted to compile a full list of organic sales points in each category. Table 70 indicates the number of organic sales points in each category. Based on this list, a minimum sampling number was set, using the square root method, and the samples were chosen for each category. The sampled sales points were contacted, and sales data (for the sales of organic products in 2014) was collected through interviews. This data was then utilised to calculate an estimate of all the non-surveyed sales points. The sum of all sales points results in the total market value.

¹Vitton Panyakul, Board Member and General Secretary, Earth Net Foundation, Bangkok, Thailand, /www.greennet.or.th

The Thai organic market

Thai organic agriculture began almost 30 years ago. Initially, organic products, especially rice, were produced for export markets. Up until recently Thai organic production has enjoyed rapid growth and the statistics show an average annual growth of 39.9 percent since 1998, when national data became available for the first time. Although the past 5 years have shown a slow-down of annual growth, i.e. 18.5 percent, the Thai organic sector still is still growing.

In total, 471 operators (excluding primary producers) are involved in the Thai organic supply chains. These include 166 processors, 51 exporters, 3 distributors, 33 green shops, 171 modern trade shops (8 companies), 24 farmers' markets, 3 membership markets, 1 direct market, and 19 food establishments.

The total Thai organic market in 2014 was estimated to be worth about 2'331.55 million Thai Baht (58.2 million euros) of which 77.9 percent was for export and 22.06 percent for the domestic market (514.45 million Thai Baht, equivalent to 12.85 million euros). The most important export products were processed food, accounting for 66.1 percent of the total export value, followed by organic rice (30.4 percent). The main export destinations were the European Union, followed by the United States, East Asian, and Southeast Asian countries. Within the domestic market, modern trade was the largest sales channel, accounting for 59.5 percent of the total domestic sales, followed by green shops (29.5 percent) and restaurants, cafe, food services (5.9 percent).

Ninety-two percent of consumers are aware of organic

Apart from the market study, the project also conducted two consumer surveys: one nationwide and another with consumers within the Bangkok metropolitan areas. Although 92 percent of consumers responded that they are aware of organic agriculture, most of them did not fully understand the concept. Only 6.5 percent of consumers nationwide and 10.9 percent of consumers in Bangkok were able to answer half of the questions on organic farming correctly. Most people were confused by the number of different safe food standards and labelling, and they were not aware if hydroponics or the use of GMOs were allowed under organic farming regulations.

Reference

Organic Development Center and the Earth Net Foundation (2015): Organic Production and Market Situation Study, Ministry of Commerce, Nonthaburi

Table 69: Thailand: Marketing channels included in the market study of the Thai organic market

Category	Criteria
Exporters	Exporting certified organic products
Green shops ²	For small shops with less than 25 million Thai Baht in sales revenue: Sales of certified organic products represent more than 10% of the total sales. For large shops with more than 5 million Thai Baht sales revenue (for each sector): Sales of certified organic products represent more than 3% of total sales.
Supermarkets	The sales of certified organic products represent more than 0.5% of the total sales.
Farmers' markets	A minimum of 20% of the regular stalls in the market are selling certified organic products.
Membership markets (e.g. box schemes, Community Supported Agriculture CSA)	A minimum of 20% of the products sold are certified organic products.
Direct sales by commercial operators and e-commerce	A minimum of 20% of the products sold are certified organic products.
Catering (e.g. restaurants, cafes)	A minimum of 5 dishes served use more than 50% of certified organic products. The dishes may not have organic certification.

Source: Organic Development Center (Sukhothai Thammathirat Open University) and the Earth Net Foundation (2015)

Table 70: Thailand: Market value by channel in 2014

	Number of sales points	Number of samples	Market value in 2014 (million Thai Baht)
Exporters	51	18	1'817.10
Green shops	33	15	151.62
Supermarkets	171	98	306.00
Farmers' markets	24	12	24.02
Membership market (e.g. box schemes, Community Supported Agriculture (CSA))	3	3	1.28
Direct sales by commercial operators and e-commerce	1	1	1.45
Catering (e.g. restaurants, cafes)	19	7	30.08

Source: Organic Development Center of Sukhothai Thammathirat Open University and the Earth Net Foundation 2015

¹ Green shops: Shop specializing in health food and environmentally-friendly products

² The baht (THB) is the currency of Thailand. In 2014, 1 baht corresponded to 0.025 euro.

Organic Farm-Gate Data in Australia – Past and Future¹

ELS WYNEN²

Introduction

Australia has a poor record of data on organic agriculture in general, though figures for land area and the number of farmers have existed for some time. Estimates of the farm-gate value of organic production have been less frequent and less reliable over time.

In 2010-11, the Australian Bureau of Statistics (ABS) included a question on organic agriculture in its five-yearly census, covering the total organic area, number of producers, and value of production. The data were then analysed and published by Australian Organic (AO) in their Market Report 2012, along with further data such as retail sales, imports, and exports (Monk et al. 2012). This was the third report in their series. In 2014, the fourth report was published based on “knowledge of the industry” (Australian Organic 2014a).³

Were these data, obtained by different methods, useful for the organic sector, or should other methods of data collection and analysis be explored?

Area and number of producers

From the early 1980s, some efforts were made to collect data on organic agriculture in Australia, especially regarding the area, the number of organic farmers and, in later years, the farm-gate production or sales value (see Table 2).

The general picture of these data is that real growth in the area under organic management started around the early 2000s, with a dramatic increase from just over one million in the mid-1990s to over five million in 2001. In 2003, it jumped to over 11 million, a figure that has been reasonably stable until 2014.

At present, there seems to be an enormous expansion of the extended grazing areas, which may well see the area under organic management doubling over the coming years. Whereas, in the past, the data on the area and the numbers of producers was collected by the former AQIS, the Australian Quarantine and Inspection Service, the data for 2010-11 were provided through the 5-yearly census of ABS. The most recent, the 2014 data, was provided by Australian Organic and are based on a survey among the certifiers, and thus, using the same method as was formerly used by AQIS. However, fewer certifiers provide data to Australian Organic, thus making their data collection less accurate.

¹ For a more extensive treatment of the issues, see: Wynen, Els (2015) Improving the measurement of Australian organic production. Discussion Paper, no. 1501, Organic Trust Australia - Research and Education. Available at <http://orgprints.org/29266/>

² Dr. Els Wynen, Eco Landuse Systems, Canberra, Australia, www.elspl.com.au

³ Editors' note: Australian Organic Ltd is working with its set of three separate research groups on the constant improvement of data collection. In the next edition of “The World of Organic Agriculture”, we will have an article on these efforts.

Table 71: Australia: Area under organic management and numbers of organic producers (1982-2014)

Year	Hectares	% of total hectares	Number of producers
1982			<500
1990-a			950-1200
1990-b	372,371		1,260
1995	1,119,235		1,462
2001	5,293,732		
2002	6,201,195		
2003	11,249,212	2.5	1,730
2004	12,128,386	2.6	1,859
2005	11,766,768	2.7	1,894
2006	12,345,314	2.8	1,710
2007	11,988,044	2.7	1,776
2008	n.a.		n.a.
2009	12,001,724	2.9	2,129
2010-11	11,199,577	2.7	1,775
2014	18.3 million ¹	4.1	1,707

Sources: 1982 and 1990-a: Conacher and Conacher (1991); 1990-b and 1995: Hassall and Associates 1995; 2001-2007: AQIS (adapted by E. Wynen); 2009: AQIS (adapted by A. Mitchell et al.); 2010-11: ABS (2014) – reported by Monk et al. (2012) as 16.9 million ha, and 2,117 primary producers. 2014: Australian Organic (2014)

The number of agricultural businesses certified as organic or in conversion has also fluctuated over time, mostly increasing but possibly decreasing in recent years. These fluctuations may have been due to several reasons, one of which being a change in measurements over the years. Another factor, which has become more pronounced in recent years here and also in other countries,² is that the smaller farmers leave certification schemes for reasons of increased complexity and cost of certification while the number of larger farmers increases. This means that, although the number of certified organic farms decreases, the area under certified organic management can still be increasing, in addition to an increase in non-certified organic farms and area.

Data on farm-gate sales

From the early 2000s, some studies on the farm gate value were undertaken (see Table 71). For 2010-11, Monk et al. (2012) estimated the value, based on ABS data (estimated certified organic production multiplied with conventional market prices), at 301 million Australian dollars (organic products only), and 432 million Australian dollars (for the

¹ Editors' note: Please note that for the global survey on organic agriculture, for Australia only the data for the fully converted area has been included.

² Personal comment by Andre Leu, president of IFOAM – Organics International, 17 August 2015

value of organic and conventional products on organic farms). Australian Organic’s fourth Market Report for 2014, for which no farm survey was conducted,¹ reports the value of the “organic market” (presumably value of organic products sold in the organic market) of 508 million Australian dollars. The increase in farm-gate value is then compared with the estimates of the value of organic and conventional production on organic farms in 2012 of 432 million Australian dollars - and calculated to be an increase of 18 percent. However, attempting to make the categories included in the two years of comparison as much as possible similar, the organic production figure for 2014 would be closer to 440 Australian dollars.

For 2014, the total industry value, calculated as retail sales and exports was estimated to be 1.7 billion Australian dollars. This includes the total production value of the products connected with the organic industry – i.e., the value of agricultural products in addition to that of products such as cosmetics, agricultural and gardening inputs, textiles, and pharmaceuticals and health supplements - is calculated at 570 million Australian dollars (Australian Organic 2014a).

Further comments on the 2014 farm-gate sales data calculated by Australian Organic (2014) are made below.

The special challenges and difficulties that are linked to the ABS data, which were used by Australian Organic as the basis for the calculation of the 2010-11 value of organic production data, are elaborated upon in the following chapter.

Table 72: Australia: Farm-gate sales of organic industry – various years

Source	Year	Farm-gate sales (food only)	Beef as share of total farm-gate-sales	Fruit, vegetables and grain as share of total farm-gate-sales
		Million AUD	%	%
Wynen (2003)	2000-01	89	36.0	51.0
Halpin (2004)	2003	140	40.9	49.5
Kristiansen et al. (2008)	2007	231.5	13.7	57.7
Mitchell et al. (2010)	2009	223.2	15.4	58.2
Monk et al. (2012)	2010-11	300.6 ¹⁾	24.2	47.4
Wynen (2015) based on Australian Organic (2014)	2014	440.0 ²⁾	14	28

1) Value of agricultural commodities produced, taking the mid-point value of 3 groups of producers with different percentages of area under organic production (see Wynen 2015). Note that this figure refers to the estimated quantity of organic products multiplied by conventional market prices. The total value of organic farms was estimated at 432 million Australian dollars for 2010/2011. (The following products were included: livestock and livestock products, fruit and vegetables (including grapes), grains, oilseeds, pasture crops, nursery products).

2) Figure calculated by the author as explained above. For details see Wynen (2015). This includes food only.

¹ Dr. Andrew Monk, personal communications, October 2015.

ABS and the value of agricultural commodities produced in 2010-11 (VACP)

Every five years, ABS conducts an Agricultural Census in Australia. All landholders meeting certain criteria are obliged to fill out a questionnaire for this census. For 2010-11, the ABS included a question about whether farmers were certified organic or in conversion, and if so, how much of the total area was under organic management. The total production value of holdings that were, at least, some part under organic certification in 2010-11 was reported to be 432.2 million Australian dollars by ABS. However, this data is rather problematic for a number of reasons.

VACP of organic farming calculated with conventional prices

First, the value of agricultural commodities produced (VACP) for the organic industry, calculated by the ABS, is underestimated because the product prices used by the ABS to calculate the VACP do not include an organic price premium. The data collected on the quantity of production is multiplied by an average price in the (conventional) market. In practice, prices for organic produce are often higher (and sometimes considerably higher) than those in the conventional market. In other words, the values used by the ABS to calculate the VACP of the organic products are most likely to be lower than their actual market values.

VACP value for industries not correct due to allocation of non-specialized industries to particular categories

Second, the ABS classifies agricultural businesses under “industries” on the basis of production and area. In practice, this often means that holdings that are classified under a certain industry, for example “grain”, would receive a large part of their income from grains. They may, however, also have receipts from other crops, such as horticulture, or even other enterprises, such as livestock (for a more detailed explanation, see Wynen 2016). In other words, income from other enterprises than those to which the business was assigned is included in totals for that industry. Conversely, receipts from, in this example, grains may be received on holdings that are classified under a different industry, such as beef.

Calculating the VACP in the case of a specialised industry, such as dairy, may not cause a major problem regarding the value of that industry, as most of the VACP is due to that one commodity (milk) anyway. However, with the least specialised industries – where the main enterprise (such as grain) receives just over the limit set by the ABS to classify that holding as belonging to that particular industry – the classification could be more distorting. Without more in-depth analysis, it is difficult to know which commodities are under or over-estimated with the ABS data in the 2010-11 analysis (as used in Monk *et al.* 2012) – but the cereal-livestock sector seems likely to be one of those most affected.

VACP for organic farms that have non-organic areas potentially calculated incorrectly

The third methodological issue is that not all the area on certified farms needs to be under organic management. This can be due to several reasons. For example, an organic vegetable enterprise could be certified only for the vegetable-growing area and not for its livestock. The organic vegetable area could be a small part of the total farm area – while most of the receipts of that farm are derived from just organic vegetables. The ABS tries

to get a measure of the degree of participation in the organic sector by asking the question: “What area of this holding is certified under organic, biodynamic or in conversion?” However, the percentage of returns from organic products is not necessarily the same as the percentage of certified area and calculating the VACP on that basis could lead to misleading answers.

The issue of adjusting the VACP to the area under organic certification is also difficult to address for the analyst. One way to do this is to assume that the percentage of total receipts from organic products is equal to the percentage of the certified organic area of the total farm area. For example, if the landholder reports that half of the area is certified, it is then assumed that half of the VACP is derived from organic products. We have already seen above that this can be misleading as the different crops are not of equal value, and the productivity of the land is not equal over the farm. The ABS data cannot solve this problem because ABS do not ask what percentage of total receipts is from organic production, sold in the organic market or not. Anecdotal evidence suggests that taking the midpoint of the range is likely to lead to an underestimate of organic production.

Not all products produced as organic are sold in the organic market

The last issue is that not all products produced as organic are sold in the organic market. This is true, in particular, for livestock on mixed-enterprise farms, as it may be difficult to find a certified abattoir within a commercially reasonable distance from the farm when the numbers of animals are low. The question is then what is reported: the farm-gate production value (i.e., sales as organic and conventional) or the sales in organic markets only? The ABS data reflects the value of all production on the organic farm, as calculated with conventional prices. This is then adjusted for sales of organic produce only by deducting the estimated value of conventional produce. The other reports quoted in Table 72 are not explicit about it but may well refer to the value of total farm-gate sales (including organic produce sold in the conventional market) or to farm-gate sales in the organic market only).

Summary and conclusions

Despite the fact that the ABS has collected a wealth of data on organic agriculture in 2010-11, there are several problems in using the data to obtain a satisfactory estimate of the size of the industry. In other words, estimating farm-gate values of agricultural commodities with ABS census data is not likely to provide a true picture of the output of the organic sector.

Furthermore, as ABS data do not come cheap and are not available more than once in five years, calculating growth rates is difficult when one cannot be sure about errors in calculating the actual size of the different enterprises and differences with methods used in different years. So is there a better way in which to measure the size of the organic market in Australia?

As data are usually used by those who are interested in investing in the industry – by potential organic farmers and input and output industries, including financial backers – it seems clear that, if the data cause misinvestments to occur, this may set back the

industry for some time in the future. This may be more important in countries where confidence in the organic sector is low, as it is in Australia.

How can data collection be done better? Data collection by official sources, such as the ABS, via an actual census on organic farming or a survey by the Australian Bureau of Agricultural and Resource Economics (ABARE) is not likely to happen in the near future. In other countries, data is widely gathered by the private sector or by government organisations “... mostly based on data of the certifiers” (Willer and Lernoud 2014, pp.122-124) – at least for basic data, such as area, production volume, livestock numbers, and operators, whereas farm-gate sales data is available only for a few countries, Germany being one of them. Government data collection systems are often linked to organic laws or regulations such as the European Union’s regulation on organic farming, under which it is even mandatory for the Member States to deliver their data to Eurostat, the statistical office of the European Union.

In Australia, most - if not all - of the certifiers have some sort of data collection system. Details about agricultural holdings are collected in a farm inspection report, gathered for the purpose of enabling the certifier to decide on the organic status of the farm. The details collected vary between certifiers. The most common details gathered are the total area of the holding, and share of organic (and in-conversion) and conventional area, which, sometimes, includes the areas under certain crops or livestock. The farm gate production or farm gate sales are less often recorded.

Therefore, in order to get reliable (census-like) data on production and farm gates sales (both quantity and value), the simplest solution would be to collect data from the certifiers and agree upon the analysis and publication. Changes will need to be made in the data collection system of the certifiers, both in questionnaires and in the storage of the data. Independent analysis can then be published for the benefit of the whole of the organic community.

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Data Availability and Data Collection Systems: Findings from the 17th Survey on Organic Agriculture Worldwide

HELGA WILLER

For the 17th survey on organic agriculture worldwide, data on organic agriculture were available for 172 countries. Since 1999, when the data collection started, the number of countries included has almost doubled.

Development of the number of countries with data on organic agriculture

Source: FiBL-IFOAM-SOEL-Surveys 1999-2016

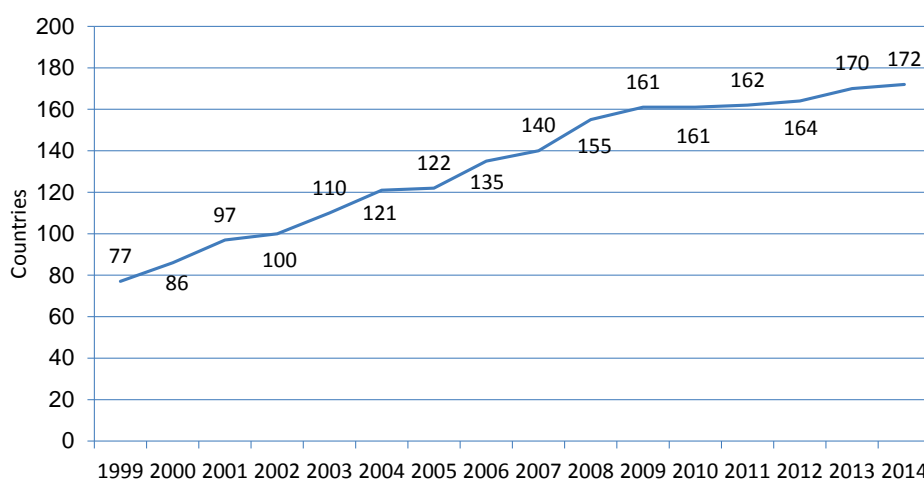


Figure 124: Development of the number of countries with data on organic agriculture 1999-2014

Source: FiBL-IFOAM-SOEL surveys 1999-2016

Whereas for the first survey on organic agriculture worldwide, only information on the total organic land and the number of farms was collected, the scope of the survey has expanded considerably in the past years, which was made possible by funding from the Swiss State Secretariat of Economic Affairs (SECO), the International Trade Centre (ITC), and NürnbergMesse, the organizers of the BIOFACH trade fair. In the framework of the European OrganicDataNetwork project (2012-2014),¹ detailed data on the organic market in Europe were compiled for the first time. These activities are continued by FiBL and AMI (see page 199).

¹ OrganicDataNetwork: Data network for better European organic market information. Information is available at www.organicdatanetwork.net

Data availability by indicator

Generally, data availability is improving every year. For the 17th survey we also noted better data availability from the international certifiers, more and more are now providing their data in a database format.

- *Data on land use, crops, livestock numbers, production volumes, and operators* are being more widely gathered, either by the private sector or by government organizations, and are mostly based on data of the certifiers.
- The availability of *domestic market and international trade data* is also improving. Domestic market data are mostly based on research carried out by market research companies and statistical offices. Import and export data is mainly collected by governments and can be based on the data from certifiers and/or customs but is most commonly based on company data (see also Zanolini et al. 2014).

Data collection systems

Governmental *data collection systems* are often linked to the establishment of regulations about organic agriculture such as the EU regulation on organic agriculture, which describes precisely what data should be provided.¹ Once such a regulation is established, there are rules about the registration of certifiers with a national authority, which opens up access to data from the certifiers. Public data collection systems mostly cover the organic area and operators, and sometimes cover production and international trade data, but they mostly exclude data on the domestic market. Whereas most countries use the data from the certifiers (administrative data), some also use data from the farm structure survey or the agricultural census. In some countries, both systems are in place (Germany, United States).

¹ Commission Regulation (EC) No 889/2008 of 5 September 2008 laying down detailed rules for the implementation of Council Regulation (EC) No 834/2007 on organic production and labelling of organic products with regard to organic production, labelling and control

Preamble (36), page 4, L 250/4:

“Notifications of information by the Member States to the Commission must enable it to use the information sent directly and as effectively as possible for the management of statistical information and referential data. To achieve this objective, all information to be made available or to be communicated between the Member States and the Commission should be sent electronically or in digital form.”

Article 93, page 36 Statistical information, L 250/31:

1. Member States shall provide the Commission with the annual statistical information on organic production referred to in Article 36 of Regulation (EC) No 834/2007 by using the computer system enabling electronic exchanges of documents and information made available by the Commission (Eurostat) before 1 July each year.

2. The statistical information referred to in paragraph 1 shall comprise, in particular the following data:

- (a) the number of organic producers, processors, importers and exporters;
- (b) the organic crop production and crop area under conversion and under organic production;
- (c) the organic livestock numbers and the organic animal products;
- (d) the data on organic industrial production by type of activities.

3. For the transmission of the statistical information referred to in paragraphs 1 and 2, Member States shall use the Single Entry point provided by the Commission (Eurostat).

4. The provisions relating to the characteristics of statistical data and metadata shall be defined within the context of the Community Statistical Programme on the basis of models or questionnaires made available via the system referred to in paragraph 1.

The data collected by the government are mostly, though not always, complete, as many countries do not have access to the data from foreign certifiers that are not registered under the country's accreditation system.

In many cases, the *private sector collates the data from the certifiers* (Canada) or *the organic operators* in the countries (Kenya, Tanzania, Uganda). However, often, the private sector does not have full access to the data.

Finally, there are *countries that have no data collection system* in place. Collection systems are still underdeveloped, particularly in countries in Africa and Asia. For these countries, FiBL attempts to get the data from major international certifiers or from contacts in the country, who provide data specifically for the survey. These data are often not complete, or there is a problem with continuity over the years.

Regional initiatives

The following are notable initiatives that have recently improved data collection systems.

European Union

The European Commission stipulates that all EU member states provide data for variables such as area, land use, number of operators and livestock, and production volumes. Eurostat, the statistical office of the European Union, compiles these data, which are accessible on the Eurostat homepage.¹ The European-funded research project OrganicDataNetwork, which ran from 2012 to 2014 and aimed to improve the collection of market data, has helped to increase the availability of market data in Europe (see page 216). A Code of Practice and Manual for the initiation and maintenance of good organic market data collection and publication procedures (OrMaCode) was written (OrganicDataNetwork 2014a), and a market database, which is available at the OrganicDataNetwork's website at www.organicdatanetwork.net/odn-statistics.html, was created. Finally, a set of recommendations of for improving market data collection was published (OrganicDataNetwork et al. 2014b).

Mediterranean Organic Agriculture Network (MOAN)

The Mediterranean Organic Agriculture Network (MOAN) is a network of the authorities in charge of organic farming that was set up by the Mediterranean Agricultural Institute in Bari, Italy, to promote data collection. Regular meetings and support through the Mediterranean Agronomic Institute of Bari (IAMB) have considerably improved data collection in the Mediterranean area in recent years. The data provided through this network is very important for data collection on organic agriculture worldwide.

Pacific Islands:

In the Pacific Islands, there are currently efforts to better coordinate organic activities in the region including the setting up of data collection systems (see also article by Karen Mapusua, page 273).

¹ Access via <http://ec.europa.eu/eurostat/data/database>

Global Survey on Voluntary Sustainability Standards (VSS)

The Research Institute of Organic Agriculture FiBL has recently expanded its data collection activities to further standards. The project "Global Survey on Voluntary Sustainability Standards (VSS)," which started in 2014, aims to set up a system to collect, process, and disseminate market data on Voluntary Sustainability Standards (VSS) across all geographic regions, and is thus an amplification of existing data collection processes for such data of the project partners FiBL, International Trade Centre (ITC), and the International Institute of Sustainable Development (IISD). (See article by Lernoud et al. on page 118).

Next global survey on organic agriculture

The next global organic survey will start in mid-2016. We would be very grateful if data could be sent to us, and we will contact all experts. Should you notice any errors regarding the statistical data in this volume, please let us know; we will then correct the information in our database and provide the corrected data in the 2017 edition of "The World of Organic Agriculture." Corrections will also be posted at www.organic-world.net.

Further reading

Pugliese, P., Bteich, M.R. and Al-Bitar, L. (Eds.) (2014) Mediterranean Organic Agriculture key Features, recent Facts, latest Figures Report 2014. Mediterranean Organic Agriculture Network (MOAN), CIHEAM Bari.

http://moan.iamb.it/index.php?option=com_phocadownload&view=category&id=8&Itemid=94

OrganicDataNetwork (Ed.) (2014a) OrMaCode – ORganic Market data MAnual and CODE of Practice - Manual and Code of Practice for the initiation and maintenance of good organic market data collection and publication procedures. Università Politecnica delle Marche, Ancona, Italy.

OrganicDataNetwork (2014b) D7.1 Data Network for better European Organic Market Information - Recommendations. Università Politecnica delle Marche, Ancona, Italy.

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Outlook

Strategizing the Details of Organic 3.0

MARKUS ARBENZ¹

After two years of think-tanking, the organic movement consults globally on the content of Organic 3.0. At the end of 2016, the global General Assembly will vote on whether Organic 3.0, as defined now, is the commitment for future development.

IFOAM – Organics International held its first global conference in Switzerland in 1977. At that conference, Lady Eve Balfour delivered a speech that cautioned against too strict adherence to a limiting set of rules. An early pioneer of organic farming and a founder of IFOAM – Organics International, Balfour seemed to fear that the organic movement might box itself in, defining itself in an exclusive way, so she argued for a farmer-led approach that prioritizes the outcomes and impacts necessary to foster the “wholeness” of a diverse, “living world”.

The need for Organic 3.0

The Organic 2.0 strategy of developing a reliable certification system, supported by government regulations, enabled continuous growth from a few farmers in various pockets of the world to a globally consolidated sector with millions of producers and consumers.

The practices envisioned by the pioneers have been tested, replicated, and scaled up globally. There is evidence of positive impacts on a wide range of important issues such as consumer health, biodiversity, and the improved welfare of producers. The holistic system viewpoint of not concentrating only on the exploitation of short-term market opportunities proved to be robust and assured growth even in times of economic crises in many countries. While there is sound development and wide prosperity in the organic sector, many stakeholders state a need

THINK TANKS FOR ORGANIC 3.0

- › The discussion paper **Organic 3.0 for truly sustainable farming and consumption by SOAAN² and IFOAM** – Organics International launched at Organic Expo 2015 in Goesan, Korea (IFOAM - Organics International and SOAAN 2015)
- › **Digests of the Organic 3.0 fora during BIOFACH 2014 and 2015** by IFOAM - Organics International
- › The main track summary and the **final declaration of the Organic World Congress 2014** in Istanbul by IFOAM – Organics International (2014)
- › The report of FiBL, Bio Suisse, Naturland, Bio Austria and Bioland: **“Mit Bio 3.0 zu einer nachhaltigen Landwirtschaft”** (Niggli et al. 2015)
- › The report on **“Transforming food & farming, an organic vision for Europe in 2030”** by IFOAM EU (Barabanova et al. 2015)
- › The “Global Vision and Strategy for Organic Farming Research”, by the Technology Innovation Platform of IFOAM, TIPI (Niggli et al. 2014)
- › The German Agrarian Research Alliance’s future organic research strategy report: **“Zukunft des Systems Ökolandbau, Strategiewurf der DAFA”**
- › **“Les Marché Bio à Horizons 2025”** by Organic Cluster
- › The Organic 3.0, trend and potentials analysis of the Austrian Zukunftsinstitut
- › The reports from the SOEL trainee program **“Die neue Generation denkt das neue Bio”**

¹ Markus Arbenz, Executive Director, IFOAM - Organics International, Bonn, Germany, www.ifoam.bio

² SOAAN is the Sustainable Organic Agriculture Action Network. For more information see <http://www.ifoam.bio/en/sustainable-organic-agriculture-action-network-soaan>

for reforms and call for a paradigm shift in order to make production and consumption truly sustainable. The achievements of Organic 2.0 are undisputedly impressive, but certified organic agriculture has not yet reached 1 percent of agricultural land or global food consumption. Delivering on the ambition to make an impact on the sustainable development of the planet requires further up-scaling and mainstreaming.

Delivering on the ambitions to have impact on the sustainable development of the planet requires further up-scaling and mainstreaming.

THE NEED FOR ORGANIC 3.0



Figure 125: The need for Organic 3.0

Source: IFOAM – Organics International and SOAAN 2015

Agriculture is one of the leading factor in global issues of hunger, inequity, energy consumption, pollution, climate change, loss of biodiversity, and depletion of natural resources. The positive and multi-faceted environmental, social, and economic benefits of a truly sustainable agriculture can contribute solutions to most of our world's major problems. If mainstream agriculture were to adopt more organic practices and principles, the need for Organic 2.0 would cease to exist. Until now, though, organic agriculture has not been included - or inclusive - enough to contribute to solving these global issues. The Organic 3.0 concept seeks to change this by positioning organic as a modern, innovative system which puts the results and impacts of farming in the foreground.

Organic 3.0: Goal & concept

The overall goal of Organic 3.0 is to enable a widespread uptake of truly sustainable farming systems and markets based on organic principles and imbued with a culture of innovation, progressive improvement towards best practice, transparent integrity, inclusive collaboration, holistic systems, and true value pricing.

The concept of Organic 3.0 seeks to address the previously outlined challenges by positioning organic as a modern, innovative system that puts the results and impacts of farming in the foreground. Diverse priorities and challenges such as climate change resilience and adaptation, access to capital and adequate income, animal welfare, the availability of land, water, seed, healthy diets, and avoidance of waste in food and farming systems cannot possibly all be folded into an ever-expanding set of standards and rules. Thus, a more holistic and dynamic model is needed.

At its heart, Organic 3.0 is not prescriptive but descriptive: instead of enforcing a set of minimum rules to achieve a final static result, this model is outcome-based and continuously adaptive to the local context. Organic 3.0 is still grounded upon clearly defined minimum requirements such as the ones maintained by many government regulations and private schemes around the world (and in the objectives of the *IFOAM Standards Requirements*). But it also expands outward from these base requirements: It calls for a culture of continuous improvement through private- and stakeholder-driven initiatives towards best practices based on local priorities (as described in the *IFOAM Best Practices Guidelines*).

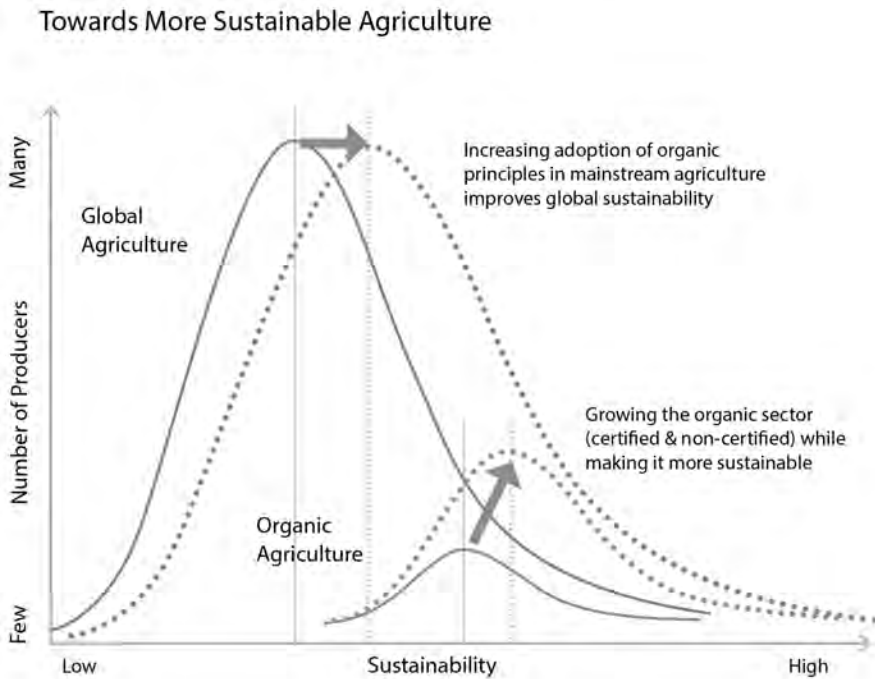


Figure 126: Towards more sustainable agriculture

Source: IFOAM - Organics International and SOAAN 2015

Organic 3.0: Strategy

The strategy for Organic 3.0 includes six main features, consistently promoting the diversity that lies at the heart of organic and recognizing there is no ‘one-size-fits-all’ approach:

- 1) A culture of innovation, to attract greater farmer conversion, adoption of best practices and to increase overall productivity and quality;
- 2) Continuous improvement toward best practice, at a localized and regionalized level;

- 3) Diverse ways to ensure transparent integrity, to broaden the uptake of organic agriculture beyond third-party assurance and certification;
- 4) Inclusiveness of wider sustainability interests, through alliances with the many movements and organizations that have complementary approaches to truly sustainable food and farming;
- 5) Holistic empowerment from the farm to the final product, to acknowledge the interdependence and real partnerships along value chains and also at the territorial level; and
- 6) True value and fair pricing, to internalize costs, encourage transparency for consumers and policy-makers and to empower farmers as full partners.

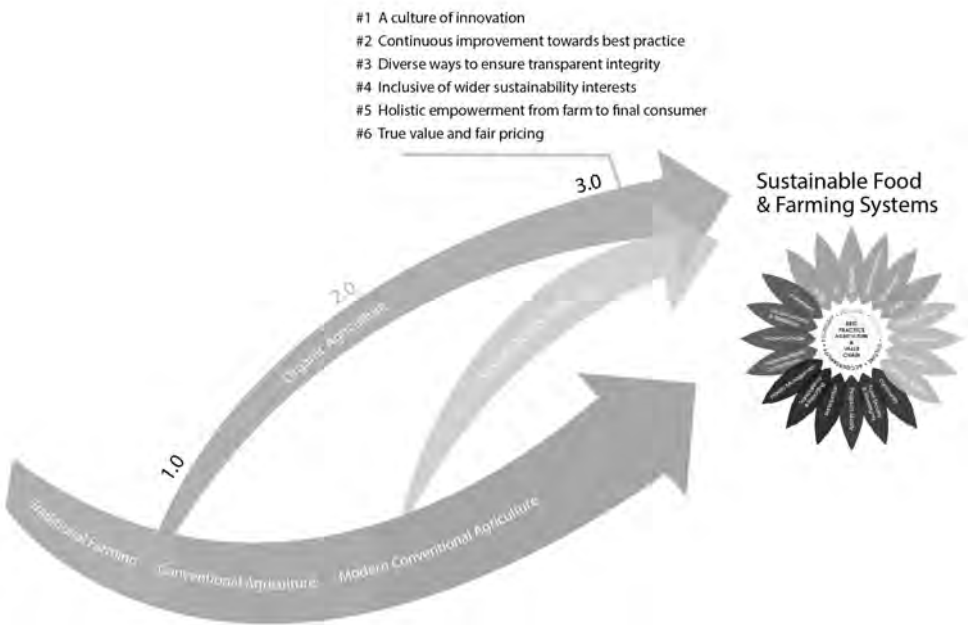


Figure 127: The six features that characterize Organic 3.0

Source: IFOAM - Organics International and SOAAN 2015

As a consequence, Organic 3.0 is innovation-oriented and proactively assesses upcoming technology against evidence-based and scientifically evaluated impact potentials based on the Principles of Organic Agriculture (Culture of Innovation). It expects operators along the whole value chain to be committed to ongoing improvements and to address all of the following dimensions: ecology, society, economy, culture and accountability. (Continuous improvement towards best practice). It provides more options for credible assurance, with more opportunities for inclusive and transparent participation by all, and exposes and mitigates conflict of interest at all levels of the public and private sector. (Diverse ways to ensure transparent integrity). It is inclusive and proactively

builds alliances with like-minded movements based on common visions rather than on competition and differences in detail. However, it also clearly distinguishes itself from unsustainable agriculture systems and “greenwashing” initiatives. (Inclusive of wider sustainability interests). Organic 3.0 takes holistic and system oriented stances for further developments in a community or a region. It particularly acknowledges the core position of smallholding family farmers around the world with a special focus on gender equity and fairness of trade. It realizes the driving potentials of good governance and of putting consumer needs and health in the foreground, particularly in the view of a fast changing technology environment and rapid urbanization. (Holistic empowerment from farm to final product). Finally, Organic 3.0 establishes a practical way to implement true cost accounting and strives for true value pricing, for creation of incentives for truly sustainable systems, with increased transparency, internalizing of external costs and benefits, and empowerment of all stakeholders to fair trade relationships. The proof of long-term societal benefit of such pricing models is brought into public policy discussions to correct current market distortions that reward unsustainable practices. (True value and fair pricing).

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- Zukunftsinstitut Österreich (2014): Organic 3.0: Trend- und Potentialanalyse für die Zukunft. Zukunftsinstitut Österreich, Wien and BIOFACH Nürnberg. Available at <https://www.biofach.de/de/presse/organic-studie/>

Annex

Key Indicators by Country

Table 73: Organic agricultural land, share of total agricultural land, number of producers, and retail sales 2014

Country	Area [ha]	Share of all agr. land [%]	Producer [no.]	Retail sales [Mio €]
Albania (2012)	515	0.04%	39	
Algeria (2013)	700	0.002%	57	
Andorra	4	0.02%		
Angola (2013)	2'486	0.004%		
Argentina	3'061'965	2.2%	1'018	
Armenia	1'000	0.1%	17	
Australia (2013)	17'150'000	4.2%	1'707	962
Austria	525'521	19.4%	22'184	1'065 (2011)
Azerbaijan	23'331	0.5%	288	3 (2011)
Bahamas	49	0.5%		
Bangladesh	6'860 (2012)	0.1%	9'335 (2011)	
Belarus		Wild collection only		
Belgium	66'704	4.9%	1'648	435
Belize	892	0.6%	721	0
Benin	2'344	0.1%	3'159	
Bermuda		Processing only		
Bhutan	6'829	1.3%	2'680	
Bolivia	114'306	0.3%	12'114	
Bosnia and Herzegovina	353	0.02%	24 (2013)	2
Brazil	705'233 (2012)	0.3%	12'526 (2012)	700 (2013)
Bulgaria	74'351	2.4%	3'893	7 (2010)
Burkina Faso	20'110	0.2%	9'032	
Burundi	148	0.01%	34	
Cambodia (2013)	9'889	0.2%	6'753	
Cameroon	380	0.004%	193	
Canada	903'948	1.3%	3'780	2'728
Chad		Wild collection only		
Channel Islands (2013)	240	2.7%		
Chile	19'932	0.1%	446	2 (2009)
China	1'925'000	0.4%	9'990	3'701
Colombia	31'621	0.1%	4'775 (2011)	
Comoros	1'723	1.1%	1'558	
Congo, D.R.	89'058	0.4%	1'122	
Cook Islands	10	0.3%	50	
Costa Rica	7'832	0.4%	3'000 (2009)	1 (2008)
Côte d'Ivoire	19'548	0.1%	490	
Croatia	50'054	3.8%	2'194	99
Cuba	2'979	0.04%	3	
Cyprus	3'887	2.7%	743	2 (2006)
Czech Republic	472'663	11.1%	3'866	77 (2013)
Denmark	165'773	6.3%	2'565	912
Dominica (2011)	240	1.0%		
Dominican Republic	166'220	8.5%	26'423	
Ecuador	45'818	0.6%	10'287	
Egypt	85'801 (2012)	2.3%	790 (2009)	
El Salvador	6'736	0.4%	2'000 (2007)	
Estonia	155'560	16.2%	1'542	
Ethiopia (2013)	160'987	0.5%	135'827	

Annex: Table: Organic Agricultural Land, Producers, Domestic Sales

Country	Area [ha]	Share of all agr. land [%]	Producer [no.]	Retail sales [Mio €]
Falkland Islands (Malvinas)	403'212	36.3%	8	
Faroe Islands	253	8.4%		
Fiji	9'218	2.2%	627	
Finland	212'653	9.4%	4'247	225
France	1'118'845	4.1%	26'466	4'830
French Guiana (France)	2'014	8.9%	44	
French Polynesia	93	0.2%	133	
Georgia	1'292	0.1%	159	
Germany	1'047'633	6.3%	23'398	7'910
Ghana	15'563	0.1%	1'588	
Greece	256'131	3.1%	20'186	60 (2010)
Grenada (2010)	85	0.7%	3	
Guadeloupe (France)	69	0.2%	30	
Guatemala	13'380 (2011)	0.3%	3'008 (2010)	
Guinea-Bissau (2013)	1'843	0.1%		
Guyana		Wild collection only		
Haiti (2013)	2'878	0.2%	1'210	
Honduras	24'950 (2012)	0.8%	4'989 (2011)	
Hungary	124'841	2.7%	1'672	25 (2009)
Iceland	11'174	0.5%	34	
India	720'000	0.4%	650'000 (2013)	130 (2012)
Indonesia	113'638	0.2%	5'700 (2013)	
Iran (Islamic Republic of)	11'601	0.02%	2'554	
Iraq	51	0.002%		
Ireland	51'871	1.3%	1'275	105
Israel	6'640	1.3%	391	
Italy	1'387'913	10.8%	48'662	2'145
Jamaica	27	0.01%	80 (2009)	
Japan	9'889	0.3%	2'130 (2012)	1'000 (2009)
Jordan	2'371	0.2%	27	
Kazakhstan (2012)	291'203	0.1%		
Kenya	4'894 (2012)	0.02%	12'647 (2011)	
Kiribati	1'600	4.7%	900	
Kosovo (2013)	114	0.03%	10	
Kyrgyzstan	6'929	0.1%	1'035	
Lao P.D.R.	6'275	0.3%	1'342 (2011)	
Latvia	203'443	11.2%	3'497	4 (2011)
Lebanon	1'079	0.2%	93	
Lesotho (2013)	560	0.02%	2	
Liechtenstein	1'135	30.9%	39	5
Lithuania	164'390	5.7%	2'445	6 (2011)
Luxembourg	4'490	3.4%	79	90
Macedonia, FYROM (2013)	3'146	0.3%	382	
Madagascar	30'265	0.1%	22'851	
Malawi	102	0.002%	2	
Malaysia (2013)	603	0.01%	119	
Mali	11'919	0.03%	12'619	
Malta	34	0.3%	10	
Martinique (France)	248	0.9%	39	
Mauritius	6	0.01%	18	
Mayotte	5	0.04%	2	
Mexico (2013)	501'364	2.3%	169'703	14
Moldova (2011)	22'102	0.9%	172	

Annex: Table: Organic Agricultural Land, Producers, Domestic Sales

Country	Area [ha]	Share of all agr. land [%]	Producer [no.]	Retail sales [Mio €]
Montenegro	3'289	0.6%	167	
Morocco	8'660	0.03%	120 (2010)	
Mozambique	15'421	0.03%	5	
Myanmar	5'320	0.04%	5	
Namibia	30'082	0.1%	12	
Nepal (2013)	9'361	0.2%	687	
Netherlands	49'159	2.5%	1'706	965
New Caledonia	411	0.2%	75	
New Zealand (2012)	106'753	0.9%	987	82
Nicaragua (2009)	33'621	0.7%	10'060	
Niger	262	0.001%		
Nigeria	5'021	0.01%	101	
Niue	164	3.3%	52	
Norway	49'827	4.6%	2'232	278
Oman (2013)	38	0.002%	4	
Pakistan	23'828	0.1%	108	
Palestine, State of	6'896	1.9%	1'096	
Panama (2013)	15'183	0.7%	1'300	
Papua New Guinea	19'796	1.7%	13'356	
Paraguay	54'444	0.3%	58'258	
Peru	263'012	1.2%	65'126	14 (2010)
Philippines	110'084	0.9%	165'974	
Poland	657'902	4.3%	24'829	120 (2011)
Portugal	212'346	6.3%	3'029	21 (2011)
Puerto Rico	No area data available		5	
Republic of Korea	18'306	1.0%	11'633	221
Réunion (France)	659	1.6%	154	
Romania	289'252	2.1%	14'159	80 (2011)
Russian Federation	245'846	0.1%	68	120 (2012)
Rwanda	2'248	0.1%	3'952	
Samoa	40'477	14.3%	658	
San Marino		Processing only		
Sao Tome and Principe	6'706	12.0%	3'738	
Saudi Arabia	37'563	0.02%	145	
Senegal (2013)	6'929	0.1%	18'393	
Serbia	9'548	0.2%	1'281 (2013)	
Singapore		Processing only		
Slovakia	180'307	9.5%	403	4 (2010)
Slovenia	41'237	8.9%	3'293	49 (2013)
Solomon Islands	5'302	6.3%	1'018	
South Africa	19'501	0.02%	259	
Spain	1'710'475	6.9%	30'602	998 (2012)
Sri Lanka	62'560	2.3%	524	
Sudan	130'000	0.1%	354	
Suriname	39	0.05%		
Swaziland	8	0.001%		
Sweden	501'831	16.4%	5'406	1'402
Switzerland	133'973	12.7%	6'195	1'817
Syrian Arab Republic (2010)	19'987	0.1%	2'458	
Taiwan, Province of China (2013)	5'937	0.7%	2'988	
Tajikistan (2012)	12'659	0.3%	10'486	
Tanzania	186'537	0.5%	148'610	

Annex: Table: Organic Agricultural Land, Producers, Domestic Sales

Country	Area [ha]	Share of all agr. land [%]	Producer [no.]	Retail sales [Mio €]
Thailand	37'684	0.2%	9'961	12
Timor-Leste	25'479	6.8%	73	
Togo	15'321	0.5%	9'933	
Tonga	1'997	6.4%	1'326	
Tunisia (2013)	139'087	1.4%	2'810	
Turkey	491'977	2.0%	71'472	4 (2009)
Uganda	240'197	1.7%	190'552	
Ukraine	400'764	1.0%	182	15
United Arab Emirates	4'286	0.8%	52	
United Kingdom	521'475	3.0%	3'526	2'307
United States of America	2'178'471 (2011)	0.6%	12'880 (2011)	27'062
United States Virgin Islands	26	-	2	
Uruguay	1'307'421	8.8%	4	
Uzbekistan		Wild collection only		
Vanuatu	6'594	3.5%	1'226	
Venezuela		Processing only		
Viet Nam	43'007	0.4%	2'721	2
Zambia	7'552	0.03%	10'059	
Zimbabwe	474	0.003%	2'003	
Total	43'662'446	1.0%	2'260'361	62'816

Source: FiBL survey 2016, based on data from governments, the private sector, and certifiers. FiBL-AMI- survey 2016, based on data from government bodies, the private sector, and market research companies. For detailed data sources see annex, page 315

Data Providers and Data Sources

Compiled by Julia Lernoud¹ and Helga Willer²

Afghanistan

Other than in previous years, for Afghanistan, no data were received.

Albania

Source

Patrizia Pugliese, Marie Reine Bteich and Lina Al-Bitar (eds.) (2014): Mediterranean Organic Agriculture. Key Features, Recent Facts, Latest Figures. Report 2014. Mediterranean Organic Agriculture Network (MOAN), CIHEAM Bari, Valenzano. Available at http://moan.iamb.it/index.php?option=com_phocadownload&view=category&id=8&Itemid=94
The data is from 2012.

Contact

Dr. Marie Reine Bteich CIHEAM - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

Algeria

Source

Mediterranean Organic Agriculture Network (MOAN)/IAMB, Bari, Italy. The data is from 2013.

Contact

Dr. Marie Reine Bteich CIHEAM - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

Note

No separate figure for the number of producers was available; the figure communicated here is that for all operators in the country.

Andorra

Source

Ecocert, 32600 L'Isle Jourdain, France

Contact

Emma Tsessue, Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com

¹ Julia Lernoud, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org

² Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Frick, Switzerland, www.fibl.org

Angola

Certifier data.

Argentina

Source

Land use/operator/production data: SENASA, 2015 "Situación de la Producción Orgánica en la Argentina durante el año 2014". Buenos Aires. In addition, further data was provided by SENASA, www.senasa.gov.ar
Export value data is from 2009.

Contact

Juan Carlos Ramirez and Diego Pinasco, SENASA, Buenos Aires, Argentina, www.senasa.gov.ar

Armenia

Source

Survey of Ecoglobe - Organic control and certification body, 375033 Yerevan, Republic of Armenia, www.ecoglobe.am.

Contact

Nune Darbinyan, Ecoglobe - Organic control and certification body, 375033 Yerevan, Republic of Armenia, www.ecoglobe.am.

Australia

Source

- › Australian Organic (Ed) (2014): Australian Organic Market Report 2014. Research by Swinburne University of Technology, the Australian Bureau of Statistics and Mobium Group. Australian Organic, Nundah. Available from http://austorganic.com/wp-content/uploads/2014/11/AO_Report_2014_web.pdf
- › For crop data: Biological Farmers of Australia, Chermside Brisbane, Australia. Australian Organic Market Report 2010

Contact

- › Andrew Monk, Chairman, Australian Organic, Nundah, Australia, www.austorganic.com

Austria

Sources

- › Data source for land area, land use and farms: Lebensministerium: Gruener Bericht. Lebensministerium, Wien, www.gruenerbericht.at
- › Domestic market data and export data are from 2011 and were compiled by the Organic Retailers Association (ORA). Details on individual products are available from RollAMA/AMA-Marketing Marktentwicklung. Wert und Menge. RollAMA/AMA-Marketing, Vienna.

Contact

- › Otto Hofer, Lebensministerium / Federal Ministry of Agriculture, Forestry,

Environment and Water Management (AT), Vienna, Austria,

www.lebensministerium.at

- › Barbara Köcher-Schulz, AMA-Marketing GesmbH AMA, Vienna, Austria

Azerbaijan

Source

GABA Ganja Agribusiness Association, Ganja, Azerbaijan, www.gaba.az

Contact

Dr. Vugar Babayev; GABA Ganja Agribusiness Association, Ganja, Azerbaijan; www.gaba.az

Bahamas

Certifier data.

Bangladesh

Source

Horticulture Export Development Foundation, Dhaka, Bangladesh, www.hortex.org. For the crops some data from an international certifier were included. The data are from 2012.

Belarus

Source

Certifier data (wild collection only). Products include among others blueberries, cranberries, mushrooms.

Belgium

Source

- › Samborski V., Van Belleghem L., Platteau J. (2014): de Biologische Landbouw in Vlaanderen. Departement Landbouw en Visserij. Brussel. Available at <http://lv.vlaanderen.be/sites/default/files/attachments/De%20biologische%20landbouw%20in%202013.pdf>

Contact

- › Vincent Samborski, Landbouw en Visserij, Brussels, Belgium
- › Paul Verbeke, BioForum Vlaanderen vzw, Antwerpen, www.bioforum.be

Belize

Source

- › Survey among the certified companies in Belize by the Belize Organic Producers Organisation BOPA, Belmopan, Belize.

Contact

- › Maximiliano Ortega, Belize Organic Producers Organisation BOPA, Belmopan, Belize

Data revision

The area data for 2001-2012 for Belize were revised: 2001-2007: 732.5 hectares; 2008: 752 hectares; 2009-2010: 476.2 hectares; 2011: 487.2 hectares; 2012: 752.7; 2013: 802.1 hectares.

Benin

Source

Ecocert West Africa, Ouagadougou, Burkina Faso

Contact

- › Laurent C. Glin, FiBL Terrain, SYPROBIO-CRRA, Sikasso, République du Mali
- › Aziz Yanogo, Ecocert West Africa, Ouagadougou, Burkina Faso, Benin

Bhutan

Source

Ministry of Agriculture (MOA), National Organic Programme DOA, Thimphu, Bhutan, www.moa.gov.bt

Contact

Kesang Tshomo, Ministry of Agriculture MOA, National Organic Programme DOA, Thimphu, Bhutan, www.moa.gov.bt.

Bolivia

Source

Survey of the Bolivian Association of Organic Producers Organisations – AOPEB.

Contact

Edmundo Janco Mita, Asociación de Organizaciones de Productores Ecológicos de Bolivia AOPEB, Bolivia

Data revision

The 2011 data was revised; according to AOPEB there were 146'412 organic hectares in that year. For 2012 and 2013, no data collection was carried out.

Bosnia Herzegovina

Source

Organska Kontrola, Sarajevo, Bosnia & Herzegovina

Contact

- › Bernisa Klepo, Organska Kontrola, Sarajevo, Bosnia & Herzegovina
- › Aleksandra Nikolic, University of Sarajevo, Bosnia & Herzegovina

Brazil

Sources

- › Area and operators: COAGRE/DEPROS/SDC/MAPA (2013): Dados da agricultura orgânica oficialmente regulamentada no Brasil. Ministério da Agricultura, Pecuária e Abastecimento. The wild collection data are from 2011.
- › Export and domestic market data ORGANICS Brasil, Brazil quoted by Karin Heinze (2014): Brazil: dynamic growth of the domestic market and exports. The Organic-Market.info website

Contacts

- › Angela Pernas Escosteguy, Instituto do Bem-Estar, Porto Alegre, Brazil

- › Ming Liu, Organic Brasil, Brazil

Bulgaria

Sources

- › Land area, operators: Ministry of Agriculture, Sofia, Bulgaria
- › Domestic market data (from 2010): Bioselela, Karlovo, Bulgaria. www.bioselela.com

Note

It should be noted that since 2015 Eurostat has asked its data providers to supply data on the harvested area, whereas in the previous years the certified area was provided. In the case of Bulgaria, the harvested area was 47'914.18 hectares. (This is the figure, which is communicated by Eurostat).

Contact

Dr. Stoilko Apostolov, FOA Bioselela, Karlovo, Bulgaria. www.bioselela.com

Burkina Faso

Sources

The data were compiled by FiBL based on the data of the following international certifiers.

- › CERTISYS, B-1150 Bruxelles, Belgium, www.certisys.eu.
- › Control Union Ecocert West Africa, Ougadougou, Burkina Faso
- › LACON GmbH, Brünnesweg 19, 77654 Offenburg, Germany, www.lacon-institut.com

Not all certifiers provided updated data.

Contact

- › Nathalie Boes, CERTISYS, B-1150 Bruxelles, Belgium, www.certisys.eu.
- › Daniel Szalai, Control Union, Zwolle, The Netherlands, www.controlunion.org
- › Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso

Burundi

Source

Ecocert East Africa, Madagascar

Contact

Sandra Randrianarisoa, Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com.

Cambodia

Source

Cambodian Organic Agriculture Association (CORAA), Khan Chamkar Morn, Phnom Penh, Cambodia, www.coraa.org. The data are based on a survey among the organic certifiers in the country. The data is from 2013.

Contact

Winfried Scheewe, Cambodian Center for Study and Development in Agriculture (CEDAC), Toul Kok Phnom Penh, Cambodia, <http://www.cedac.org.kh>

Cameroon

Source

The data were compiled by FiBL based on the data of the following international certifiers:

- › Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.
- › Soil Association Certification Limited, Bristol, UK, www.soilassociation.org/certification

Not all certifiers provided updated data.

Contact

- › Andrew Bayliss, Soil Association Certification Limited, Bristol, UK, www.soilassociation.org/certification
- › Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

Canada

Source

Land area, producers and other operator types, market data: Survey of the Canada Organic Trade Association (COTA), Ottawa, Canada, based on information of the certifiers.

Contact

- › Marie-Eve Levert, Canada Organic Trade Association (COTA), Ottawa, Canada, <http://ota.com/otacanada.html>

Note

See also article about organic farming in Canada in this and in previous editions of "The World of Organic Agriculture."

Chad

Source

Certifier data (wild collection only).

Channel Islands

Source

FAOSTAT (2014) Organic area data Channel Islands. The FAOSTAT website, FAOSTAT, Rome, Italy, FAOSTAT > Agri-Environmental Indicators> Inputs> Land. Download of December 12, 2014 <http://faostat3.fao.org/download/R/RL/E> The data is from 2013.

Chile

Source

- › Certified areas, producers/ smallholders, livestock : Servicio Agrícola y Ganadero (SAG) Santiago, Chile, www.sag.gob.cl.
- › Organic export value (2012): Servicio Nacional de Aduanas, Santiago, Chile
- › Domestic market data (2009) according to USDA: Organic Products Report Chile. GAIN Report Number CI0031. November 30, 2010

Contact

Pilar M. Eguillor Recabarren, Oficina de Estudios y Políticas Agrarias (ODEPA), Ministerio de Agricultura, Teatinos 40, Santiago, Chile, www.odepa.gob.cl.

China

Sources

Land area, operators, market and export data; Chinese Agricultural University, Beijing, China

Contact

- › Dr. Wang Maohua, Certification and Accreditation Administration of the People's Republic of China CNCA
- › Yuhui Qiao, Chinese Agricultural University, Beijing, China
- › Zejiang Zhou, Vicepresident, Board of IFOAM Asia, World Board of IFOAM – Organics International, China

Colombia

Source

ECONEXOS, Conexión Ecológica, Calle 5 No. 45A-125, Cali, Colombia, info@econexos.org, www.econexos.com, based on a survey among the certifiers.

Contact

Carlos Escobar, ECONEXOS - Desarrollo en Movimiento, Cali República de Colombia, www.econexos.com.

Comoros

Source

Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Contact

Sandra Randrianarisoa, Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com.

Congo, Democratic Republic of

Source

Certifier data. The producer data from 2013.

Cook Islands

Source

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int.

Contact

Karen Mapusua, Secretariat of the Pacific Community (SPC), Private Mail Bag, Suva Fiji, www.spc.int

Costa Rica

Source

- › Land area, operators and export volume data: Servicio Fitosanitario del Estado (2015): Programas Especiales/ Agricultura Orgánica. Estadísticas 2014. M.A.G Costa Rica, San José.

- › Export value (2009 data) PROMOCER (2011): Costa Rica: exportaciones de productos orgánicos según destino.
- › Domestic market data (2008) were provided by the organic sector organization MAOCO.

Contact

Roberto Azofeifa, Ministerio de Agricultura y Ganadería, 10094-1000 San José, Costa Rica.

Côte d'Ivoire

Sources

The data were compiled by FiBL based on the data of the following international certifiers.

- › BCS, Nürnberg, Germany, www.bcs-oeko.de
- › Control Union, Zwolle, The Netherlands, www.controlunion.org
- › Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com
- › Not all certifiers provided updated data.

Contact

- › Tobias Fischer, BCS, Nürnberg, Germany, www.bcs-oeko.de;
- › Daniel Szalai, Control Union, Zwolle, The Netherlands, www.controlunion.org
- › Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

Croatia

Sources

- › Area and operators: Eurostat, Luxembourg
- › Market & trade data: Darko Znaor, Independent Consultant, 10000 Zagreb, Croatia.

Contact

- › Darko Znaor, Independent Consultant, 10000 Zagreb, Croatia

Cuba

Certifier data.

Cyprus

Source

- › Land area and producer data: Eurostat, Luxembourg
- › Market data (from 2006): Organic Retailers Association, Ecozept and Biovista (eds.) (2008): Specialised Organic Retail Report 2008. Freising and Vienna 2008

Czech Republic

Source

Institute of Agricultural Economics and Information (UZEI), Department of Agri-environmental Policy, 602 00 Brno, Czech Republic
The market and international trade data are from 2013.

Contact

- › Hana Šejnohová, Institute of Agricultural Economics and Information (UZEI),

- Department of Agri-environmental Policy, 602 00 Brno, Czech Republic
- › Andrea Hrabalova, Institute of Agricultural Economics and Information (UZEI), 602 00 Brno, Czech Republic

Denmark

Sources

- › Land area, land use, Operators: Eurostat database, Eurostat, Luxembourg
- › Domestic sales: Source: Landbrug & Fødevarer. Based on data from Statistics Denmark (retail sales) and Organic Denmark (for other marketing channels).
- › Exports, imports: Statistics Denmark.
- › Other marketing channels: Organic Denmark. Data compiled by Danish Agriculture & Food Council, Agro Food Park 15, 8200 Aarhus.

Contact

- › Carmen I. Calverley. Ministeriet for Fødevarer, Landbrug og Fiskeri NaturErhvervstyrelsen, Nyropsgade 30, 1780 København V. www.naturerhverv.dk
- › Martin Lundioe, Statistics Denmark, Copenhagen, www.statbank.dk
- › Ejvind Pedersen, Danish Agriculture & Food Council, Agro Food Park 13, 8200 Aarhus N, Denmark.

Dominica

Source

Division of Agriculture, provided by Dominica Organic Agriculture Movement (DOAM) Inc., PO Box 1953 - Roseau, Commonwealth of Dominica. The data is from 2011.

Contact

Ms. Aikuali Joseph, Dominica Organic Agriculture Movement (DOAM) Inc., Roseau, Commonwealth of Dominica.

Dominican Republic

Source

Secretaria de Estado de Agricultura, Oficina de Control Orgánico, Santa Domingo, Dominican Republic, www.agricultura.gob.do.

Contact

José A. Zapata, Secretaria de Estado de Agricultura, Oficina de Control Orgánico, Santa Domingo, Dominican Republic, www.agricultura.gob.do.

Ecuador

Source

Land area, operators, exports: Agrocalidad, Quito Ecuador, www.agrocalidad.gob.ec. The aquaculture data is from 2012.

Contact

- › Christian Báez, Agrocalidad, Quito, Ecuador

- › Paulina Betancourt, Agrocalidad, Quito, Ecuador
- › Omar Pavón, Agrocalidad, Quito, Ecuador

Egypt

Source

Mediterranean Organic Agriculture Network MOAN, c/o IAMB Bari. The data is from 2012.

Contact

Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

Note

For Egypt only a figure for the total operators is available for 2009, this figure is listed under “producers”.

El Salvador

Source

Ministerio de Agricultura y Ganadería, Final 1a. Avenida Norte, 13 Calle Poniente y Avenida Manuel, Gallardo, Santa Tecla, El Salvador. Data is from 2008.

Contact

Douglas A. Navarro, Coordinador Area de Inocuidad de Alimentos y Agricultura Orgánica Ministerio de Agricultura y Ganadería Dirección General de Sanidad Vegetal, El Salvador

Estonia

Sources

- › Land area, land use, operators: Eurostat database, Eurostat, Luxembourg
- › Market data was not available
- › A detailed report about organic farming in Estonia can be found at http://www.organic-europe.net/fileadmin/documents/country_information/estonia/vetemaa-mikk-2015-estonia-2014.pdf

Contact

Merit Mikk, Centre of Ecological Engineering, Tartu, Estonia

Ethiopia

Source

Ethiopian Institute of Agricultural Research, Akaki, Ethiopia. The data is from 2013.

Contact

Addisu Alemayeh, Ethiopian Institute of Agricultural Research, Akaki, Ethiopia

Falkland Islands

Source

Department of Agriculture, Bypass Road, Stanley, Falkland Islands, www.agriculture.gov.fk. Data on export is from 2013.

Contact

Lucy Ellis, Department of Agriculture, Bypass Road, Stanley, Falkland Islands, www.agriculture.gov.fk

Faroe Islands

Source

Vottunarstofan Tún ehf, Laugavegur 7, 101 Reykjavik, Iceland, www.tun.is.

Contact

- › Gunnar Gunnarsson, Vottunarstofan Tún ehf., Reykjavik, Iceland, www.tun.is
- › Rannveig Guðleifsdóttir, Vottunarstofan Tún ehf., Reykjavik, Iceland, www.tun.is

Fiji Islands

Sources

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva, Fiji

Finland

Sources

- › Land area and operators: Eurostat database, Eurostat, Luxembourg. Total organic agricultural land provided by Pro Luomo, Kauniainen, Finland
- › Wild collection provided Pro Luomo, Kauniainen, Finland;
- › Market data: Pro Luomo, Kauniainen, Finland; for total market value: Finnish Grocery Trade Associations

Contact

- › Marja-Riitta Kottila, Pro Luomu, Kauniainen, Finland
- › Sampsa Heinonen, Evira, Helsinki, Finland

France

Source

- › Area and operators: Eurostat database, Eurostat, Luxembourg. Total organic agricultural land according to Agence Bio, Montreuil-sur-Bois, France. www.agencebio.org
- › Retail sales: ANDi / Agence Bio, Montreuil-sur-Bois, France
- › Export and import data from 2013, Agence Bio, Montreuil-sur-Bois, France

Contact

- › Nathalie Rison, Agence Bio, Montreuil-sous-Bois, France, www.agencebio.fr

French Guyana

Source

Agence BIO: The Agence Bio website, Agence Bio, 93100 Montreuil-sous-Bois, France. Available at <http://www.agencebio.org/la-bio-dans-les-regions>

Contact

Nathalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

French Polynesia

Sources

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int.

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva, Fiji, www.spc.int

Gambia

Data for Gambia have not been supplied since 2007 by any of the certification bodies. Any information on certified organic farming in Gambia should be sent to Julia Lernoud or Helga Willer at julia.lernoud@fibl.org and helga.willer@fibl.org.

Georgia

Source

Elkana Survey, Elkana, 16 Gazapkhuli street, 0177 Tbilisi, Georgia, www.elkana.org.ge.

Contact

Elene Shatberashvili, Biological Farming Association Elkana, 16 Gazapkhuli street, 0177 Tbilisi, Georgia, www.elkana.org.ge

Germany

Sources

Agrarmarkt Informations-Gesellschaft mbH (AMI), Bonn, Germany, www.ami-informiert.de. For total organic land and number of operators: Federal Agency Agriculture and Food, Bonn, Germany

Contact

Diana Schaack, Agrarmarkt Informations-Gesellschaft mbH (AMI), Bonn, Germany, www.ami-informiert.de

Ghana

Source

The data was compiled by FiBL based on the data of the following international certifiers.

- › BCS, Nürnberg, Germany, www.bcs-oeko.de;
- › CERTISYS, Brussels, www.certisys.eu
- › Control Union, Zwolle, The Netherlands, www.controlunion.org
- › Ecocert West Africa, Ougadougou, Burkina Faso
- › IMO, Weinfelden, Switzerland, www.imo.ch
- › Soil Association, Bristol, UK

Contact

- › Andrew Bayliss, Soil Association, Bristol, UK
- › Ruben Cortes, IMO, Weinfelden, Switzerland
- › Tobias Fischer, BCS, Nürnberg, Germany, www.bcs-oeko.de
- › Nathalie Boes, CERTISYS, Brussels, Belgium

- › Daniel Szalai, Control Union, Zwolle, The Netherlands
- › Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

Note

A direct year-to-year comparison over the past years is not possible as not all certifiers provided updates every year.

Greece**Sources**

- › Land area and operators: Ministry of Agriculture, Athens, Greece
- › Market data (from 2010) were provided by Nicolette van der Smissen, Feres, Greece

Contact

Nicolette van der Smissen, Feres, Greece

Grenada

Data from one international certifier (data from 2010).

Guadeloupe**Source**

Agence BIO: The Agence Bio homepage 93100 Montreuil-sous-Bois, France. Available at <http://www.agencebio.org/la-bio-dans-les-regions>

Contact

Nathalie Rison, Agence Bio, Montreuil-sous-Bois, France, www.agencebio.fr

Guatemala**Source**

Department of Organic Agriculture, Ministerio de Agricultura, Ganadería y Alimentación (MAGA), Ciudad de Guatemala, Guatemala C.A. 01013, <http://www2.maga.gob.gt>. The data is from 2011.

Contact

Ing. Agr. Alvaro Alfredo Ramos Méndez, Departamento de Agricultura Orgánica, Viceministerio de Sanidad Agropecuaria y Regulaciones, Ministerio de Agricultura Ganadería y Alimentación

Guinea Bissau

Certifier data.

Guyana**Source**

Ecocert Colombia, Bogota D.C., Colombia (wild collection only).

Contact

- › Richard Escobar, Henao, Ecocert Colombia, Bogota D.C, Colombia
- › Marcela Machuca Henao, Ecocert Colombia, Bogota D.C, Colombia
- › Wendy Johana Ramírez F., Ecocert Colombia, Bogota D.C., Colombia

Haiti**Source**

Ecocert Colombia, Bogota D.C., Colombia.

Contact

Camille Godard, Ecocert, Toulouse, France

Honduras**Source**

Agricultura Orgánica Honduras, Secretaría de Agricultura y Ganadería, Tegucigalpa, Honduras, SENASA Honduras.

The area data is from 2011 and 2012 and the operator data is from 2011.

Contact

Carlos Galo, Jefe del Departamento de Agricultura Orgánica (DAO) Sub Dirección de Sanidad Vegetal (SAVE). Servicio Nacional de Sanidad Vegetal (SENASA) Secretaría de Agricultura y Ganadería (SAG) Edificio Senasa Boulevard Centroamérica, Ave. La FAO, antes de INJUPEMH, Tegucigalpa. M.D.C. Honduras.

Hungary**Sources**

- › Land area and operators: National Food Chain Safety Office, Budapest, Hungary, www.nebih.gov.hu
- › Market and trade data (from 2009): Survey of Biokorsar, Budapest, Hungary

Contact

- › Dora Drexler, ÖMKI, Budapest, Hungary, www.biokutats.hu

Data revision

For data published in the 2015 edition of "The World of Organic Agriculture": The total organic agricultural land in Hungary in 2013 was 131'018 hectares; the fully converted area 112'287 hectares. For more details see FiBL online database at <http://www.organic-world.net/statistics/statistics-data-tables/statistics-data-tables-dynamic.html>

Iceland**Source**

Vottunarstofan Tún ehf., Laugavegur 7, 101 Reykjavík, Iceland, www.tun.is.

Contact

- › Gunnar Gunnarsson, Vottunarstofan Tún ehf., Laugavegur 7, 101 Reykjavík, Iceland, www.tun.is
- › Rannveig Guðleifsdóttir, Vottunarstofan Tún ehf., Reykjavík, Iceland, www.tun.is

India**Source**

- › Land area, operators, exports: Agricultural and Processed Food Products Export Development (APEEDA) Ministry of Commerce & Industry, Government of India, New Delhi - 110 016, India,

www.apeda.com. The retail sales data is from 2012.

Contact

- › Dr. P.V.S.M. Gouri, Agricultural and Processed Food Products Export Development (APEDA), New Delhi, India, www.apeda.com
- › Manoj Kumar Menon, International Competence Centre for Organic Agriculture ICCOA, Bangalore, India

Indonesia

Source

Indonesian Organic Alliance, Bangor, Indonesia (www.organicindonesia.org). Survey among the certifiers active in the country.

Contact

Lidya Ariesusanty, Indonesia Organic Alliance, Indonesia, www.organicindonesia.org

Iran

Source

Environmental Sciences Research Institute, Shahid Beheshti University ESRI, Evin, Tehran, Iran. The information is based on the data of the certifiers active in the country. The data on operator numbers is from 2013.

Contact

Hossein Mahmoudi, Environmental Sciences Research Institute, Shahid Beheshti University ESRI, Tehran, Iran

Iraq

Source

Zakho Small Villages Projects (ZSVP), Dohuk City, Dohuk, Iraq.

Contact

Dr. Abid Ali Hasan, Zakho Small Villages Projects (ZSVP), Program Coordinator in Iraq, Dohuk City, Dohuk, Iraq.

Ireland

Source

- › Area, operators and livestock data: Eurostat, Luxembourg
- › Market data: Bord Bia, Dublin, Ireland

Contact

- › Philipp Cullen, Department of Agriculture Fisheries and Food, Johnstown Castle Estate, Co. Wexford, Ireland www.agriculture.gov.ie.
- › Lorcan Burke, Bord Bia, Dublin, Ireland

Israel

Source

Source for all data: Standardization and Accreditation Department Ministry of Agriculture and Rural Development Plant Protection and Inspection Services (PPIS), Israel, www.ppiseng.moag.gov.il/ppiseng/ISRAEL The export data is from 2011.

Contact

Brett Hickson, Senior Chief Officer, Standardization and Accreditation Department, Ministry of Agriculture and Rural Development, Plant Protection and Inspection Services (PPIS), Israel

Italy

Sources

- › Operator, primary crops, livestock products, imports: Eurostat database, Eurostat, Luxembourg
- › Domestic market: Data source: Ismea based on data from ISTAT; Nielsen, Federfarma, Bio Bank, Assobio, Mise. Published by Rampold Christine (2015): Bio-Konsum in Italien nimmt zu. Marktwoche Ökolandbau 44/2015. AMI Agrarmarkt-Informationsgesellschaft, Bonn
- › Share of all retail sales: Nomisma, Bologna, Italy

Contact

- › Roberto Pinton, ASSO BIO, 35121 Padova, Italy
- › Marta Romeo, SINAB Italian Information System on Organic Farming, Rome, Italy
- › Silvia Zucconi, Nomisma, Bologna, Italy

Jamaica

Source

Jamaica Organic Movement JOAM, P.O. Box 5728, Kingston 6, Jamaica, www.joamltd.org

Contact

Trevor Brown, Jamaica Organic Movement JOAM, www.joamltd.org

Japan

Source

- › Area and producer data: Ministry of Agriculture, Forestry and Fisheries (MAFF), Tokyo 100 - 8950, Japan, www.maff.go.jp/e/index.html. The area is from 2013 and producer data is from 2012
- › Domestic market data (from 2009): Heinz Kuhlmann, ABC Enterprises, Tokio, Japan

Contact

- › Yu Watanabe, IFOAM Japan, Tokyo, Japan
- › Heinz Kuhlmann, ABC Enterprises, Tokio, Japan

Jordan

Source

Mediterranean Organic Agriculture Network (MOAN), maintained by IAM Bari, Italy

Contact

- › Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

Kazakhstan**Source**

The data were compiled by the Organic Centre of Kazakhstan (www.organiccenter.kz); a survey among the certifiers was carried out. The data is from 2012.

Contact

Evgeniy Klimov, Director of the Organic Centre of Kazakhstan and director of the Foundation for Integration of Ecological Culture, 40, Almaty, Kazakhstan, www.organiccenter.kz

Kenya**Source**

Kenya Organic Movement (KOAN), Nairobi, Kenya, www.koan.co.ke. The data are collected among the organic operators in the country and cover most of the country's organic land/producers. The data is from 2012.

Contact

Jack Juma, Kenya Organic Movement (KOAN), Nairobi, Kenya, www.koan.co.ke

Korea, Republic of**Source**

National Agricultural Products Quality Management Service, Korea (for area, production, imports) and Korea Rural Economic Institute for retail sales.

Contact

- › Jennifer Chang, Korean Federation of Organic Agriculture Organisations (KFSA), Republic of Korea
- › Hyejing Lee, Korea Rural Economic Institute, Republic of Korea

Kiribati**Source**

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int;

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Kosovo**Source**

Initiative for agricultural development of Kosovo (IADK), Mitrovica, Republic of Kosovo. The data is from 2013.

Contact

Basri Hyseni, Initiative for agricultural development of Kosovo (IADK), Mitrovica, Republic of Kosovo

Kyrgyzstan**Source**

Agricultural Commodity and Service Cooperative "Bio Farmer", Kyrgyzstan. To this data, the data of one international certifier was added.

Contact

Gulzaada Aleshova, Helvetas, Jalalabad, Kyrgyzstan

Lao People's Democratic Republic**Source**

Department of Agriculture (DOA), PO BOX 811, Vientiane, Laos.

Contact

Thavisith Bounyasouk, Department of Agriculture (DOA), PO BOX 811, Vientiane, Laos

Latvia**Source**

- › Area and Operators: Eurostat database, Eurostat, Luxembourg
- › Market data (from 2011): Ekoconnect, Dresden, Germany and AMI, Bonn, Germany

Contact

Livija Zarina, State Priekuli Plant Breeding Institute SPPBI, Priekuli, Cesis distr, Latvia

Lebanon**Source**

CCPB/IMC, Beirut, Lebanon, and Mediterranean Organic Agriculture Network (MOAN), maintained by IAM Bari, Italy.

Contact

- › Angel Atallah, CCPB/IMC, Beirut, Lebanon
- › Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

Lesotho

Certifier data

Liechtenstein**Source**

Klaus Büchel Anstalt, Institute of Agriculture and Environment, 9493 Mauren, Liechtenstein, www.kba.li.

Contact

Klaus Büchel, Institute of Agriculture and Environment, 9493 Mauren, Liechtenstein, www.kba.li.

Lithuania**Source**

- › Land area, production volume, operators: Eurostat database, Eurostat, Luxembourg
- › International trade data: Agricultural & Food Market Information System, 03105 Vilnius, Lithuania, www.vic.lt.
- › Domestic Market data (from 2011): Ekoconnect, Dresden, Germany and AMI, Bonn, Germany

Contact

Virgilijus Skulskis, Lithuanian Institute of Agri Economics, Vilnius, Lithuania

Luxembourg

Source

- › Land area and operator data Eurostat database, Eurostat, Luxembourg
- › Market data : Biogros Estimate, 13 Parc d'Activité Syrdall, L-5365 Munsbach, www.biogros.lu

Contact

- › Raymond Aendekerck, IBLA, 13, rue Gabriel Lippmann, Parc d'Activité Syrdall, L-5365 Munsbach, www.biolabel.lu
- › Nadine Kieffer, Administration des Services Techniques de l'Agriculture (ASTA), 1019 Luxembourg, www.asta.etat.lu.
- › Aender Schanck, Biogros, 13 Parc d'Activité Syrdall, L-5365 Munsbach, www.biogros.lu

Macedonia, the Former Yugoslav Republic

Source

Ministry of Agriculture, Forestry and Water economy, Skopje, provided by Mediterranean Organic Agriculture Network (MOAN), Bari, Italy. The data is from 2013.

Contact

- › Olivera Bicikliski, Ministry of Agriculture, Forestry and Water Management, Skopje, Former Yugoslav Republic of Macedonia
- › Marie Reine Bteich, Mediterranean Organic Agriculture Network (MOAN), c/o IAM Bari, Italy

Madagascar

Sources

The data was compiled by FiBL based on the data of the following international certifiers.

- › Australian Certified Organic, Nundah, Australia, www.aco.net.au
- › Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com
- › LACON GmbH, Brünnesweg 19, 77654 Offenburg, Germany, www.lacon-institut.com

Contact

- › Sandra Randrianarisoa, Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com

Fehler! Hyperlink-Referenz ungültig. Please note that not from all certifiers updated data were received.

Malawi

Source

Certifier data

Malaysia

Source

Department of Agriculture, Malaysia. The data is from 2013.

Contact

Ong Kung Wai, Humus Consultancy, Penang, Malaysia

Mali

Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

Contact

Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

Malta

Source

Land area and operators: Eurostat: Luxembourg

Contact

Marie Reine Bteich, Mediterranean Organic Network MOAN, c/o IAM Bari, Italy

Martinique (France)

Source

Agence Bio, Montreuil sous Bois, France.

Available at: <http://www.agencebio.org/la-bio-dans-les-regions>

Contact

Nathalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

Mauritius

Source

Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com.

Contact

Sandra Randrianarisoa, Ecocert S.A., Villa Arimanantsoa, Madagascar, www.ecocert.com

Mayotte (France)

Source

Agence Bio, Montreuil sous Bois, France.

Available at: <http://www.agencebio.org/la-bio-dans-les-regions>

Contact

Nathalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

Mexico

Source

Universidad Autónoma Chapingo, based on data of the certifiers. The data is from 2013.

Contact

Rita Schwentesius, Universidad Autónoma Chapingo, Carretera México - Texcoco Km. 38.5. Chapingo, México

Moldova

Source

Moldovan Investment and Export Promotion Organisation (2012)"Organic Agriculture in Moldova: Local and Regional Perspectives," Moldova The data is from 2011.

Mongolia

The certifier who provided data in the past did not report any activities any more.

Montenegro**Source**

- › Ministry of Agriculture and Rural Development, Podgorica, Montenegro
- › Market data (from 2010): Ecozept - Market research and marketing consulting agency. Freising, Germany

Contact

Andrijana Rakočević, Advisor for Organic production, Ministry of Agriculture and Rural Development, Podgorica, Montenegro

Morocco**Source**

Ministère de l'Agriculture et de la Pêche Maritime, Rabat, Morocco, <http://www.agriculture.gov.ma>; for export data: Etablissement Autonome de Contrôle et de Coordination des Exportations (EACCE), Rabat, Morocco provided by the Mediterranean Organic Agriculture Network MOAN, C.I.H.E.A.M., c/o Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it.

Contact

Dr. Marie Reine Bteich, C.I.H.E.A.M. Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it.

Note on producer data

No separate figure for the number of producers was available; the figure communicated is that for all operators in the country (2010 data).

Mozambique**Sources**

- › BCS, Nürnberg, Germany
- › Control Union, Zwolle, The Netherlands
- › Ecocert, South Africa, Capetown, South Africa

Please note that from one certifier no breakdown of the land area was provided, however, the crops grown are: chillies, fallow land, soybeans, and sugarcane.

Contact

- › Tobias Fischer, BCS, Nürnberg, Germany
- › Cliflyn McKenzie, Ecocert South Africa, Capetown, South Africa
- › Daniel Szalai, Control Union, Zwolle, The Netherlands

Myanmar**Source**

Certifier data

Contact

San Linn, Myanmar Organic Agriculture Group, Yangon, Myanmar

Namibia**Source**

Namibian Organic Association, PO Box 1504, Okahandja, Namibia, the data of one international certifier are included. PGS figures are included.

Contact

Manjo Smith, Namibian Organic Association (NOA), PO Box 1504, Okahandja, Namibia

Nepal**Source**

The data were provided by Maheswar Ghimire, Kathmandu, Nepal. The data is from 2013.

Contact

Maheswar Ghimire, Kathmandu, Nepal

Netherlands**Sources**

- › Land area: Eurostat database, Eurostat, Luxembourg
- › Operator data: Eurostat
- › Market data: Bionext, Zeist, The Netherlands; the Bionext website, available at <http://www.bionext.nl/zakelijk/feiten-cijfers>
- › International trade data: Bionext, Zeist, The Netherlands

Contact

Bavo van der Idsert, Bionext, Utrecht, The Netherlands

New Caledonia**Source**

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int;

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

New Zealand**Source**

The AgriBusiness Group, Christchurch, New Zealand, www.agribusinessgroup.com. The data is from 2012.

Contact

Jon Manhire, the AgriBusiness Group, Christchurch, New Zealand, www.agribusinessgroup.com

Nicaragua

The data are from 2009.

Source

Ministerio Agropecuario y Forestal MAGFOR, Managua, Nicaragua, www.magfor.gob.ni

Niger

Certifier data.

Nigeria**Source**

Association of Organic Agriculture Practicioners of Nigeria (NOAN), Ibadan, Nigeria, and University of Ibadan, Nigeria The data includes PGS area.

Contact

Olugbenga O. AdeOluwa, University of Ibadan, Nigeria

Niue**Source**

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int.

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Norway**Sources**

- › Land area and operator data: Eurostat database, Eurostat, Luxembourg
- › Market data: Norwegian Agricultural Authority SLF, Oslo, Norway

Contact

Julie Kilde, Statens landbruksforvaltning (SLF), Oslo, Norway

Oman**Source**

Organic Plant Production and Agroecosystems Research in the Tropics and Subtropics, Kassel University, Witzenhausen, Germany, www.uni-kassel.de/agrar/?language=en. The data is from 2013.

Contact

Prof. Dr. Andreas Bürkert, Organic Plant Production and Agroecosystems Research in the Tropics and Subtropics Kassel University, Witzenhausen, Germany, www.uni-kassel.de/agrar/?language=en.

Pakistan

Data was provided by two international certifiers. Please note that not all certifiers provided data on the number of smallholders.

Palestine, State of

Certifier data. The number of producers were provided by the Mediterranean Organic Agriculture Network (MOAN), c/o IAM, Bari.

Panamá**Source**

Ministerio de Desarrollo Agropecuario, Dirección Nacional de Sanidad Vegetal, Panama, www.mida.gob.pa. The data is from 2013.

Contact

Fermin Romero, Dirección Nacional de Sanidad Vegetal, Ministerio de Desarrollo Agropecuario, Panama, <http://www.mida.gob.pa>

Papua New Guinea**Source**

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Paraguay**Source**

Servicio Nacional de Calidad y Sanidad Vegetal y de Semillas, Department of Organic Agriculture, Asuncion, Paraguay, www.senave.gov.py

Contact

Genaro Coronel, Servicio Nacional de Calidad y Sanidad Vegetal y de Semillas, Department of Organic Agriculture, Asuncion, Paraguay, www.senave.gov.py

Perú**Source**

- › Area and number of producers: SENASA. Producción Orgánica. Lima, Perú
- › Market and Export data: Promperu, San Isidro - Lima 27 Perú, www.promperu.gob.pe. The total value of domestic market is an estimate, based the data from Promperu that the domestic market is between 13.1 and 23.2 million US dollars (2010).

Contact

Dr. Jorge Leonardo Jave Nakayo, Director de Producción Orgánica, Ministerio de Agricultura, SENASA, Peru

Philippines**Sources**

The data were compiled by FiBL from a number of certifiers, but there are more certifiers active than those listed below. A direct year-to-year comparison over the years is not possible. Not all certifiers provided updated data.

Certifiers who provided data

- › BCS, Nürnberg, Germany, www.bcs-oeko.de;
- › Ceres, Happpburg, Germany, www.ceres-cert.com;
- › Control Union, Zwolle, The Netherlands, www.controlunion.org;
- › Ecocert, L'Isle Jourdain, France, www.ecocert.com;
- › Organic Certification Center of the Philippines OCCP (2009 data), Barangay Laging Handa, Quezon City, Philippines, www.occp.ph.

Contact

- › Tobias Fischer, BCS, Nürnberg, Germany, www.bcs-oeko.de;
- › Simone Groh, Ceres, Happpburg, Germany, www.ceres-cert.com;

- › Camille Godard, Area Manager, Ecocert, L'Isle Jourdain, France, www.ecocert.com;
- › Lani Katimbang-Limpin, OCCP, Quezon City, Philippines, www.occp.ph
- › Daniel Suzalai, Control Union, Zwolle, The Netherlands, www.controlunion.org;

Note

Not all certifiers provided data on the number of producers, which therefore must be higher than communicated here.

Please note that the 2013 data for the area have been revised; the total for 2013 should read as 86'155 hectares.

Poland

Source

- › Land area and land use, livestock and production: Eurostat database, Luxembourg
- › Market data (from 2011): Andrzej Szeremeta, based on national data sources

Portugal

Source

- › Organic land and operators: Eurostat database, Luxembourg
- › Market data: INTERBIO (2011), <http://www.interbio.pt>

Contact

Catarina Crisostomo, Portugal

Please note that the 2012 and 2013 data for the area have been revised; the total for 2012 should read as 200'833 hectares and 2013 should read as 197'295 hectares. For further revisions see FiBL organic market database at <http://www.organic-world.net/statistics/statistics-data-tables.html>

Puerto Rico

USDA Organic Integrity Database. USDA, Washington

Réunion

Source

Agence Bio, Montreuil sous Bois, France. Available at <http://www.agencebio.org/la-bio-dans-les-regions>

Contact

Nathalie Rison, Agence Bio, Montreuil-sous-Bois, France, www.agencebio.fr

Romania

Sources

- › Organic area, land use, livestock and production: Eurostat database, Luxembourg. Aquaculture data from 2013.
- › Wild collection: Ministry of Agriculture MADR, Bucharest, Romania, see <http://www.madr.ro/ro/agricultura-ecologica/dinamica-operatorilor-si-a-suprafetelor-in-agricultura-ecologica.html>.

- › Market data (from 2011): BCG-Global Advisors (2013) Romanian Organic Sector – Business Insight Booklet. Global Advisors, Bio-Romania Association, University of Bucharest. Bucharest 2012

Contact

- › Iulia Grosulescu, Counsellor Organic Farming Office, Ministry of Agriculture and Rural Development, 24, Blvd Carol I, Bucharest Romania
- › Marian Ciocanu, Asociatia Bio Romania, Str. Mihai Eminescu, București, Romania, <http://www.bio-romania.org/contact/>

Russian Federation

Source

The data was compiled by FiBL based on the data of the following international certifiers, not all of who provided updated data.

- › BCS, Nürnberg, Germany, www.bcs-oeko.de;
- › Bio.Inspecta, Frick, Switzerland, www.bio-inspecta.ch
- › Control Union, Zwolle, The Netherlands, www.controlunion.org;
- › Eco-control Ltd., 141506 Solnechnogorsk, Russia, www.eco-control.ru. Not all certifiers provided updated data.
- › IMO, Weinfelden, Switzerland, www.imo.ch
- › Istituto per la Certificazione Etica ed Ambientale (ICEA), Bologna. Italy, www.icea.info

Contact

- › Milena Belli, Istituto per la Certificazione Etica ed Ambientale (ICEA), Bologna. Italy, www.icea.info
- › Tobias Fischer, BCS, Nürnberg, Germany, www.bcs-oeko.de
- › Ruben Cortes, IMO, Weinfelden, Switzerland, www.imo.ch
- › Dr. Andrey Khodus, Eco-control Ltd., 141506 Solnechnogorsk, Russia, www.eco-control.ru
- › Daniel Suzalai, Control Union, Zwolle, The Netherlands, www.controlunion.org

Rwanda

Certifier data.

Samoa

Source

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int.

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

San Marino

Certifier data. The data is from 2013.

Sao Tome and Prince**Source**

Ecocert West Africa, Ougadougou, Burkina Faso.

Contact

Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com

Saudi Arabia**Source**

- › Department of Organic Agriculture (DOA), <http://moa.gov.sa/organic/portale>
- › GIZ Organic Farming Project, Riyadh, Saudi Arabia

Contact

- › Felix Ruhland, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Riyadh, Saudi Arabia, www.giz.de
- › Mohamed Salih; Abdalla, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), Riyadh, Saudi Arabia, www.giz.de/Senegal

Source

To the data provided by the National Federation for Organic Agriculture, AGRECOL BP. 347 Thiès, Sénégal. The data is from 2013. Wild collection data from international certifiers were added.

Contact

Famara Diedhio, National Federation for Organic Agriculture, AGRECOL, BP. 347 Thiès, Sénégal

Serbia**Source**

Eurostat database, Eurostat, Luxembourg
Export, import and operator data: Mediterranean Agronomic Institute of Bari (IAMB), Valenzano, Italy

Contact

- › Jelena Milic, Ministry of Agriculture, Forestry and Water, Belgrade, Republic of Serbia
- › Marie Reine Bteich, Mediterranean Agronomic Institute of Bari (IAMB), Valenzano, Italy

Sierra Leone

Data had been available previously from one international certifier, but the projects are not involved in organic farming any longer. Any information on certified organic farming in Sierra Leone should be sent to Julia Lernoud or Helga Willer at julia.lernoud@fibl.org and helga.willer@fibl.org.

Singapore

Two international certifiers reported a number of processors.

Slovakia**Sources**

- › Area, operators, livestock, and crop production: Eurostat database, Luxembourg
- › Market data (2010): Ecozept, market research and marketing consulting agency. Freising, Germany.

Slovenia**Sources**

- › Area, operators, livestock, crop production: Eurostat database, Luxembourg
- › Domestic market data (from 2103): Institute for Sustainable Development, Ljubljana, Slovenia
- › Exports and imports (from 2009): Institute for Sustainable Development, Ljubljana, Slovenia

Contact

Anamarija Slabe, Institute for Sustainable Development, Ljubljana, Ljubljana, Slovenia

Solomon Islands**Source**

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int.

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Somalia

No data were reported for Somalia.

South Africa**Source**

The data were compiled by FiBL based on the data of the following international certifiers.

- › BCS, Nürnberg, Germany, www.bcs-oeko.com
- › Control Union, Zwolle, The Netherlands, www.controlunion.org: Please note that the data from Control Union are from November 2015
- › Ecocert Southern Africa, Gardens Cape Town, www.ecocert.com
- › IMO, Weinfelden, Switzerland, www.imo.ch
- › Soil Association, Bristol, United Kingdom, www.soilassociation.org

Contact

- › Andrew Bayliss, Soil Association, Bristol, United Kingdom
- › Ruben Cortes, IMO, Weinfelden, Switzerland
- › Tobias Fischer, BCS, Nürnberg, Source, BCS Clifyn Mckenzie, Ecocert Southern Africa, Gardens Cape Town
- › Daniel Szalai, Control Union, Zwolle, The Netherlands

Spain**Sources**

- › Area and land use, operators: Eurostat database, Luxembourg
- › Wild collection data (2013) Ministerio de Agricultura, Alimentación y Medio Ambiente (2015): Agricultura ecológica-estadísticas 2013. MAGRAMA, Madrid, Spain
- › Market and international trade data (from 2012): Ministerio de Agricultura, Alimentación y Medio Ambiente (2013): Caracterización del sector de la producción ecológica. MAGRAMA, Madrid 2013

Contact

- › González Pérez, Victor, Spanish Society of Organic Agriculture SEAE, Catarroja (Valencia), Spain, www.agroecologia.net
- › Joan Picazos, Biocop Productos Biológicos, S.A. (BIOCOP), Lliçà de vall (Barcelona), Spain, www.biocop.es

Sri Lanka**Source**

Lanka Organic Agriculture Movement (LOAM), Nawinna, Maharagama, Sri Lanka, survey among the international certifiers.

Contact

Thilak Kariyawasam Lanka Organic Agriculture Movement (LOAM), Nawinna, Maharagama, Sri Lanka.

Sudan (former)**Sources**

Federal Ministry of Agriculture & Irrigation Export Development & Quality Control Unit, Republic of the Sudan. Data on wild collection from one international certifier were included.

Contact

Afaf Abdelrahim Elgzouly, Federal Ministry of Agriculture & Irrigation Export Development & Quality Control Unit, Sudan

Data revision:

Please note that the total land area for Sudan for 2013 was revised. We now use the total organic area as provided by the Ministry of Agriculture and included some of the crop details from as supplied by international certifiers.

Suriname

Certifier data.

Swaziland

Certifier data.

Sweden**Sources**

- › Area, livestock and operators: Eurostat database, Luxembourg
- › Market data: Statistics Sweden SCB, Orebro, Sweden

Contact

- › Johan Ceije, Krav, Uppsala, Sweden
- › Carla Larsson, Statistics Sweden SCB, Orebro, Sweden

Switzerland**Sources**

- › Land area and crop data: Federal Agency for Statistics (BFS), Neufchatel, Switzerland. Please note that compared with previous years the data source has changed and that a direct year-to-year comparison is not possible.
- › Operators and market data: Bio Suisse, Basel, Switzerland, www.biosuisse.ch/de/bioinzahlen.php.

Contact

Helga Willer, FiBL, Frick, Switzerland

Syria**Source**

Mediterranean Organic Agriculture Network MOAN c/o C.I.H.E.A.M; Bari; Italy. The data is from 2010.

Contact

Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

Notes

No separate figure for the number of producers was available; the figure communicated is that for all operators in the country.

Taiwan, Province of China**Source**

Taiwan Organic Agriculture Information Centre. Statistics 1996-2013 at <http://info.organic.org.tw/supergood/front/bin/ptlist.phtml?Category=104854>, Original Source: Agricultural and Food Agency, Council of Agriculture, Taiwan. The data are from 2013.

Tajikistan**Source**

SAS - SUGDAGROSERV, 2 Baraka Boboeva, Khujand 735700, Tajikistan. (Data 2012). To these data, the data of one international certifier were added (2012).

Contact

Javohir Eshmatov, SAS - Sugdagroserv, 2 Baraka Boboeva, Khujand 735700, Tajikistan.

Tanzania**Source**

Tanzania Organic Agriculture Movement (TOAM), PO Box 70089, Dar es Salaam, Tanzania, www.kilimohai.net. Survey among the organic operators in the country. The data is from 2013.

Contact

Jordan Gama, Tanzania Organic Agriculture Movement (TOAM), PO Box 70089, Dar es Salaam, Tanzania, www.kilimohai.net.

Thailand

Source

Green Net Survey among the international and domestic certifiers; Green Net, 10330 Bangkok, Thailand

Contact

Vitoon Panyakul, Green Net, 10330 Bangkok, Thailand, www.greenet.or.th.

Timor-Leste

The data is based on the information of one international certifier.

Togo

Sources

The data was compiled by FiBL based on the data of the following international certifiers. Not all certifiers provided updated information.

- › CERTISYS, Brussels, Belgium, www.certisys.eu
- › Ecocert, Ecocert West Africa, Ougadougou, Burkina Faso, www.ecocert.com
- › LACON GmbH, Brünnesweg 19, 77654 Offenburg, Germany

Contact

- › Ruben Cortes, IMO, Weinfeld, Switzerland
- › Nathalie Boes, CERTISYS, Brussels, Belgium
- › Aziz Yanogo, Ecocert West Africa, Ougadougou, Burkina Faso

Tonga

Sources

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Tunisia

Source

Direction Générale de L'Agriculture Biologique (DGAB), Tunis, Tunisia. The data is from 2013

Contact

Samia Maamer Belkhiria, Direction Générale de L'Agriculture Biologique (DGAB), Ministry of Agriculture and Hydraulic Resources, Tunis, Tunisia

Turkey

Source

- › Ministry of Food, Agriculture and Livestock (MoFAL), Ankara, Turkey
- › Market data (2010): Estimate by Erdal Süngü, MoFAL, Ankara, Turkey

Contact

Erdal Süngü, Ministry of Food, Agriculture and Livestock (MoFAL), Ankara, Turkey, www.tarim.gov.tr.

Note

Some areas contain crops that can be harvested from the same parcel. Therefore, the total of the land use/crop data exceeds the actual area surface cultivated for organic farming. A correction value was used in order to calculate the correct total. Data on the organic domestic market value are roughly estimated (2010 data).

Uganda

Source

National Organic Agricultural Movement of Uganda (NOGAMU), PO Box 70071, Clock Tower, Kampala, Uganda, www.nogamu.org.ug.

Contact

Chariton Namuwoza, National Organic Agricultural Movement of Uganda (NOGAMU), PO Box 70071, Clock Tower, Kampala, Uganda, www.nogamu.org.ug.

Ukraine

Source

Organic Federation of Ukraine (OFU), Kyiv, Ukraine, www.organic.com.ua

Contact

Eugene Milovanov, Organic Federation of Ukraine, Kyiv, Ukraine www.organic.com.ua

United Arab Emirates

Source

Ministry of Environment and Water (MOEW), United Arab Emirates

Contact

- › Eng. Saif Mohamed Alshara, Ministry of Environment and Water, United Arab Emirates
- › Fatima Obaid Saeed, Ministry of Environment and Water, United Arab Emirates
- › Mohammad Al-Oun (PhD). Expert, Organic Farming, Plant Health and Development Department, Dubai, UAE

United Kingdom

Sources

- › Land use details/crops/operators: Eurostat database, Eurostat, Luxembourg
- › Market data: Soil Association 2014: Organic Market Report 2013. Bristol, United Kingdom

Contacts

- › Dr. Susanne Padel, The Organic Research Centre Elm Farm, Newbury, UK, www.organicresearchcentre.com
- › Martin Cottingham, UK

United States of America**Sources**

- › Land area and producers (from 2011): United States Department of Agriculture, Washington, USA, <http://www.ers.usda.gov/data-products/organic-production.aspx#.UsV8fMpczGA>.
- › Market data: Organic Trade Association 2015: Organic Industry Survey, Brattleboro VT 05301, USA, www.ota.com
- › Export data: USDA provided by Barbara Haumann, OTA, Brattleboro VT 05301, www.ota.com. See also article by Barbara Haumann in this book.

Contacts

- › Catherine Greene, United States Department of Agriculture, Washington, USA, www.ers.usda.gov/briefing/organic/.
- › Barbara Haumann, OTA, Brattleboro VT 05301, www.ota.com

Uruguay**Source**

Certifier data.

Please note that in previous editions of “The World of Organic Agriculture”, data from 2006, provided by the Ministerio de Ganadería, Agricultura y Pesca (MGAP), Montevideo, Uruguay, www.mgap.gub.uy were published.

Contact

Betty Mandl, Ministerio de Ganadería, Agricultura y Pesca (MGAP), Montevideo, Uruguay, www.mgap.gub.uy

Uzbekistan**Source**

Certifier data (wild collection only).

Vanuatu**Source**

Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Contact

Karen Mapusua, Pacific Organic and Ethical Trade Community (POETCom), Suva Fiji, www.spc.int

Venezuela

USDA Organic Integrity Database. USDA, Washington

Viet Nam**Source**

Vietnam Organic Agriculture Association, Hanoi, Vietnam. Data include PGS

Contact

Nhung Tu Thi Tuyet, Vietnam Organic Agriculture Association, Hanoi, Vietnam

Virgin Islands**Source**

Certifier data.

Zambia**Source**

OPPAZ, Lusaka, Zambia. The data are from 2009. To these data, area data for wild collection from one international certifier on beekeeping and beehives were added.

Zimbabwe**Source**

Certifier data. The area data is from 2013; the wild collection data is from 2014.

Contact

- › Dominikus Collenberg, Organic Africa, Harare, Zimbabwe
- › Clifyn Mckenzie, Ecocert Southern Africa, Gardens Cape Town

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