The World of Organic Agriculture

Statistics and Emerging Trends 2011

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The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

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Foreword from ITC and SECO

One of the world's greatest challenges is to guarantee food security for the world's growing population whilst also ensuring greater sustainability of food production, trade, and consumption.

Agriculture has made many technological advances, increasing its level of productivity and thus creating wealth in rural areas and lowering the price of food. However, the successful growth of the sector has been accompanied by widespread concern over food safety scares, damage to workers' health and the loss of biodiversity from intensified agriculture.

The successful transformation of organic agriculture from a series of scientific experiments in the 1950s to a US$ 55 billion industry today can be partially attributed to these concerns: consumers are willing pay more for a way of farming that promotes healthy agro-ecosystems and avoids the use of agrochemicals.

Policymakers similarly see the social and economic value of a production system that generates environmental benefits, like agrobiodiversity and carbon sequestration, avoids the need for workers to handle pesticides and does not impose environmental costs on the taxpayer, like cleaning up water pollution.

Organic agriculture also has a role in achieving development objectives with developing countries exporting premium price tropical and counterseasonal crops to developed countries.

There is still considerable potential for organic agriculture to grow but it requires a more favourable policy environment. For this to happen, policy makers, civic society, and the private sector rely upon credible information to support their decision-making.

The *World of Organic Agriculture 2011* serves this need with an overview of the production and trade of organic products across the globe and an analysis of regulations, standards, policies, and market trends. This type of information is difficult to find but is crucially important to help support the sector's development. *The World of Organic Agriculture 2011* provides a unique global service in this regard and so makes an important contribution to bringing about greater sustainability in trade and agriculture in both the developed and developing world.

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Foreword from FiBL and IFOAM

Data collection is a major concern of the Research Institute of Organic Agriculture (FiBL) and the International Federation of Organic Agriculture Movements (IFOAM). The comprehensive data provided in this publication serve as an important tool for stakeholders, policy makers, 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 crucially, for monitoring the impact of these activities.

With this edition, FiBL and IFOAM are presenting *The World of Organic Agriculture* for the twelfth 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. Furthermore, for this edition a large number of country reports was 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 the International Trade Centre (ITC) and the Swiss State Secretariat for Economic Affairs (SECO)/Economic Development and Cooperation for their support for this project, which will help to expand and improve the data collection and processing activities in the future.

Furthermore, we are happy to count on the continuous support of NürnbergMesse, the organizers of the BioFach World Organic Trade Fair.

Bonn and Frick, February 2011

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AQIS: Australian Quarantine and Inspection Service, Canberra, Australia

BMELV: Ministry of Food, Agriculture and Consumer Protection, Berlin, Germany, www.bmelv.de

CACC: Certification, Accreditation and Compliance Committee of the US National Organic Standards Board (NOSB)

CNCA Certification and Accreditation Administration of the People's Republic of China, Beijing, China

CBTF: Capacity Building Task Force on Trade, Environment and Development of the United Nations Conference on Trade and Development (UNCTAD) and the United Nations Environment Programme (UNEP)

EPOPA: Export Promotion of Organic Products from Africa

EquiTool: Guide for Assessing Equivalence of Standards and Technical Regulations, developed by ITF

EU: European Union

FAO: Food and Agriculture Organization of the United Nations, Rome, Italy

FiBL: Research Institute of Organic Agriculture, Switzerland

GOMA: Global Organic Market Access project of FAO, IFOAM, and UNCTAD

GTZ: German Society for Technical Cooperation and Development, Germany

IAASTD: International Assessment of Agricultural Knowledge, Science and Technology for Development

IAMB: Mediterranean Agronomic Institute of Bari, Italy

ICROFS: International Center for Research in Organic Food Systems, Denmark

IFAD: International Fund for Agricultural Development

IFOAM: International Federation of Organic Agriculture Movements, Bonn, Germany

IFPRI: International Food Policy Research Institute

IOAS: International Organic Accreditation Service

IROCB: International Requirements for Organic Certification Bodies of the ITF

ITF: International Task Force on Harmonization and Equivalence in Organic Agriculture

ITC: International Trade Centre, Geneva, Switzerland

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JAS: Japan Agricultural Standard

MOAN: Mediterranean Organic Agriculture Network, Italy

NOGAMU: National Organic Agricultural Movement of Uganda

Norad: Norwegian Agency for Development Cooperation

NOSB: US National Organic Standards Board (USA)

NGO: Non-governmental organization

NOP: National Organic Program of the United States

ORC: The Organic Research Centre Elm Farm, UK

ORCA: Organic Research Centres Alliance, c/o FAO, Rome, Italy

OTA: Organic Trade Association, com, USA

SECO: Swiss State Secretariat for Economic Affairs, Berne Switzerland

SENASA: Servicio Nacional de Sanidad y Calidad Agroalimentaria, Buenos Aires, Argentina

SIDA: Swedish International Development Cooperation Agency

SME: Small and Medium-sized Enterprises

UNCTAD: United Nations Conference on Trade and Development

UNEP: United Nations Environment Programme

UNESCO: United Nations Educational, Scientific and Cultural Organization

USDA: United States Department of Agriculture, Washington, US, www.usda.gov

WTO: World Trade Organization

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Organic Agriculture 2011: Key Indicators and Leading Countries

Indicator		Leading countries 2009
Countries with data on certified organic agriculture 2009[1]	2009: 160 countries (2008: 154; 2000: 86)	
Organic agricultural land 2009	37.2 million hectares (2008: 35.2, 1999: 11)	Australia (12 million ha), Argentina (4.4 million ha), US (1.9 million ha)
Number of countries with more than five percent organic agricultural land 2009	24 countries (2008: 22); More than ten percent: 7 countries (2008: 6 countries)	Falkland Islands (Malvinas) (35.7 %), Liechtenstein (26.9 %), Austria (18.5 %)
Further, non-agricultural organic areas 2009	41.9 million hectares (2008: 31 million)	Finland (7.8 million ha), Brazil (6.2 million ha); Cameroon (6 million ha).
Producers 2009	1.8 million producers (2008: 1.4 million)	India (677'257), Uganda (187'893), Mexico (128'826)
Organic market size 2009	54.9 billion US dollars or 40 billion euros (2008: 50.9 billion US dollars; 1999: 15.2 billion)	US (17.8 billion euros), Germany (5.8 billion euros), France (3 billion euros)
Number of countries with organic regulations 2010	74 countries (2008: 73 countries)	
Organic certifiers 2010	523 certifiers (2008: 489)	Japan, USA, South Korea
Number of IFOAM affiliates 2011	1.1.2011: 757 affiliates (2008: 734 affiliates 2000: 606 affiliates)	Germany: 98 affiliates; United States: 45 affiliates; India: 44 affiliates

Source: FiBL and IFOAM; for total global market: Organic Monitor; for certifiers: Organic Standard/Grolink.

[1] Where the designation "country" appears in this book, it covers countries or territories.

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The World of Organic Agriculture 2011: Summary

HELGA WILLER[1]

Organic agricultural land and farms as well as the global market continued to grow in many countries during 2009.

Current status of organic agriculture

According to the latest FiBL/IFOAM survey on certified organic agriculture worldwide (data as of end of 2009, see page 33), statistical information on organic agriculture is now available from 160 countries, an increase of six countries since the last survey.

There are 37.2 million hectares of organic agricultural land (including in-conversion areas). The regions with the largest areas of organic agricultural land are Oceania (12.2 million hectares), Europe (9.3 million hectares), and Latin America (8.6 million hectares). The countries with the most organic agricultural land are Australia, Argentina, and the United States.

Currently 0.9 percent of the world's agricultural land is organic. However, some countries reach far higher shares: Falkland Islands (35.7 percent), Liechtenstein (26.9 percent), and Austria (18.5 percent). Seven countries have more than ten percent organic land.

Compared with the previous survey, organic land increased by two million hectares or six percent. Growth was strongest in Europe, where the area increased by almost one million hectares. The countries with the largest increases were Argentina, Turkey, and Spain.

Apart from agricultural land, there are further organic areas, most of these being areas for wild collection. These areas constitute 41.9 million hectares and have increased by 10 million hectares since 2008.

There were 1.8 million producers in 2009, an increase of 31 percent since 2008, mainly due to a large increase in India. Forty percent of the world's organic producers are in Asia, followed by Africa (28 percent), and Latin America (16 percent). The countries with the most producers are India (677'257), Uganda (187'893), and Mexico (128'862).

Almost two-thirds of the organic agricultural land of 37.2 million hectares in 2009 was grassland/grazing areas (23 million hectares). With a total of at least 5.5 million hectares, arable land constitutes 15 percent of the organic agricultural land. An increase of 13.2 percent compared with 2008 was reported. Most of this category of land is used for cereals including rice (2.5 million hectares), followed by green fodder from arable land (1.8 million hectares), and vegetables (0.22 million hectares). Permanent crops account for approximately six percent of the organic agricultural land, amounting to 2.4 million hectares. Compared with the previous survey, almost half a million hectares more were reported. The most important crops are coffee (with 0.54 million hectares reported, constituting one-fifth of the organic permanent cropland), followed by olives (0.49 million hectares), cocoa (0.26 million hectares), nuts (0.2 million hectares), and grapes (0.19 million hectares).

[1] Dr. Helga Willer, Communication, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Internet www.fibl.org

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Global market

According to Organic Monitor, the global market for organic food and drink is recovering from the repercussions of the economic crisis. Single-digit market growth was observed for the first time in 2009 because of the economic slowdown reducing industry investment and consumer spending power. Organic food and drink sales expanded by roughly five percent to 54.9 billion US dollars[1] in 2009. Global revenues have increased over three-fold from 18 billion US dollars in 2000 and double-digit growth rates were observed each year, except in 2009. Healthy growth rates are envisaged to restart as consumer spending power rises and as more countries come out of economic recession (see article by Amarjit Sahota, page 62). The countries with the largest markets are the US, Germany, and France; the highest per capita consumption is Denmark, Switzerland, and Austria (see article on the global survey on organic agriculture, page 33.)

Africa

In Africa, there are slightly more than one million hectares of certified organic agricultural land. This constitutes about three percent of the world's organic agricultural land. There were 500'000 producers reported. The countries with the most organic land are Uganda (226'954 hectares), Tunisia (167'302 hectares), and Ethiopia (122'727 hectares). The highest shares of organic land are in Sao Tome and Prince (6.5 percent), Sierra Leone (1.8 percent), and Uganda (1.7 percent). The majority of certified organic produce in Africa is destined for export markets; in Uganda the export value for organic products was 37 million US dollars in 2009/2010 (see article by Charity Namuwoza and Hedwig Tushemerirwe, page 117). The European Union, as the major recipient of these exports, is Africa's largest market for agricultural produce. Tunisia was accepted under the EU's Third Country List in 2009 (see article by Lukas Kilcher and Samia Maamer Belkhiria, page 111). Organic agriculture has a significant role to play in addressing the pressing problems of food security and climate change in Africa. It is therefore very important that national and regional policies in Africa do not overlook the benefits provided by organic agriculture.

The second African Organic Conference to be held in Lusaka, Zambia, from May 15-19, 2012 will provide a key platform for discussion and sharing experiences. Moreover, this conference will provide a significant opportunity to mobilize support for organic agriculture and take the necessary actions to bring the organic agenda to new heights in Africa (see article by Hervé Bouagnimbeck, page 104).

Asia

The total organic agricultural area in Asia is nearly 3.6 million hectares. This constitutes ten percent of the world's organic agricultural land. There were 731'315 producers reported. The leading countries by area are China (1.9 million hectares) and India (1.2 million hectares). Timor-Leste has the most organic agricultural area as a proportion of total agricultural land (almost seven percent). The region hosts a wide range of organic sector development scenarios, from early development to highly regulated. Far from the marginal position it held previously, organic is now an accepted concept and growing market trend in the region. Whilst export remains the dominant feature of sector development in the majority of developing countries in the region, local markets have emerged and are gaining ground. Primarily a market driven sector, government policy is an emerging and significant sector

[1] 1 US dollar = 0.71895 Euros; average exchange rate 2009, Source: http://www.oanda.com/lang/de/currency/average

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development factor today in many countries. Although domestic market size is still relatively small, the high value and profile associated with organic has led to civil society (consumer) calls and governments' interest to regulate the sector. Seven markets have implemented organic labeling regulations (i.e., China, India, Japan, South Korea, Philippines, Taiwan, and Malaysia). Others, Sri Lanka and Nepal have established government competent authorities. Thailand and Indonesia have also established accreditation systems (see article by Ong Kung Wai, page 122). A major event—The 17th IFOAM Organic World Congress—will be held in Korea in autumn 2011. See also country reports (starting page 128) on Armenia by Nune Darbinyan, on China by Yuhui Qiao, on Indonesia by Lidya Ariesusanty, on Kzakhstan by Evgeniy Klimov and on South Korea by Dong-Geun Choi.

Europe

As of the end of 2009, 9.3 million hectares of agricultural land in Europe were managed organically by more than 250'000 farms. In Europe, 1.9 percent of the agricultural area, and in the European Union 4.7 percent of the agricultural area is organic. Twenty-five percent of the world's organic land is in Europe. Compared to 2008, organic land increased by nearly one million hectares. The countries with the largest organic agricultural area are Spain (1.3 million hectares), Italy (1.1 million hectares) and Germany (0.95 million hectares). There are five countries now in Europe with more than ten percent organic agricultural land: Liechtenstein (26.9 percent), Austria (18.5 percent), Sweden (12.6), Switzerland (10.8 percent), and Estonia (10.5 percent).

Sales of organic products were approximately 18'400 million euros in 2009. The market grew at smaller rates than in previous years even though some countries like France and Sweden showed strong growth. The largest market for organic products in 2009 was Germany with a turnover of 5'800 million euros, followed by France (3'041 million euros) and the UK (2'065 million euros). As a portion of the total market share, the highest levels have been reached in Denmark, Austria and Switzerland, with five percent or more for organic products (see article by Schaack et al. page 156). The highest per capita spending is also in these countries.

Support for organic farming in the European Union and neighboring countries includes grants under rural development programs, legal protection, and the European as well as national action plans. An updated overview of European action plans shows that currently 26 action plans (including regional action plans) are in place (see article by Gonzalvez et al., page 160). A major development in 2010 was the launch of the new European logo for organic food (see article by Helga Willer, page 150). European country reports include a report about Switzerland by Lukas Kilcher (page 169) and one about Ukraine by Natalie Prokopchuk and Tobias Eisenring (page 173).

Latin America

In Latin America, more than 280'000 producers managed 8.6 million hectares of agricultural land organically in 2009. This constitutes 23 percent of the world's organic land and 1.4 percent of the regions agricultural land. The leading countries are Argentina (4.4 million hectares), Brazil (1.8 million hectares), and Uruguay (930'965 hectares). The highest shares of organic agricultural land are in the Falkland Islands/Malvinas (35.7 percent), the Dominican Republic (8.3 percent), and Uruguay (6.3 percent). Most organic products from Latin American countries are sold on the European, North American or Japanese markets. Popular goods are especially those that cannot be produced in these regions, as well as off-season

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products. Thus, the development of robust local markets is still a major challenge, without which the sustainability of organic production cannot be achieved. Important crops are tropical fruits, grains and cereals, coffee, cocoa, sugar, and meats. Most organic food sales in the domestic markets of the countries occur in major cities. Eighteen countries have legislation on organic farming, and five additional countries are currently developing organic regulations. Costa Rica (see article by Roberto Azofeifa on page 194) and Argentina have both attained Third Country status according to the EU regulation on organic farming. The types of support in Latin American countries range from organic agriculture promotion programs to market access support by export agencies (see article on Latin America by Salvador Garibay, Roberto Ugas and Patricia Flores, page 182 and on Chile by Pilar Eguillor Recabarren, page191).

North America

In North America, almost 2.7 million hectares are managed organically, of these nearly two million in the United States and 0.7 million in Canada, representing approximately 0.7 percent of the total agricultural area in the region and 7 percent of the world's organic agricultural land.

US sales of organic products continued to grow during 2009 despite the distressed state of the economy. In fact, organic product sales in 2009 grew by 5.3 percent overall, to reach 26.6 billion US dollars.[1] Of that figure, 24.8 billion US dollars represented organic food or 3.7 percent of the food market. The remaining 1.8 billion were sales of organic non-foods. On the Canadian front, Agriculture and Agri-Food Canada in 2010 released a new report on the Canadian organic sector's trade data and retail sales. Analyzing the 2008 sales of organic foods, the report concludes that the total Canadian organic market is now worth 2 billion Canadian dollars annually.[2] Projections for 2010 and beyond indicate higher growth rates for organic sales in North America.

Regarding legislation, representatives from the Canada Organic Office and the US National Organic Program have completed a full peer review, in order to monitor and evaluate how the US-Canada organic equivalence arrangement is being applied (see articles by Barbara Haumann, page 205; and Matthew Holmes and Anne Macey, page 211).

Oceania

This region includes Australia, New Zealand, and island states like Fiji, Papua New Guinea, Tonga, and Vanuatu. Altogether, there are 8'466 producers, managing 12.2 million hectares. This constitutes 2.8 percent of the agricultural land in the area and 33 percent of the world's organic land. Ninety-nine percent of the organic land in the region is in Australia (12 million hectares, 97 percent of which is extensive grazing land), followed by New Zealand (124'000 hectares), and Vanuatu (8'996 hectares). The highest shares of all agricultural land are in Samoa (7.9 percent), followed Vanuatu (6.1 percent), the Solomon Islands (4.3 percent), and Australia (2.9 percent). Growth in the organic industry in Australia, New Zealand and the Pacific Islands has been strongly influenced by rapidly growing overseas

[1] 1 US dollar was 0.71895 euros in 2009, and 0.75464 in 2010 Average exchange rate according to www.oanda.com

[2] 1 Canadian dollar = 0.63046 euros, average exchange rate 2008; source: www.oanda.com/lang/de/currency/average

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demand; domestic markets are, however, also growing. In Australia it was at 947 Australian dollars[1] in 2009 and in New Zealand at 350 million New Zealand dollars.[2]

The biggest change in the Australian domestic market over 2009 was that the Australian Standard for Organic and Biodynamic Products was adopted and published by Standards Australia. Now that the Australian Standard has been published, the organic industry and the authority in charge, the Australian Quarantine and Inspection Service, are working towards a situation where one standard can be used for the domestic and export market (see article on Australia by Els Wynen et al., page 218).

The year 2010 marked a milestone for the Pacific Region as the International Organic Accreditation Service (www.ioas.org) has assessed the Pacific Organic Standard (POS) and found it to be equivalent to the standards requirements of the European Union's organic regulations. This means that, according to the IOAS, the Pacific Organic Standard is suitable for use by conformity assessment bodies in the Pacific region as a standard for the certification of operators who may wish to export products to the European Union.

Most of the organically certified products from the region are for export. Generally, the domestic markets for organically certified products are not very developed and in some cases are non-existent. Organic products are commonly sold as conventional without a price premium. Interesting opportunities are now being explored within the tourist structures of several countries that are facing a growth in the presence of tourists (e.g., Fiji, Cooks, and Samoa) focusing on development of Pacific cuisine and linking small holder organic farmers directly with tourist and hospitality providers. While there is no regional policy for organic agriculture, the Secretariat of the Pacific Community developed a specific policy brief in 2009 to assist governments and others in the region to develop relevant policy. The policy brief focuses on how organic agriculture can assist in meeting regional challenges and outlines seven initial policy recommendations (see chapter by Karen Mapusua, page 223).

Standards and regulations

The year 2010 has been a year of consolidation in the field of standards and regulations.[3] The new EU regulation on organic production as well as the Canadian organic standard have been implemented, and the details for Canada and the US—the world's first fully reciprocal agreement between regulated organic systems—have been clarified. Regulations in new countries have only been adopted in Malaysia, but a fair amount of countries especially in Africa are in the process of elaborating legislations on organic agriculture. According to the FiBL survey on organic rules and regulations, the number of countries with organic standards has increased to 74, and there are 27 countries that are in the process of drafting a legislation (see article by Huber et al., page 68).

There has been modest growth in the number of certification bodies in most regions, it has, however, increased rapidly in some European countries because international certification

[1] 1 Australian dollar = 0.56599 euros in 2009; average annual exchange rate 2009; Source: http://www.oanda.com/lang/de/currency/average

[2] 1 New Zealand dollar = 0.45376 Euros in 2009, average exchange rate; average annual exchange rate 2009; Source: http://www.oanda.com/lang/de/currency/average

[3] For a brief history of organic standards and regulations see www.organic-world.net/rules.html as well as previous versions of this article as published in the various editions of *The World of Organic Agriculture*. These can be downloaded at www.organic-world.net/former-editions.html.

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bodies have started branch offices that have gained approval by, for example, the EU or the local government. The total number of certification bodies is 532, up from 489 in 2009. Most certification bodies are in the European Union, the United States, Japan, South Korea, China, Canada, and Brazil (see article by Kolbjörn Örjavik, page 78).

In 2009, FAO, IFOAM and UNCTAD started the Global Organic Market Access (GOMA) project. Activities in 2010 included the promotion of south-south cooperation on organic agriculture in Asia and in Central America as well as consultations on objectives and related practice requirements for organic standards (see article by Sophia Twarog, page 76).

A growing number of organic producers across the world are verified for the local market through Participatory Guarantee Systems (PGS). There are now PGS initiatives on all continents, with Latin America and India being the leaders in terms of the number of farmers involved. In the year 2010, important steps were taken in increasing official recognition of PGS by governments, most notably in Brazil and in India (see article by Joelle Katto, page 82).

The organic sector faces the challenge of an increasing number of other standards and brands competing for green and ethical segments of the consumer market. While sales of organically certified products have grown, the sector has to face new market entrants making green and ethical claims. The article from Oliver von Hagen und Alexander Kasterine (page 84) outlines the nature of competition to organic from other sustainability labels and initiatives and the strategic responses the sector can make.

A recent study conducted by FiBL reviewed the current state of empirical research on environmental, social, and economic impacts of sustainability certification in the agricultural sector. According to this study, sufficient evidence is available for organic agriculture, which shows a wide-range of environmental and economic benefits (but with an emphasis on the western world). For fairtrade, most studies on social and economic benefits report positive impacts on producers in developing countries (see paper by Jawtusch et al., page 88).

Organic beekeeping

For the first time, an overview of organic beekeeping is presented in *The World of Organic Agriculture*. In the article of Garibay et al. (page 94) a general overview is given, including statistical information, obtained at the First World Conference on Organic Beekeeping that took place in Bulgaria in 2010. The next conference on organic beekeeping will be organized by FiBL, Naturland, and local partners in Mexico in 2012.

Developments within IFOAM

The IFOAM Inspiration for Living Change Declaration, which was publicly affirmed by a dozen laureates of the Alternative Nobel Prize, the World Food Prize and the One World Organic Lifetime Achievement Award, outlines the importance of reforming national and international policies to advance organic agriculture

IFOAM has three campaigns advocating for organic solutions: the “People before Commodities” campaign focuses on Food Security, “Powered by Nature” focuses on Biodiversity, and “Not just Carbon” is on Climate Change.

All these campaigns see eco-intensification as the common strategy to develop agriculture in the 21st century. Besides the aforementioned declaration and campaigns, IFOAM initiated a new tool to lead the organic movement called “camps,” which are workshops to build

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participatory strategies for stakeholders. Camps on fairtrade, nanotechnology, food sovereignty or aid effectiveness will also be pursued, as soon as donors and stewards for those topics can be identified. Another element that leads the organic movement towards the facilitation of development is the best practice standard, decided upon by the IFOAM membership in July 2010 as part of the Organic Guarantee System. IFOAM, with the "International Association of Partnership (IAP)," is showing a way to position organic as a development model for the sustainability of rural livelihoods in poor and rich countries.

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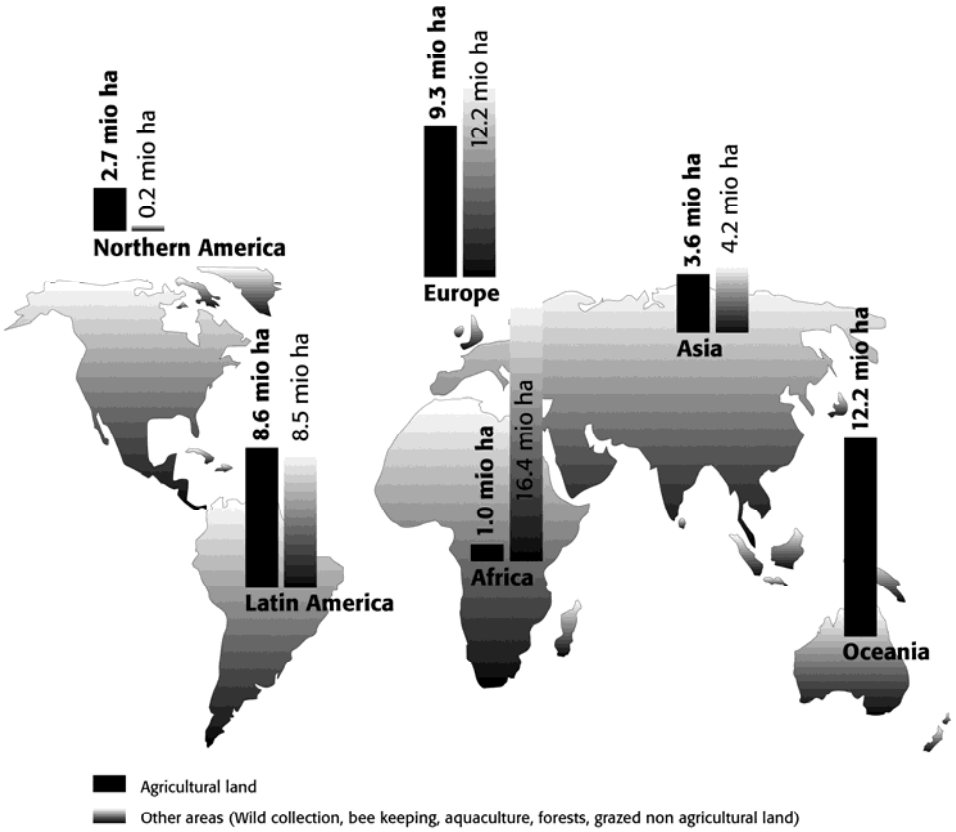
Organic Agriculture Worldwide:
The Results of the Global Survey on Organic Agriculture



Map 1: Organic agricultural land and other organic areas in 2009

Source: FiBL/IFOAM Survey 2011

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Organic Agriculture Worldwide – The Results of the FiBL/IFOAM Survey

HELGA WILLER[1]

The 12th survey on certified organic agriculture worldwide was carried out by the Research Institute of Organic Agriculture (FiBL) and the International Federation of Organic Agriculture Movements (IFOAM). It was funded by the Swiss State Secretariat for Economics Affairs (SECO), the International Trade Centre (ITC), and NürnbergMesse.

Governments, private sector organizations, and certifiers 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 of Marketecology (IMO), LACON, Naturland and the Soil Association. Furthermore, data collection in the Mediterranean countries was carried out in cooperation with the Mediterranean Organic Agriculture Network (MOAN, c/o IAM Bari) and in the Central American countries with RUTA, the Regional Unit for Technical Assistance for Sustainable Rural Development.

In total data were available from 160 countries (most data are per end of 2009), this is up from 154 countries for the previous survey (data as of end of 2008).

From the following countries data were received for the first time: Andorra, Angola, Belarus, Channel Islands, Cook Islands, Grenada, Haiti, Myanmar and Singapore. For the following countries, for which data had been available previously, data were not available anymore: Guinea Bissau and Somalia.

Updated data on the organic area were available for 142 countries; however, for some countries, updates were only available for the total organic area, but not necessarily for number of farms or land use or other variables. In such cases, data of the previous survey were used.

Table 1: Countries and territories covered by the global survey on organic agriculture 2009

	Countries* with data on organic agriculture	Countries per region	Share of countries that provided data (%)
Africa	38	57	67
Asia	37	49	76
Europe	45	46	98
South & Central America, Caribbean	29	45	64
North America	2	5	40
Oceania	9	13	69
World	160	214	75

Source: FiBL/IFOAM survey 2011
*Where the designation "country" appears in this book, it covers countries or territories.

[1] Dr. Helga Willer, Research Institute of Organic Agriculture (FiBL), Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

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Data were collected on the following variables: Certified organic area (in hectares), including in-conversion area; land use details; production volumes (in metric tons), data on the number of producers and other operator types; domestic market data (total domestic sales values), export and import (values and volumes in tons). Not all data collected are published in this volume, and for many variables no complete global picture is possible.

SECO ITC project on data collection worldwide

Under the SECO/ITC project on data collection and processing worldwide (2008-2012) a number of tasks were carried out in 2009 and 2010: The tools for data collection and processing were improved to include more variables, the existing classification for land use and crop data was expanded, a classification for manufactured products was developed, support was given to some developing countries for their data collection, and a study on the availability of data and on data collection systems worldwide was carried out. Furthermore the website www.organic-world.net was set up and maintained, and a number of slide presentations were prepared.

Presentation of the statistics

The statistics compiled from the survey can be found at various places in this book. This chapter is on the current statistics on organic agriculture worldwide and includes the following information: Organic agricultural land; shares of organically managed agricultural land by region and country; growth in organic land; organic producers and other operator types; market data; organic farming in developing and transition countries and in emerging markets; land use and crop data. Full tables are available in the annex.

At the Organic-World homepage (www.organic-world.net), the tables with more details on crops and by conversion status can be downloaded as excel files.

Contact

Enquiries related to the data should be directed to Helga Willer, FiBL, Frick,
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General Note on the Data

Countries: For countries and areas, FiBL and IFOAM used the Standard Country and Area Codes Classifications as defined by the United Nations Statistics division.[1] Where the designation "country" appears in this volume, it covers countries or territories.

Data sources: Data were 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.

Direct year-to-year comparison: A direct year-to-year comparison is not always possible for many data, as the data sources may change or data access becomes better.

Completeness of data: For some countries either no current data were available or the data provided may not be complete and for some countries no data were available. It may therefore be assumed that the extent of organic agriculture is larger than documented in this volume.

Organic areas: Data represent certified land/areas that are already fully converted as well as land under conversion, since many data sources do not separate or include the latter (for instance Australia, Austria, Germany, Switzerland), and since land under conversion is under organic management.

Crop data: For some crops the area values provided may refer to main crops grown. Furthermore, in some cases the areas may refer to agroforestry areas, where the provided crop surfaces are the total surface of the agroforestry system, including shade trees and other crops. Such cases are difficult to compare with those that provide only the effective crop area.

Share of total agricultural land: In some cases, the calculation of the shares of organically managed land, based on the Eurostat and FAOSTAT data, might differ from the organic shares obtained from ministries or local experts.

Producers: Some countries report the number of smallholders, and others only the number of companies, projects or grower groups, which may each comprise a number of producers.

Data revisions: Data revisions and corrections, compared with the data published in the 2010 edition of *The World of Organic Agriculture*, are communicated in the annex of this volume and at http://www.organic-world.net/revisions.html.

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[1] For the Composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings se the UNSTAT homepage at http://unstats.un.org/unsd/methods/m49/m49regin.htm

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Organic agricultural land

Currently 37.2 million hectares are under organic agricultural management (end of 2009 for most data).[1]

The region with the most organic agricultural land is Oceania, with 12.15 million hectares, followed by Europe with almost 9.3 million hectares, Latin America (8.6 million hectares), Asia (3.6 million hectares), North America (2.7 million hectares), and Africa (more than 1 million hectares).

Oceania has almost one-third of the global organic agricultural land, but its relative importance is decreasing. Europe, a region that has had a very constant growth of organic land over the years, has one quarter of the world's organic agricultural land. The share of Latin America is slightly lower than that of Europe (23 percent) (see Figure 1).

Australia is the country with the most organic agricultural land, 97 percent of which is extensive grazing area. Argentina is second, followed by the United States in third place (Figure 2). The ten countries with the most organically managed land have a combined total of 27.5 million hectares, constituting three quarters of the world's organic agricultural land.

Table 2: Organic agricultural land (including in-conversion areas) and regional shares of the global organic agricultural land 2009

Region	Organic agricultural land (hectares)	Regions' share of global agricultural land
Africa	1'026'632	2.8
Asia	3'581'918	9.6
Europe	9'259'934	24.9
Latin America	8'558'910	23.0
Oceania	12'152'108	32.6
Northern America	2'652'624	7.1
Total	37'232'127	100.0

Source: FiBL/IFOAM Survey 2011
Notes: Agricultural land includes in-conversion areas and excludes wild collection, aquaculture, forest, non-agricultural grazing areas.

[1] Data provided on the conversion status were processed for this work. However, some countries provided only data on the fully converted area, others only on the total organically managed agricultural land, and thus the conversion area is not known for many countries (for instance the U.S., Argentina, Chile and Uruguay).

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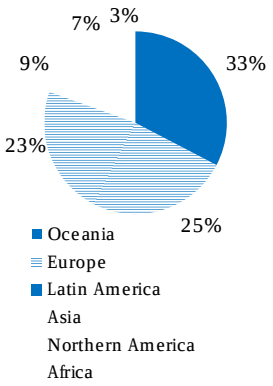

Figure 1: Distribution of the organic agricultural land by geographical region in 2009

Source: FiBL/IFOAM Survey 2011, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

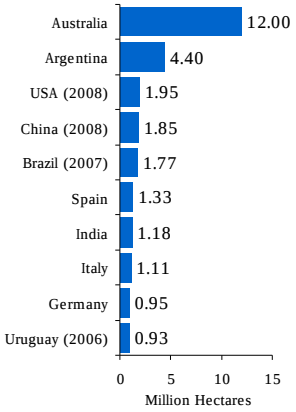

Figure 2: The countries with the largest areas of organic agricultural land 2009

Source: FiBL/IFOAM Survey 2011, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

Related tables

Annex

- Table 38: Organic agricultural land, share of total agricultural land and number of producers
- Table 41: Organic agricultural land by country 2009
- Table 40: Organic agricultural land: The top ten countries per region 2009

www.Organic-World.net › Password area (organic2011; organicworld)

- Organic agricultural land, share of total agricultural land and number of producers; in excel format
- Organic agricultural land by country 2009; in excel format
- Power Point presentation with key results on the organic agricultural land

Willer, H. and Kilcher, L. (Eds.) (2011):
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Shares of organically managed agricultural land by region and country

The share of the world's organic agricultural of all agricultural land is 0.85 percent.

By region, the share is highest in Oceania (2.8 percent), followed by Europe with 1.9 percent and Latin America with 1.4 percent. In the 27 countries of the European Union, the share of organically managed land is more than 4.7 percent. In the other regions, the share of organically managed land is less than one percent (see Table 2).

Many countries, however, exhibit much higher percentages (Figure 3, Figure 4) and seven countries have even reached shares of more than ten percent of the agricultural land, most of these in Europe. The country with the highest share is the Falkland Islands (Malvinas), where several large sheep farms are working organically. It is interesting to note that many island states have high shares.

However, 68 percent of the countries for which data are available have less than one percent organic agricultural land.

Table 3: Organic agricultural land (including in-conversion areas) and shares of total agricultural land 2009

	Agr. land (hectares)	Share of total agr. land
Africa	1'026'632	0.10%
Asia	3'581'918	0.25%
Europe	9'259'934	1.87%
Latin America	8'558'910	1.37%
Oceania	12'152'108	2.82%
Northern America	2'652'624	0.68%
Total	37'232'127	0.85%

Source: FiBL/IFOAM Survey 2011
Shares of total agricultural land (including only the countries that are included in the survey).

In order to calculate the percentages, the data for most countries were taken from the FAO Statistical database FAOSTAT (as of 2008).[1] For the European Union, most data were taken from Eurostat.[2] Where available, data for total agricultural land from ministries was used (for instance U.S., Switzerland, and Austria), which sometimes differ considerably from those published by Eurostat or FAOSTAT.

Please note that in some cases the calculation of the shares of organically managed land, based on the Eurostat and FAOSTAT data, might differ from the organic shares obtained from ministries or local experts.

[1] FAOSTAT, Data Archives, the FAO Homepage, FAO, Rome at faostat.fao.org > Resources > Resourcestat at http://faostat.fao.org/site/377/default.aspx#ancor
[2] Eurostat: Basic data – key agricultural statistics at http://ec.europa.eu/agriculture/agrista/2007/table_en/2012.pdf, The Eurostat Homepage, Eurostat, Luxembourg

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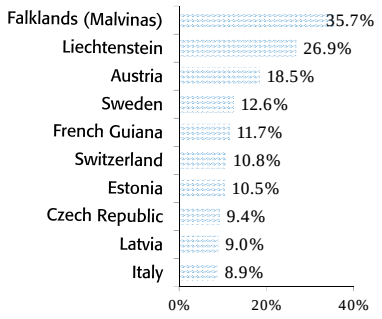

Figure 3: The ten countries with the highest shares of organic agricultural land 2009

Source: FiBL/IFOAM Survey 2011, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

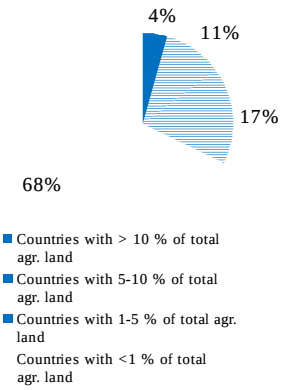

Figure 4: Distribution of the shares of organic agricultural land 2009

Source: FiBL/IFOAM Survey 2011, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

Related tables

Annex

- Table 38: Organic agricultural land, share of total agricultural land and number of producers
- Table 43: Shares of organic agricultural land by country 2009, sorted
- Table 42: Share of organic agricultural land: The top ten countries per region 2009

www.Organic-World.net › Password area (organic2011; organicworld)

- Organic agricultural land, share of total agricultural land and number of producers; in excel format
- Shares of organic agricultural land 2005-2009; in excel format
- Power Point presentation with key results on organic agricultural land

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Growth of the organic agricultural land

Compared with the revised data[1] from 2008, the organically managed land area increased by more than two million hectares, or by six percent in 2009 (Table 4). Compared with 1999, when data on organic agriculture worldwide were available for the first time (Willer/Yussefi 2000), the organic agricultural land has more than trebled.

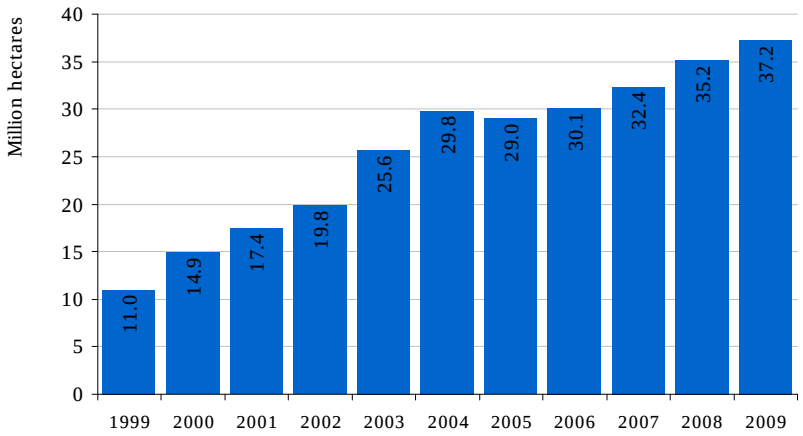

Figure 5: Growth of the organic agricultural land 1999-2009

Source: FiBL, IFOAM and SOEL 2000-2011. Differences compared with data published previously are due to data updates and revisions; this is an on-going process.

In 2009, the organic agricultural land increased in all regions. The highest relative growth was in Africa (+ 20 percent), the highest absolute growth in Europe (+ 1 million hectares).

Table 4: Organically managed agricultural land (hectares) by region: growth from 2008 to 2009

Region	Organic agr. land (ha) 2008	Organic agr. land (ha) 2009	+/- in hectares	+/- percent
Africa	857'662	1'026'632	168'971	19.7
Asia	3'351'068	3'581'918	230'850	6.9
Europe	8'263'740	9'259'934	996'194	12.1
Latin America	8'065'147	8'558'910	493'763	6.1
Northern America	2'577'502	2'652'624	75'122	2.9
Oceania	12'046'784	12'152'108	105'324	0.9
Total	35'225'786	37'232'127	2'006'341	5.7

Source: FiBL/IFOAM Surveys 2009-2011

Ninety-eight countries (including those that provided data for the first time) showed an increase in their agricultural land. A decrease was reported from 41 countries. For the remainder, the organic agricultural land did not change or no new data were received.

[1] For details on data revision, see www.organic-world.net/revisions.html

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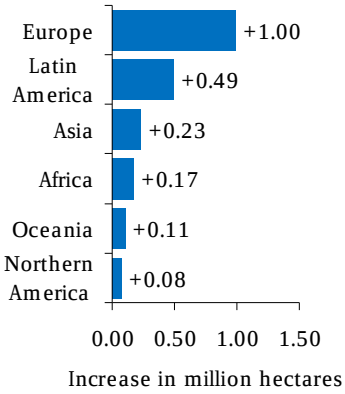

Figure 6: Increase of organic agricultural land 2008/2009 in the regions

Source: FiBL/IFOAM Survey 2011, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

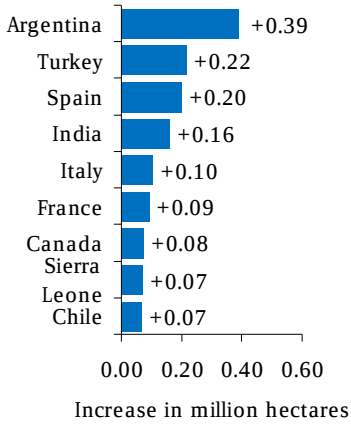

Figure 7: The countries with the largest growth 2008/2009

Source: FiBL/IFOAM Survey 2011, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

Related tables

Annex

- Table 38: Organic agricultural land, share of total agricultural land and number of producers
- Table 43: Growth of the organic agricultural land by region 1999-2009
- Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009

www.Organic-World.net › Password area (organic2011; organicworld)

- Organic agricultural land, share of total agricultural land and number of producers; in excel format
- Development of the organic agricultural land and share of the agricultural land by region and country 2005-2009; excel format
- Growth of the organic agricultural land by region 1999-2009
- Power Point presentation with key results on organic agricultural land

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Other organic areas

Apart from the organic agricultural land there are further organic areas, the largest part of these are wild collection areas and areas for beekeeping, aquaculture, forest areas and grazing areas on non-agricultural land. It should be noted, that many countries do not report these areas, as they only communicate the agricultural land. The total area for these areas was 41.9 million hectares, constituting an increase of 10 million hectares compared with 2008. Large increases of wild collection and beekeeping areas occurred in Cameroon and Russia.

Table 5: Organic areas: Agricultural land and further certified organic areas by region in 2009

	Agricultural land	Wild collection*	Aquaculture	Forest	Grazing areas on non-agr. land	Total
Africa	1'026'632	16'429'557		185		17'456'374
Asia	3'581'918	4'224'787	428'852	94	6'000	8'241'652
Europe	9'259'934	12'183'100		4'352	20'261	21'467'647
Latin America	8'558'910	8'457'786	4'532	1'198		17'022'426
Oceania	12'152'108	50				12'152'158
Northern America	2'652'624	210'231				2'862'855
Total	37'232'127	41'505'511	433'384	5'829	26'261	79'203'112

* Wild collection and beekeeping
Source: FiBL/IFOAM Survey 2011

Wild collection and beekeeping

The collection of wild harvested crops is defined in the IFOAM Basic Standards (IFOAM 2006), and wild collection activities are regulated in organic laws. A collection area (including beekeeping) of 41.5 million hectares was reported for 2009, which is an increase of 10 million hectares compared with 2008. The organic wild collection areas are concentrated in Africa, Asia, Europe and Latin America; the distribution is thus quite different than that of agricultural land. There are some wild collection crops in Canada. For the United States, no such areas were reported.

The countries with the largest areas are Finland (mainly berries), followed by Brazil and Zambia (beekeeping). Together, the ten countries with the largest wild collection areas have 28.4 million hectares. Details on the collected crops were available for about one-third of the wild collection area (see Table 6). Wild berries (mainly in Finland), medicinal and aromatic plants, as well as wild nuts (e.g., shea nuts in Africa and chestnuts in Latin America) play the most important role.

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Table 6: Wild collection and beekeeping areas by crop group 2009

Crop group	Hectares
Wild collection, no details	14'763'197
Apiculture	12'678'629
Berries, wild	7'898'805
Medicinal and aromatic plants, wild	3'620'830
Nuts, wild	1'446'211
Oil plants, wild	400'087
Seaweed	200'660
Fruit, wild	152'287
Forest products	95'150
Forest honey	89'753
Palmito, wild	66'780
Wild collection, other	64'800
Mushrooms, wild	14'194
Palm sugar	12'422
Baobab	1'232
Animal products	243
Bamboo, wild	230
Total	41'505'511

Source: FiBL/IFOAM Survey 2011. Data on wild collection were not available for all countries that provided data.

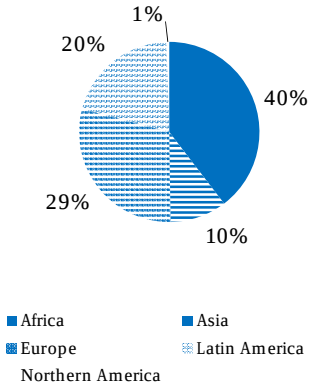

Figure 8: Geographical distribution of organic wild collection and beekeeping areas in 2009

Source: FiBL/IFOAM Survey 2011, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

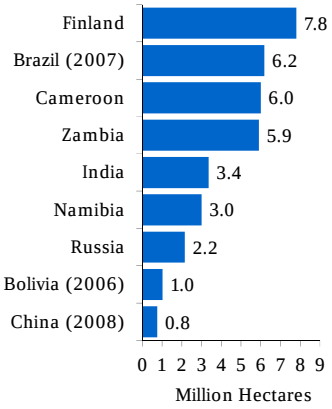

Figure 9: The ten countries with the largest organic wild collection and beekeeping areas in 2009

Source: FiBL/IFOAM Survey 2011, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

Related tables

Annex

- Table 45: All organic land use types by region and country

www.Organic-World.net › Password area (organic2011; organicworld)

- All organic land use types by region and country, excel format
- Power Point presentation with key results on the organic land

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Organic producers and other operator types 2009

For the current survey, a total of 1.8 million organic producers was reported, an increase of more than 0.4 million compared with 2008.

According to the data obtained, more than three quarters of the producers are located in Asia, Africa and Latin America (see Figure 10).

The country with the most producers is India,[1] followed by Uganda and Mexico (see Figure 11). In India, the number of organic producers almost doubled in 2009.

Table 7: Development of the numbers of producers 2008 to 2009

Continent	2008	2009	Increase in number	Increase in %
Africa	468'761	511'661	42'900	9.2
Asia	404'733	731'315	326'582	80.7
Europe	222'470	257'545	35'075	15.8
Latin America	262'414	283'066	20'652	7.9
Northern America	16'844	17'069	225	1.3
Oceania	7'960	8'466	506	6.4
Total	1'383'182	1'809'122	425'940	30.8

Source: FiBL/IFOAM Survey 2011

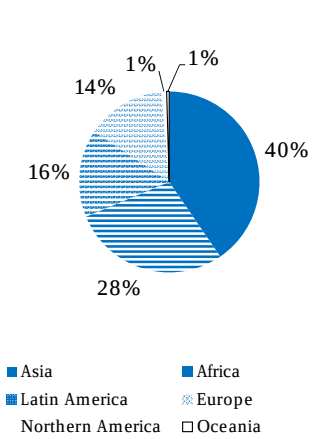

Figure 10: The distribution of organic producers by geographical region 2009

Total: 1.8 million producers
Source: FiBL/IFOAM survey 2011

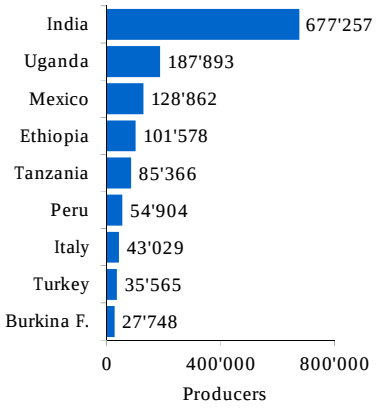

Figure 11: The countries with the highest numbers of organic producers 2009

Source: FiBL/IFOAM Survey, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

To find precise figures on the number organic farms remains difficult, as 1) some countries report only the numbers of companies, projects or grower groups, which may each comprise a number of producers; 2) some countries do not provide data on the producers at all; 3) some countries with wild collection areas include collectors; and 4) some countries provide the number of producers per crop, and there may be overlaps for those growers who grow

[1] The producer figure for India includes collectors; India has 3.4 million hectares of wild collection/forest areas.

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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 probably higher than reported here.

Further operator types

Regarding data on further operators types, it can be said that there are at least 43'000 processors and that there are at least 2'700 importers, most of these in Europe. However, not all countries reported the number of processors, exporters, importers or other operator types. For instance, data for the United States are missing, and it may be assumed that the number of processors and importers is far higher.

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

Related tables

Annex

- Table 46: Organic producers and other operator types by country

www.Organic-World.net > Password area (organic2011; organicworld)

- Organic producers and other operator types by country
- Power Point presentation with key results on the operator numbers

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Domestic market values

Whereas global trends and a global figure for the organic market is presented by Amarjit Sahota in this volume (page 62), we are showing the country related data compiled in the framework of the FiBL/IFOAM survey. For Europe this data collection is taking place in cooperation with the German AgrarmarktInformations-Gesellschaft and the Organic Research Centre, UK.

The countries with the largest market for organic food are the United States, followed by Germany and France. The highest per capita consumption in 2009 was in Denmark, followed by Switzerland and Austria.

According to Organic Monitor global sales with organic food and beverages reached almost 55 billion US dollars in 2009.

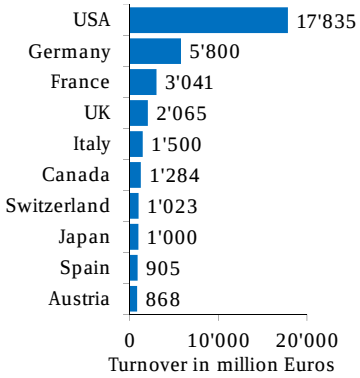

Figure 12: The countries with the largest markets for organic food 2009

Source: FiBL/IFOAM Survey, based on data from government bodies, the private organic sector and market research companies. For detailed data sources see annex.

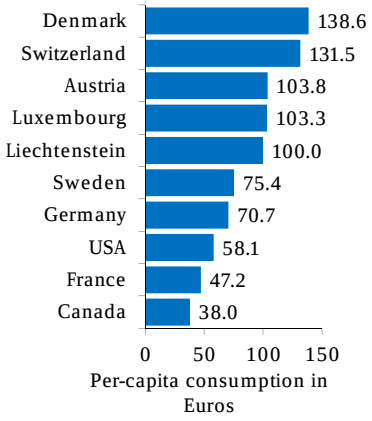

Figure 13: The countries with the highest per capita consumption 2009

Source: FiBL/IFOAM Survey, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

The following table lists the domestic sales and export data that were collected in the framework of the global survey on organic agriculture.

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Table 8: Turnover with organic food and beverages and exports by country 2009

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 www.organic-world.net/revisions.html.

Country	Sales, total [Mio €]	€/person	Exports [Mio €]
Australia	536.0	25.2	123 (2007)
Austria	867.6	103.8	66.0
Azerbaijan	0.7	0.1	
Belgium	350.0	32.3	
Bolivia (2006)			13.2
Bulgaria	4.5	0.6	
Canada (2008)	1'283.8	38.0	106.4
Chile	1.8	0.4	
China	790.8	0.6	
Costa Rica	1.4	0.3	18.9.
Croatia	37.4	8.4	2.5
Cyprus	1.5	1.9	
Czech Republic	68.3	6.5	4.0
Denmark	765.0	138.6	99.7
Estonia	11.8	8.8	
Falklands (Malvinas)			2.1
Finland	75.4	14.1	14.0
France	3'041.0	47.2	
Germany	5'800.0	70.7	
Greece	58.0	5.2	
Hungary	25.0	2.5	20.0
India			87.7
Ireland	112.8	23.9	
Italy	1'500.0	25.0	
Japan	999.7	7.8	
Korea, Republic of	226.2	7.8	
Liechtenstein	3.4	100.0	
Luxembourg	51.0	103.3	
Mexico (2008)	20.5	0.2	310.4
Montenegro (2008)	0.1	0.1	
Netherlands	590.5	35.8	525.0 (2007)
New Zealand	142.5	33.4	79.4
Norway	113.9	23.7	
Peru			122.05
Poland (2006)	50.0	1.3	
Portugal (2006)	70.0	6.6	

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Country	Sales, total [Mio €]	€/person	Exports [Mio €]
Romania (2006)	2.5	0.1	
Russian Federation	65.0	0.5	4.0
Samoa	0.0	0.1	0.1
Slovakia (2008)	4.3	0.8	
Slovenia	34.4	17.0	0.1
Spain	905.0	19.5	454.0
Sweden	697.9	75.4	
Switzerland	1'023.5	131.5	
Tunisia			29.0
Turkey	3.6	0.1	
Uganda			26.6
Ukraine	1.2	0.0	
United Kingdom	2'065.0	33.5	
US	17'835.2	58.1	
Uruguay (2006)	5.4	1.6	

Blank cells: Not data

Compiled by FiBL in cooperation with AMI, ORC and IFOAM, based on data from government bodies, the private organic sector and market research institutes. For detailed data sources see annex.

Related tables and information

Tables and chapters in The World of Organic Agriculture 2009

- Table 29: The European market for organic food 2009
- The Global Market for Organic Food & Drink, page 62
- The Organic Market in Europe, page 156
- Market subchapters in the chapters on Africa (page 104), Asia (page 122), Latin America (page 182), North America (page 200), and Oceania (page 219)

www.Organic-World.net › Password area (organic2011; organicworld)

- Data tables with market and trade data
- Power Point presentation with key results on the organic market

Willer, H. and Kilcher, L. (Eds.) (2011):
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Land use and crop data

Almost two-thirds of the organic agricultural land of 37.2 million hectares in 2009 was grassland/grazing areas (23 million hectares). The cropland area (arable land and permanent crops) constitutes 9.2 million hectares and thus almost a quarter of the organically managed agricultural land. The cropland area is probably much higher, as for some countries with large organic agricultural areas, (e.g., Brazil, India, and Canada), details on land use are not available. General land use information was available for almost 90 percent of the organic agricultural land, which does, however, not mean that detailed crop information is available for all areas[1] For this survey, the general FAO classification[2] of land use types is utilized, with slight modifications. For the classification of crops, a system similar to that of Eurostat was used.[3]

The following main levels were used to classify the land use data: arable land; permanent crops; cropland for which no further details are available (cropland=arable land + permanent cropland); permanent grassland/grazing areas; other agricultural areas (like for instance hedges); and agricultural land for which no details are available at all. Aquaculture, forest, and grazed non-agricultural land were distinguished from "agricultural land" with a separate category, as were organic wild collection areas.[4]

Table 9: Organic agricultural land (including conversion areas) by main use and region 2009

Main use	Africa	Asia	Europe	Latin America	Northern America	Oceania	Total
Agr land, no details	348'969	1'491'973	129'851	2'369'394	12'321	384'250	4'736'759
Arable land	121'162	201'884	3'719'125	171'066	1'311'143		5'524'380
Cropland, no details	24'459	1'105'254		5'401	97'561	6'661	1'150'012
Other agr. land	54'404	46	313'999	5'027	23'338	7'702	404'516
Permanent crops	451'510	181'874	1'010'534	715'702	64'572	3'238	2'427'429
Permanent grassland/grazing	26'128	600'887	4'175'747	5'292'321	1'143'689	11'750'258	22'989'031
Total	1'026'632	3'581'918	9'259'934	8'558'910	2'652'624	12'152'108	37'232'127

Source: FiBL/IFOAM survey 2011
Totals include correction values for some countries for land with double use during one year.

[1] For some countries, only information on the main uses (arable crops, permanent crops, and permanent grassland) was available. For Australia, for instance, only a rough estimate on the extent of the permanent grazing land is available. For other countries, very detailed statistical land use information can be found; the Eurostat statistics, for instance, list each vegetable type for many countries.

[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 the German Central Market and Price Report Office (ZMP, succeeded by AMI) is used. It is currently being further developed in order to make it possible to include manufactured products. The questionnaire as well as some background information is also available at www.organic-world.net.

[4] More information is available at www.organic-world.net/databackground-general.html

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Related tables

Annex

- Table 38: Organic agricultural land, share of total agricultural land and number of producers
- Table 45: All organic land use types by region and country 2009
- Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

www.Organic-world.net › Password area (organic2011; organicworld)

- All crop and land use data, including information on conversion status as well as shares of respective totals in excel format
- Power Point presentation with key results on the organic agricultural land and crops

Arable land

With a total of at least 5.5 million hectares, arable land constitutes 15 percent of the organic agricultural land. The organic arable land accounts for 0.4 percent of the world's total arable land.[1] An increase of 13.2 percent was reported. Most of the organic arable land is located in Europe (3.7 million hectares), followed by North America (more than 1.3 million) and Latin America (170'000 hectares).

Most of this category of land is used for cereals including rice (2.5 million hectares), followed by green fodder from arable land (1.8 million hectares) and vegetables (0.22 million hectares).

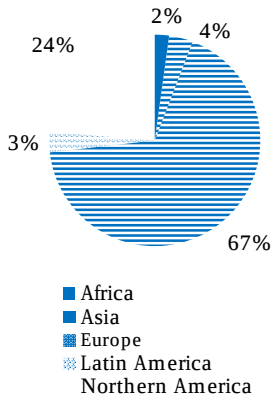

Figure 14: Distribution of arable cropland by region 2009
Source: FiBL/IFOAM survey 2011

Table 10: Use of organic arable land, 2008 and 2009 compared

Main crop category	2008 Area (ha)	2009 Area (ha)	Change in %
Arable crops, no details	68'935.3	39'432.1	-42.8
Arable crops, other	61'007.8	59'249.9	-7.5
Cereals	2'203'092.8	2'438'465.3	10.7
Flowers and ornamental plants	2'067.2	323.6	-84.3*
Hops	151.5	207.7	37.1
Industrial crops	24'001.1	23'222.4	-3.2
Medicinal and aromatic plants	46'872.7	71'782.3	53.1
Mushrooms	55.4	106.0	91.3
Oilseeds	340'870.3	445'707.4	30.8
Green fodder from arable land	1'542'857.2	1'843'152.9	19.5

[1] 1'380'515'000 hectares in 2008 according to FAOSTAT, FAO, Rome. See the FAO Homepage: faostat.fao.org > Resources > Resourcestat > http://faostat.fao.org/site/377/default.aspx#ancor

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Main crop category	2008 Area (ha)	2009 Area (ha)	Change in %
Protein crops	178'633.8	204'093.4	14.3
Root crops	42'791.7	44'445.3	3.9
Seeds and seedlings	12'733.3	293.3	-97.7*
Strawberries	3'033.9	3'048.8	0.5
Sugarcane	54'218.4	51'287.9	-5.4
Textile crops	89'866.2	77'131.9	-14.2
Tobacco	85.0	197.1	131.9
Vegetables	209'865.8	222'232.6	5.9
Total	4'881'139	5'524'380	+13.2

Source: FiBL/IFOAM survey 2011
Includes in-conversion and fully converted land. Not all countries included in the survey provided data on land use or crop areas.

*Note: The decrease of seeds and seedlings as well as of flowers and ornamental plants is mainly due to the fact that Eurostat does not report this category anymore since 2009. Source: FiBL/IFOAM Survey 2011

Permanent crops

Permanent crops account for approximately six percent of the organic agricultural land, amounting to 2.4 million hectares, which is 1.7 percent of the world's permanent cropland.[1] Compared with the previous survey, almost half a million hectares more were reported. With 6.5 percent, permanent cropland has a higher share in organic agriculture than in total agriculture, where it accounts for approximately three percent of the agricultural land. Most of the permanent cropland is in Europe (1 million hectares), followed by Latin America (0.75 million hectares) and Africa (0.45 million hectares). The most important crops are coffee (with 0.54 million hectares reported, constituting one-fifth of the organic permanent cropland), followed by olives (0.49 million hectares), cocoa (0.26 million hectares), nuts (0.2 million hectares), and grapes (0.19 million hectares).

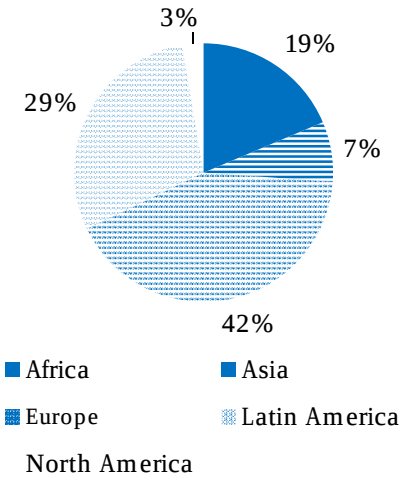

Figure 15: Distribution of permanent cropland by region 2009

Source: FiBL/IFOAM survey 2011

[1] 146'242'120 hectares of permanent cropland in 2008 according to FAOSTAT, FAO, Rome. See the FAO Homepage: faostat.fao.org > Resources > Resourcestat > Land athttp://faostat.fao.org/site/377/default.aspx#ancor

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Table 11: Use of organic permanent crop land, 2008 and 2009 compared

Main crop group	2008 Area (ha)	2009 Area (ha)	Change 2008 to 2009
Berries	28'218.5	29'887.3	6%
Citrus fruit	57'637.8	64'696.1	12%
Cocoa	165'058.0	264'468.5	60%
Coconut	15'482.7	43'321.4	180%
Coffee	463'499.9	545'367.8	18%
Flowers and ornamental plants, permanent	64.9	75.3	16%
Fruit, no details	6'836.5	7'062.9	3%
Fruit, temperate	100'593.9	91'022.1	-10%
Fruit, tropical and subtropical	132'156.5	161'599.1	22%
Fruit/nuts/berries, no details	30'387.5	20'710.3	-32%
Grapes	150'535.7	190'850.2	27%
Gum Arabic	19'978.0	6'849.0	-66%
Medicinal and aromatic plants, permanent	18'049.6	14'767.0	-18%
Nurseries	1'059.4	1'070.7	1%
Nuts	174'893.6	200'170.8	14%
Olives	432'189.1	493'841.4	14%
Other permanent crops	53'259.0	154'715.0	190%
Permanent crops, no details	48'007.9	82'257.8	71%
Tea/mate	49'099.9	54'696.0	11%
Total	1'947'008	2'427'429	25%

Source: FiBL/IFOAM survey 2011
Includes in-conversion and fully converted land. Not all countries included in the survey provided data on land use or crop areas.

Land use in the regions

Looking at land use, a different pattern emerges for each region. In the annex, a land use table is available (page 262). Detailed information on land use patterns by country is available in the password area at www.organic-world.net.[1]

Africa: For Africa, land use information covering about one third of the organic agricultural land was available. About half of the agricultural land is used for permanent crops. The main permanent crops are cash crops like coffee and olives.

Asia: Some land use details are known for two thirds of the organically managed land in Asia. Arable land is mainly used for cereals, including rice. Furthermore, cotton is important; India and Syria are two of the leading organic cotton producers.

Europe: In Europe, the organically managed land uses are relatively well known, and the main crop categories are well documented. Permanent pastures and arable land have approximately equal shares of the organic agricultural area. The arable land is mainly used for cereals (1.7 million hectares), followed by the cultivation of green fodder (1.4 million hectares). Permanent crops account for eleven percent of organic agricultural land. More than one third of this land is used for olives, followed by grapes, nuts, and fruits.

Latin America: Most of the organically managed land in Latin America for which information was available is permanent pasture. Permanent crops account for about one tenth of the agricultural area. About half of the permanent cropland is used for coffee, followed by cocoa and tropical fruits.

[1] Username: organic2011, password organicworld

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North America: As in Europe, arable land and permanent grassland have almost equal shares. A major part of the arable land is used for cereal production (0.6 million hectares).

Oceania: Most of the land in Australia is used for extensive grassland/grazing areas. Little or no information is available about the remaining land.

Related tables

Annex

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Organic farming in developing and transition countries and in emerging markets

For this section, the countries listed on the Development Assistance Committee (DAC) list of recipients for Official Development Assistance (ODA) from the Organization for Economic Cooperation and Development (OECD) were analyzed.[1]

More than one-third of the world's organic agricultural land—13.4 million hectares—is located in countries listed on the DAC list. If wild collection and beekeeping areas are included, the total area is 44.4 million hectares. Most of the agricultural land is in Latin American countries (8.2 million hectares), with Asia (3.5 million) and Africa (1 million) in second and third place. The countries with the largest areas under organic management are (from most to least) Argentina, China, Brazil, India, and Uruguay. Not surprisingly, the first four are all large countries.

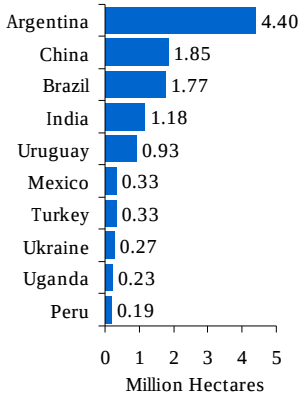

Figure 16: Countries on the DAC list: the countries with the largest organic agricultural land in 2009

Source: FiBL/IFOAM Survey, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

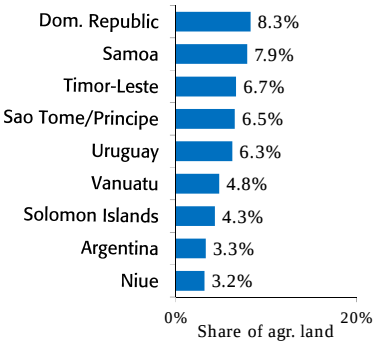

Figure 17: Countries on the DAC list: the countries with the highest shares of organic agricultural land in 2009

Source: FiBL/IFOAM Survey, based on data from government bodies, the private organic sector and certifiers. For detailed data sources see annex.

However, when it comes to land under organic management as a percentage of total area under agriculture, the order is totally different. The highest percentages of organically managed land are in several Pacific Island countries and in Dominican Republic and Timor Leste. Argentina, with by far the largest area under organic management (with 4.4 million hectares), is ranked ninth when organically managed area is measured relative to total agricultural area. In the top ten developing countries, the shares of organically managed land are comparable to those in Europe. These high shares can probably be attributed in part to a high potential for and focus on exports. Support activities may also play a role. For instance, in Latin America there are various forms of government support; see the chapter on Latin America and the Caribbean by Garibay et al. (page 182). However, out of the countries on the DAC list covered by the survey, only a few have a share of organically managed land

[1] The list is available at www.oecd.org/document/16/0,3343,en_2649_34447_2093101_1_1_1_1,00.html.

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that is higher than one percent of total agricultural area. Thus, compared with developed countries, organic farming lags behind in most developing, transition, and emerging market countries.

Land use details were available only for 31 percent of the agricultural land; crop data are missing for some of the world's largest producing countries (China, Brazil, India). However, the available statistics show that the shares of grassland/grazing areas and of permanent crops are relatively high as compared with Europe and North America. Arable land, by contrast, is of minor importance. This can be attributed to the fact that export plays an important role—either for meat products (mainly from Latin America) or for permanent crops. The most important permanent crops are export crops, such as coffee, olives, cocoa, and sugarcane.

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Data collection on organic agriculture worldwide: background

Data collection systems and data availability

In general, data availability is improving every year. This is because more and more countries are establishing data collection systems. Data on land use, crops, production, and operators are being more widely gathered, either by the private sector or by government organizations.

It is important to know what type of collection system is behind the data provided, in order to understand how reliable or complete the data are. For the basic data on organic farming (i.e. on land area and producers), 70 countries have well-functioning government/public data collection systems in place, and 35 have private collection systems, sometimes with public funding. For the remaining countries (55), no permanent collection system is in place.

The availability of market and trade data is also improving; these are, however, often collected under another system than the data related to primary production.

Governmental data collection systems for primary production related data

Governmental data collection systems are often linked to the establishment of regulations about organic agriculture. Once such a regulation is established, there are rules about the registration of certifiers with a national authority. This opens up access to data from the certifiers. Public data collection systems mostly cover the organic area and operators, and also sometimes production and export data, but they mostly exclude data on the domestic market or on imports.

In most countries, the government collection systems are based on the data of the certifiers.[1] In the European Union, the new organic farming regulation describes precisely what data should be provided by the competent authorities, who collect the data among the certifiers/inspection bodies.[2.] The data collected by the government are mostly (though not

[1] Other systems include:
Farms that receive direct payments as the basis for the data (Switzerland)
Farm structure survey: Some countries have included the option to identify organic farms in the framework of general farm structure surveys.

[2] 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).

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always) complete, as many countries do not have access to the data of foreign certifiers that are not registered under the country's accreditation system.

In many cases, the private sector collates the data from the certifiers or the organic operators (for example the exporters) in the countries. The private sector does, however, often not have full access to the data.

Finally, there are countries that have no collection system in place. Particularly in Africa and in Asia, but also in countries in other regions such as Oceania, collection systems are still underdeveloped. For these countries, FiBL and IFOAM attempt to get the data from major international certifiers or from contacts in the country, who provide the data specifically for the survey. These data are often not complete, and there is a problem of continuity over the years.

Regional initiatives

The following are notable initiatives that have improved data collection systems recently, or are in the process of being set up:

The European Commission stipulates that all EU member states provide data for variables such as area, land use, number of operators, and livestock, as well as production volumes. Eurostat, the statistical office of the European Union, compiles these data, which are made accessible on the Eurostat homepage.[1] While most countries provided these data in the past, the EU regulation that obliges them to do so did not come into force until January 2009.

The Mediterranean Organic Agriculture Network (MOAN): The Mediterranean Agricultural Institute in Bari, Italy, has set up this network of the authorities in charge of organic farming in order to promote data collection among these. Regular meetings and support through the Mediterranean Agronomic Institute of Bari (IAMB) have considerably improved the data collection in the Mediterranean area in the past years

Central America: RUTA, the Regional Unit for Technical Assistance for Sustainable Rural Development in Central America, is now supporting the data collection in this region and data access has improved considerably. There are also plans to publish the data on RUTA's organic farming homepage at www.ruta.org/rediao/.

Pacific Islands: In the Pacific Islands, there are currently efforts to coordinate the organic activities in the region better, which also includes the setting up of data collection systems.

Africa: In Africa, data collection is coordinated by the IFOAM Africa office.

Available data

For the twelfth survey on organic agriculture worldwide, data on organic agriculture were available for 160 countries; and 75 percent of all countries are covered by the survey (see Table 1, page 34). Since 1999, when the data collection started, the number of countries included has almost doubled.

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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.

1 Access via the Organic-Europe.net homepage: http://www.organic-europe.net/europe_eu/statistics-eurostat.asp#tables

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Whereas originally for the global organic survey 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 the funding of the Swiss State Secretariat of Economic Affairs (SECO) and the International Trade Centre (ITC).

The year 2004 marks the year when data on land use and crops were collected for the first time. With the 2009 survey (data as of 31.12.2007), data on the conversion status of organic land was collected for the first time; hence the increase of the data volume in that year. The strong increase in 2009 is due to better data availability but also to the increased cooperation with international certification bodies who provide extracts from their databases. As these are often not country data but data from individual operations, the number of records has increased fast. The data which are currently collected include, apart from the land area and operator data, information on production, market, export, import volumes and values, not all of which are published in this volume.

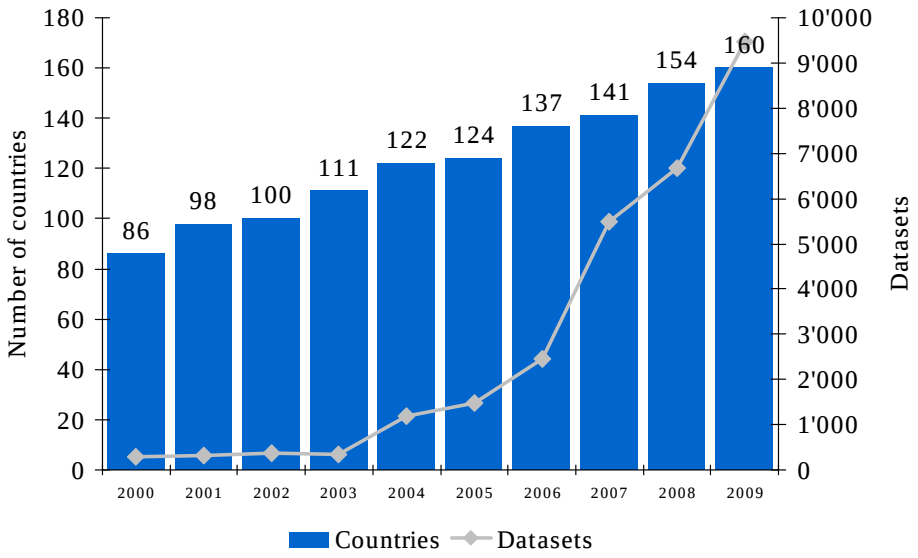

Figure 18: Development of the data availability by country 2000-2009

Source: FiBL/IFOAM Survey 2011

Next global survey on organic agriculture

The next global organic survey will start early 2011. We would be very grateful if data could be sent to us, but we will of course also 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 2012 edition of *The World of Organic Agriculture*. Corrections will also be posted at www.organic-world.net.

Contact

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Further reading

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Global Market

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The Global Market for Organic Food & Drink[1]

AMARJIT SAHOTA[2]

1 Introduction

The global market for organic food & drink is recovering from the repercussions of the financial crisis. Single-digit market growth was observed for the first time in 2009 because of the economic slowdown reducing industry investment and consumer spending power. Organic food & drink sales expanded by roughly five percent to 54.9 billion US dollars[3] in 2009.

Sluggish growth in 2009 is considered an anomaly in the long-term development of the organic food industry. Global revenues have increased over three-fold from 18 billion US dollars in 2000. Double-digit growth rates were observed each year, except in 2009. Healthy growth rates are envisaged to restart as consumer spending power rises and as more countries come out of economic recession.

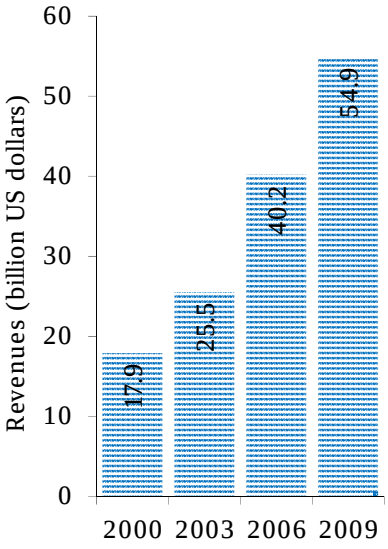

Figure 19: The global market for organic food and drink: Market growth 2000-2009

Note: All figures are rounded

Source: The Global Market for Organic Food & Drink (Organic Monitor 2011)

Demand for organic products is concentrated in Europe and North America. The two regions comprise 96 percent of global sales. Although demand is broadening to other regions, low consumer awareness and low disposable incomes limit sales to the most affluent countries. A major challenge for the industry is to ease this over-concentration of demand.

Two other challenges the organic food industry face are overcoming the expensive perception of organic products, and managing supply-demand imbalances. The conversion period to organic agriculture, typically two years, causes supply to lag behind demand. Thus, some sectors of the organic food industry face product shortages, whilst others experience overproduction. The price premium is the major barrier to wider adoption rates. Some consum-

[1] * This chapter has been prepared from the report *The Global Market for Organic Food & Drink: Business Opportunities & Future Outlook* (Organic Monitor, December 2010).

[2] Amarjit Sahota is the director of Organic Monitor, a specialist research, consulting & training firm that focuses on the global organic & related product industries. More details are on www.organicmonitor.com

[3] 1 US dollar = 0.71895 Euros; average exchange rate 2009, Source: http://www.oanda.com/lang/de/currency/average

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ers see organic foods as expensive products that they cannot afford, in spite of the associated environmental, ethical, and potential health benefits.

2 Europe

Valued at 26 billion US dollars, the European market comprises almost half of global organic food & drink sales. The organic products market is considered the largest and most sophisticated in the world, home to international companies. It is also characterized by a high degree of competition, with an exceptionally large number of companies involved in the production and distribution of organic products.

The financial crisis had a negative impact on organic product sales. Consumer spending on organic food & drink was affected as disposable incomes fell and unemployment levels rose. The UK organic food and drink market was the most affected, suffering a 14 percent contraction. The German market stagnated, largely because of falling prices of organic products. In contrast, other organic food and drink markets, such as those in France and Sweden, showed double-digit growth in 2009.

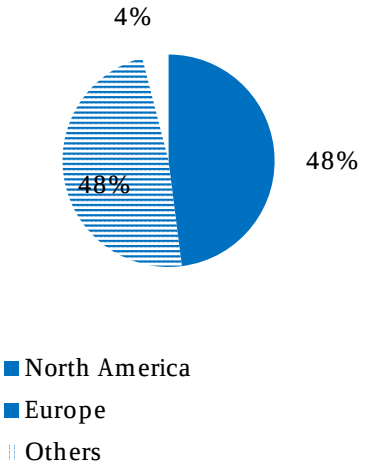

Figure 20: The global market for organic food and drink: Distribution of revenues by region 2009

Note: All figures are rounded

Source: The Global Market for Organic Food & Drink (Organic Monitor 2011)

Most organic food and drink sales are concentrated in Western Europe: Germany, UK, France, and Italy comprise over 70 percent of sales. The largest consumers of organic foods however are in Scandinavian and Alpine countries. The market share of organic products is over 5 percent of total food and drink sales in Denmark, Austria and Switzerland. Danish consumers are the world's largest buyers of organic foods, spending about 202 US dollars per capita.

Southern Europe has a large number of export-oriented organic food producers. Spain, Portugal, and Greece are important producers, but not large consumers of organic products. Indeed, most organic agricultural products in these countries are exported to northern European countries. Such crops include organic fruits, vegetables, herbs, spices, and olive oil.

Organic food production is also increasing in Central and Eastern European (CEE) countries. Like Southern Europe, most production is export-oriented although internal markets for organic products are slowly developing. Important markets are in the Czech Republic, Poland, and Hungary.

3 North America

North America has the largest market for organic food and drink in the world. Worth US 26.3 billion US dollars, the market has become more prominent than that of Europe. Alt-

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hough the growth rate slowed in 2009, consumer demand for organic food and drink remains robust.

The US market is the largest in the world; it also comprises over 90 percent of regional revenues. The US is a leading producer and exporter of organic agricultural goods, however many sectors remain import dependent. Domestic supply of organic products is falling short of demand, with products coming in from many continents. Significant volumes of organic fruits, vegetables, meats, beans, seeds, herbs and spices and ingredients are imported into North America. Latin America is the main source.

Expanding distribution in conventional grocery channels is the major driver of market growth. Organic products are becoming widely available in supermarkets, discount stores and mass merchandisers. All leading food retailers have introduced private labels for organic foods. "O Organics," the private label of Safeway supermarkets, is becoming the leading brand of organic foods in the US. Loblaw's private label "PC Organics" is already the leading organic food brand in Canada.

The organic food industry in North America is more concentrated compared to that in Europe. Large companies are dominating the production, distribution, and retailing. Large conventional food companies have a strong market presence; they include Dean Foods, PepsiCo, Danone and Hersheys. UNFI has become the dominant distributor of organic products, whilst Whole Foods Market and Trader Joe's are the frontrunners in natural food retail.

The Catering and Foodservice Sector (CFS) is becoming an important channel for organic products. A growing number of foodservice outlets are serving organic products, whilst catering establishments are increasingly using organic ingredients. Some companies are specifically targeting the CFS sector. For instance, Organic To Go Food Corporation operates organic cafés and serves organic meals to a number of catering establishments. Other foodservice establishments, such as Pizza Fusion, are using organic ingredients in its chain of pizza restaurants.

4 Asia

Asia has a two-tier organic food industry. The first-tier comprises producer countries that have large agricultural sectors. China, India, Thailand, the Philippines, and Vietnam are in the first-tier. These countries mainly grow organic products for the export market. Important organic agricultural products include fruits, vegetables, herbs, spices, rice, tea, and other ingredients.

The second-tier countries are large consumers of organic foods but not important producers. The most affluent Asian countries are in the second-tier; they include Japan, South Korea, Taiwan, and Singapore. Demand for organic products is concentrated in these countries, although relatively few are produced here.

Organic food & drink sales are growing at a steady rate in Asia. The Asian market was valued at just over 1 billion US dollars in 2009. Rising consumer awareness of organic foods and increasing distribution are the major drivers of market growth. A growing number of mainstream retailers are introducing organic products, some under their private labels. Asian consumers are demanding organic foods as they become more aware of food safety and ecological issues. Food scandals, especially those involving Chinese products, are making consumers concerned about food safety.

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The Asian market has many impediments to market growth. The lack of standards in the region is hindering trade of organic products. Few Asian countries have introduced mandatory standards for organic agriculture and foods; most countries either do not have national standards or have voluntary standards. Consumers therefore cannot distinguish between legitimate organic products and competing products that are often marketed on similar attributes such as "chemical-free" or "low pesticide." There is also an absence of equivalency between national standards. Producers and importers therefore have to get multiple certifications for their organic products.

5 Oceania

Although the continent has about one third of the world's organic agricultural land, it has a relatively small market for organic products. Retail sales of organic food & drink were about 0.8 billion US dollars in 2009.

As in other regions, market growth slowed because of the economic slowdown. Healthy growth rates are envisaged as consumer demand for healthy and nutritious foods strengthens. Increasing distribution is a major driver of market growth; organic products are making inroads in supermarkets, convenience stores, department stores and catering and foodservice outlets.

The Australasian market is characterized by limited availability of organic products. Although organic food & drink products have made inroads in mainstream retailers, the product ranges remain low. The price premium and perceived value of organic products are also major barriers to higher adoption rates. Consumer confidence in organic products remains low partly because of the voluntary nature of organic standards.

Australia and New Zealand are important exporters of organic products. Significant volumes of organic beef, lamb, wool, kiwi fruit, wine, apples, pears, and vegetables are exported from the region.

As has happened in Europe and North America, large food companies and retailers are coming into the organic food market. Woolworths became the leading retailer when it acquired the Macro Wholefoods chain of organic food shops in 2009. It has integrated these stores under the Thomas Dux Grocer banner. Large food companies, such as Fonterra and Sanitarium, are taking up strong market positions as they expand their organic product ranges.

6 Other Regions

Consumer demand for organic products is also increasing in other regions. Although most production in Latin America is for export markets, internal markets are slowly developing. Brazil is poised to have the largest market for organic food & drink in the region, as many producers focus on the domestic market as well as exports. Organic foods are grown in almost all Latin American countries, however few are important consumers.

Almost all organic food production in Africa is for the export market. South Africa has the largest market in this continent. Internal markets are also developing in Egypt, Saudi Arabia, United Arab Emirates, and Kuwait. Israel has the largest market in the Middle-East region.

7 Conclusions

The global market for organic food & drink is recovering from the economic slowdown. Growth slowed to single-digit—five percent—for the first time in 2009. The European

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market was the most adversely affected, with the UK market contracting because of the poor economic conditions. Healthy growth continued in North America, making the region overtake Europe in terms of importance. Although other regions—including Asia and Australasia—are showing strong demand for organic products, they comprise just 4 percent of global revenues.

Market growth rates were recovering in 2010. Healthy growth rates are resuming as the repercussions of the financial crisis slowly subside. With food inflation looming and market growth rates continuing to rise, increases in organic product prices are envisaged. Although many sectors of the organic food industry were experiencing overproduction in 2010, rising demand is expected to alleviate excess capacity in the coming years. The major challenge for many organic food companies and retailers will then become scarcity of supply and / or high prices.

Growing demand for organic products in regions like Asia and Latin America is also expected to make sales less concentrated. The emergence of India, China, and Brazil as economic superpowers is leading to a burgeoning middle-class; as this section of the population becomes more educated and affluent, they are demanding organic products. This development is expected to transform these organic food producer countries to important consumer countries. As demand becomes more evenly spread, the organic food industry will become *truly* global.

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Standards and Regulations

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Standards and Regulations

Beate Huber[1], Otto Schmid[2], Gbati Napo-Bitantem[3]

The year 2010 has been a year of consolidation in the field of standards and regulations.[4] The new EU regulation on organic production as well as the Canadian organic standard have been implemented, and the details for Canada and the US—the world's first fully reciprocal agreement between regulated organic systems—have been clarified. Regulations in new countries have only been adopted in Malaysia, but a fair amount of countries especially in Africa are in the process of elaborating legislations on organic agriculture.

Organic legislations worldwide: Current situation

According to the FiBL survey on organic rules and regulations, the number of countries with organic standards has increased to 74, and there are 27 countries that are in the process of drafting a legislation. The data on regulations around the world were collected from authorities and experts. Regulations were categorized as "not fully implemented" or "fully implemented" based directly on the feedback of the persons interviewed, and not subject to verification. We received responses from experts and authorities in 75 percent of the countries. It is assumed that a majority of the 25 percent of non-responding countries did not pass legislation on organic production, although the share of countries in the process of developing legislation is probably greater than reflected.

For the list of countries with regulations or in the process of drafting regulations on organic agriculture see Table 12 and Table 13. Please send comments or information on countries not listed to beate.huber@fibl.org.

Table 12: Countries with regulations on organic agriculture

Region	Country	Remark
European Union (27)[5]	Austria	Fully implemented
	Belgium	Fully implemented
	Bulgaria	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

[1] Beate, Huber, Research Institute of Organic Agriculture FiBL, Ackerstrasse, CH-5070 Frick, Internet www.fibl.org
[2] Otto Schmid, Research Institute of Organic Agriculture FiBL, Ackerstrasse, CH-5070 Frick, Internet www.fibl.org
[3] Gbati Napo-Bitantem, Research Institute of Organic Agriculture FiBL in 2010
[4] For a brief history of organic standards and regulations see www.organic-world.net/rules.html as well as previous versions of this article as published in the various editions of *The World of Organic Agriculture*. These can be downloaded at www.organic-world.net/former-editions.html.
[5] Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/92. http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:189:0001:0023:EN:PDF

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Region	Country	Remark
	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 Netherland	Fully implemented
	United Kingdom	Fully implemented
Non-EU Europe (11)	Albania	Fully implemented
	Croatia	Fully implemented
	Iceland[1]	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
Asia & Pacific Region (17)	Azerbaijan	Not fully implemented
	Australia	Fully implemented
	Bhutan	Not fully implemented
	China	Fully implemented
	Georgia	Fully implemented
	India[3]	Fully implemented
	Indonesia	Fully implemented
	Israel	Fully implemented
	Japan[4]	Fully implemented
	Malaysia	Not fully implemented
	New Zealand[5]	Fully implemented
	Philippines	Fully implemented
	Korea South	Fully implemented
	Saudi Arabia	Not fully implemented
	Taiwan	Fully implemented
	Thailand[6]	Fully implemented
	United Arab Emirates	Not fully implemented
The Americas & Caribbean	Argentina	Fully implemented

[1] www.landbunadarraduneyti.is/log-og-reglugerdir/Reglugerdir/Allar_reglugerdir/nr/79
[2] www.admin.ch/ch/d/sr/c910_18.html
[3] www.apeda.com/apedawebsite/organic/index.htm
[4] JAS Standards for organic plants and organic processed foods: www.maff.go.jp/e/jas/specific/organic.html
[5] New Zealand Food Safety Authority (NZFSA) Official Assurance Programme for Organic Products: www.nzfsa.govt.nz/organics/index.htm
[6] Homepage of the National Bureau of Agricultural Commodity and Food Standards, www.acfs.go.th/eng/index.php

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Region	Country	Remark
(18)		
	Bolivia[1]	Fully implemented
	Brazil[2]	Fully implemented
	Canada	Fully implemented
	Chile	Fully implemented
	Costa Rica[3]	Fully implemented
	Colombia	Fully implemented
	Dominican Republic	Fully implemented
	Ecuador[4]	Fully implemented
	El Salvador[5]	Not fully implemented
	Guatemala	Not fully implemented
	Honduras[6]	Fully implemented
	Mexico	Not fully implemented
	Paraguay[7]	Not fully implemented
	Peru[8]	Fully implemented
	Uruguay	Not fully implemented
	USA[9]	Fully implemented
	Venezuela	Not fully implemented
Africa (1)	Tunisia	Fully implemented

Source: Huber, Napo-Bitantem

Table 13: Countries in the process of drafting regulations

Region	Country
Europe (3)	Bosnia & Herzegovina
	Russia
	Ukraine
Asia and Pacific Region (5)	Armenia
	Hong Kong
	Lebanon
	Sri Lanka
	Syria
The Americas & Caribbean (5)	Cuba
	Jamaica
	Nicaragua
	Solomon Islands
	St. Lucia
Africa (14)	Burundi
	Cameroon
	Egypt
	Ghana
	Kenya
	Mali

[1] www.aopeb.org/
[2] www.planetaorganico.com.br
[3] www.mag.go.cr/legislacion/
[4] www.magap.gob.ec/mag01/index.php?option=com_content&view=article&id= 256&Itemid=216
[5] www.mag.gob.sv/phocadownload/Comunicaciones/OPPS/politica_agricultura_organica.pdf
[6] www.senasa-sag.gob.hn/
[7] www.senave.gov.py/index.php ?pag=ampliamos&Cod_noticias=102
[8] www.senasa.gob.pe/0/modulos/JER/JER_Interna.aspx?ARE=0&PFL=3&JER=134
[9] www.ams.usda.gov/AMSv1.0/nop

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Region	Country
	Morocco
	Rwanda
	Senegal
	Tanzania
	Uganda
	South Africa[1]
	Zambia
	Zimbabwe

Source: Huber, Napo-Bitantem

International standards & regulations

IFOAM Organic Guarantee System

IFOAM is currently revising its Organic Guarantee System (OGS). The new system approved in July 2010, contains several services, namely:

- The IFOAM Family of Standards, for standard owners (presentation at BioFach 2011);
- The IFOAM Standard, for standard users;
- The Global Organic Mark, for operators (presentation on 14.02.2011 in the OGS Courier)[2];
- The Community of Best Practice, for standard owners;
- The IFOAM Accreditation and the Global Organic System Accreditation, for certification bodies.

IFOAM is currently introducing these services, creating new opportunities for organic stakeholders to get recognition for their work on organic standards and certification. The new IFOAM norms are under development and broad consultation will be sought in 2011. Frequent OGS newsletters are informing about the latest developments.[3]

The Codex Alimentarius Guidelines: Recent Developments[4]

The need for clear and harmonized rules has not only been taken up by private bodies, IFOAM and state authorities, but also by United Nations Organizations, including the Food and Agriculture Organization of the United Nations (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.[5] They also provide guidance to governments in developing national regulations for organic food.

[1] www.afrisco.net/Html/Product_Stardards.htm
[2] The OGS Courier is a new free electronic newsletter about the IFOAM Organic Guarantee System. More information is available atwww.ifoam.org/about_ifoam/standards/ogs.html
[3] For further information see http://www.ifoam.org/about_ifoam/standards/ogs.html
[4] Information about Codex Alimentarius is available via the homepage, http://www.codexalimentarius.net/web/index_en.jsp. The *Guidelines for the Production, Processing, Labeling and Marketing of Organically Produced Foods*, amended in 2009, can be downloaded from www.codexalimentarius.net/download/standards/360/cxg_032e.pdf.

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The annex lists of the Codex Alimentarius Guidelines, which define what substances 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 Labeling (CCFL), which was supported by the government of Canada, were charged with this work. The Codex Commission adopted several amendments in the annex lists that were proposed by the CCFL in July 2009. Other substances discussed, like nitrites and nitrates, as well as ascorbates for meat processing, and phosphates as food additives, however, were not approved in the Codex Guidelines for organic food. In 2010, an amendment was made regarding a more restricted use of rotenone for pest control (the substance should be used in such a way as to prevent its flowing into waterways). In May 2010 a working group was established, coordinated by the United States, which deals with the revision of the guidelines. It is foreseen that proposals for new substances will be reviewed (possibly in a two year-cycle), also applicable to other sections if needed. the current proposal for new work by the EU include spinosad, potassium bicarbonate and copper octanoate. In addition there is a discussion on the expansion of the uses of ethylene for de-greening of citrus fruit, for the induction of flowering in pineapples and for sprout inhibition in potatoes and onions. Furthermore the European Union has brought forward a discussion paper proposing an improved mechanism for the exchange of information between competent authorities when suspecting fraud concerning organic products including the scope of possible new work. The other new areas in Codex initiated by the EU are aquaculture and seaweed production for considerations at the next sessions.

EU regulation on organic production

Revision of the basic rules

In July 2007, Council Regulation (EC) No 834/2007 of June 28, 2007 on organic production and labelling of organic products and repealing Regulation (EEC) No 2092/91 was adopted, and it came into force on January 1, 2009.[1] This regulation describes the objectives, principles, and basic requirements of regulations for organic production. It is supplemented by the implementation rules, which describe the details on production, labelling, control, and imports (Commission Regulation (EC) No 1235/2008 of December 8, 2008, Commission Regulation (EC) No 889/2008 of September 5, 2008; Commission Regulation (EC) No 1254/2008 of December 15, 2008). In 2009 the implementation rules were augmented with the introduction of aquaculture standards. The proposal regulating organic wine making at the EU level has finally been withdrawn by the European Commission after a very controversial discussion among the Member States. However, the rules for "wine produced from organic grapes" continue to apply.

Revised import procedures

At the end of December 2006, the European Union published new regulations concerning the importation of organic products.

In the future, products will only be granted import into the EU if they have been certified by an inspection body or authority recognized by the European Commission. The European

[1] The revised Regulation 834/2007 and its implementation rules are published on the EUR-Lex website, lex.europa.eu. They are available in all official languages of the European Union.

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Union will publish lists of approved inspection bodies and authorities as well as approved third countries.[1]

The first deadline for certification bodies applying for recognition of their activities in Third Countries (i.e., countries outside the European Union) expired on October 31, 2009. The European Union received 72 applications from certification bodies from all over the world. The first list of certification bodies approved under the new import scheme is expected to be published in the beginning of 2011. Import authorizations will only be issued 12 months after the publication of this list. The existing system for approval of countries in the "Third Country List" will be maintained.

The new import regulation allows a more consistent and effective control system for imported products and improves the possibilities for supervision of inspection bodies operating in Third Countries. It further increases transparency by publishing lists of recognized inspection bodies. The new system allows inspection bodies from non-EU-countries to apply for recognition on their own initiative, enabling them to prove they are recognized prior to the start of trade relationships. This also reduces the risk to importers who import products certified by non-European and/or lesser-known inspection bodies.

US National Organic Program (NOP)

The US published new rules for pastures on February 17, 2010. New producers must be in compliance starting July 1, 2010 and renewing producers must comply by July 2011.[2] Also, the NOP published a book of guidance documents this year, which is helping certifiers and producers standardize interpretation of the regulation. More information about the NOP is available in the North American section of this volume (see page 199).

Import requirements of major economies

The most important import markets for organic products are the EU, the US, and Japan. All of them have strict regimes for the importation of organic products. In the EU, the US and Japan, products may only be imported if the certifying agency has been approved by the respective competent authority. Approval of certification bodies requires compliance or equivalency with the requirements of the importing countries, which can either be achieved

[1] There will be three different lists:

- List of inspection bodies that apply an inspection system and production standards equivalent to the EU regulation on organic production (publication expected in 2011).
- List of inspection bodies that have been accredited according to EN 45011/ISO 65 and that apply an inspection system and production rules compliant with the EU regulation on organic production. The provision on compliance with EU regulation on organic production is new (publication expected after 2013).
- List of countries whose system of production complies with rules equivalent to the EU's production and inspection provisions (see EU Regulation 1235/2008). Compliance requires a full application of the EU Regulation, e.g., a seed data base, and does not accept grower groups with internal control systems, whereas equivalence allows a locally adapted approach.

Under options 1) and 2) the inspection bodies can either be located within or outside the EU. Under options 2) and 3), (equivalency-option), the imported products have to be covered by a certificate of inspection, which is not a provision under option 1). For options 2) and 3), Codex Alimentarius shall be taken into account for assessing equivalency.

[2] For information on the pasture rules see http://www.ams.usda.gov/AMSv1.0/ams.fetchTemplateData.do?template=TemplateN&navID=PastureRulemakingNOPNationalOrganicProgram-Home&rightNav1=PastureRulemakingNOPNationalOrganicProgramHome&topNav=&leftNav=NationalOrganicProgram&page=NOPAccesstoPasture&resultType=&acct=nopgeninfo

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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 importing country

Most importing countries—including the US, 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 the will and political negotiations of the governments, but in part are also based on technical assessments.

While bilateral agreements tended to stagnate in the past, a breakthrough was achieved with the bilateral agreement between the US and Canada. Under a determination of equivalence, producers and processors that are certified with National Organic Program (NOP)[1] standards by a US Department of Agriculture accredited certifying agent do not have to become 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 labeled in the United States as organically produced. Both the USDA Organic seal and the Canada Organic Biologique logo may be used on certified products from both countries. The COPR came into effect on June 30, 2009. In addition, the US is negotiating equivalency agreements with Australia, the European Union, India, and Japan.

The European Union currently recognizes nine countries[2] and is in intensive negotiations with Canada, Japan, and the US.

The US has otherwise accepted few foreign governments' accreditation procedures. Certification bodies accredited according to the US requirements by Denmark, UK, India, Israel, Japan, and New Zealand are accepted by the United States Department of Agriculture for certifying according to the US National Organic Programme (NOP)—even though they are not directly accredited by 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.

Acceptance of the certifying agency by the target importing country

The US, the European Union, and Japan have options for recognizing certification bodies operating outside the country. 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.

The US National Organic Program (NOP) requires all produce labeled as organic in the US to meet the US standards, including imported products. The US system provides for the approval of certification bodies as agents to operate a US 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 US Department of Agriculture USDA are accepted. It is not relevant whether the certification body is

[1] National Organic Programme (NOP) www.ams.usda.gov/AMSv1.0/NOP
[2] Argentina, Australia, Costa Rica, Japan, India, Israel, New Zealand, Switzerland, and Tunisia

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based in the US or elsewhere. So far, almost 100 certification bodies have been accredited according to NOP requirements by the USDA, and only produce certified by these certification bodies may be exported to the US.

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- www.unctad.org/trade_env/itf-organic/ welcome1.asp: http://www.unctad.org/trade_env/itf-organic/welcome1.asp International Task Force on Harmonization and Equivalency in Organic Agriculture (ITF)
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Facilitating Global Organic Market Access

Sophia Twarog[1]

The Food and Agriculture Organization of the United Nations (FAO), the International Federation of Organic Agriculture Movements (IFOAM) and the United Nations Conference on Trade and Development (UNCTAD) have been working closely together since 2001 to facilitate trade in organic products through harmonization and equivalence. This has been through the UNCTAD-FAO-IFOAM International Task Force on Harmonization and Equivalence in Organic Agriculture (ITF, 2003-2009) and its successor project, Global Organic Market Access (GOMA), financed by the Norwegian Agency for Development Cooperation (www.norad.no).

The Global Organic Market Access (GOMA) project seeks to simplify the process for trade flow of organic products among various regulatory and/or private organic guarantee systems. GOMA focuses on harmonization and equivalence of organic standards and certification performance requirements as mechanisms for clearing trade pathways. It provides two practical tools for this purpose. The tools were developed by the International Task Force on Harmonization and Equivalence in Organic Agriculture (ITF), comprised of representatives from governments, intergovernmental organizations and private sector representatives, and subjected to international consultation. The *Guide for Assessing Equivalence of Standards and Technical Regulations* (*EquiTool*) and the *International Requirements for Organic Certification Bodies (IROCB)* can be used by any government or private sector organic label scheme as tools for recognizing other organic standards and certification performance requirements as equivalent to their own.

Highlights in 2010

Promoting south-south cooperation on organic agriculture in Asia and in Central America

In Asia this included:

- Preparation, consultation, and publication of a scoping study for equivalence and harmonization of organic standards and technical regulations in the Asia region (UNCTAD/DITC/TED/2010/7).
- Regional meeting in Shanghai, China in May 2010 where the participating countries announced their intention to cooperate to facilitate trade of Asian organic products including through the development of a common regional organic agriculture standard (see UNCTAD Information Note for the press, UNCTAD/PRESS/IN/2010/018).
- First meeting of the Working Group for Cooperation on Organic Labeling and Trade for Asia (Mumbai, India, 9-10 December 2010). The WG mapped out the framework for future cooperation through harmonization and equivalence recognition on organic standards and conformity assessment. This includes the TORs and timeline of the Drafting Group for Asia Regional Organic Standards, which will have its first meeting in Manila in March 2011.

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In Central America, GOMA supported the development and national consultations (in the Central American countries plus the Dominican Republic) of the draft Central American Organic Agriculture Regulation. Comments gathered during the consultations will be considered by a GOMA-supported regional meeting of the Governments' Competent Authorities in early 2011.

Consultations on objectives and related practice requirements for organic standards

In order to enhance the practical use and uptake of the Equitool, the GOMA Steering Committee decided to develop an expanded Annex 2 called *Common Objectives and Requirements of Organic Standards*. It is a compilation of the most common objectives and requirements found in standards for organic production and processing around the world.

The aim of the revised Annex is to facilitate trade by encouraging regulators to think in terms of overall fulfillment of key objectives and requirements of organic standards instead of each regulator requiring that all prescriptive details in their own particular standard be complied with 100 percent by producers everywhere in the world. Equivalence is based on a shared commitment to a common set of objectives combined with respect for policy space.

The whole approach is somewhat revolutionary. Examples of real application in international trade (of all products, not only organic products) of the principle of equivalence as opposed to compliance are few and far between. The impact therefore could extend beyond the organic sector.

A first round of consultations on the revised annex was held in 2010. A second round is planned for early 2011.

Outreach activities

Outreach activities via meetings with key public and private sector actors, presentations at relevant forums, a workshop *Levelling the Playing Field* at BioFach organic trade fair in February 2010, information provision via GOMA website (www.goma-organic.org) and periodic newsletters.

Conference on International Harmonization and Equivalence in February 2012

In February 2002, FAO, IFOAM, and UNCTAD joined forces to organize a Conference on International Harmonization and Equivalence in Organic Agriculture. This sparked the formation of the ITF and GOMA. Ten years later, on **February 13-14, 2012**, GOMA is organizing an international conference in Nuremberg just before BioFach 2012. The current working title is "**Let the Good Products Flow: Global Organic Market Access in 2012 and Beyond**. "This conference will assemble, on a global scale, key government, and private sector actors to review the progress made in the last decade on organic guarantee systems, including outcomes of the ITF and GOMA, as well as envision strategies for the next ten years of public-private cooperation that are crucial for the continued growth of organic agriculture and markets.

Further reading

- GOMA (2010): Scoping Study for Equivalence and Harmonisation of Organic Standards and Technical Regulations in the Asia Region. IFOAM, Bonn. Available at http://www.goma-organic.org/GOMA_AsiaScopingStudy_100615_finalrevision.pdf

Links

- www.goma-organic.org: Homepage of the Global Organic Market Access (GOMA) project
- www.itf-organic.org: Homepage of International Task Force on Harmonization and Equivalence in Organic Agriculture (ITF), with all documents

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World of Organic Certification 2010

KOLBJÖRN ÖRJAVIK[1]

The eighth edition of *The Organic Certification Directory* will be published in February 2011. This directory lists all organic certification bodies in the world. Previously, it was issued as a special edition of *The Organic Standard*, but will now be issued separately and distributed for free to the organic world. Two of the many new features in the directory are that it will be published online on the website of The Organic Standard and will also list Participatory Guarantee Systems Organisers.

Number of certification bodies by country and region

There has been modest growth in the number of certification bodies in most regions, while the number of certification bodies has increased rapidly in some European countries because international certification bodies have started branch offices that have gained approval by, for example, the EU or the local government. The total number of certification bodies is 532, up from 489 in 2009. Most certification bodies are in the European Union, the United States, Japan, South Korea, China, Canada, and Brazil.

Table 14: Certification bodies: The countries with the highest numbers 2008-2010

Country	2010	2009	2008
Japan	59	59	60
United States of America	57	55	57
South Korea	33	32	32
Germany	32	31	32
Spain	28	28	27
China P.R.	27	29	29
Canada	21	21	21
Brazil	20	20	20
Romania	18	2	3
India	17	16	13
Italy	15	16	16
United Kingdom	12	9	10
Poland	11	7	7

Source: Grolink 2010

Eighty-three countries have a domestic certification body, but this does not imply that producers in the other countries are without certification services. Many of the listed certification organizations also operate outside their home country. Most of them are based in a developed country and offer their certification services in developing countries. Very few operate in several developed countries (e.g., there is not a single EU-based certification body offering its services in the United States, even when they have the required accredita-

[1] Kolbjörn Örjavik, Grolink, Kungsgatan 16, 75332 Uppsala, Sweden, e-mail news@organicstandard.com, www.grolink.sewww.organicstandard.com

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tion under the National Organic Program). In addition, a small amount of organizations work on several or all of the continents. There appears to be certified operators in nearly all countries in the world.

Most of Africa and large parts of Asia still lack local service providers. There are only 12 certification bodies in Africa (in Egypt, Kenya, Senegal, South Africa, Tanzania, Tunisia, Uganda, and Zambia). Asia has 165 certification bodies, most of them based in South Korea, China, India, and Japan. The Caribbean has very few certification bodies. The Pacific region has certification bodies only in Australia and New Zealand, but have operations in most of the countries in the Pacific.

Development of the number of certification bodies

Since 2003 the number of certification bodies has risen sharply in Asia and Europe, increased in Latin America and has been relatively stable in Africa and Oceania. The introduction of the National Organic Program (NOP) in the US has caused a fairly drastic reduction in the number of certification bodies in the first few years, after which the situation stabilized. In some countries, notably China, Japan, and South Korea, introduction of an organic regulation has led to a growth in the number of certification bodies. In Japan, however, the numbers dropped after several years.

A significant rise of certification bodies is noted in Eastern Europe and a modest rise in Central Europe in 2010. Romania now has 18 control bodies, up from 2 in 2009. Poland currently has 4, United Kingdom 3, Germany 1. Denmark reformed their governmental certification system, resulting in 2 new certification bodies. Africa also received 2 new certification bodies.

Table 15: Number of certification bodies per region 2003-2009

	2003	2004	2005	2006	2007	2008	2009
Africa	7	9	7	8	8	10	10
Asia	83	91	117	93	147	157	164
Europe	130	142	157	160	172	177	180
Latin America & Caribbean	33	33	43	43	47	48	47
North America	101	97	85	80	83	78	76
Oceania	10	11	11	11	11	11	12
Total	364	383	420	395	468	481	489

Source: Grolink 2010

Number of certified operators

Certification bodies were asked for information about the number of operators they certify. Two hundred and thirty-one responded, reporting a total of 192'272 operators. Two hundred and two certification bodies gave an answer regarding the number of farmers. They certified in total 1'215'519 farms, with BCS reporting it certifies 342'000 farms. The Institute for Marketecology (IMO) head office alone reports more than 120'000, and its office in Latin America 36'000. India reports the highest number of organic farms in the world. Less than half of the certification bodies in India reported the number of certified operators and still the figure is higher than all other countries with 315'000 farmers. OneCert India and

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Apof Organic Certification Agency certify 100'000 farms each, USOCA 51'000, and the Natural Organic Certification Association 27'000. Naturland reports 50'000 farms, and Certimex nearly 30'000 farms. It should be noted that the same farm can be certified twice (e.g., many Naturland-certified farmers are also IMO-certified as the two organizations cooperate closely). Nevertheless, the number of certified farms is likely to be in the range of two million or possibly more, as data are lacking from many important countries and half of the certification bodies.

Turnover

Most organisations are still not transparent about their turnover. Only 80 organizations responded. Many report figures in the range of 100'000 to 500'000. Ecocert France reports a turnover of 8 million Euros, which is by far the highest figure reported. Other organisations reporting a turnover of 2 million or more are CCPB ltd, Suolo e Salute s.r.l., DIO Certification & Inspection Organization of Organic Products, BIOHELLAS SA, Inspection Institute of Organic Products, Debio, Instituto per la certificazione Etica e Ambientale (ICEA), bio.inspecta AG, Stichting Skal, Ecocert SA (International Department), and Qualité-France SA. The global turnover in organic certification is clearly above 200 million Euro, perhaps even double or more (400 million would represent roughly one percent of the estimated market value, or roughly 200 euros per farmer).

Starting year

Of the 339 certifiers that responded to the question concerning the starting date of their operation, only 13 started before 1985 and more than half of them started in the period 1995-2004.

Approvals

The EU represented the biggest increase in approval status. The European Union has 214 approved certification bodies, up from 182. The majority of imports into the European Union come through certification granted under article 11.6 (i.e., the importer's derogation).

Table 16: Certification bodies: Numbers and approvals per region 2010

Region	Total	IFOAM	Japan	ISO 65	EU	USA
Africa	12	3		6	4	1
Asia	165	7	60	20	30	12
Europe	214	11	13	93	184	35
Latin America & Caribbean	51	6	4	18	12	10
North America	78	1	17	26	14	64
Oceania	12	4	6	5	7	6
Total 2010	532	32	100	168	251	128

Source: Grolink 2010

IFOAM has lost five accredited certification bodies, four in the United States and one in Japan. The first African NOP approved certification body is from Egypt. ISO 65 accreditation is up from 166 to 168, still less than a third have ISO 65 accreditation. The number of organisations approved in Japan increased with one approved body. The United States system has approved 128 bodies, of which 72 are outside the US. Only ten organisations—

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four Italian and two each from Argentina, Australia, and New Zealand, reported having all five approvals. One hundred twenty four certification bodies confirm having their own standard.

Further information

In its 2001 edition, *The Organic Certification Directory* also lists Participatory Guarantee Systems (PGS), of which there were 25. The directory also started listing private labeling organisations and companies offering organic inspection services. The three lists are not included in the statistics of approvals and certification bodies.

The Organic Certification Directory will be published in February 2011 in PDF format and online. More information can be found under www.organicstandard.com/directory

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Government Recognition of Participatory Guarantee Systems in 2010

Joelle Katto-Andrighetto[1]

A growing number of organic producers across the world are verified for the local market through Participatory Guarantee Systems (PGS). 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 (IFOAM definition, 2008). While some PGS initiatives are nearly as old as the first organic agriculture associations, the rate of creation of PGS initiatives has been particularly high since 1998, with a major a surge in growth in 2005, just after IFOAM and MAELA (The Latin America Agro-Ecology Movement) organized the first International Workshop on Alternative Certification in Torres, Brazil.

There are now PGS initiatives on all continents, with Latin America and India being the leaders in terms of the number of farmers involved in PGS, as well as the level of recognition achieved from the national governments. In Latin America, the governments of Bolivia, Brazil, Costa Rica, El Salvador, Mexico, Paraguay and Uruguay have officially recognized participatory guarantee systems in their national organic legislative framework. India has a national PGS council formed by the private sector (NGOs) in 2007 with initial support of an FAO project. The Indian legislation on organic farming does not mention PGS, but India currently has a voluntary organic regulation for the domestic market, meaning that organic claims can be made without verification or with PGS verification.

In the year 2010, important steps were taken in increasing official recognition of PGS by governments, most notably in Brazil and in India.

Brazil

In Brazil, a new milestone has been reached: PGS initiatives have been considered for accreditation by a competent authority for the first time - globally. Under the Brazilian legal framework, the Decree 6323 (of December 27, 2007), regulating the law 10831 from 2003, recognizes PGS certification at the same level as third party certification (granting access to the national organic seal). It also establishes processes by which PGS initiatives can obtain accreditation from the Ministry of Agriculture, Livestock and Supply. Starting from December 31, 2010, organic products sold in supermarkets and restaurants in Brazil must bear a national certification seal on the package. In 2010, producers, certification bodies and PGS groups took steps to comply with the national regulation and to obtain government accreditation. According to the implementation rules No 19, of May 28, 2009, the process of accreditation implies a standardized application to the office for Agricultural Policy and Development (Sepdag) in the Brazilian State where the PGS has its Head Office, as well as an audit of the PGS organization by COAGRE, a department of the Ministry of Agriculture responsible for promoting the development of organic agriculture in Brazil. COAGRE is also the public national body that decides on accreditation for third party certifiers and PGS in Brazil. Three PGS initiatives applied for and obtained national accredita-

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tion in 2010. The Associação de Agricultura Natural de Campinas (ANC), an organization involving around 60 producers in PGS, was the first PGS organization to undergo audit by the government for the purpose of accreditation. ANC was accredited on November 27. A few weeks later, the PGS initiative Rede Ecovida de Agroecologia, involving more than 3000 producers from the south of Brazil, underwent the same process and obtained national accreditation. The third PGS initiative to receive national accreditation was the Associação de Agricultores Biológicos do Estado do Rio de Janeiro (ABIO).

The Brazilian government's accreditation of PGS initiatives has generated great interest from other PGS stakeholders across the globe, who will be following this process and the lessons learnt from it in 2011 and beyond.[1]

India

In India, 2010 has witnessed the launching of a government-run national PGS program, under the leadership of the National Center for Organic Farming (NCOF). After several years of discussion and efforts following the dialogue initiated during the 2006 FAO project, the Department of Agriculture and Cooperation of the Indian Ministry of Agriculture, under the National Project on Organic Farming (NPOF), approved the launching of a national organic PGS program. The National Centre of Organic Farming (NCOF) prepared a draft operational manual describing the new national PGS system, basing its work on previous efforts from the FAO project and on IFOAM PGS documents and guidelines. Between September and November 2010, NCOF sought broad stakeholder input on the draft operational manual, holding several consultation workshops in various locations throughout India. NCOF's work received very positive feedback from local and international organizations that appreciated NCOF for its innovative approach to PGS support, the quality of its draft, and the extensive consultation process that accompanied its development. NCOF released the final version of the manual in November 2010. A copy can be requested from the NCOF director.[2]

India and Brazil are the two countries with the highest number of organic producers involved in PGS (roughly 4'000 in each). It is therefore not surprising that it is currently in these two countries that we observe important progress in terms of government recognition of PGS. It can also be noted that government recognition and support comes along with government supervision, which can be acceptable to PGS initiatives if the policies and framework that regulate it have been developed with intensive participation of the PGS stakeholders.

Further information

IFOAM provides regular updates on PGS through a free electronic publication entitled The Global PGS Newsletter. All interested persons can subscribe by writing to pgs@ifoam.org.

More information on IFOAM's PGS activities can be found at www.ifoam.org/about_ifoam/standards/pgs.html.

[1] English and Spanish versions of the Organic Agriculture Law and corresponding Decree can be found at: http://www.prefiraorganicos.com.br/agrorganica/legislacaonacional.aspx?search=Ingl%C3%AAs

[2] Dr. A.K. Yadav, National Centre of Organic Farming (NCOF), e-mail akyadav52@yahoo.com, www.dacnet.nic.in/ncof

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The Organic Standard in the Market for Sustainable Products

Oliver von Hagen[1] and Alexander Kasterine[2]

The organic sector has grown fast in response to strong consumer concern over food safety and the environment. However, while sales of organically certified products have grown, the sector has had to face new market entrants making green and ethical claims. This is particularly the case when it comes to certified tropical commodities (Potts et al. 2010). This paper outlines the nature of competition to organic from other sustainability labels and initiatives and the strategic responses the sector is making.

The growth in the sustainability market

Despite the economic downturn, the market for products compliant with quality, safety and sustainability standards has continued to grow. This growth applies to both:

- Business to business (B2B) standards that mainly relate to quality or product safety issues (e.g., ISO, GlobalGAP or HACCP) and
- Business to consumer (B2C) standards making sustainability claims (Fairtrade, organic or Rainforest Alliance for example).

Products that comply with business to business standards accounted for 22 percent of global retail food sales in 2010 (GFSI, 2010). Products compliant with business to consumer standards range between 20 percent market share for bananas[3] (2009) to 8 percent of exported green coffee[4] (2009) and 3 percent of global cocoa sales[5] (2009).

The number of business-to-consumer standards has proliferated due to greater consumer demand for products fulfilling sustainability requirements and retailers' strategy to differentiate their product range according to their brand or choice of sustainability scheme.

Whilst the overall trend is towards competition, there has been some mutual recognition among standards based on benchmarking[6] exercises and the establishment of codes of good practice for standard setting (e.g., ISO, ISEAL Alliance).

In the last decade, business to consumer standards have shown *yearly* double-digit growth rates. This is driven by:

- Multinational corporations who use green and ethical certification and verification as a means to differentiate products and to comply with Corporate Sustainability Reporting requirements (e.g., Unilever, Nestlé or Kraft Foods).

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[1] Oliver von Hagen, International Trade Centre (ITC), Geneva, Switzerland, www.standardsmap.org/

[2] Dr. Alexander Kasterine, International Trade Centre (ITC), Geneva, Switzerland, www.intracen.org/organics

[3] The State of Sustainability Initiatives Review 2010: Sustainability and Transparency (SSI Report). This number is based on export data.

[4] Based on green coffee exports in 2009 (SSI Report). Adjusted for double and triple certification.

[5] Tropical Commodity Coalition (TCC) Cocoa Barometer 2010. Numbers not adjusted for multiple certification.

[6] Benchmarking is a process whereby standard setting organizations evaluate various aspects of their standard in relation to another standard. This allows comparisons between the respective standards and provides the basis for the recognition of the benchmarked standard as equivalent standard.

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- Increasing consumer demand for assurance of green production processes and food safety.

Challenges to the organic standard and responses

Organic is distinct from other sustainability standards in two respects. Firstly, as described by the Codex Alimentarius, it is a "holistic production management system" and is unrestricted in product scope; the system is practiced and promoted by private and public organizations in over 160 countries of the world. Secondly, it is the only standard that is defined by public regulations, such as in the EU and US. However, despite this, organic standards compete for market shares with other sustainability standards such as Rainforest Alliance, UTZ Certified or Fairtrade. This mainly results from the undifferentiated perception of these standards by the majority of consumers.

Competing claims for environmental sustainability

Organic has long been the market leader in sustainability standards, but this position is under threat particularly in tropical commodities. Despite continuous growth of the market of organic products in absolute terms, new market entrants show stronger growth and compete with organic labels (Pierrot et al. 2011). Organic has taken a non-confrontational approach with competing green standards, perhaps confident of holding the position of delivering strong environmental benefits.

Threats from green claims extend beyond competing standards to corporations some of whom are accused of greenwashing[1] in their marketing and communication. Greenwashing is damaging to organic in so much as it undermines consumer confidence in sustainability products in general.

Multiple sustainability issues

"Sustainable" consumerism no longer encompasses just organic. Consumers demand evidence of sustainable practices beyond what organic can offer, including "ethical" labor practices, the exclusion of child labor, buying local products, reduced carbon emissions, conservation of flora and fauna, and so on.

A key response of private organic standard setters has been to integrate other sustainability criteria which do not relate directly to organic production, for example stricter rules on animal welfare than provided by the EU regulation and setting ceilings on carbon emissions from transport.

Alliances between brands have formed, which may eventually have negative implications for the organic standard and its ability to withstand competition. For example, the Rainforest Alliance standard for coffee has been benchmarked against the Common Code for the Coffee Community (4C) Association standard, making Rainforest Alliance certification of coffee equivalent to 4C Association certification and thus easier for producers to attain double certification.

The organic sector has also accepted double and triple certification with complementary schemes. In cocoa, 15 percent of organic and Fairtrade certified produce is double or triple

[1] For a definition see Greenpeace's www.stopgreenwash.org for example.

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certified.[1] In coffee, 50 percent of Fairtrade certified produce is also organic certified.[2] In coffee, organic has also double certified with Rainforest Alliance. The UK high end retailer Marks and Spencer, has announced it will sell only triple certified coffee (Fairtrade, organic, and Rainforest Alliance).

Premium labels

Manufacturers and retailers have developed premium labels to convey sustainability and food safety qualities to the consumer instead of using the organic standard. This is observed in the coffee sector with the coffee brand Nespresso[3] who promote sustainability through other means than the use of the organic label.

Whilst the term "organic" is protected by law, similar claims like "natural" act as competition. For example, market research in the US from Shelton[4] shows that many consumers misunderstand the terms "natural" and "organic," and believe that natural is the more regulated term. Their focus groups also revealed that lower-middle income groups found the term organic "elitist" and a way simply "to extract more money" from the consumer.

Local claims

"Local" food is widely promoted by retailers, celebrity chefs, and politicians for its diversity, freshness and low "food miles". Locally produced products appear to be an alternative for consumers who would otherwise buy organic. Some organic labels give clear preference to local food and ban air transport, ostensibly to reduce carbon emissions (e.g., Bio Suisse).

Conclusion

The organic sector faces the challenge of an increasing number of other standards and brands competing for green and ethical segment of the consumer market. Sustainability as a term has broadened and corporations are introducing sustainability objectives across the whole value chain. The organic sector is heterogeneous and private standard setters have responded differently. Some like KRAV and the Soil Association include broader sustainability objectives than just organic, whilst the majority of standards remains focused on organic production and processes.

Whilst the market grows, it appears the organic sector is unconcerned about competing standard setters and brands making claims on sustainability. This position is strengthened by the protection that the EU, US, and other countries' regulations provide to the organic name and thus supports consumer confidence. The sector perceives larger threats to its growth from policies that favor GMOs and the agrochemical industry.

[1] Tropical Commodity Coalition, Cocoa Barometer 2010.

[2] Tropical Commodity Coalition, Coffee Barometer 2009.

[3] The Nespresso Sustainable Quality was developed by Nespresso in collaboration with the Rainforest Alliance in 2005, this collaboration looks to serve the growing demand for sustainability standards across the specialty coffee sector (Potts et al., 2010).

[4] http://www.foodnavigator-usa.com/Financial-Industry/US-consumers-think-natural-is-greener-than-organic-says-survey

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Table 17: Challenges for organic production from other standards and brands

Challenges for organic	Examples	Risks to organic	Response of organic sector
Competing green claims	Rainforest Alliance, UTZ Certified	Losing market share, particularly in tropical commodities	Passive; accepting multiple certification
Corporate greenwashing	Regarding beef /soya and associated deforestation	Damage to growth due to lost credibility of green claims	Advocate sustainability of organic production systems
Multiple sustainability issues	Fair labor practices	Higher risk in produce from developing countries	Double/ triple certification with complementary standards (Fairtrade)
	Carbon emissions	Increasing risk, but an opportunity	Inclusion of criteria on transport (KRAV): risks of damage to trade Advocate climate benefits of organic in general
	Animal welfare	Low	Inclusion of criteria on welfare (Soil Association)
Premium labels	Nespresso	Risk of losing market share given corporate power behind claims	Passive Advocate benefits of organic
Local production claims	Local food movement in US and EU	Restricts trade and market growth	Embrace localism in Europe and US. (Rejection by developing country exporters.)

Source: Authors' elaboration

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Environmental, Social, and Economic Impacts of Sustainability Certification in the Agricultural Sector – The Current State of Empirical Research

Julia Jawtusch[1], Bernadette Oehen[2], and Urs Niggli[3]

Various stakeholders involved with sustainability certification are interested in knowing whether certification really fulfills its promises. Business managers who have to determine what type of products to source, consumers who are concerned about making appropriate buying decisions for themselves and their families, producers who think about obtaining certification, and sustainability standard initiatives that themselves need arguments to support their certification programs.

A recent study conducted by FiBL (Niggli et al 2011) reviewed the current state of empirical research on environmental, social, and economic impacts of sustainability certification in the agricultural sector. One result of the study was that a disproportionate number of research papers are on the impacts of organic standards in comparison to the other labels under investigation (Fairtrade, Sustainable Agriculture Standard certified by the Rainforest Alliance, UTZ Certified, Roundtable on Sustainable Palm Oil, and Roundtable on Responsible Soy).

Table: Number of empirical studies that measure sustainability impacts of four selected certification schemes in the agricultural sector (Studies addressing several standards were counted for each label)

	Organic	Fairtrade	Sustainable Agriculture Standard (Rainforest Alliance)	UTZ Certified
Environmental impacts	213	9	8	4
Social impacts	22	38	5	4
Economic impacts	29*	53	9	6
Total	240	56	13	6
Published in peer-reviewed journals	213	28	4	2
Studies addressing only that standard (not several standards)	228	44	2	2

*Only studies with regard to producers in developing countries were considered.

Most identified impact studies deal with the environmental impacts of organic agriculture. This might be due to the fact that organic production is supported by governments for its

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environmental benefits in some regions and hence, more money is available for its research.

There are also a considerable number of studies on fairtrade, the majority of which are on socio-economic impacts. For the Sustainable Agriculture Standard (certified by Rainforest Alliance) and UTZ Certified, only few impact studies have been conducted so far. More research is needed before conclusions can be made on their real-life sustainability impacts. No scientific impact assessments were found for the Roundtables on Sustainable Palm Oil or Responsible Soy.

Concerning environmental impacts, there is overwhelming evidence for wide-ranging benefits of organic agriculture in comparison with conventional agriculture. Higher biodiversity is seen in plants, earthworm, and arthropod populations (30 percent more species, 50 percent higher abundance), water and air quality is shown to be better, lower greenhouse gas emissions, less energy use, less soil erosion, higher soil organic matter content and stocks as well as biologically more active soils. Organic farming avoids chemical/synthetic inputs (herbicides, pesticides, and synthetic fertilizers) and allows only a limited use of veterinary pharmaceutical products. These bans immediately and greatly reduce adverse environmental impacts.

Usually, farmers can only cope with the restrictions made by organic standards by redesigning their farms in order to increase resilience and self-regulation. This is typically done by diversifying crop rotations, using efficient and low-loss compost and manure recycling, mulch farming, cover crops, hedge rows, wildflower strips, and natural regeneration plots. However, with regard to tropical and subtropical production systems organic farming needs further development and appropriate pedoclimatic adaptations.

Social improvements due to certification (e.g. contentment of farmers and improved cooperation) are difficult to measure and quantify. It is therefore not surprising that anecdotal evidence prevails here. According to the available information, participation in a functioning producer group with Western world partners—often with external support such as paid training—is usually associated with positive social effects, such as team spirit, motivation, satisfaction, improved access to education, and empowerment. The most evidence available concerning social benefits is seen with fairtrade. Many reports analyzing fairtrade describe higher producer confidence and satisfaction, improved access to knowledge and education, higher democracy and participation in producer organizations.

Concerning economic impacts on farmers in the South, research finds that the certification schemes analyzed usually provide benefits to their participating producers—most importantly through price premiums and/or improved market access and trade relationships. Farm income tends to increase, but sometimes with only marginal effect. Some critical papers question whether certification schemes really reach the poorest and whether they might negatively affect non-participating producers in the same or neighboring rural communities. Fairtrade, the only scheme offering a guaranteed minimum price, does not seem to necessarily outperform the other schemes when the market prices for the products are generally good. However, the minimum price can provide a safety net in times of low world market prices.

What is frequently mentioned as an economic barrier to organic certification is the 2-year conversion period. During this period yields may decline and since no premium is paid during this time, financial hardship can ensue. After the conversion period, however, yields

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usually increase and the scheme becomes economically profitable. In developing countries, it is important to provide support to producers that are in the process of getting certified (financial support and training)—in the case of organic, support is appreciated throughout the conversion period.

In conclusion, sufficient evidence affirms a wide-range of environmental and economic benefits of organic agriculture (but with an emphasis on the western world). For fairtrade, most studies on social and economic benefits report positive impacts on producers in developing countries but, only half of the studies identified appeared in peer-reviewed journals, and many are anecdotal accounts taken from specific projects. For the Sustainable Agriculture Standard (Rainforest Alliance), UTZ Certified, and many other voluntary standards that have arisen in recent years, little knowledge on real-life impacts is available thus far. This study was a first step to assess the impacts and benefits of certification in the agricultural sector. Further development and research is needed, as well as the integration of research results into the standards.

This article is based on:

- Niggli, Urs, Julia Jawtusch, Bernadette Oehen (2011, unpublished): "Do standards and certification in the agricultural sector matter for sustainability? A review of the state of research." Research Institute of Organic Agriculture (FiBL), Switzerland and RESOLVE, USA.

Links

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- www.sanstandards.org
- www.utzcertified.org
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Organic Beekeeping

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Organic Beekeeping: Opportunities and Risks

Salvador Garibay[1], Peter Gänz[2], Rémy Vandame[3], Ulrich Broeker[4], and Stefan Bogdanov[5]

Statistical data on organic beekeeping is still lacking in many aspects. This chapter is therefore primarily based on a general context of organic beekeeping worldwide. Having said that, much of the data was obtained recently at the First World Conference on Organic Beekeeping that took place in Sunny Beach, Black Sea Coast, Bulgaria, August 27-29, 2010[6] and is therefore current. Additional information came from experts on the different topics. It is expected that this chapter will be further developed in the following edition of this book. The next World Conference on Organic Beekeeping will be organized by FiBL, Naturland, and local partners in Mexico in 2012.

European Union

Organic beekeeping was first regulated in 1991 with EU Regulation184/91, and then updated with the two regulations 834/2007 and 889/2008. These regulations are implemented on the national level.

Overview by country

In nine surveyed EU countries organic beekeeping represents between 0.2 and 8 percent of all beekeeping. The number of organically certified hives varies from 1'000 to 100'000 per country. On average, an organic beekeeper manages 130 hives while conventional beekeepers manage on average 23 hives.

- Italy is the leader of organic beekeeping in the EU with more than 100'000 certified organic hives (about eight percent of all hives). The government pays about 300 Euro for each organic apiary. In Italy a special competition has been held annually in Sicily since 2008, the Prize BioMiel for certified organic honey. This prize has the aim of selecting the best national and international organic honey and to promote its consumption. Organic honey production is about 15 percent of the total honey production.
- Spain has about 57'600 organic hives, meaning that about three percent of all hives are certified. The average number of hives per beekeeper is 300 (about 194 certified beekeepers).
- Germany is a major importer of honey worldwide, producing just 25 percent of the national consumption itself. Domestic organic apiculture counts about 600 beekeepers holding 25'000 colonies (three percent of total). As climatic conditions in Central Europe do not allow for regular and reliable honey yields, many beekeepers are producing honey on a hobby level, supplying their family, friends, and colleagues. Nevertheless, although costs for certification are not covered by a better price for the product, quite a

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number of beekeepers get certified for idealistic reasons and to support the organic sector in general. A few dozen family enterprises get their main income from keeping 400 to 1000 colonies, migrating to different places all over Germany, where the harvest is from dandelion, acacia, linden, chestnut, heather or forest (fir) honey, which fetches the highest price on the market.

- France is known for producing different varieties of honey such as lavender, sunflower, and forest. As France has quite a strong professional beekeepers lobby, some pesticides were legally banned from application in conventional farming. These substances were suspected to be extremely harmful to insects, as was proven by several accidents in Germany and Italy, when about 100'000 bee colonies died after contact with dust released from corn seeds which were bated with neonicotinoids. The number of organic beekeepers is currently 219 (0.3 percent of the total number of beekeepers), managing about 42'500 organic hives (3 percent of all hives) or, on average, 194 hives per organic beekeeper.
- Bulgaria started with organic beekeeping in 1990. By the end of 2009, there were about 44'861 certified organic colonies (6.5 percent of the total) and corresponding to approximately 300 hives/organic beekeeper). The average conventional beekeeper manages 14 hives. The Bulgarian government pays 13 euros per organic hive and allows group certification—two measures that foster organic beekeepers. The volume of organic honey was of about 1'700 tons in 2009, or about 15 percent of the country's total honey production. Bulgaria introduced a law to prevent GMOs from being introduced into the country. It stipulates that no GMO crop is allowed within the flight range of bee colonies. As beekeeping is present in all regions of Bulgaria, no area is currently suitable for GMO fields.
- In Portugal and Greece, two Southern European countries with good possibilities for beekeeping, organic practice is only at the beginning, with 0.15 and 0.4 percent respectively of all beekeepers being organic.
- In Slovakia and Poland organic beekeeping is only just beginning, representing only 0.1 to 0.2 percent of the conventional beekeeping. Organic beekeeping is not very popular because the production costs are higher than in conventional beekeeping and because the national regulations are too complicated.
- In Romania, the organic beekeeping sector is in a dynamic stage. The first organic beekeepers were certified in 2000. Since then the number of organic beekeeping operators has been increased continuously. At present there are 84'700 bee hives, or 7.7 percent of all hives in the country.

Significance and sources of imports

North and Central Europe are not self-reliant even in conventional honey. As there is a constant growth in demand for organic food in general, bee product imports have added potential. Germany is a key player in the import of organic honey. Most organic honey imports are from other EU countries and Latin America. Discount supermarket chains also have organic honey on their shelves—at prices that are not competitive for German producers (e.g., 5 euros per kilogram for imported honey, 10 euros for local honey).

Policy and trade environment

For food product imports of animal origin, such as honey, the EU legislation requires a series of health and national residue monitoring procedures (e.g. HACCP Hazard Analysis

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and Critical Control Points) during the production and processing of honey. This is independent of whether the honey is organic or conventional. The aim is that imported products meet the standards equivalent to at least those required for the production in, and trade between, EU Member States.

Costs, lack of qualified personal, misinterpretation of the EU legislation, lack of international standardized laboratories, and inappropriate infrastructure are the main hurdles for becoming accredited by the EU. Nevertheless, some East African countries, Turkey, and countries of the former Yugoslavia with some potential for export undergo the time-consuming process of becoming approved for the so-called "Third Country" list specifically for honey (which has nothing to do with the EU-third country list for equivalent organic guarantee systems). The national markets are therefore more attractive than exporting since honey usually gets a much higher price than most importers are willing pay.

Switzerland

Overview

In Switzerland, approximately 4'100 colonies are kept under organic production methods (2007). By the end of 2007, there were about 275 certified organic beekeepers (1.8 percent of the total beekeepers) producing not only under the Swiss ordinance and the Bio Suisse standards, but also under the Demeter and the APIBIO label. In 2007, they produced about 40 metric tons, which was 2.9 percent of the total Swiss honey production that year. The major types of honey differ depending on the region. The most common honeys are multifloral (dandelion, fruit trees, rape, and wild flowers), forest (various honeydew-yielding trees, mainly coniferous), alpine honey (alpine rose, Erica and wild flowers), and chestnut honey. Switzerland has a bee density of 4.5 colonies per square kilometer, which is one of the highest in the world. As bees are kept all over Switzerland, the pollination of all cultivated and wild plants is assured. Organic honey in Switzerland is mostly produced by hobby beekeepers; their annual honey yield is about 10 kilograms per colony. Very few hobby beekeepers supply specialized stores, they mainly sell their honey privately. However, in the last few years distributors have started buying larger volumes of organic honey. For Swiss supermarket chains organic honey is still a relatively new concept, but their entry has already begun, which should stimulate the market in the near future. Increasing amounts of organic honey are demanded by the processing industry. The potential of organic honey is good over the next several years because the demand is much larger than that of honey produced in the country. Experts expect an annual increase in the market from 10 to 15 percent over the next couple of years.

Significance and sources of imports

The amount of organic honey produced in Switzerland does not cover the current demand. Therefore, organic honey is imported from various countries such as India, Mexico, Cuba, Nicaragua, Brazil, Argentina, Germany, Italy, and France. East European countries, such as Bulgaria, the former Yugoslav Republic of Macedonia, and Romania have increased production of organic honey in the last few years; therefore they will also play an important role as suppliers of organic beekeeping products. The big Swiss retailer Migros offers Latin American organic honey at 13 Swiss Francs per kilogram, while big retailer in Germany offer organic honey at lower prices.

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Policy and trade environment

Since 2002, organic beekeeping is regulated by the Swiss ordinance, which is equivalent to the EU regulation. The private standard Bio Suisse did not regulate organic honey production in Switzerland until 2003. The association AGNI (Working Group for Natural Beekeeping) is the main umbrella organization promoting organic beekeeping independent of the standards. The import policy of honey in Switzerland is based on the EU import regulation.

Problems and wishes of market operators

The honey market is very attractive for many beekeepers and honey traders due to the higher prices of honey in Switzerland. EU organic honey is already found in many market channels, however honey labeled under the private standard Bio Suisse is also starting to increase in demand. Bio Suisse does not allow the use of thymol against varroa mites and the water content of honey is restricted to 18 percent. Such conditions can be difficult to fulfill in some tropical warm and humid areas. For other countries, for instance Bulgaria, beekeepers have already satisfied Bio Suisse regulations.

Other countries in Europe

The Former Yugoslav Republic of Macedonia has 15'000 organic certified colonies, representing 20 percent of all bee colonies. Turkey produces different varieties and flavors of honey and in the last several years has become one of the ten largest producers of honey in the world and is also the biggest producer of pine honey. In 2009, the number of certified organic beekeepers was 147 and beekeepers in–transition to becoming certified organic were 318. A decrease in the number of organic beekeepers was observed between 2004 and 2009 (from 256 to 147). The reasons for the decrease were implementation difficulties of organic beekeeping, low honey yield per colony and low honey price.

Middle East

Only little honey production data are available from the Middle East. Our example comes out of Lebanon. Beekeeping in Lebanon is based on a vertical transhumance following temperature variation, in which apiaries are moved from the coast during the winter to a higher altitude during the summer months, alternating between or chards and forest. Local certification bodies such as IMC (Mediterranean Institute of Certification) and LibanCert are currently developing certification rules that are awaiting legislation.

Africa

A substantial part of beekeeping in Africa is fulfilling the standards for organic beekeeping, although only a small part of it is certified organic. Africa has a big potential for organic beekeeping, as the native bees are resistant to bee pests, and bees live in their natural environment. Sub-Saharan Africa has great potential for production also for the local market as honey is generally in high demand, and prices for local markets are more attractive than for exports. A few fair trade and private initiatives send organic honey from Tanzania and Zambia to Europe. Quantities are marginal, however.

Some of North African countries have potential to produce organic beekeeping products, but the domestic organic market is not yet well developed. There are a few exceptions like Tunisia and Egypt, but distribution is still weak and average consumers cannot afford the high price premiums.

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Asia

Asia has big producers such as China (biggest producer and exporter worldwide), India, Thailand, and Vietnam. The organic beekeeping sector is still in an initial phase however, and organic exports amount to not more than a few hundred metric tons. In the medium and long-term, however, there will be a rising demand in the domestic markets, in particular in the growing mega-cities. Shanghai or Mumbai for example have several organic supermarkets already.

Australia / New Zealand

Australia exports considerable quantities of honey, but there are, however, no verifiable figures for organic quality. New Zealand is famous for supplying other countries with beeswax of organic origin. Beeswax on its own cannot be certified, as it is neither food nor animal food. The EU regulation does however require the exchange of "conventional" wax with wax from an organically certified beekeeper during the conversion time.

USA and Canada

In the USA, professional beekeepers earn their money mostly from pollination services. The honey from orchards and oilseed/seed propagation fields is often not edible due to high antibiotic and pesticide residues. Moreover, quite a number of crops (vegetables, corn, soybean, rape seed/canola) are genetically modified and therefore excluded from organic certification. In Canada, two percent of the bee colonies are organic, most of them are in Quebec.

Latin America

Brazil, with an annual production of 40'000 metric tons, of which an important part is organic, is the world's largest producer of organic honey. There are several big companies producing over 1'000 metric tons of organic honey each. The main certifiers are IMO (Institute for Marketecology), IBD (Instituto Biodinamico), and the private controlling agency BCS. In contrast to other Latin American countries, Brazil has many large-scale organic beekeepers, each with several hundred hives. Argentina is the second largest producer of conventional honey. However, it produces less organic honey than one would expect, 1'130 metric tons in 2008 and 830 metric tons in 2009, that were extracted from 57'600 hives in 2009. Genetically modified soybeans are cultivated on a large scale in Argentina. Because their pollen can be detected in honey, genetically modified soybeans are a factor that will limit the expansion of Argentinean organic apiculture.

Mexico

Mexico is a country with highly diverse ecosystems, crops, fauna and flora. These are very good preconditions for organic honey production. Mexico ranks sixth in the world in honey production (57'000 metric tons) and third as an exporter (25'000 metric tons). Germany buys 57 percent of the Mexican export. Other bee products are not significant and are only sold locally.

Data, history, and requirements of organic beekeeping

Mexico produces approximately 1'150 metric tons organic certified honey, equaling about five percent of the Mexican honey export. Currently, 20 operators are certified organic. Most organic producers are cooperatives with small-scale beekeepers. In 2010, more than 448 organic beekeepers (and 291 beekeepers in transition) were managing more than

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46'318 organic hives (and 8'629 hives in transition). Organic honey is mainly produced in the states of Yucatan, Campeche, Quintana Roo, Chiapas, Oaxaca, Morelos, and Jalisco. Some of the organic beekeeping cooperatives also hold fair trade certificates. The first cooperatives were certified in the 1990s in the state of Oaxaca y Guerrero. For small-scale beekeepers in cooperatives, an Internal Control System (ICS) has to be developed and full traceability of the product must be ensured. Organic certifiers like Naturland, IMO and Certimex carry out wax samples in order to ensure absence of conventional varroacides in the wax. If wax is contaminated it has to be replaced and the cycle of home-grown wax has to be established.

Beekeeping management in Mexico

Until now, there has been no report of massive colony losses like in Europe or the USA. This is presumably due to: 1) the management of Africanized bees, fairly unselected and with high resistance to principal diseases; 2) a generally lower use of pesticides in Latin America than in the USA or the European Union; 3) a general trend to preserve more natural vegetation, offering diversity of floral resources to the bees. Africanized honey bees entered Mexico in 1986 and now are established as the local race. Initially Mexican beekeepers complained about the increased defensiveness of the Africanized bee, but the gradual value of higher productivity and resistance to principal diseases, like the varroa mite, has brought them around. Selection of desirable characteristics of the Africanized honey bee still needs to be accomplished. The old habit of using antibiotics, like streptomycin and sulphonamide, makes it necessary that every exported lot be analyzed to make sure it is not contaminated with antibiotics.

In the cooperatives of southern Mexico, beekeepers own from 20 to 100 hives. Professional beekeepers in central and northern Mexico can manage 100 to 500 hives or more. Honey yield per hive is around 25-30 kilos, but it differs from region to region. By changing the location of apiaries during the year, beekeepers in southern state of Chiapas can harvest 4-5 times with a yield of 50-60 kilos per hive. Mexican honey generally maintains water content at around 18 percent. However, in the rainy season, the water content in the tropical climate of Yucatan Peninsula can increase to 19.5 percent. Nectar flow in this tropical / subtropical climate is during the dry season from October until May. Generally polyfloral honey is harvested from tropical forests and shade grown coffee plantations.

Challenges

A big challenge for Mexican, export-oriented, honey producers is compliance with the various "Good Production and Manufacturing Practices," which are required for exportation, especially to the European market. Filter and sedimentation facilities have to meet the strict hygienic standards of the Mexican Ministry of Agriculture. This obligatory HACCP style verification also includes a Honey Identification System with traceability logbooks.

Problems and risks

Mexican beekeeping and harvest volumes can be impacted severely by the climate and the flow of nectar is not always guaranteed. The Yucatan Peninsula especially is often exposed to hurricanes or, on the contrary, the rain often simply does not come at all. Small-scale agriculture and the low use of pesticides, especially in the southern states of Mexico with large indigenous cultures, are good conditions for organic beekeeping. However, the high Mexican deforestation rate, combined with intensification of agriculture, will bring some

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risks. Of special concern are the fields of genetically modified soybean and transgenic corn, which will endanger organic beekeeping.

According to a study from 2008 that was updated in 2010, the cost of producing organic honey in Mexico and Guatemala is around 3.52 US dollars per kilogram versus 2.67 for conventional honey (including labor costs). This relatively high difference is rarely compensated for by market prices for organic honey, which seems the main reason why the production of organic honey remains low.

Honey at risk of GMO contamination

It is widely accepted that high intensity agriculture that uses pesticides and displaces wildflowers that provide food for bees is partly responsible for bee colony losses. But an even greater threat to organic beekeeping is growing: crops such as maize, soybeans and canola (rapeseed) that produce pollen or nectar harvested by bees are now often genetically modified. Genetically modified organisms (GMOs) are continuously expanding worldwide, especially outside of Europe. Once set free, there is no way back for GMOs. Many of the GMO croplands found in the USA, Brazil, Argentina, India, Canada and China are also important producers of bee honey.

Bees forage in a large radius from their colonies and do not differentiate GMO crops from conventional or organic crops. Beekeepers have no way of knowing if their bees are feeding on GMO pollen and nectar. When bees harvest from GMO plants, the pollen of these plants are present in the honey. The current win-win situation between farmers and beekeepers will reverse. Because of the rejection by the public of GMO labelled products both conventional, as well as organic beekeepers, are falling victim to GMO crops. In Europe GMO products must be labeled as such and since GMOs are not allowed in organically certified products, this trend will cause export of organic honey to be hindered. In Canada for example, due to large-scale GMO canola fields, honey exports to Europe dropped heavily. In 2008 a German conventional beekeeper had to destroy his annual honey production, which was contaminated with pollen of GMO maize. The administrative court in Augsburg has declared that pollen from this GMO maize categorically is prohibited in honey and neither suitable for consumption nor marketable.

The consumer watch magazine Öko-Test from January 2009 had a range of honeys tested and found extensive GMO contamination: 11 out of 24 batches of honey were contaminated with GMO pollen, mainly those from South America. In the EU the legal threshold value of GMO ingredients is 0.9 per cent, above which products must be labeled as genetically modified. Since honey only contains approximately 0.1 to 0.5 percent pollen, labeling is not required. That's why the organic sector insists that the maximum limit for GMO contamination must be reduced to 0.1 per cent.

Potential

Despite the risks, Mexico has considerable potential for honey production. Mexico has superb conditions of biodiversity and nectar sources from extensive natural forests, traditionally not intensively developed, and more than 320'000 hectares organically certified agricultural land. The honey qualities in Mexico are excellent and ensure ongoing demand in the world market. Mexico has the potential to increase organic honey production considerably and many cooperatives with small farmers can benefit by including organic beekeeping in their production.

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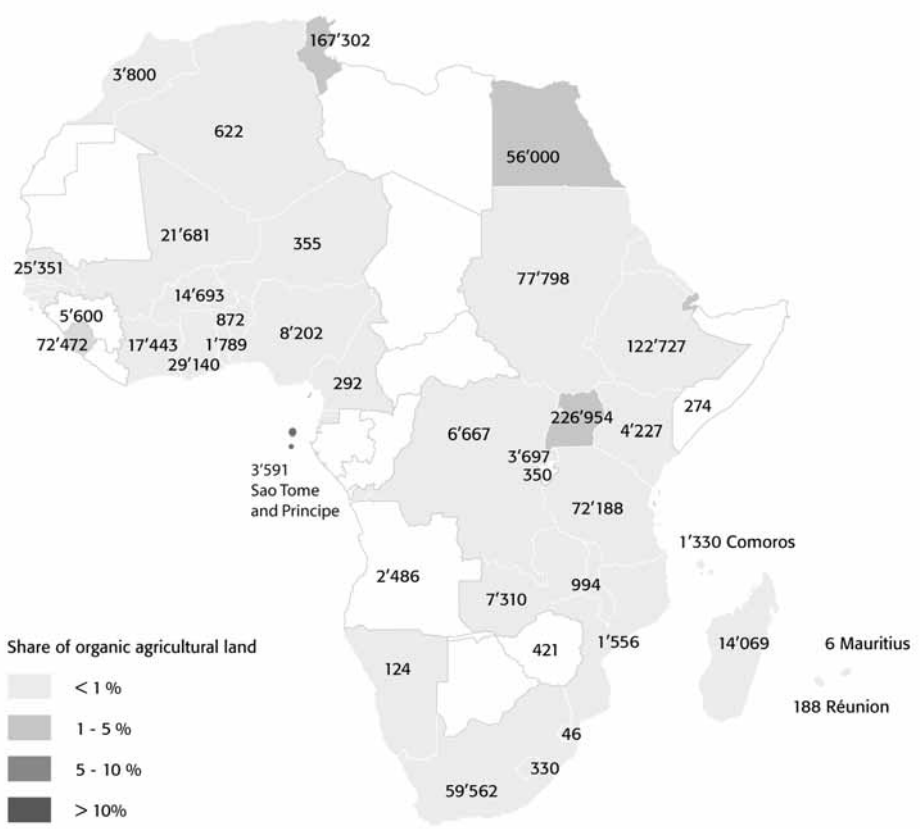
Africa



Map 2: Organic agriculture in the countries of Africa 2009

Compiled by IFOAM and FiBL 2011; based on information from the private organic sector, certifiers, governments and the Mediterranean Organic Agriculture Network.
For detailed data sources see annex, page 233.

Willer, H. and Kilcher, L. (Eds.) (2011):
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Organic Farming in Africa

HERVÉ BOUAGNIMBECK[1]

The use of biodiversity, ecosystem services and the greater integration of people centered ecological practices and systems are now widely recognized as a sustainable and appropriate option to optimize the productivity and climate resilience of farming systems.

- The International Assessment on Agricultural Knowledge, Science and Technology for Development (IAASTD) report noted that expensive, "quick fix" technologies – including GM crops – fail to address the complex challenges that small-scale and subsistence farmers face, and often exacerbate already bad conditions. Instead, the IAASTD outlined the needs for ecological approaches, the use of appropriate and low-cost technologies and a focus on capacity building for small holding farmers including women (IAASTD 2008).
- The UN Special Rapporteur on the Right to Food has called on governments and international agencies to urgently boost ecological farming techniques to increase food production and save the climate.[2]
- The UNEP called for organic agriculture to be supported as one of five recommendations for transforming the global economy under its "Global Green New Deal".[3]

This is particularly important for Africa, as solutions proposed for increasing food security are sometimes based on the industrialization of African agriculture and the intensification of costly external and ultimately unsustainable inputs.

Sustainable production systems offer Africa huge opportunities in terms of improving food and nutrition security, increasing local access to food, bringing degraded land back into production, building the resilience of farms to climate change, especially to water stress, and protecting biodiversity and ecosystem services through their sustainable use. In addition to its affordability, organic agriculture in particular is recognized for its contribution to alleviating poverty and offers farmers the additional benefit of access to higher value markets both at home and abroad (Badgley et al. 2006; EPOPA 2008; FAO 2007; IAASTD 2008; Ifejika Speranza 2010; Lyons and Burch, 2007; UNCTAD-UNEP, 2008).

There are many highly convincing examples throughout the continent of the enormous development and progress organic agriculture can bring – especially to resource poor farmers and their families. For example:

[1] Hervé Bouagnimbeck, Africa Office, International Federation of Organic Agriculture Movements, Charles-de-Gaulle-Str. 5, 53113 Bonn, Germany, www.ifoam.org

[2] UN Special Rapporteur on the Right to Food : "Agroecology outperforms large-scale industrial farming for global food security," says UN food expert. Press release June 22, 2010, Brussels. Available on www.srfood.org/images/stories/pdf/press_releases/20100622_press_release_agroecology_en.pdf

[3] Global Green New Deal: In response to the financial and economic crisis, UNEP has called for a "Global Green New Deal" for reviving the global economy and boosting employment, while simultaneously accelerating the fight against climate change, environmental degradation and poverty. More information is available at www.unep.org/greeneconomy/GlobalGreenNewDeal/tabid/1371/language/en-US/Default.aspx

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- The push-pull method of maize growing developed by the International Research Institute (www.icipe.org) in Kenya, together with local farmers, led to yield increases of up to 200 percent while reducing dependency on chemical pesticides and GMOs. The benefits of this methodology are scientifically well evidenced and it is positioned for a significant rollout in Africa.[1]
- The SEKEM group in Egypt, with over 30 years of experience in biodynamic, ecological farming, has not only transformed their 70 hectares of desert into a productive paradise, but also enabled the country to reduce synthetic pesticide use by 95 percent through their extension activities.[2]
- In the Tigray region of Ethiopia, organic management practices have produced many positive results: higher yields, decrease in the use of costly synthetic fertilizers, a greater diversity of crops, improved farm resilience, higher ground water tables, better nutrition and new income opportunities (Edwards et al. 2010).
- Through the Export Promotion of Organic Products from Africa (EPOPA) more than 60,000 farmers from Uganda and Tanzania gained access to higher value organic markets in the industrialized world and could provide their families with a richer and more varied diet. Furthermore, organic agricultural practices learned through the projects were transferred to the production of subsistence crops, improving productivity and local food security (EPOPA 2008).

Two of these projects were honored with considerable international acclaim in 2010 by the jury of the One World Award, which recognizes the year's most innovative projects and courageous ideas for a sustainable world.[3] Dr. Hans Rudolf Herren, Rachel Agola and the Swiss Biovision Foundation in Kenya (practitioners of the push-pull method) were named the 2010 laureates. Helmy Abouleish, Director of the SEKEM Group in Egypt, was named one of the five finalists. This is a clear sign that commitment for sustainable and just world makes a difference and brings hope in Africa.

The extent of organic agriculture in Africa

The lack of an official organic agriculture data collection in many African countries makes it difficult to obtain reliable information on the extent of certified organic production. With the exception of Tunisia, Algeria, Morocco and Egypt where the government collates the data, data related to organic agriculture in Africa is collected by private sector organizations, such as national organic umbrella organizations and certification bodies (For specifics, please see annex). Nevertheless, the availability and quality of information is improving in most countries and organic agriculture continued to grow across the continent.

In global terms, Africa accounts for 2.8 percent of total certified organic land. Table 38, (page 234) shows the figures for individual African countries. According to these figures, 38 African countries are engaged in certified organic agriculture (data end 2009).

Currently (data end 2009), more than 1 million hectares of land is certified organic, constituting an increase of approximately170'000 hectares compared with the previous survey

[1] International Centre of Insect Physiology and Ecology: Push-Pull: A novel conservation agriculture technology for ending hunger and poverty in sub-Saharan Africa. More information at www.push-pull.net/works.shtml
[2] More information is available at the website o of the Egyptian Biodynamic Association (EBDA) at http://www.sekem.com/english/cultural/EBDA.aspx?PageID=1
[3] More information is available at www.one-world-award.com.

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(data end 2008). This land is managed by at least 500'000 farms. The agricultural land is mainly used for permanent crops, principally cash crops like coffee and olives.

The leading country in terms of organically managed agricultural land is Uganda with 227'000 hectares.

However, when organically managed land is measured as a percentage of each country's agricultural area, Sao Tome and Prince rank highest with 6.5 percent.

Uganda (187'893 farms) has the largest number of organic farms, followed by Ethiopia (more than 100'000 farms) and Tanzania (85'366 farms).

Of the total increase in organic agricultural land, there were increases and decreases in individual countries. Substantial increases were recorded in countries like Sierra Leone (+71'512 hectares) and Ethiopia (+22'783 hectares). The biggest decrease was recorded in Madagascar (-5'845 hectares). These changes all occurred against the backdrop of new projects being initiated and others coming to an end.

Organic wild collection areas and bee pastures

In addition to the one million hectares of certified organic agricultural land, 16.4 million hectares of land are organic beekeeping, forest and wild collection areas (Table 45). The largest beekeeping areas are in Cameroon (6 million hectares). The largest wild collection areas are in Namibia (3.0 million hectares) and Morocco (618'000 hectares). Medicinal plants like devil's claw (*Harpagophytum procumbens*) play the most important role in wild collection.

Markets

Farmers in Africa produce a diversity of organic crops. These range from cash crops like coffee, cocoa, tea, cotton and olives to processed fruits and vegetable oil, including everything in between, e.g., fresh fruits and vegetables or honey.

Export

The majority of certified organic produce from Africa is destined for export markets, with the large majority being exported to the European Union, which is Africa's largest market for agricultural produce. The total value for the export of organic produce from Uganda has been estimated at 36.87 million US dollars[1] in 2009. In most cases, due to the dominance of smallholders in Africa, the typical supply chain is made up by a private enterprise organizing many smallholders as out growers to secure the sufficient quantities for export, or farmers are working together on one project supplying and packaging for exporting trading companies.

In Tanzania, for example, the total value for the nine most exported organic product categories was estimated at almost 10 million euros in 2009 (Kledal & Kwai 2010). The exports are mostly destined for the European Union and the USA. In terms of tons, heavier nut products like cocoa, cashews and coffee are on the top. In economic terms, cocoa, cashews, vanilla and tea are the most important export products. They represent 55 percent of the total organic export value.

[1] 1 US Dollar = 0.71895 Euros; average exchange rate 2009. Source: www.oanda.com

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The domestic market

Although the African market for organic products is still small, domestic organic markets are growing in Africa. Local organic markets are usually located near capital cities. The majority of the consumers are foreigners and upper-middle class citizens with values similar to European organic consumers. The products marketed include organic fresh fruit and vegetables, dairy products, meat, wine, herbs, and personal care products. In Tunisia and in Egypt, specialized shops and a number of supermarket chains (Metro and Carrefour) have organic sections. Similarly, organic shops in South Africa, Kenya and Uganda and Ghana are also picking up organic products and therefore playing a growing role in the domestic organic market. In Zambia, organic farmers sell their produce in local farmers' markets or to urban supermarkets. There is no doubt that, with increasing awareness, the potential of local or domestic African markets for organic products will increase. However, few African countries have articulated a concrete promotion strategy for domestic markets. (For an important exception, see Tunisia country report (page 111).

State support

Despite the benefits of organic agriculture, it receives little support from African governments and is generally not integrated into agriculture policies. However, in some countries like Kenya, South Africa, Tanzania, Uganda and Tunisia, there is a growing recognition of policy makers that organic agriculture has a significant role to play in addressing the pressing problems of food security and climate change in Africa. In these countries, organic policy is in the process of being developed, and the national organic movements are strongly involved in the process. There is no doubt that once finalized, these policy frameworks will help realize the multi-functional benefits of organic agriculture in these countries. Having an organic policy in place offers access to financial resources, educational and training programs, and increased market opportunities for organic farmers.

In other countries like Ghana, given the multiple benefits of organic agriculture and the growth of the organic sector in the country, a desk for organic agriculture has been established in the Ministry of Agriculture. The desk works as a contact point for organic agriculture to liaise between the government and the organic industry. Its aim is to increase awareness of organic agriculture and build the capacity of officers of the Ministry of Agriculture at the district and regional levels, so that they can better serve the interests of organic farmers and support the further development of the organic sector in the country.

Given the affordability and multi-benefits of organic agriculture, it is important to enable national policy frameworks on organic agriculture in other African countries in order to grow the capacity for the African governments to develop sustainable, resilient and productive farming.

Standards and legislation

With the exception of Tunisia, which has Third Country Status with the European Union, all other African countries are reliant for export on foreign standards. To date, the largest part of certified organic production has been certified according to the EU regulation for organic products. Some producers are, in addition, certified to the U.S. National Organic Program (NOP) or the Japan Agriculture Standards (JAS) and numerous private-sector organic standards, such as those from Naturland.

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For the domestic market, African countries are reliant upon national standards. The countries with organic standards are Egypt, Senegal, Tunisia, and the East African countries (Kenya, Uganda, Tanzania, Rwanda and Burundi). The ways of ensuring that organic standards are met include both third-party certification and Participatory Guarantee Systems (PGS). In some countries like Burkina Faso, Malawi, Zambia and Zimbabwe, national standards are in the process of being developed.

Research, extension and training

Dedicated organic research on organic agriculture is still very minimal in Africa. However, there are some outstanding examples of innovative organic research within research institutes, universities and private sector led projects such as:

- The International Centre of Insect Physiology and Ecology (ICIPE), Kenya;
- The Jomo Kenyatta University of Agriculture and Technology, Kenya;
- The University of Agriculture Abeokuta, Nigeria;
- The Sokoine University of Agriculture (SUA), Tanzania;
- The African Organic Center of Excellence, Uganda Martyrs University; and
- The Technical Centre of Organic Agriculture in Sousse, Tunisia.

The lack of dedicated research initiatives in Africa constitutes a barrier to developing the potential of the African organic sector, as it makes it difficult to find appropriate solutions to the problems and questions of African organic farmers, processors and marketers.

African Organic Agriculture Manual

Organic agriculture provides effective tools to manage resources efficiently and has the potential to improve incomes and livelihoods through access to domestic and international markets. With the aim of harnessing the potential of organic agriculture to break Africa's cycle of hunger and poverty, the Research Institute of Organic Agriculture (FiBL) is currently developing training materials in collaboration with IFOAM and African National Organic Agriculture Movements to enhance the adoption of organic farming practices by African smallholder farmers.

The materials will include a manual for trainers, booklets for farmers, videos, posters and radio programs and will be comprehensive, easy to understand and extensively illustrated. The materials will be made available in 2011 to training organizations throughout Africa. There will be field programmes to refine and disseminate the materials.

The project is funded by the Bill & Melinda Gates Foundation and the Syngenta Foundation for Sustainable Agriculture.

Outlook

Organic agriculture has a significant role to play in addressing the pressing problems of food security and climate change in Africa. It is therefore very important that national and regional policies in Africa do not overlook the valuable tool-kit provided by organic agriculture.

In addition to expanding international market access, there is a need to develop local and regional markets for organic produce in Africa. Key elements to achieving long-term sustainability of organic production systems in Africa include: increased consumer awareness, cooperation among stakeholders and producers in the supply chain, increased investments in research on organic agriculture, and the development of conformity assessment mechanisms for local marketing that are accessible for smallholders, such as Participatory Guarantee Systems (PGS). There is no doubt that the recently launched IFOAM OSEA II Project

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(Regional Cooperation for Organic Standards and Certification Capacity in East Africa), funded by Sida (the Swedish International Development Cooperation Agency), will help to address these issues and thus facilitate trade in organic products in East Africa. Also, once finalized, the African Organic Agriculture Manual will help to increase awareness of organic agriculture and build the capacity of African trainers, extension workers and small-scale farmers to understand and implement organic farming principles and practices.

More importantly, given the affordability and multiple benefits of organic agriculture, there is a need to implement national policy frameworks on organic agriculture in African countries that can increase the capacity for the governments to develop sustainable, resilient and productive farming.

The second African Organic Conference to be held in Lusaka, Zambia, from May 15-19, 2012 will provide a key platform for discussion and sharing experiences. Moreover, this conference will provide a significant opportunity to mobilize support for organic agriculture and take the necessary actions to bring the Organic Agenda to new heights in Africa.

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Background: The Organic Alternative for Africa

Despite the multi-functional benefits of organic agriculture in Africa, it receives little support from African governments and is generally not integrated into agriculture, climate change adaptation and poverty reduction policies. Instead, industrial and GMO agriculture are promoted over affordable and sustainable practices.

IFOAM's Organic Alternative for Africa is a continental strategy to increase awareness of the multiple benefits of organic agriculture and facilitate the integration of organic agricul-

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ture solutions and opportunities at the core of African policies and agricultural development. This initiative builds on IFOAM networks, activities and experiences in Africa and its development and implementation are subject to the support of partners and donors.

IFOAM wishes to engage with organizations and groups that are interested to work with IFOAM and the African organic movement in the framework of **the Organic Alternative for Africa** to design appropriate strategic approaches or develop specific projects that meet the objectives of the initiative. Key components of the initiative include:

- Providing African national and regional policy makers, media and funding agencies with evidence-based information on the multi-functional benefits of organic agriculture and their contributions to the challenges and needs in Africa.
- Increasing awareness of the opportunities presented by organic production and trade for contributing to the realization of the Right to Food and poverty alleviation.
- Assisting governments, intergovernmental organizations and funding agencies interested in exploring organic agriculture for integration into agriculture, food security, climate change adaptation, biodiversity, and poverty alleviation policies.
- Building national capacities for implementing practices and systems for building secure, resilient, profitable and sustainable farming systems.

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Related tables

- Table 40: Organic agricultural land: The top ten countries per region 2009
- Table 42: Share of organic agricultural land: The top ten countries per region 2009
- Table 43: Growth of the organic agricultural land by region 1999-2009
- Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009
- Table 45: All organic land use types by region and country 2009
- Table 46: Organic producers and other operator types by country 2009
- Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

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Tunisia: Country Report

LUKAS KILCHER[1] AND SAMIA MAAMER BELKHIRIA[2]

The year 2009 was a historical year for organic agriculture in Tunisia: The European Commission approved Tunisia for the Third country list. This means that the system in Tunisia complies with rules equivalent to the EU's production and inspection provisions. The year 2010 was another historical year: In May 2010, the Ministry of Agriculture launched the organic label "Bio Tunisia." The launch of this label is part of a strategy to develop organic agriculture in Tunisia as decided by the government of Tunisia in 2010.

Organic agriculture in Tunisia started in the 1980s with private initiatives. The years after 1997 were characterized by a high increase in area, number of farmers, and crop diversification. This important development is the result of policies supporting this sector underlined in a clear national strategy and action plan. Looking at the impressive growth, the Tunisian interventions on the level of research, advisory, legislation, and market development are consistently positive and convincing.

Production data and operators

Tunisia is the leading Maghreb country in terms of organic agricultural development.

Table 17: Tunisia: Land use 2009

Crops	Area (ha)
Olives	115'000
Dates	1'100
Cereals	1'216
Vegetables	210.5
Fruit trees	4'313
Aromatic and medicinal plants	408.5
Fallow land	20'975
Pasture	24'079
Organic agricultural area	**167'302**
Alfa	95
Forest	168'500
Wild collection total	**168'595**
Total	**335'897**

Source: General Direction of Organic Agriculture

Below are some key performance figures:

- In 2009, nearly 336'000 hectares were certified organic. This is 16 times more certified land compared to the 16'500 hectares in 2001.
- Organic vegetable production rose from 4000 metric tons in 2001 to more than 240'000 metric tons in 2009.
- The number of actors in organic business increased from 294 in 2001 to 1'911 in 2009.
- Tunisia is the country with the second largest organic agricultural area in Africa.

[1] Lukas Kilcher, Head of Communications, FiBL, Ackerstrasse, 5070 Frick, Switzerland, wwww.fibl.org
[2] Samia Maamer Belkhiria, General Director for Organic Agriculture of the Ministry of Agriculture, Hydraulic Resources and Fisheries in Tunisia

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- It has the third largest organic olive oil area in the world.

Key institutions/organizations

The governmental institutions are leading the organic sector in Tunisia. So far, there is no national private organic producer association. However, the Tunisian union of Agriculture and Fishing UTAP functions as the federation of organic producers, representing their interest. Further, there are more than 30 agricultural development groups (groupements de développement agricole) for organic farmers and more than ten mutual companies (sociétés mutuelles) for organic products created in 2010 in the frame of the Interprofessional Groupings for vegetables, fruits, legumes, bee-keeping, poultry and rabbit products, meat and milk.

The General Direction of Organic Agriculture

In April 2010, the General Direction of Organic Agriculture (DGAB) was created by a presidential decision. This new department of the Ministry of Agriculture has become the competent authority of the organic sector in Tunisia and has the following tasks: Elaborate strategies, concepts, and action plans for the development of organic agriculture; supervise the organic guarantee system, especially the certification bodies; implement development plans and contracts with the stakeholders of the organic chain; support investment projects and facilitate their follow up; facilitate international cooperation and represent the Ministry at the competent international organizations and institutions; host the permanent secretary of the national commission for organic agriculture.

DGAB is structured in two directions, five sub-directions, services, and local divisions in each of the 24 regional commissariats of Tunisia in order to facilitate and assure: Information, dissemination, and a promotion plan for organic production; payment of subsidies for certification, training and extension programs; market development strategies, grant the use of the organic label "Bio Tunisia"; the development of organic standards and legislation.

The National Commission for Organic Agriculture

This commission is implemented by law and in charge of: Proposing development plans and support for capacity building in the organic sector; advising the Ministry concerning the efficiency and the accreditation of certification bodies; obtaining statistical data from the organic sector.

APIA, the Promotion Agency of Agricultural Investments

APIA is promoting the organic sector through participation at international trade fairs and supporting investments for all new projects up to 30 percent of the value.

Domestic market

The domestic market for organic products has been emerging over the last couple of years. The market started with vegetables, fruits, pasta, olives, and olive products. In 2010, the government of Tunisia set the goal of improving the availability of organic products in the domestic market by reaching a domestic market share of one percent for organic products by 2014 and assuring continuous supply.

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This is an ambitious target and all stakeholders are mobilized to work on it. Organic products are available in Tunisia in supermarkets, farmers' markets, hotels, and restaurants, duty free-shops, etc. The main challenges for developing the domestic market are continuous availability of organic products, diversity of products on the market, and affordable certification in order to guarantee moderate price premiums. A number of promotional activities have been implemented in order to promote the domestic market, such as domestic trade fairs, TV promotion, and pilot market projects in supermarkets, hotels, and other sales channels.

In 2010, a unique promotional campaign began in Tunisia with the launch of eight stamps dedicated to organic agriculture. The goal of this campaign is to convey the richness and diversity of organic products from Tunisia as well as to demonstrate the importance of the organic sector on the national policy level, performing development benefits for the whole country.

Trade: export, import

By far the largest part of organic production in Tunisia is destined for the European Market. The most important export products are olive oil, dates, fruits, and vegetables. The national strategy is to double the export to 120 million TDN[1] in 2014 through a better positioning of classical Tunisian products with high added value on the market.

Table 18: Production and export of main organic products

	2002	2003	2004	2005	2006	2007	2008	2009
Total production in tons (incl. olives)	9'077	39'364	30'030	100'000	120'000	150'000	170'000	246'688
Total production in tons (incl. olive oil)	5'566	12'116	16'430	40'000	80'000	70'000	94'000	165'888
Total Export (tons)	1'110	1'015	3'018	2'615	5'600	8'960	13'330	12'255
Olive oil (metric tons)						6'061	9'656	8'200
Dates (metric tons)						2'300	3'025	3'055
Others (metric tons)						600	650	1'000
Export Value (Million TDN)	No figures	No figures	12	11	44	57	64	55

Source: General Direction of Organic Agriculture

Legislation

A national regulation was issued in April 5, 1999. Since then, several additional laws, decrees, and orders appeared related to organic agriculture (web information: www.ctab.nat.tn).

The complete national regulatory framework was ready by the end of the year 2005. In 2009, the European Commission approved Tunisia on the Third country list. In order to be added to this list, Tunisia had to develop and put in place an organic farming legislation and

[1] 1 Tunisian Dinar (TDN) = 0.52190 Euros or 0.67739 US Dollars, exchange rate January 7, 2011, /www.oanda.com

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a fully implemented system of inspection and monitoring. The organic legislation of Tunisia is equivalent to the EU requirements and the Codex Alimentarius. The European Commission decides on the basis of an assessment conducted by EU experts in the last couple of years. Organic imports from Tunisia are now subject to simpler procedures for approval. Tunisia is also in process to be accepted on the Swiss Country List, approval is expected by July 2011.

The new "Bio Tunisia" label allows the value and benefits of all organic products from Tunisia to be communicated to consumers both nationally and abroad. The launch of this label is part of the strategy for developing organic agriculture in Tunisia, as decided by the government of Tunisia in 2010, which aims to promote organic agriculture within the agricultural system of Tunisia and give its preference due to the environmental and health benefits.

Figure 21: The Tunisian organic logo

Government support / development cooperation

A comprehensive strategy and action plan for the development of organic agriculture in Tunisia was set into force by the Tunisian Ministry of Agriculture and Fisheries in 2005, a project funded by the Food and Agriculture Organisation of the United Nations (FAO). Since then, the Tunisian government has been supporting organic agriculture with a comprehensive set of actions on the level of research and extension, production and trade, legislation and guarantee system.

In 2010, a new governmental program and strategy 2010-2014 was launched with the following objectives:

- Expanding the organic area to 500'000 hectares by 2014;
- Diversifying organic production, based on the demand and looking for products with high added value;
- Reaching an organic market share of one percent in the domestic market and assuring its continuous supply;
- Doubling organic exports by 2014 through a better positioning of classical Tunisian products with high added value on the market;
- Guaranteeing through research, advisory, and certification the quality and productivity of organic agriculture, as well as conformity to international regulations in order to create a national commission for planning and evaluation of organic research;
- Increasing financial support to producers, organized in cooperatives and professional groups from 5'000 to 10'000 Tunisian Dinar per year for the subsidies on control and certification costs;
- Promoting organic production and markets with the following activities (i) the annual fair "organic week" in Tunis, (ii) participating at international trade fairs, (iii) promotion of activities in Tunisia and abroad, (iv) promoting the development of the domestic organic market including tourism;

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- Developing regional organic advisory services, to develop more farmer field schools in the country, and to set up organic pilot farms in each region of the country;
- Developing organic research, supervised by the horticulture and organic research centre CRHAB;
- Developing regional development studies for organic agriculture (e.g., îles Kerkennah).

Research, advice, and training

The Technical Centre for Organic Agriculture

The Technical Centre of Organic Agriculture (Centre Technique de l'agriculture biologique CTAB (www.ctab.nat.tn) in Sousse was created in 1999 and has as its mission to promote and develop organic agriculture in Tunisia by undertaking various activities in the fields of applied research, training, information, technical publications, and international cooperation.

Horticulture and organic regional research centre CRRHAB

Since 2006, the horticulture and organic research centre "Centre Régional de Recherche en Horticulture et Agriculture Biologique de Chott Mariem" in Sousse (CRRHAB) is developing research and dissemination. Its specific mission in organic horticulture research is breeding plant varieties, developing organic horticulture production systems and methods, studying processing and conservation methods, socio-economic research, monitoring the national organic research laboratory, disseminating horticultural research results (advisory, trainings, technical education, national and international cooperation and partnerships).

Other training and university services

Further activities related to organic farming research, advice, and training are:

- Activities of regional advisors;
- Farmer field schools (since 2004);
- Training advisors;
- Master theses at universities (Institut National Agronomique de Tunis (INAT), Ecole Supérieure d'Agriculture Mograne (ESA Mograne), Ecole Supérieure d'Agriculture du Kef (ESA Kef), Institut Supérieur Agronomique de Chott Meriem (ISA-CM);
- Diploma for organic agriculture (since 2010; by APIA, and the Agricultural Training and Extension Agency). This diploma targets all stakeholders of the organic sector (producers, processors, traders, etc.);
- In academic training, some modules in organic agriculture are offered to students in all superior agronomic institutes of the country;
- Two Masters of Sciences (DEA) are offered in Sustainable Agriculture.

Outlook

The outlook for organic agriculture is very positive, as there is an important growth policy and support mechanisms in place.

Links/Further reading

- Website of Tunisian Agriculture: www.agriportail.tn
- ONAGRI, the National Observatory of Agriculture: www.onagri.tn
- APIA, the Promotion Agency of Agricultural Investments: www.apia.com.tn

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- CTAB, the Technical Centre for Organic Agriculture: www.ctab.agrinet.tn
- UTAP, Tunisian union of Agriculture and Fishing: www.utap.org.tn
- IRESA, the Institution of Agricultural Research and Higher Education: www.iresa.agrinet.tn
- Tunisian Olive Oil Office (ONH): www.onh.com.tn
- Interprofessional Grouping for Poultry and Rabbit Products (GIPAC): www.gipaweb.com.tn
- Agricultural Training and Extension Agency (AVFA): www.avfa.agrinet.tn
- Interprofessional Grouping for Fruit (GIFruits): www.gifruit.nat.tn
- Interprofessional Grouping for Vegetables (GIL): www.gil.com.tn
- Office of Livestock and Pasture (OEP): www.oep.nat.tn

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Uganda: Country Report[1]

CHARITY NAMUWOZA[2] AND HEDWIG TUSHEMERIRWE[3]

Organic Certified agricultural land and farmers

Currently 226'954 hectares are under organic agricultural management in Uganda (up from 210'245 hectares in 2008/2009).[4] This was a result of the increase in number of farmers certified organic from 180'746 to 187'893 representing 1.3 hectares per farmer on average. Most of these farmers are smallholder farmers.

There has been a steady increase in certified land and number of organic farmers respectively from 2002/2003, reaching a peak at 2007/2008. More export companies had been acquiring the organic status each year and hence more farmers and certified land. In 2007/2008, the sector saw more companies dealing in cotton with several thousand farmers getting organic certification. Following a government directive to scale down the number of organic cotton projects, however, most of these companies exited and some reduced the number of farmers significantly in 2008/2009. In addition, some companies did not renew their organic certification. The slight increase in the number of farmers and certified land in 2009/2010 is the net effect between the newly certified farmers (mainly coffee and cocoa) and the cotton farmers who lost certification as well as those whose certification was not renewed.

Production

Among the products exported, organic coffee, comprising both Arabica and Robusta, continued to fetch the highest foreign earnings.

Other major organic products exported included cocoa, dried fruits (pineapples, apple bananas, jack fruit, mango and papaya); frozen fruit/pulp (pineapple, passion fruits, apple banana); fresh products (pineapples, apple bananas, passion fruits, mango, jack fruit, plantain, papaya), ginger; sesame, cotton, vanilla, bird's eye chilies, black pepper, cardamom to mention a few. This represents a growth in the product range compared to 2001 when just a few products were exported.

Key institutions/organizations

The key institutions behind the growth of the organic sector is NOGAMU (the umbrella organization that brings together all stakeholders in the organic sector in Uganda), NGOs that are partnering with NOGAMU at a regional level, international consultancy companies

[1] Much of this report is based on the Uganda Organic Statistics Report, 2009/10, published by NOGAMU in December 2010

[2] Namuwoza Charity, International Marketing Officer, National Organic Agricultural Movement of Uganda (NOGAMU), P.O. Box 70071, Kampala, Uganda, e-mail cnamuwoza@nogamu.org.ug, www.nogamu.org.ug

[3] Hedwig Tushemerirwe, Organic Trade Point, National Organic Agricultural Movement of Uganda (NOGAMU), Kampala, Uganda, www.nogamu.org.ug

[4] On an annual basis, the National Organic Movement of Uganda (NOGAMU) assesses the growth of Uganda's organic sector. This is done through a country survey conducted among all the exporting companies as well government institutions like Uganda Coffee Development Authority (UCDA) and other sub-sector associations which compile production and export statistics of specific organic agricultural products. In 2009/2010, like in the previous years, the data was collected and compiled over a period of two months.

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such as Agro Eco Louis Bolk Institute and Grolink that provide organic trainings and technical support, and private export companies that are involved in the mobilization of farmers. This has been mainly using the support of donor funds.

Domestic market

Organic products for the domestic market are sold via a number of outlets: supermarkets like Uchumi, Nakumatt, furthermore restaurants, international schools and open markets. There is a big range of organic products supplied by small scale farmers and processors on the domestic market. These include coffee, bee products, fresh fruits and vegetables, and dried fruits. Over years, the demand for organic products has been growing steadily. For some products such as organic dried fruits, the demand by far exceeds supply. Products like organic arabica coffee are increasingly being consumed in restaurants/coffee shops.

Through a basket delivery scheme of one of the organic outlets (NOGAMU shop), fresh fruits and vegetables and other organic products (e.g., sesame, spices, teas, fruit concentrates) are supplied on an order basis to customers. Customers place their orders by telephone or email and baskets are prepared and delivered to their doorsteps.

In some cases, buyers have come with trucks from Kenya and Southern Sudan to buy fresh fruits and vegetables directly from organic farmers' gardens. In such cases, farmers have even received equivalent or better prices than the export prices for the same products.

Growth in organic exports

The Ugandan organic export sub-sector registered a double-digit growth in 2009/2010 despite the global economic decline. The survey indicated that organic exports in 2009/2010 totaled 36.9 million US dollars up from 30.1 million US dollars, representing an overall growth of 22.7 percent in value, compared to the previous period. This was in part attributed to the increase in volumes (from 47.1 metric tons to 115.6 metric tons) of processed fruits exported, particularly dried fruits and fruit pulp, as well as increased commodity prices, especially for coffee, cocoa, and sesame.

Meanwhile, the overall *volume* of organic exports declined. This was mainly due to decreased organic cotton and fresh products (mainly fruit) exports compared to the previous period.

In 2009/2010, 1'689.5 metric tons of cotton lint was exported compared to 2'955 metric tons in 2008/2009. This was due to a decrease in the number of organic cotton farmers from 78'770 to only 44'076 in 2009/2010 as well as organic cotton export companies from 3 in 2008/09 to 2 in 2009/2010 (6 in 2007/2008). This followed a government directive to scale down on the number of organic cotton projects. On the other hand, exports of organic fresh products (which are largely bulky) decreased mainly as a result of high freight costs, which deter most importers from buying. For instance, much as the Ugandan pineapple is very sweet, its competitiveness in the international market is greatly reduced by the high freight costs and hence less volume has been exported.

The effect of the global economic recession was however felt, considering that the sector grew at a lower rate of 22.7 percent compared to the average growth in the past three years of over 34 percent. In comparison with the overall value of agricultural exports for the country (which dropped in the same period), the organic exports accounted for about 2.4 percent of all exports. Figure 22 shows the trend of growth of the size of the organic sector between 2002 and 2010.

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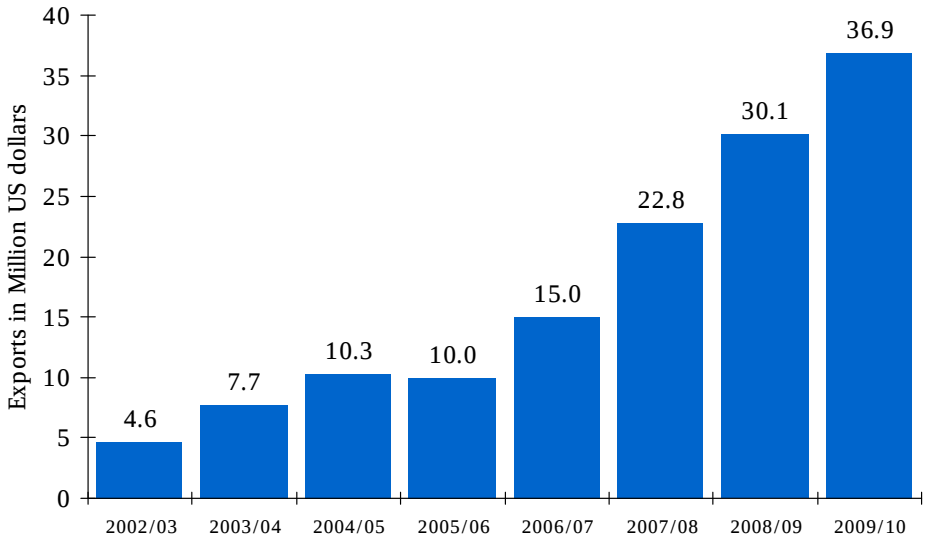

Figure 22: Uganda: Value of organic export in million US dollars 2002-2010

Source: NOGAMU

Export companies and challenges in international trade

The number of certified export companies was 42 in 2009/2010 indicating a decline from 44 in 2008/2009. Twenty-four percent of these companies deal in fresh and dried fruits while the rest deal in commodities and spices.

The NOGAMU (2010) survey indicated a number of challenges, which were highlighted at the individual exporter level and across all companies.

All the companies that deal in fruits reported failure to take advantage of the market opportunities for the highly demanded processed products due to limited processing capacity: 60 percent indicated high cost of packaging materials, 50 percent indicated high air-freight costs, and 40 percent reported high cost of certification as the major challenges.

Sixty-seven percent of the companies that deal in commodities indicated limited supply of products from smallholder farmers and high cost of farmer organization as major challenges. Thirty-three percent reported high organic certification costs as well as lack of crop and trade financing as big limitations for trade.

Other challenges include poor road infrastructure and high cost of borrowing money from commercial banks.

Standards and certification

The stakeholders of the Ugandan organic sector under the coordination of NOGAMU developed the Uganda Organic Standard (UOS), which is in line with the EU regulation. In 2007 an East African Organic Product Standard (EAOPS) and mark (Kilimohai) were developed by the East African countries in harmony with the country organic standards and in line with the EU regulation. The EAOPS has been adopted and own by the East African

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Community as a private standard against which products are certified. These products are sold with the Kilimohai mark on the domestic market.

One local certification agency exists in Uganda namely Uganda Organic Certification Ltd. (Ugocert), which was established by NOGAMU in 2004. Besides this national body, international certification agencies such as BCS, IMO, Ceres, Ecocert, and Soil Association offer services in the country.

Government support and organic policy

Despite the Government's good will for organic farming in Uganda, there has been no organic policy put in place. There is a draft organic policy that is still at the top management level of the Ministry of agriculture animal industry and fisheries for presentation to the Government Executive Cabinet for approval. It is hoped that by end of 2011, the organic policy will be in place.

Research, advice, and training

Currently, there is still limited research in the organic sector. This is partly because there is no specific budgetary allocation from the government towards organic research in Uganda. However, as donors or private companies supported initiatives, some research has been conducted on specific areas. NOGAMU has been behind the overall coordination of such initiatives at the general sector level and in collaboration with other private local and international organizations. There has also been research by academic institutions such as Uganda Martyrs University, Nkozi (UMU), and Makerere University (MUK). UMU offers degree and certificate courses in organic agriculture whereas MUK offers a short training in collaboration with BOKU University in Austria.

Conclusion

While the sector faces challenges, it is projected to grow further given the increasing market opportunities for organic products, the major driving force for companies engaging in international organic trade. If the above mentioned challenges are addressed in the medium term, the sector is capable of growing at a higher rate of 60 percent per annum, if the number of farmers doubles, land under organic management doubles, and the organic policy is put in place.

Further reading/Sources

- NOGAMU (2010): Uganda Organic statistics Report, 2009/10. NOGAMU, Kampala

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Asia

Map 3: Organic agriculture in the countries of Asia 2009

Compiled by FiBL and IFOAM 2011; based on information from the private organic sector, certifiers, governments and the Mediterranean Organic Agriculture Network.
For detailed data sources see annex, page 233.

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Organic Asia 2010

ONG KUNG WAI[1]

Overview

The region hosts a wide range of organic sector development scenarios, from early development to highly regulated. Far from the marginal position it held previously, organic is now an accepted concept and growing market trend in the region.

Whilst export remains the dominant feature of sector development in the majority of developing countries in the region, local markets have emerged and are gaining ground. A host of small to medium local enterprises have started up from Bali to Kathmandu. Local market chains are stocking organic. Local market development is still difficult, nevertheless healthy profits are possible.

Whilst there is still skepticism amongst policy makers, there is also growing interest in the merits of organic production systems and products. The positive impact of these systems on local communities and economy and also on climate change as well as agriculture carbon footprint debates have opened minds. Beyond a niche market foreign currency earner, some policy makers are considering organic agriculture principles as part of a long term national sustainable agriculture development (e.g. Bhutan).

Debate against organic agriculture development at public forums is now rare. There is growing consensus that organic agriculture is a development option not to be ignored. The Governor of Bali, for instance, has launched Organic Bali. Adding an Indonesian organic island campaign to that of the Negros island in the Philippines and a string of organic Indian states in recent years. There is serious discussion and concrete measures to introduce support for organic fertilizers as a means to wean producers off chemical fertilizers and reduce their corresponding import costs in Sri Lanka and Indonesia.

Primarily a market driven sector, government policy is an emerging and significant sector development factor today. Although domestic market size is still relatively small, the high value and profile associated with organic has led to civil society (consumer) calls and governments' interest to regulate the sector. Whilst still not well understood by the general public, the organic concept is institutionally well established in the region. There are at least twelve national standards published with two more in draft mode. Seven markets have implemented organic labeling regulations (i.e., China, India, Japan, South Korea, Philippines, Taiwan, and Malaysia). Others, Sri Lanka and Nepal have established government competent authorities. Thailand and Indonesia have also established accreditation systems.

In the Scoping Study for Harmonization and Equivalence of Organic Standards and Technical Regulations in the Asia region, published by Global Organic Market Access (GOMA 2010), a joint project by FAO, UNCTAD, and IFOAM, growth in developed and developing domestic markets in the region, are also dependent on import of ingredients and finished products not available locally. Ironically, government regulations initiated to assist development of the sector may become an inhibiting factor. Intra-regional trade is now further complicated with the establishment of organic labeling regulations in the region.

[1] Ong Kung Wai. Humus Consultancy, Penang, Malaysia. Member of the IFOAM World Board.

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With the Canada-USA equivalency agreement in place, operators only need one certification to access the North American market. The same is true for the EU. Whilst operators only need two certifications to export to the EU and North America, they will need more to trade within the region. Whilst there are recognition agreements between governments in the region with the EU and USA, there is no recognition agreement between regulators in the region. Whilst many rightly look to the Asia region for the next organic boom, regional market and sector development is in danger of being constrained as intra-regional import rules add more complication, bureaucracy, and costs to trade in organic but not for conventional agriculture products. Small producers, which constitute the majority of farmers in the region, cannot feasibly cope with an increasing web of regulations. Hence, the Harmonization and Equivalence for Organic Agriculture in Asia initiative launched in 2010 by GOMA, a joint project collaboration between FAO, UNCTAD, and IFOAM, is most timely.

Production & Markets

Organic area

Land under organic management reached 3.6 million hectares for 2009 up from just under 3.4 million hectares reported for 2008 and under 2.9 million hectares for 2007. The expansion of over 0.2 million hectares, a growth rate of close to 6 percent comes on top of a 17 percent growth from 2007 to 2008. It maintains an upward trend albeit a slower pace of conversion.[1]

The main contributor of the expansion of cultivated acreage is India. The Agriculture and Processed Food Product Export Development Authority (APEDA), competent authority of India's National Programme for Organic Production (NPOP), celebrated the NPOP's 10th anniversary in May 2010. APEDA reported cultivated area grew from close to 1.02 million hectares in 2008 to 1.18 million hectares in 2009. Forest area reached 3.36 million hectares up from 2.79 million hectares. No new data were available for China.

Other countries reporting large increases in cultivated organic acreage are Philippines (+36'751 hectares), Saudi Arabia (+16'635 hectares), Thailand (7'361 hectares), and Indonesia (+10'000 hectares). It is the 3rd consecutive large annual increase for Saudi Arabia. Myanmar reported for the first time at 555 hectares.

The number of producers took a giant leap from just under 405'000 to 725'000. This is mainly due to the phenomenal increase in the number of producers in India, which almost doubled from the 340'000 reported in 2008 to 677'000 in 2009.

The majority of production in the region (except for China) is organized and certified under grower group schemes. Wild collection takes place in 12 out of the 35 places covered within the region. Aquaculture is reported only in three countries (China, Indonesia, and Vietnam), although projects can also be found in Thailand and Myanmar. Organic livestock production is not developed in most parts. Organic animal products are only available in some places (e.g., Japan, South Korea, Taiwan, and China). The majority of production and export in the region continue to be primary products except for Japan, South Korea, and Taiwan.

[1]Editor's note: Collection of data is not yet well developed in many Asian countries. A direct year-to-year comparison is often not possible, due to varying, even though improving information sources. Conclusion from these figures should therefore only be drawn with caution. See also information on the data providers in the annex of this book.

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Market and trade

Production and market figures are still not readily available from most places. India reported a total production of 1.70 million metric tons, with 0.06 million metric tons exported at a value of 112 million US dollars (excluding production and export of organic fiber and garments). Growth rates for total production was reported at 60 percent. Export volume at 46 percent and export value at 36 percent.

The Japanese organic market was valued at about 130 to 140 billion Yen (approximately 998 million to 1.1 billion euros[1]) as of 2009. A recent report in Japanese is available from the Organic Market Research Project (OMR). However, an English translation is currently not available.

South Korea reported the domestic market value for organic products to be 226 million euros[2] for 2009; 106 million euros for non-processed products and 121 million euros for processed foods. The figures reportedly register an increase of 30.1 percent and 23.3 percent respectively compared with 2008.

An indicative survey (summary below) conducted as part of the GOMA project (GOMA 2010) noted growth of domestic markets in general to be upbeat. The number of small and medium enterprises and emerging product lines can be surprising (e.g., organic mushroom chips in Bali and organic ice cream in Nepal). Diverse market channels, including ad hoc organic bazaars, small retail outlets, supermarket corners, multi level direct selling and internet marketing have sprouted. The majority of markets in both affluent and developing economies in the region reportedly rely on imports to meet market demand. The majority of imported products are from Europe and USA.

Table 19: Summary of a survey about key regional markets and imports

Respondents	Regional market destinations	Imports
Cambodia	Malaysia; Singapore	None
Indonesia	Hong Kong; Malaysia; Singapore	Low [<10%]
Laos	Japan; China; S. Korea	None
Myanmar	Japan, possibly Hong Kong, S. Korea & Taiwan Province of China	Significant [10-30%]
Malaysia	Hong Kong, Indonesia, Singapore	Dominant [>50%]
Philippines	Japan; China; S. Korea	Significant [10-30%]
Thailand	Malaysia; Singapore	Significant [10-30%]
Vietnam	Japan, possibly Hong Kong, S. Korea & Taiwan Province of China	Dominant [>50%]
Nepal	Japan, S. Korea; India	Low [<10%]
India	South East Asia; Japan	NA
Japan	NA	Dominant [>50%]

Source: GOMA 2010

Although the domestic market size is small, the high value and profile associated with organic has precipitating government interest and labeling regulation throughout the region.

[1] 1 Yen = 0.01070 US dollars, average exchange rate 2009; source http://www.oanda.com/lang/de/currency/average; 1 Yen = 0.00768 Euros, average exchange rate 2009; Source;: www.oanda.com/lang/de/currency/average

[2] 1 Korea Won = 0.00065 Euros; average exchange rate 2010; = 0.00056 Euros average exchange rate 2009; Source: www.oanda.com/lang/de/currency/average
Korea Won = 0.00086 US dollar, average exchange rate 2010; = 0.00079 US dollars average exchange rate 2009; Source: http://www.oanda.com/lang/de/currency/average

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Intra-trade within the region is growing but still miniscule in comparison to export flows to the EU and USA. The region continues to host about seven annual organic related trade fairs in Japan, China, Hong Kong, Taiwan, and India.

Standards, certification & regulation

A mixture of regulatory frameworks co-exist in the region. The GOMA Scoping Study (GOMA 2010) summarized regulatory frameworks and certification in the region as shown in the table below:

Table 20: Asia regulatory frameworks and certification

Source : GOMA 2010

Country & Region	Regulation application	Additional Scope	Accreditation	Certification Bodies	Inspectors	Recognition Export / Import
India	Export only Domestic pending	Livestock	Mandatory (NAB)	18 domestic (5 foreign)		EU 3rd country list USDA equiv
Japan	Domestic & Imports	Livestock (optional)	Mandatory (ISO65)	59 domestic 40 external		EU 3rd country list USDA equiv
China	Domestic & Imports	Livestock & Aquaculture	Mandatory (NAB)	32 domestic (6 foreign)	National registration	
South Korea	Domestic & Imports	Livestock	Mandatory (x2 NABs)	32 domestic	National registration	
Taiwan Province of China	Domestic & Imports		Mandatory	4 domestic		Canada, NOP & New Zealand for import
Philippines	Domestic & Imports		Mandatory	1 domestic		
Malaysia	Domestic & Imports		NA	1 Govt prog 1 domestic		
Indonesia	National & Private Std		Voluntary	7 domestic		
Thailand	National & Private Std	Livestock & Aquaculture	Voluntary	3 Govt prog 2 domestic		
Nepal	National & Private Std		NA	1 domestic		
Laos	National Std		NA	1 Govt prog		
Vietnam	National Std	Livestock & Aquaculture	NA	1 domestic (1 foreign)		
Sri Lanka	National draft Private Std		NA	2 domestic (1 foreign)		
Bhutan	National draft		NA	NA		
Cambodia	Private Std		NA	2 domestic		

Source : GOMA 2010

Six countries and regions (i.e., China, India, Japan, South Korea, Philippines, and Taiwan have implemented organic labeling regulations as of 2010. Six of the existing national organic standards include animal husbandry. Three include aquaculture requirements. Mandatory certification for organic labeling in the domestic market is required for China, Japan,

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Philippines, South Korea, and Taiwan. Malaysia has revised its food labeling act with implementation scheduled for 2011. Import certification rules are pending for Malaysia, Philippines, India, and South Korea (for processed products). Mandatory certification for export is required in India and Japan. Exports from others can be certified to export requirements only.

Three countries (Malaysia, Thailand, and Laos) have government based certification programs, which are implemented at a nominal charge. Eight countries (China, India, Indonesia, Japan, South Korea, Philippines, Taiwan, and Thailand) have established accreditation or approval/registration of certification bodies. India and Japan have established Third Country recognition with the EU as well as recognition of their accreditation system by the USDA. Other established systems in the region have yet to facilitate export recognition. Most exports are certified by international certification bodies working in the regions accredited by international and EU based accreditation bodies or directly by the USDA.

Local certification bodies in the region, in general, are relatively small and face difficulties to compete with international certification bodies. A number of private and government linked certification bodies have teamed up to collaborate in inspection and certification under the guise of Certification Alliance (www.certificationalliance.org). The collaboration launched in 2008 now includes partners in nine countries in the region (i.e., China, Indonesia, Laos, Malaysia, Nepal, Philippines, Sri Lanka, South Korea, and Thailand).

Of those who have implemented import rules, only Taiwan has recognition agreements for imports. No recognition agreement has been reached between governments within the region. The working Group for Cooperation on Organic Labeling and Trade for Asia convened in 2010 within the GOMA Harmonization initiative will hopefully change this. The working group's agenda include developing a proposal for a Multi-Lateral Agreement for a cooperation framework on organic labeling and trade in the region by May 2012. The working group agreed to pursue both adoption of a common regional standard—Asian Regional Organic Standards (AROS)—and also equivalence of standards, facilitated by using the EquiTool.[1]

The Working Group opted for equivalence assessment through a common reference over developing one common requirement, the International Requirements for Organic Certification Bodies (IROCB).[2] Regarding supervision of organic certification, the Working Group agreed that it is not practical to develop a common supervision scheme and that equivalence among existing schemes, based on a peer review process, is the best option.

Development challenges: Collaboration is key

Organic sector development in the region is poised to turn a corner. Whilst it is possible for more affluent countries to offer public funding for conversion, sector development in developing economies will likely have to be market based. It has been noted in previous sum-

[1] EquiTool is a tool for determining equivalence between organic standards for organic production and processing, it was developed by the International Task Force on Harmonisation and Equivalence ITF, a joint initiative of the Food and Agriculture Organization FAO of the United Nations, the International Federation of Organic Agriculture Movements IFOAM and the United Nations Conference on Trade and Development UNCTAD. The tool was finalized in 2008. For more information see http://www.organic-world.net/itf.html?&L=2

[2] The International Requirements for Organic Certification Bodies IROCB is a set of performance requirements for organic certification. It was developed by the International Task Force on Harmonisation and Equivalence ITF. http://www.organic-world.net/itf.html?&L=2

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maries that the most critical challenge for sector development in the region is in the development and success of private sector, civil society, and public sector partnerships.

The need for collaboration is indeed at hand. The region as a whole only registered a few percent of the global organic market for food and beverage according to the Organic Monitor in this publication. This can only change if Asia links a Multi-Lateral Agreement on organic labeling and trade in the region. Sector development will be stymied unless sector actors and policy makers take opportunity to harness emerging market potential in the region through the GOMA initiative. If not by development discourse and collaboration between civil society, business and public sector, how else can the sector as a whole grow?

On the regulatory level, a diverse mix of scenarios, from highly developed regulatory frameworks to non-regulated developing markets, is expected to further develop in the region. For the markets there is a need for mechanisms to recognize certification of products from non-regulated markets in the region. In a good case scenario, where the regional Multi-Lateral Agreement includes all regulated markets in the region including a regional standard (AROS) that is approved by the EU for import, certification bodies in the region will only need three approvals (regional, EU and USA or Canada) for two sets of standards (AROS and Canada or US rules) to provide a One Stop certification for the Asia region, EU and North America. In a best case scenario, where the EU, Canada, and USA joins the recognition arrangement, certification bodies in all participating regions will only need one approval to provide a One Stop certification service for Asia, EU, and North America. Organic operators need only produce according to their national or regional standard.

Further reading

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Related tables

- Table 40: Organic agricultural land: The top ten countries per region 2009
- Table 42: Share of organic agricultural land: The top ten countries per region 2009
- Table 43: Growth of the organic agricultural land by region 1999-2009
- Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009
- Table 45: All organic land use types by region and country 2009
- Table 46: Organic producers and other operator types by country 2009
- Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

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Organic Agriculture in Armenia

Nune Darbinyan[1]

Recent important developments

Organic agriculture is part of Armenia's sustainable development concept and is a priority area in the government's agro-food policy. Organic farming is considered an excellent business opportunity for farmers and investors involved in agriculture and food production.

History

The discussion on organic agriculture among stakeholders started in 2002, coordinated at the time by the United States Department of Agriculture (USDA). These activities have continued under an FAO[2] and USAID[3]/DAI ASME[4] project. As a result, the Armenian Organic Agriculture Foundation was established as a platform. Several farmer associations included organic agriculture on their agendas and some of their members started to produce organically. Donors supported organic agriculture via projects and now the sector continues to develop largely independent of foreign funds.

Production data and operators

In Armenia the demand from processing companies for organic raw materials is the main factor for the development on a farm level, since there are no subsidies for organic farming by the state. In 2009, there were 1'100 hectares of certified areas, 600 hectares were agricultural land. The remaining areas are for wild collection and areas under conversion. There are about 1'000 beehives.

The production of fruits, berries, alfalfa, some grains, vegetables, and collection of wild species as well as beekeeping are the main organic agricultural activities. Further processing is based on the above mentioned raw materials. The main final products are juices, nectars, concentrates, purees, quick frozen products, and bread. Organic animal husbandry is seen as having high potential and is therefore high on the list of priorities for Armenian agriculture in state policies.

There were eight certified organic farms and six certified organic processing and import enterprises in Armenia in 2009. Many more farms are under conversion. The size of organic farms vary, typically from 5 to 120 hectares. Organic farms are either privately owned by farmers or individual farmers are part of an agricultural association. Farmers also have the possibility to work in community orchards as part of community development projects.

Key institutions

The main public agencies involved in organic agriculture are the Ministry of Agriculture, the Forest Agency, the Ministry of Nature Protection, the Agency for the Management of Natural Resource as well as the Ministry of Economy. The Ministry of Agriculture is in charge of developing policy and legislation on organic agriculture as well as for its enforcement.

[1] Dr. Nune Darbinyan, ECOGLOBE, Yerevan, Armenia, www.ecoglobe.am
[2] Food and Agriculture Organisation of the United Nations (FAO), www.fao.org
[3] United States Agency for International Development (USAID), www.usaid.com
[4] Armenia Small and Medium-Sized Enterprises Market Development, www.dai.com

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ECOGLOBE is a local organic certification body in Armenia. It implements organic certification under trade mark "Green Caucasus" for national, EU, and other export markets. ECOGLOBE has an alliance with its Georgian partner Caucascert via harmonized regional standards. Services of ECOGLOBE and the "Green Caucasus" system are accredited by DAkkS[1] according to EN45011 and EU regulations 834/2007 and 889/2008 . ECOGLOBE is also an Accredited Certifying Agent of the U.S. National Organic Program.

In addition, there are several NGOs in Armenia that promote and support organic agriculture.

Legislation

An organic law has been in force since 2009. The basis for the law is the Codex Alimentarius organic guidelines and the EU organic regulation. The scope of the law is broad and therefore requires further by-laws. However, stakeholders agreed that national legislation should be revised according to international developments and have requested that a National Organic Agriculture Plan be prepared.

Domestic market

A first organic consumer survey was conducted by the Armenian Organic Agriculture Foundation in 2005. In the same year, the first International Conference on Organic Agriculture was organized in Armenia by Fruitful Armenia, an NGO that promotes agribusiness and economic development in Armenia.

The state does not provide direct payments for organic farming, which may be the cause of the sector developing slower at farm level than is desired by stakeholders such as processors. This is seen as a problem since organic products are growing and demand may be difficult to meet if faster development does not occur.

The domestic market is still in the early stages of development, although in supermarkets locally produced organic bread, honey, herbal teas, and juices can be found.

Export market

The first exports of Armenian organic products started in 2008. The main exported organic products are fruit and berry products from production and wild collection, such as quick frozen juices, beverages, fruits in syrup (compotes). The main export markets are Russia and the European Union.

It is expected that from 2010 to 2012 new areas will complete their conversion and become certified organic, which will increase export volumes. It is expected that the markets will expand also to the USA, Canada, and Asia.

The processors are usually engaged in export/import, and the following processors are also the main traders: Tamara Fruit, Beer of Yerevan, SIS Natural, HAM, Biouniversal and some others.

Every year Armenian organic producers visit the organic fair BioFach in Germany and have an Armenian organic stand. In addition, trade shows such as Anuga, Green Week in Germany, Organic Marketing Forum in Poland, and All Things Organic in the USA are also attended.

[1] Deutsche Akkreditierungsstelle GmbH / Geman accreditation agency (DAkkS), www.dakks.de

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Imports

The import of organic ingredients, such as sugar is crucial as it is a key ingredient in many processed organic foods. There is a problem with unregulated organic imports in Armenia. This fact damages the reputation of organic food and farming locally. Some imports of teas, coffee, and body care products are carried out by the Center of Agricultural and Rural Development .

Education, extension, and training

Extension capacities are developing, and the State Agrarian University of Armenia (www.armagrar-uni.am) continues to collaborate with Kassel University to establish educational opportunities for teachers and researchers in Armenia and Germany. Currently, the university's dairy is being converted to organic.

The state extension employees and agricultural associations are involved in trainings provided by ECOGLOBE and others.

In addition, NGOs such as Shen and Green Lane give advice to communities and farmers.

Investment in the organic sector

The investment into agriculture is growing in many regions and includes both local and foreign private investments. Foreign investment is mainly sourced from the Armenian diaspora in Russia, USA, and Europe.

In 2009, the Government of Armenia provided a grant of 1 million US dollars to plant organic berry plantations in various Armenian regions. The grant was given to a processor to further invest in organic farming.

NGOs, in particular Shen together with Swiss donor support, implements community projects that have for example planted 160 hectares of organic orchards.

Donor support

Two prominent projects have recently been completed:

The project "Development of Biological Agriculture and Bio Certification in South Caucasus" was supported by SDC[1] and HEKS[2] (2002-2010) with technical assistance provided by GTZ[3]. The project "Organic Chain Development in Caucasus and Moldova" was supported by the Dutch Ministry of Foreign Affairs and Avalon, Netherlands (2005-2009).

The Food and Agriculture Organisation of the United Nations (FAO) has assisted the Armenian government with the elaboration of their organic law.

The United States Department of Agriculture (USDA), USAID,[4] FAO, and the United Nations Development Programme (UNDP)[5] have also supported several organic initiatives in Armenia.

In the framework of ongoing GTZ projects a focus is on public private partnership aimed at organic agriculture.

[1] Swiss Agency for Development and Cooperation, www.sdc.admin.ch
[2] HEKS is the aid organisation of the Protestant Churches of Switzerland, www.heks.ch
[3] German Technical Co-operation GTZ, www.gtz.de
[4] United States Agency for International Development (USAID), www.usaid.gov
[5] United Nations Development Programme (UNDP), www.undp.org

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Armenia is currently involved in a pilot project under the Green Economy Initiative[1] of the United Nations Environment Programme (UNEP) to re-orient the agricultural sector towards green jobs creation and a greener environment. IFOAM, Grolink[2], and ECOGLOBE have been delegated this project and will conduct a survey and prepare a national report with findings and recommendations for the sector's development.

[1] Green Economy Initiative, www.unep.org/greeneconomy
[2] Grolink, www.grolink.se

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Organic Agriculture Development in China

Yuhui Qiao[1]

Recent important developments

In 2005, the Chinese National Organic Product Standard (CNOPS) came into effect. Five years after implementation, some rules needed to be modified, and in spring 2010, experts were commissioned by the Certification and Accreditation Administration of the People's Republic of China (CNCA) to revise the standards. In 2010, the Organic Product Certification Management Rule and the Organic Products Certification Administrative Methods were also revised. The standard, rule and administrative methods will be issued and implemented in 2011. By the end of 2009, the China Organic Technical Committee (COTC) was set up, including 26 members from related stakeholders. The committee will keep track of development trends, standards, regulations and related technical issues as well as provide consultancy to the authorities about certification and surveillance, and provide technical support for international recognition of the organic certification system among other things. By the end of 2009, 22 local certifiers carried out certifications according to the CNOPS and four foreign certifiers (ECOCERT, IMO, BCS, and CERES) carried out international certification in China according to EU regulation on organic agriculture, the US National Organic Program (NOP) and/or the Japanese Organic Standard (JAS).

History

All forms of sustainable agriculture in China are based on 4'000 years of traditional practices such as crop rotation, compost application with organic matter recycling as well as some traditional ecological systems like mulberry trees combined with fish ponds, which help to maintain soil fertility and ecosystems. Due to the negative impact of the green revolution in the 1970s to 1980s, Chinese Ecological Agriculture (CEA) was promoted by the Chinese government not only as an evolution of traditional, biological, and organically based agricultural production systems, but also a new alternative to decades of traditional agricultural practices that provide a good basis for organic farming (Ye, 2002).

The development of certified organic agriculture in China was based completely on the concept, standards, organization, accreditation, monitoring, and trade developed in the Western countries. In 1990, for the first time, organic tea from Lin'an County of the Zhejiang Province was exported with SKAL certification of the Netherlands, which marked the launch of organic production in China (IFAD, 2005). Since then, organic agriculture in China has been booming with international production and trade in organic foods developing rapidly. The organic sector was consolidated with the issuing of national regulations for Certification and Accreditation in 2005, including a national logo for organic products. At the same time the domestic market is also booming.

Production

According to latest statistics, nearly 4'000 enterprises were certified by the end of 2009. Organic agricultural products are produced in two different areas. The main certified areas are located in the provinces of Northeast China including Heilongjiang, Jilin, Inner Mongo-

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lia, and Liaoning province. The main products produced and exported from these provinces are cereals, various types of bean and sunflower/pumpkin kernels. The developed coastal region including Shandong, Jiangsu, Beijing, Shanghai, Zhejiang and Fujiang provinces mainly produce organic vegetables for the domestic market and for export to Japan. Southeast China like Zhejiang, Jiangxi and Fujian is the main area for organic tea production. The processing products are mainly distributed in eastern developed areas such as Shanghai, Beijing, Zhejiang, Shandong, Jiangsu Province.

Key actors

In the early 1990s, the Nanjing Environment Research Institute under the State Environmental Protection Agency (SEPA) was the first agency to get involved in organic management and certification and set up the Organic Food Development Center (OFDC) in 1994. Since then, SEPA has been involved in the management of organic farming development in China. In 2003, the Certification and Accreditation Administration of the People's Republic of China (CNCA) replaced SEPA as the official authority on organic agriculture especially for the administration of certification and accreditation under the regulations of the People's Republic of China on certification and accreditation issued by the State Council. The Ministry of Agriculture (MOA) has also been a key player in the development of environmentally friendly agricultural production, which launched a campaign for green food and pollution free agricultural products in 1990s. In 2002 an organic certification body called China Organic Food Certification Center (COFCC) was set up to promote organic farming under the system of the agricultural authority. Currently, government bodies are becoming increasingly involved, and they have issued policies to promote the development of organic farming in China, such as the Ministry of Commerce (MOC), the Development and Reform Committee, and the Ministry of Science and Technology (MOST).

Market & trade

In China, the majority of organic products are exported to foreign markets, mainly to the EU, US, and Japanese markets; this is especially true for the years prior to 2005. Export products include beans, rice, tea, mushrooms, vegetables, processed oil, herbs among other products. Beans account for the largest export, with around 42 percent of the total export value, followed by cereals, nuts, vegetables, and tea. The products are exported to more than 20 countries according to 2009 statistics. According to the China Organic Food Certification Center (COFCC), the value of exported organic products increased from 0.3 million USD in 1995 to 350 million USD in 2004 accounting for 1.7 percent of the total value of Chinese agricultural exports (Li, 2006).

The Chinese domestic organic market was nearly non-existent in 2000, but it has grown fast since. Currently, most of the products sold in domestic markets are certified by COFCC and OFDC. Beijing is the largest organic market, accounting for one third of the total domestic market value, followed by some other mega-cities such as Shanghai, Guangzhou, Nanjing and Shenzhen. The main channel for organic food sales are specialized stores, supermarkets, and home delivery systems, which are new and have become popular over the last couple years. The main organic products found in domestic markets are cereals (rice or beans), meat, eggs, milk, vegetables, and oil for human consumption. The price of some organic products is up to three times that of the price of conventional products for cereals or meat, but for organic vegetables, the price can be as much as 10 times more expensive than conventional products (Zhao, 2007).

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Legislation

Since 2000, food safety and eco-labeled products are the major themes in delegates' proposals at every session of the People's Congress and Chinese People's Political Consultative Conference (CPPCC). A Law on Agricultural Food Safety has been issued by the Committee of the People's Congress and was implemented on November 1, 2006. Three relevant milestones for organic regulations have occurred recently. In 2001, SEPA issued Organic Food Certification and Management Measures. The National Regulation of People's Republic of China on Certification and Accreditation was put into effect on November 1, 2003. All certification and accreditation bodies including ISO 9000, ISO 14000, HACCP, as well as organic certifiers must follow this regulation in their certification activities (Zhou, 2005). In 2003, CNCA issued guidelines of accreditation for organic products certification agents. In 2005, the Chinese National Organic Product Standards were issued and effective on April 1st. At the same time, the Organic Product Certification Management Rule and Organic Products Certification Administrative Methods came into effect.

Figure 23: China: National logo for organic products

Government and international (development) support

There is some indication that the central government will continue its commitment to green food and pollution-free products and provide more financial incentives for farmers to switch from intensive (chemical input) agriculture. It is clear that the central government has a positive attitude towards organic agriculture, but there is no substantial investment yet. With the background of the central government support, several local and regional governments mainly in eastern and southern developed regions have expressed their commitment to support organic agriculture and some have invested in pilot projects and research. By now the support is mainly towards covering the cost of certification and support is low. Apart from the support for production and trade, also research and consultation on organic agriculture are receiving funds from donors/government. Most research conducted in organic agriculture has been funded by international organizations such as the International Fund for Agricultural Development (IFAD), the German Technical Cooperation (GTZ), the AMBER Foundation and Greenpeace, Asian Development Bank Institute (www.adbi.org), the International Centre of Research in Organic Food systems, Denmark (www.icrofs.org), Asialink[1], the Asia-Pacific Economic Cooperation (www.apec.org) among others. Since 2000, some projects also receive funds from domestic sources. These projects demonstrate the willingness of the state to support the further development of organic agriculture throughout China (Feng et al., 2005).

[1] The Asia Link was set up by the European Commission in 2002 to promote regional and multilateral networking between higher education institutions in Europe and developing countries in Asia. The programme aimed to develop new and existing partnerships between European and Asian universities. For more information see http://ec.europa.eu/europeaid/where/asia/regional-cooperation/higher-education/index_en.htm

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Research and Consulting

Although organic agriculture is developing fast in China, it is still facing some challenges in the research sector to provide substantial and practical support with technology and the way of thinking. During the last 30 years, research has mainly focused on eco-agriculture and green food, which is the key area in China for sustainable agriculture development plan. Until now there are no specific funding schemes for organic agriculture research in China. Since 2000, international cooperative programs provided financial support for research on China's organic agriculture mainly in the area of organic agriculture development and assessment. Later, research institutions and universities also started technological consulting and research programs with funds from enterprises, local government and a little part from central government with some regions compiling organic development planning by local governments at provincial and county level as well. At present, substantial and practical organic technology, policy decision making and marketing linkage are the key needs for the current organic research and development. There is no platform for organic research cooperation at national level; a national organic industry alliance is foreseen to be set up with the support from the Ministry of Science and Technology in the near future.

The government does not have a supporting policy to help farmers receive consulting, nor do they provide financial subsidies for consulting. This leads to an awkward situation that farmers wish to receive consulting yet consulting agencies cannot find any business. In China there are nearly 30 certification agencies but only about 5 professional organic agriculture consulting organizations from universities and institutes, with most of them focusing on establishing quality systems instead of technique consulting. At the same time, the local extension service has not yet played an important role in the organic farming technology development, it should be better promoted.

Constraints and Outlook

Chinese organic production has been promoted by the global trade and the growing market allows products to be certified in a short time. Although there is a quality control system to guarantee the conformity with the organic regulations, there is still a substantial lack of technologies and advice regarding pest and disease control as well soil fertility maintenance.

Currently, most organic food production in China is managed by smallholder farmer organizations. Although small households have been organized as grower groups by the company, the grower group is loose and most of them are not well organized and managed. Most of the farmers do not understand the essence of organic production. They only know that no chemical inputs are allowed in organic production, the economic aspects attract them to cooperate with the companies.

Food security is vital for China, research on scientific operation technology, reasonable management measures, standards and the demonstration of successful business model are necessary to be carried out as a support base to promote organic agriculture. The support style should be diversified including credit support, less tax for organic ventures especially for farmer cooperative organizations, subsidies for land conversion among other things.

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Links/Further reading

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Indonesia: Country Report

LIDYA ARIESUSANTY[1]

The development of organic agriculture in Indonesia began in the early 1980s, especially in Java. It started with initiatives from NGOs that cooperated with small farmers. Organic farming was seen as an alternative to the green revolution, which degraded the environment and required high production costs for the farmer. Organic farming was also carried out to support the farmers and to avoid dependence on external inputs. Currently 50'000 hectares or 0.2 percent of the country's agricultural land is under organic management.

The milestones of organic movement are as follows:

Figure 24: Indonesia: National logo for organic products

- 1984: Bina Sarana Bakti (BSB), the first organic training center in Indonesia, is established;
- 1990: A network between farmer and fisherman is formed in Jogjakarta, which helped initiate many local networks and actions, especially a local rice project;
- 1992: The first organic coffee is certified by SKAL in Gayo, Aceh;
- 1998: A first national networking scale is formed, The Indonesia Network of Organic Agriculture (Jaker-PO);
- 1999: The SAHANI cooperation, the first to carry out local direct marketing of organic products, is established in Jogjakarta;
- 2000: The staff of the Department of Agriculture and academics form MAPORINA (maporina.com) to improve farmer welfare and conservation through organic agriculture;
- 2001: The Department of Agriculture launches the "Go Organic 2010" program;
- 2002: The Indonesia Organic Alliance (IOA) is founded, formerly named BIOCert organization. In 2006, its name is changed to Indonesia Organic Alliance, which developed BIOCert Indonesia, the first national certification body. Also in 2002, the national standard for organic food products is launched (SNI 01-6729-2002);
- 2003: Indonesian Organic Producer Association (APOI) is founded;
- 2005: IOA launches the IOA organic agriculture standard, referring to the IFOAM Basic Standard and the Codex Alimentarius guidelines.

[1] Lydia Ariesusanty, Indonesia Organic Alliance IOA, Bogor, Indonesia, www.organicindonesia.org

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Production

The total organic agricultural land in Indonesia was more than 50'000 hectares in 2009 (including conversion areas of 4'096 hectares). In addition there were 16.3 hectares with PAMOR certification (a participatory guarantee system, more information below). Furthermore, there were 94 hectares of aquaculture and more than 32'000 hectares of wild collection areas. Apart from the certified area, 1'564 hectares were managed using organic methods by members of the Indonesia Organic Alliance, but without certification.

The most important crop is coffee. Among the arable crops, vegetables play a major role with more than 18'000 hectares. These are mainly grown for the domestic market.

Table 21: Indonesia: Use of agricultural land and crops grown 2009

Main land use	Main crop type	Organic agricultural land (ha)
Agricultural land and crops, no details	Agricultural land and crops, no details	9'013
Arable crops	Cereals	560
	Medicinal and aromatic plants	2'913
	Mushrooms	1
	Vegetables	92.3
Arable crops total		*21'524*
Permanent crops	Cocoa	2'386
	Coconut	936
	Coffee	31'580
	Fruit, tropical and subtropical	18
	Medicinal and aromatic plants, permanent	849
	Nuts	3'574
	Tea/mate	206
Permanent crops total		*39'549*
Total		**52'133**

Source: Indonesia Organic Alliance 2010

Domestic market and exports

The national certification bodies mainly certify for the domestic market. The highest domestic demand is for vegetables and rice. There are two types of organic markets in Indonesia, mainstream supermarkets and specialized organic stores that sell only organic products. One of the Indonesia Organic Alliance's activities is to facilitate market access for farmers through certification and to develop local market initiatives with the PAMOR system (see below). The local market initiatives aim to provide market access where local consumers can buy organic products they can trust.

Products for export are usually certified by international certification bodies, with organic coffee playing a major role with over 30'000 hectares.

Policy support

Observing the development of organic agriculture, the Agriculture Department established the Competent Authority of Organic Agriculture (OKPO), which is in charge of a number of activities. In 2007, the Department of Agriculture allocated a budget of four million US

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dollars for an organic program. Furthermore, in 2009, the ministry of Agriculture set a target to minimize the use of chemical fertilizer.

The "Go Organic 2010" program aims to make Indonesia one of the main organic food producers in the world. Though this goal is far from being achieved, the OKPO is actively supporting the development of organic food in Indonesia. It has also issued a number of decrees and rules to regulate the organic sector. In the area of standards, a number of guidelines were issued, including one for the Indonesian organic logo.

Certification

The National Standardization Institution (NSI) is in charge of carrying out accreditations and it has, for instance, issued a Guideline for Organic Food Certifiers. Currently, agreements with Japan (JAS) are underway.

Currently seven national organic certification bodies have OKPO accreditation: BIOCert, LeSOS, PERSADA, Mutu Agung Lestari (MAL), Sucofindo, INOFICE, and Sumbar. Apart from these, there are seven international certification bodies operating in Indonesia: IMO, Control Union, NAASA Australia, Naturland, Ecocert, Goca, and Australian Certified Organic.

One of the Indonesia Organic Alliance's activities is to facilitate market access for farmers through certification, and in 2008, it therefore created a Participatory Guarantee System for Indonesia, called PAMOR Indonesia. PAMOR is a guarantee system to improve socio-economic conditions enabling small-scale cultivation, and production, and marketing. PAMOR Indonesia is particularly dedicated to small-scale farmers.

Links

- www.organicindonesia.org
- www.jakerpo.org
- www.deptan.go.id
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Kazakhstan: Country Report

Evgeniy Klimov[1]

The agricultural sector in Kazakhstan

Agriculture is one of the key sectors of the Kazakhstan economy. As one of the priorities in development, agriculture has huge potential. The variety of climatic conditions in Kazakhstan allows nearly all temperate zone crops to be grown and for the enhancement of animal husbandry.

The total agricultural land in Kazakhstan amounts to 222.6 million hectares, of which 24 million hectares are arable land (10.8 percent), 5 million hectares are meadows (2.2 percent), and 189 million hectares are pastures (85 percent). Ten percent of the country's area is in forest-steppe and steppe zones; about 60 percent is in the semi-desert and desert zones; and about 5 percent is in mountainous areas. All agricultural zones in the country are characterized by low annual precipitation amounting to 150 to 320 millimeters per annum.

The lack of sea access creates significant difficulties for accessing external markets. The county is self-sufficient for most foodstuffs, except for such products as sugar, cooking oil, poultry meat, vegetables, and fruits during the off-season. The country is a major exporter of wheat and flour (one of the world's top ten exporters) and also has a significant share in total agricultural exports of the country with cotton (15 percent), leather and wool (25 percent).

Conditions for the organic sector development

The area of agricultural land under chemical treatment is about 160'000 hectares (i.e., only a small part of the agricultural area). In Kazakhstan the cultivation of genetically modified crops is banned. All this creates favorable conditions for the development of organic production and considerably facilitates the process of conversion.

Regulatory and legal framework, labeling, and certification

The environmental code (ST RK 1618-2007) stipulates the basic provisions for the labeling of "eco-products." "Eco-products" are defined by the code as products that have beneficial effects on the environment, public health, and biological resources. Ecologically clean production does not, however, correspond to international understanding of organic production.

In Kazakhstan, the prefix "bio" is used for food products enriched with vitamins and beneficial bacteria. "Organic" is a brand and not related to organic production. The use of the term "organic" is not regulated.

Currently Kazakhstan has no state certification system for organic products. There are also no local private certification companies. There are, however, three European certification companies in Kazakhstan accredited to certify products exported to international markets.

[1] Evgeniy Klimov, Director of the Organic Centre of Kazakhstan and director of the Foundation for Integration of Ecological Culture, 40, Orbita-1, Office 107 B, 050043 Almaty, Kazakhstan, Tel. +7 727 255 27 11 and +7 727 296 93 41, Fax +7 727 255 27 11, e-mail fiec@mail.ru, Internet www.organiccenter.kz

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Production and export of organic products in Kazakhstan

One of the three certifiers made data available for this article (Table 22). According to this certifier, the area under organic control is almost 135'000 hectares. Eight companies are certified and much of the organic production is geared for export.

Table 22: Kazakhstan: Organic production: Organic area, production, and exports

Products	Cultivated area (ha)	Harvested crops (product) in metric tons	Exported crops (in metric tons)
Soft Wheat	35'706	49'847	33'035
Durum wheat	8'298	14'936	3'067
Rice	2'862	10'017	500 (Cargo)
Rice chaff			1'300
Lucerne	2'291	22'818	
Rape	16'193	24'290	1'137
Rapeseed cake		10'000	9'727
Barley	620	1'240	
Oat	10	13	
Wine Grapes	20	90	
Sunflower	3'672	5'508	
Linen	5'304	7'426	4'590
Soy	6'528	18'278	3'037
Alcohol		100	
Vodka		250	

Source: Organic Centre of Kazakhstan (data from one certifier)

Internal Market

Despite several barriers such as lack of legislation and lack of public awareness, basic conditions for developing an internal market in Kazakhstan exist. This is shown by market research results carried out by the Organic Center of Kazakhstan showing a demand for organic products. The majority of the surveyed were prepared to pay 10 to 30 percent more for organic products, 20 percent of the people answered that they are even prepared to pay 50 percent more.

Information campaigns held by the Organic Center of Kazakhstan resulted in an increase in demand for organic products. Organic products have been sold in the past year and a half in supermarkets in Kazakhstan. As a consequence of the weak development of organic production in Kazakhstan thus far, all products are imported, mainly from the EU countries. Products such as juices, baby food, cosmetics, tea, and coffee are part of the product mix. In 2010 some supermarkets opened specialized stands for organic products. Currently, only one organic café and one specialized eco-shop exist.

For 2011, the marketing of local organic dairy products in the city of Almaty is planned, with the assistance of the Organic Center of Kazakhstan. If an appropriate legislative framework is developed, a dynamic growth of both production and consumption of organic products in Kazakhstan is expected.

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Background: The Organic Centre of Kazakhstan www.organiccenter.kz

The Organic Centre of Kazakhstan was founded in 2008 as a result of cooperation between the Foundation for Integration of Ecological Culture (FIEC, Kazakhstan) and the Agro Eco Louis Bolk Institute (The Netherlands) with financial support from the European Commission. The mission of the Centre is to strengthen the organic movement and assist in creating an enabling environment for the development of organic agriculture in Kazakhstan and Central Asia.

The Organic Centre is the only organization of this type in Kazakhstan. The organization smoothly combines the non-profit and commercial activities, and it helps develop the organic sector in the region combining dissemination of knowledge and experience with the provision of resources and creating a competitive market environment. The Organic Centre of Kazakhstan supports and develops a broad partner network in Central Asia and other regions of the world.

Currently, the Organic Centre is working on the following main tasks:

- Providing access to information to the interested parties through organization of information campaigns, trainings, and issuing publications;
- Assistance to farmers in transition to organic production through the implementation of training and consulting programs;
- Assistance in creation of a sustainable commodity organic chain for both domestic and international markets;
- Influencing the drafting process of the national legislation meeting the international organic standards;
- Cooperation with interested Central Asian, international, and foreign partners aimed at small business development in the field of organic agriculture;
- Information and methodological support to small and medium business support units.

Background: Third International Conference on organic sector development in Central/Eastern European and Central Asian countries

During September 2010, the 3rd International Conference on the organic sector development in Central/Eastern European and Central Asian countries took place and focussed on the relationship between organic agriculture, biodiversity, rural development, and ecotourism.

One hundred and twenty participants from 18 countries came to Astana, Kazakhstan, from September 17-18, 2010. More than half of the participants were from Central Asian countries. Furthermore, participants came from countries like Ukraine and Georgia, but also from Turkey and some Western European countries.

By holding the conference in Astana, the organizers deliberately decided to strengthen the movement in a region where organic is just emerging as a solution compared to Georgia and Ukraine, where the two previous conferences were held. In Kazakhstan, like in its neighboring countries, there are only very few certified organic farms and even fewer manufacturers. Markets are mostly export oriented as domestic markets are either non-existent or in the very early stages of development.

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A total of 43 speakers in ten parallel and six plenary sessions presented during the conference. Papers of all speakers compiled in English and Russian in the conference proceedings were given to the participants to support dissemination of knowledge. After two intensive days of exchange, discussion, and inspiring presentations, the 3rd international conference closed by presenting the conference declaration that was passed.

The conference was organized by the Foundation for Integration of Ecological Culture, Organic Services, Agro Eco Louis Bolk Institute, and the Organic Federation of Ukraine.

Links

- www.Conference.OrganicCenter.kz: Website of the Organic Conference in Kazakhstan
- OrganicCenter.kz: Website of the Organic Centre Kazakhstan
- Louisbolk.org: Website AgroEco Louis Bolk Institute
- FIEC.kz: Website Foundation for Integration of Ecological Culture (FIEC)

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South Korea: Country Report

Dong-Geun Choi[1]

Organic farming in Korea is generally categorized under the term "environmentally-friendly agriculture." This refers to every agricultural method used to protect the environment and produce safer agricultural products as compared to conventional methods of farming.

The first initiatives for organic agriculture in South Korea resulted from the spontaneous action of farmers and civil groups in the mid-1970s. Korean farmers became aware of the health and ecological hazards posed by the over-use of agro-chemicals and synthetic fertilizers and chose to convert to a safer mode of agriculture. Non-governmental organizations started to voice their concerns on the safety of conventional agricultural systems and the growing consumer awareness on food safety and the environment also fostered the growth of organic agriculture. Consumer organic cooperatives began to take root nationwide and the sale of organic products increased with direct sales between farmers and the consumers. In late 1994, the Korean government established the Environmental Agriculture Division, and this became the starting point for implementing government policies regarding environmentally-friendly agriculture, including organic farming, in South Korea.

At the end of 2009, environmentally friendly agriculture stood at 202'000 hectares, a clear indicator showing the emergence of this type of agriculture from a niche market to the mainstream market, with a market share of 12.2 percent for its products. It is expected that growth will continue in the future. Organic agriculture accounts currently for 13'343 hectares of agricultural land.

Government support

In order to support organic farmers, the government worked toward the amendment of the "Environmentally-friendly Agriculture Promotion Act" to establish the legal foundations for an official list of inputs, which are allowed in organic agriculture. As of July 2010, the system operated by the Rural Development Administration includes a list of about 1'067 organic materials permitted for use in the practice of organic agriculture, of which 675 are for soil improvement and 392 are for use in pest control.

As a part of Low Carbon-Green Growth policies, the government announced in April 2010 measures to promote organic processed foods and several actions with the aim to increase organic farmland to 50'000 hectares by 2015, expanding the organic food market and industry to 2 trillion won (approximately 1.4 billion euros), and raising the exports of organic food. The present certification system which is divided into organic agricultural products (applicable under the "Environmentally-friendly Agriculture Promotion Act") and processed food (applicable under the "Food Industry Promotion Act") will be unified by 2011. The government has announced measures for the amendment of the organic food certification system and will come up with regulations for equivalency for foreign organic certification systems and promote equivalency agreements.

[1] Dong-Geun Choi, Executive Director, Korean Federation of Sustainable Agriculture Organizations, 2F, 458-3 Deokso-ri Wabu-eup, Namyangju City, Gyeonggi Province, South Korea, e-mail kfsa@chol.com

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Production

In 2009, organic products accounted for 5 percent of the total production of environmentally-friendly products, no-pesticide products accounted for 37 percent, and low-pesticide products accounted for 58 percent. There were 9'403 organic farm households, with a cultivated area of 13'343 hectares and a production volume of 108'810 metric tons.

Table 23: South Korea: Organic agricultural production in 2007-2009

Category	2007	2008	2009	Share of respective Korean totals in 2009
Farm households	7'507	8'460	9'403	0.8 %
Farmland (ha)	9'729	12'033	13'343	0.8 %
Production (ton)	107'179	114'649	108'810	0.6 %

Source: National Agricultural Products Quality Management Service

According to the types of organically produced products in 2009, vegetables and grains took the biggest share (Table 24).

Table 24: South Korea: Production volume of organic products according to type in 2009

(in metric tons, share (%)

Category	Grain mt (%)	Fruit mt (%)	Vegetable mt (%)	Potato mt (%)	Crops for Special Use mt (%)	Total mt (%)
2009	29'861 (27.4)	7'216 (6.6)	54'068 (49.7)	4'307 (4.0)	13'358 (12.3)	108'810 (100.0)

Source: National Agricultural Products Quality Management Service

The production of organic livestock exceeded 10'000 metric tons in 2008, driven by the rapid growth of dairy products (see Table 25). Organic pork and organic chicken did not record high increases, but organic beef dramatically increased to 423 metric tons in 2009. This is due in part to the increase in the introduction of the resource-circulation type of organic agriculture (combination of organic agriculture and organic husbandry) in rural communities.

Table 25: South Korea: Organic animal husbandry according to type in 2009

in metric tons

Category	Beef	Pork	Chicken	Egg	Milk	Others	Total
2008	13	144	134	793	10'123	-	11'207
2009	423	124	149	529	9'270	585	11'080

Source: National Agricultural Products Quality Management Service

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The market

Organic agricultural products show a higher rate of direct sales than environmentally-friendly products. Major sales channels are consumer cooperatives, large retail shops (shopping malls, department stores, large supermarkets, etc.), specialized organic shops (largely based on franchise contracts), local agricultural cooperatives, internet shopping malls, internet websites, direct sales, school meals, and wholesale markets.

Of the total amount of sales of organic organic products, direct sales amounted to 10 to 15 percent while sales through producer groups and large retail shops took up 40 to 50 percent. Sales through consumer cooperatives like *Hansalim* which take pre-orders and make home deliveries or through their own shops, was at 15 to 20 percent and sales through specialized organic shops 20 to 25 percent. Organic agricultural products sold in the wholesale markets reached 0.6 percent (650 metric tons in 2009, compared to 364 metric tons in 2008, and 369 metric tons in 2007).

The domestic market of organic agricultural products was 188.5 billion won[1] as of 2008, and showed an increase of 30.1 percent annually. Processed organic foods recorded 215.8 billion won, showing a growth rate of 23.3 percent.

Because of the increasing demand, imports are playing an increasingly important role.

Table 26: South Korea: Development of the domestic market for organic food
in billion won 2006-2008

Category	2006	2007	2008	Annual Growth Rate
Organic agricultural products	111.4	142.7	188.5	0.301
Organic processed food	141.9	171.9	215.8	0.233
Total	253.3	314.6	404.3	0.263

Source: National Agricultural Products Quality Management Service

Table 27: South Korea: Imports of organic primary products according to country
(metric tons)

Country	2006 (mt)	2007 (mt)	2008 (mt)
China	3'919	5'467	4'020
USA	15		
Australia	21	195	458
Kyrgyzstan	1'235	709	1'010
Philippines	729	2'356	2'185
New Zealand	924	706	420
Colombia		103	17
Canada		306	690
Mexico			265
Total	6'843	9'842	9'063

Source: Korea Food & Drug Administration 2009, provided by Jennifer Chang

[1] 1 Korean won = 0.00063 Euros average exchange rate 2008. Source: www.oanda.com/lang/de/currency/average

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Table 28: South Korea: Imports of processed organic products* (2001 to 2008)

Year	Volume (metric tons)	Main Countries
2001	746	USA, NZ, Japan, France
2002	1'102	Germany, USA, Japan, Austria, France
2003	1'819	USA, Germany, England, France, Japan
2004	4'674	USA, Germany, France, England, Japan
2005	7'469	USA, France, Italy, Germany, Austria
2006	11'469	USA, Austria, France, Italy, Germany
2007	24'793	USA, France, Germany
2008	18'028	USA, France, Austria, Germany

Source: Korea Food & Drug Administration 2009
*Including products with organic ingredients

Symposia and other Events in 2010

The Korean Association of Organic Agriculture hosted a symposium in commemoration of its 20th anniversary under the theme of Current Status and Future of Organic Agriculture, and the 17th IFOAM Organic World Congress Korea Organizing Committee also hosted a symposium on small-holders and weed control in late September 2010.

Outlook

With the increase in government support for organic farming, it is expected that both the domestic market and the land under organic management be increased substantially in the future. The organic movements also expect a major boost for the development of new organic sectors like organic tea and aquaculture, with the hosting of the 17th Organic World Congress in late September in 2011.

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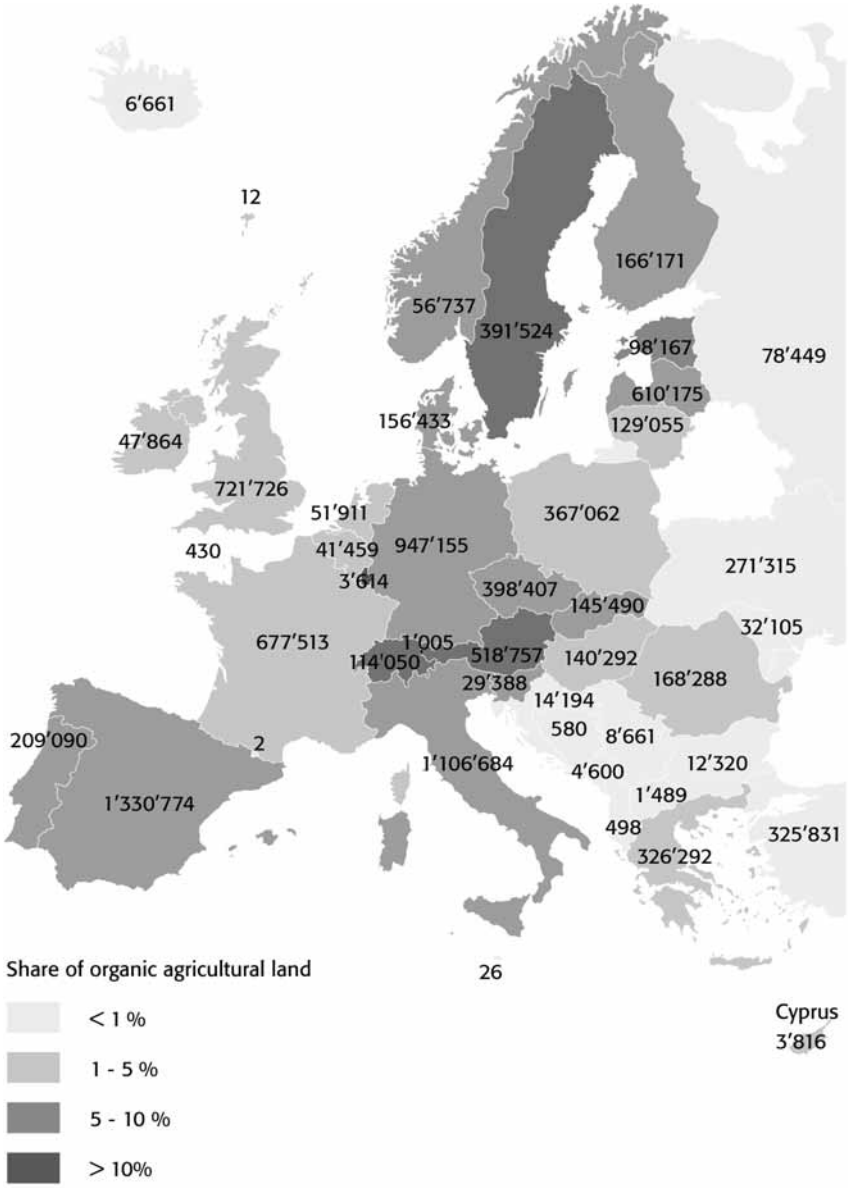
Europe



Map 4: Organic agriculture in the countries of Europe 2009

Compiled by FiBL and IFOAM 2011; based on information from the private organic sector, certifiers, governments, Eurostat and the Mediterranean Organic Agriculture Network.
For detailed data sources see annex, page 233.

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Organic Agriculture in Europe: Overview

HELGA WILLER[1]

Production

Organic agricultural land has exceeded the nine million hectare mark in 2009; 9.3 million hectares were under organic agricultural management in Europe constituting 1.9 percent of the agricultural area. Compared with 2000 (4.5 million hectares), the organic land has doubled and growth between 2008 and 2009 was considerably higher than in previous years. The area increased by almost one million hectares or twelve percent.

In the European Union there were 8.4 million hectares in 2009, constituting 4.7 percent of the agricultural land. Compared with 2000 (4.3 million hectares) the organic area also almost doubled (including all 27 Member States). The new Member States showed a considerably faster growth; the organic area increased by 400 percent from 0.34 million hectares in 2000 to 1.7 million hectares in 2009 (FiBL 2010).

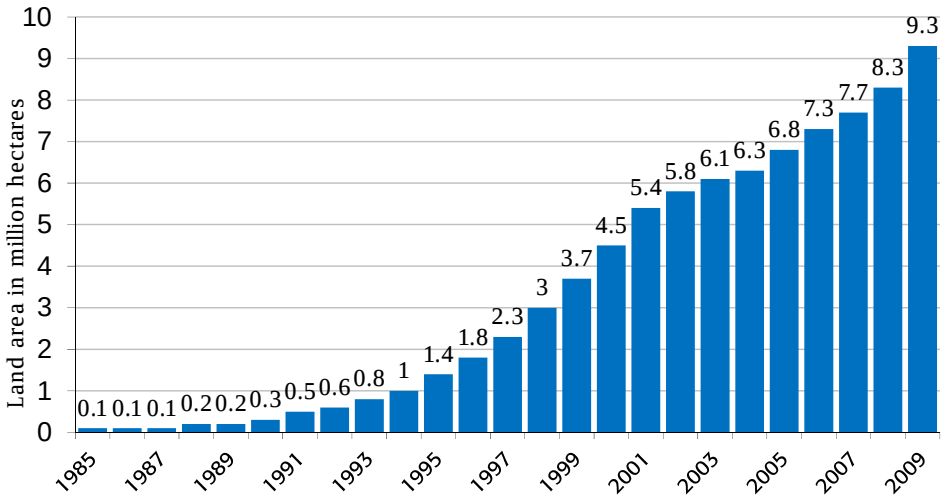

Figure 25: Europe: Development of organic agriculture land 1985 to 2009

Source: Aberystwyth University and FiBL 1985-2011

In addition to agricultural land, there are other certified areas such as wild collection, aquaculture, and grazing land outside the agricultural land and forests (FiBL 2010). Finland has the largest organic wild collection area in the world with 7.8 million hectares of mainly wild berries.

There are significant differences among the individual countries regarding the extent of organic agricultural land. There are five countries now that have more than ten percent

[1] Dr. Helga Willer, Research Institute of Organic Agriculture FiBL, Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

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organic land (2009): Liechtenstein (26.9 percent), Austria (18.5 percent), Sweden (12.6 percent), Switzerland (10.8 percent) and Estonia (10.5 percent). Germany, the largest market for organic food in Europe and the second largest in the world, has a 5.6 percent share of organic land.

Operators

In 2009, there were approximately 260'000 organic producers in Europe, compared with 150'000 in 2000. In addition to the producers there are almost 35'000 processors and 2'500 importers.

Land use

In 2009, 40 percent of all farmland was used for arable crops (3.7 million hectares) and 45 percent was grassland (4.2 million hectares), with eleven percent (one million hectares) being used to grow permanent crops.[1] Growth was noted for all crop groups.

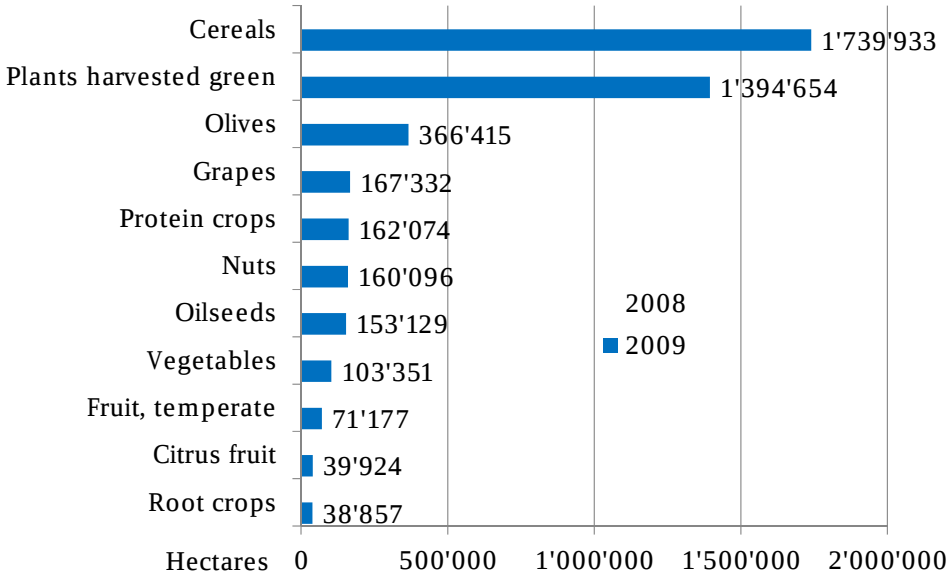

Figure 26: Europe: Development of key crop groups; 2008 and 2009 compared

Source: FiBL Survey based on national ministry sources, Eurostat and information of the private sector

Spain (760'000 hectares), Germany (514'000 hectares) and the United Kingdom (496'000 hectares) have the most permanent **grassland/grazing areas**. To convert extensively used areas and grassland to organic farming requires relatively few changes in production and few investments. Therefore, grasslands are higher in organic farming than in conventional farming, where it accounts to about one third of the agricultural land (Schaack 2010). The key **arable crop** group is cereals: Nineteen percent of the European organic area is cereal production, amounting to 1.7 million hectares in total (1.5 million in the EU). Most cereals were grown in Italy (251'000 hectares), Germany (209'000 hectares), Spain (184'000) and Ukraine (134'000 hectares). Organic vegetables were grown on 103'000 hectares in 2009;

[1] Figures are rounded, for details please check tables in the annex.

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key producing countries were Italy (30'000 hectares), the United Kingdom (16'000 hectares) and Germany (11'800 hectares). Eleven percent of the organically managed land was used for **permanent crops** in 2009; most of this land is either olives (366'000 hectares), grapes (167'000 hectares) and nuts (160'000 hectares). The organic grape area increased by 30 percent compared with 2008. Most of the increase occurred in Spain, which is now the country in Europe with the largest organic grape area (Italy previously held this position).

EU Regulation on organic farming

Organic farming has had legal protection since the beginning of the 1990s with Council Regulation (EEC) No 2092/91. On July 20, 2007, the new organic regulation was published, '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,' and it came into force on January 1, 2009. The new rules include the mandatory use of the EU organic logo on pre-packaged organic products, and it can be accompanied by national or private logos.

Figure 27: European Union: New logo for organic products

One of the key developments of the European Organic Sector in 2010 was the launch of the new EU Logo for organic products. Since July 1, 2010, the organic logo of the EU has been obligatory on all pre-packaged organic products that have been produced in any of the EU Member States and meet the necessary standards. The "Euro-leaf" design shows the EU stars in the shape of a leaf against a green background conveying the message: Nature and Europe.

Government support

Switzerland and Denmark had introduced support schemes already in the 1980s, and in 1989 Germany introduced support for organic farming under what is known as the extensification program. With the EU's agri-environmental program, this support was extended to all EU countries (since 1992). The type and amount of support provided within this program varies within the different EU Member States. Also, non-EU countries such as Switzerland and Norway have similar support schemes.

Currently 26 countries and regions in Europe have an action plan (see article by Gonzalvez et al., page 160), many of them with quantitative targets. Austria, for instance, aims to have 20 percent organically managed agricultural land by the end of 2010—an aim that was almost achieved by mid 2010 when 19.5 percent of the agricultural land was organic.

In 2004 the European Action Plan for organic food and farming was launched. The information campaign proposed in the plan (Action 1, a multi-annual EU-wide information and promotion campaign to inform consumers, public institution canteens, schools, and other key actors) was implemented in July 2008. The campaign homepage offers a wide-range of information on organic agriculture and numerous tools (e.g., pictures, flyers) to support the promotion of organic agriculture.

Development and potential of the European organic market

In spite of the financial crisis, the European organic market continued to grow in 2009, even though a lower growth rated than previously. The turnover of organic food and drink

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(general retail sales, specialized shops, farmer to consumer direct sales, etc.) was approximately 18.4 billion euros in 2009. Germany had 5.8 billion euros, followed by France with 3 billion euros, then the UK with 2.1 billion and Italy with 1.5 billion.

In 2009 the highest market shares—with more than five percent of the total market—were reached in Denmark (7.2 percent), Austria (6 percent) and Switzerland (5.2 percent). While organic land has expanded rapidly in many new EU Member States, as well as in candidate and potential EU candidate countries, consumption levels have remained very low in these countries and the organic market accounts for less than one percent of the total food market. For more details see article by Schaack et al. (p. 156) in this volume.

Research

Today, organic farming research is substantially funded under national research programs or national organic action plans, as well as through European projects.[1] Even though no figures for all European countries are available, it is known that the funds of the eleven countries that are part of the ERA-Net project CORE Organic[2] amounted to more than 60 million euros annually in 2006 (Lange et al. 2007).

Since the mid-1990s, several organic farming research projects have been funded under the framework programs of the European Commission. Furthermore, there are several European projects that do not have organic farming as their focus but carried out research related to organic farming in the framework of individual work packages. In the Seventh Framework Programme, launched in 2008, there are currently five projects focusing on organic farming that are being funded.[3]

- CERTCOST (www.certcost.eu): Economic analysis of certification systems for organic food and farming;
- LowInputBreeds (www.lowinputbreeds.org): Development of integrated livestock breeding and management strategies to improve animal health, product quality and performance in European organic and "low input" milk, meat and egg production;
- Organic Sensory Information System (OSIS) (ww.ecropolis.eu): Documentation of sensory properties through testing and consumer research for the organic industry (www.ecropolis.eu);
- Indicators for biodiversity in organic and low-input farming systems (BioBio, www.biobio-indicator.wur.nl/UK)
- CORE Organic II - Coordination of European Transnational Research in Organic Food and Farming Systems (www.coreorganic2.org)

CORE Organic II started in April 2010 and it builds on the outcome of the first CORE Organic—successfully completed in 2007—with the aim of building an effective and sustainable transnational research program. It has 21 partner countries. CORE Organic's goal is to identify common research priorities for the organic sector where a transnational approach

[1] For a list of projects funded by the European Commission see www.organic-europe.net/europe_eu/research-euprojects.asp.
[2] CORE Organic (Co-ordination of European Transnational Research in Organic Food and Farming); Internet www.coreorganic.org. CORE Organic is a three-year coordination action in organic food and farming (2004 to 2007). The overall objective was to gather a critical mass and enhance quality, relevance and utilization of resources in European research in organic food and farming. It is succeeded by the CORE Organic II project.
[3] For a list of EU-funded organic farming projects see the Organic-Research.org homepage at www.organic-research.org/european-projects.html.

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gives added value, launch at least two transnational calls, initiate research projects, organize project monitoring and dissemination of results, and to consider funding models. A call for proposals was launched late summer 2010.

In February 2010 the Strategic Research Agenda (SRA), the second major document of the Technology Platform TP Organics (www.tporganics.eu)[1] was finalized, underlining research priorities and a number of suggestions for research projects. Currently the implementation action plan of the TP Organics is in preparation. The Implementation Action Plan will explain how the research priorities and research topics identified in the Strategic Research Agenda can be implemented, with a particular focus on funding instruments, research methods, and communication of results.

Links

- www.ifoam-eu.org: European Union Group of the International Federation of Organic Agriculture Movements - IFOAM EU Group
- www.ifoam.org: International Federation of Organic Agriculture Movements (IFOAM)
- europa.eu.int/comm/agriculture/qual/organic/index_en.htm: The European Commission's Organic farming homepage
- ec.europa.eu/Eurostat: Eurostat: Organic farming data: ec.europa.eu/eurostat > Statistics > Statistics A-Z > Agriculture > Data > Main tables > Organic Farming
- www.fibl.org: FiBL – Research Institute of Organic Agriculture
- www.organic-europe.net: Organic Europe, maintained by FiBL: Country reports, address database, statistics
- www.organic-world.net
- www.organic-world.net: Organic World (maintained by FiBL): Statistics, country information, news
- www.organic-market.info: Organic Market Info: Market News and updates: www.organic-market.info
- www.tporganics.eu: Technology Platform TP Organics

Further reading

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Van Osch et al. (2008): Specialised Organic Retail Report. Practical Compendium of the Organic Market in 27 European Countries. ORA, Vienna, EKOZEPT, Montpellier/Freising, Biovista, Ettlingen

[1] On December 2, 2008, the Technology Platform (TP) Organics (www.tporganics.eu) was launched with a public presentation in Brussels. The platform joins the efforts of industry and civil society in defining organic research priorities and defending them vis-à-vis policy-makers. The TP Organic 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).

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Related tables

- Table 40: Organic agricultural land: The top ten countries per region 2009
- Table 42: Share of organic agricultural land: The top ten countries per region 2009
- Table 43: Growth of the organic agricultural land by region 1999-2009
- Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009
- Table 45: All organic land use types by region and country 2009
- Table 46: Organic producers and other operator types by country 2009
- Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

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The Organic Market in Europe

DIANA SCHAACK,[1] HELGA WILLER,[2] AND SUSANNE PADEL[3]

In 2009 the organic market continued to grow in Europe, particularly in France and Sweden. While some countries were affected by the economic crisis which lead to stagnation (for example in Germany and the Czech Republic) or even decline (such as in the United Kingdom and Ireland) of the organic market, most European countries grew at single-digit rates. Initial estimates indicate that in 2010 the markets grew at a higher rate again.

The European Market in 2009

The total value of the European organic market in 2009 is estimated at approximately 18.4 billion euros.

The largest markets were in Germany, France, the UK, and Italy. Denmark, Austria, and Switzerland had the highest market shares and the countries with the highest per capita spending were Switzerland, Denmark, and Austria (see Table 29; Figure 28 and Figure 29).

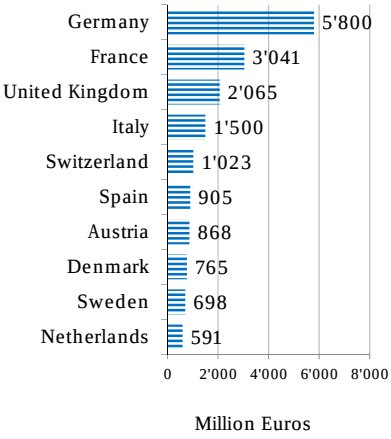

Figure 28: Europe: The ten countries with the largest markets for organic food and beverages 2009

Source: Survey of FiBL, AMI and ORC

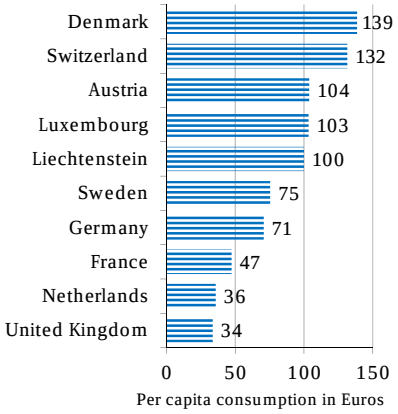

Figure 29: Europe: The ten countries with the highest per-capita consumption levels 2009

Source: Survey of FiBL, AMI and ORC

[1] Diana Schaack, Agrarmarkt Informations-Gesellschaft mbH, Dreizehnmorgenweg 10, 53175 Bonn, Germany, www.marktundpreis.de
[2] Dr. Helga Willer, Research Institute of Organic Agriculture FiBL, Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org
[3] Dr. Susanne Padel, The Organic Research Centre, Elm Farm, Hamstead Marshall, Newbury, Berkshire RG20 0HR, United Kingdom, www.organicresearchcentre.com

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In 2009 sales grew slower in many countries than in previous years. It is likely that the economic crisis affected the organic market to a certain extent, but differently in different countries. In the United Kingdom the market reduced in value by 12.9 percent, demand decreased considerably, and retailers delisted many products. The market also stagnated in Germany between 2008 and 2009, but continued to grow in France, Switzerland, and Sweden. In 2009 consumers remained cautious in terms of their spending.

Market values were also affected by decreasing prices for many products, but at the same time sales volumes were rising. In Germany—one of the few countries where prices are published regularly—producer prices and consumer prices decreased for many products, and processors and traders had the option to go for cheaper alternatives when choosing their raw materials.

When comparing the 2009 European estimate with the published data for 2008 (FiBL&AMI 2010), the following major data revisions need to be noted. The Italian market had been overestimated in the last years and this has been corrected, also for the historical figures. Furthermore a detailed study revealed a new (2009) value for the Spanish domestic market, far higher than what was communicated previously and upward corrections have also been published for Estonia and Norway. The overall European estimate for 2008 is lower than the figure previously published. Taking these corrections for 2008 into account, the European market grew by approximately four to five percent between 2008 and 2009. This illustrates that the comparability of retail sales estimates between countries and over time remains very problematic. The availability of accurate statistics on the organic market across Europe remains limited and different methods are used that can change over time—even within one country—leading to the correction of estimates.

Trends in 2010

With the improvement of economic conditions in general, the situation has changed in 2010 with organic products showing notable increases in sales again. In 2010 prices rose considerably in the second half of the year after a lower harvest for many crops, so it is likely that the limiting factor for market growth could again be supply. In some countries short supply for cereals, some vegetables, potatoes, and dairy products is expected for the first half of 2011. Overall it is estimated that market development in 2010 across Europe resulted in single digit growth rate for sales volumes and a bigger growth rate for the sales volumes.[1]

For 2011 market actors expect an ongoing mainly single-digit growth of the organic market in many countries.

Data on international trade

Data on imports and exports, on sales through catering and within Europe remain very limited. According to a recent study of the European Commission (2010), intra-EU trade and imports from third countries represent an important part of domestically consumed organic products in most Member States of the European Union (see also van Osch et al 2008). Dependence on imports (whether from EU Member States or third countries) seems to be particularly high in the new Member States (for which estimates are available), with the exception of Poland and the Czech Republic. This can be attributed to a lack of certified

[1] Figures for 2010 will be available in the first half of 2011. They will be reported at www.organic-world.net.

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processing facilities so that organic processed food products consumed in the new Member States are quite often imported from the original EU-15 Member States.

Germany is reported to be in deficient since 2006 in poultry, fruits and vegetables, potatoes, and compound feed and since 2007 for dairy products (butter) and cereals (Hamm, 2009, quoted by the European Commission 2010). In France, according to Agence Bio (2010), in 2009, 38 percent of consumed organic food products (in value) were imported: one-third were tropical products, one-third were products for which France has no clear competitive advantage (aquaculture, soya, Mediterranean products, among other products), and one-third products for which France has competitive advantage, but lacks temporarily (cereals, milk, meat, fruit and vegetables).

Table 29: The European market for organic food 2009

	Total sales [Mio €]	Growth 2008/09 [%]	€/person	Share of total market [%]	Catering [Mio €]	Exports [Mio €]
Country						
Austria	868	5%	104	6%	51	66
Belgium	350	15%	32	1.5%		
Bulgaria (2008)	5		1			
Croatia	37		8	0.8%		3
Cyprus (2006)	2		2			
Czech Republic	68		7	0.7%		4
Denmark	765	6%	139	7.2%	67	100
Estonia	12	1%	9	1.0%		
Finland	75	1%	14	1.0%		14
France	3'041	19%	47	1.9%		
Germany	5'800	0%	71	3.4%	300	
Greece (2006)	58		5			
Hungary	25		3	0.3%	0.1	20
Ireland	113		24			
Italy	1'500	9%	25			
Liechtenstein	3		100			
Luxembourg	51		103	3.3% (2006)		
Montenegro (2008)	0.01		0.1			
Netherlands	591	10%	36	2.3%	56	525 (2007)
Norway	114	10%	24	1.3%		
Poland (2006)	50		1	0.1% (2006)		
Portugal (2006)	70		7	0.5%		
Romania (2006)	3		0.1			
Russian Federation	65		0.5			4
Slovakia (2008)	4		1			
Slovenia	34		17	1.0%	0.05	0.1
Spain	905		20	0.97%		454

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	Total sales [Mio €]	Growth 2008/09 [%]	€/person	Share of total market [%]	Catering [Mio €]	Exports [Mio €]
Sweden	698	16%	75	4.0%		
Switzerland	1'023	7%	132	5.2%		
Turkey	4		0.1			20
Ukraine	1		0.03			
United Kingdom	2'065	-13%	34		19	

Source: Survey of FiBL, AMI and ORC among a number of data sources; see below
Blank fields: No data available

Note on tables 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 2009 average exchange rate from the European Central Bank.[1]

Austria: ARGE Bioumsätze; Belgium: Departement Landbouw en Visserij; Bulgaria (data 2008): Bioselena; Croatia: Darko Znaor/Ecologica; Cyprus (data 2006): Ekozept; Czech Republic: Green Marketing; Denmark: Organic Denmark/Statistics Denmark/LF; Estonia: Estonian Organic Farming Foundation EOFF; Finland: Organic Food Finland; France: Agence bio; Germany: AMI, a`verdis (for Catering); Greece (data 2006): Ekozept; Hungary: Survey of Biokorsar; Ireland: Bord Bia; Italy: AssoBio; Liechtenstein: KBA; Luxembourg: BIOGROS; Montenegro (2006): Production of Organic Food; Netherlands: Biologica, for export data (2007): LEI; Norway: SLF; Poland (Data 2006): Ekozept; Portugal: Ekozept; Romania (data 2006): Ekoconnect; Russian Federation: Eco-Control survey; Slovakia (data 2008): Green Marketing; Slovenia: Institute of Sustainable Development; Spain: Ministerio de Medio Ambiente, Medio Rural y Marino; Sweden: SBC; Switzerland: BIO SUISSE; Turkey : MARA; Ukraine : OFU; United Kingdom: Soil Association. For details on the data sources see annex.

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European Commission (2010): An Analysis of the EU Organic Sector. European Commission, Directorate-General for Agriculture and Rural Development. An analysis of the EU organic sector. Brussels. Available at http://ec.europa.eu/agriculture/analysis/markets/organic_2010_en.pdf
FiBL & AMI (2010): The European Market for Organic Food 2009. Table. In: Willer/Kilcher (eds.) (2010): The World of Organic Agriculture. Statistics and Emerging Trends 2010. IFOAM, Bonn, and FiBL, Frick
Ministerio de Medio Ambiente, Medio Rural y Marino 2010: Valor y Volumen de los productos ecologicos de origen nacional en la industria agroalimentaria espanola, Madrid 2010
van Osch et al /Ekozept (2008): The Specilialised Organic Retail Report Europe 2008, Freising

[1] Average annual exchange rate of the Euro; see http://sdw.ecb.europa.eu/browse.do?node=2018794

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Organic Action Plans in Europe in 2010

VICTOR GONZÁLVEZ[1], OTTO SCHMID[2] AND HELGA WILLER[3]

Introduction

Organic action plans are usually the result of many years of dialogue and meetings among the organic movement and the industry with the explicit purpose of encouraging the development of a national or regional action plan that reflects the passions, concerns, hopes, and visions of this diverse and thriving community.

An organic action plan is not a scientific or peer-reviewed exercise but rather an organizing effort to engage more effectively in reaching organic agriculture's potential. The real measures of progress on organic food and agriculture will only be as good as our collective abilities to articulate clear goals, benchmarks, and timelines. The central challenge is how best to continue the growth of organic agriculture while preserving organic integrity and retaining farmer and customer confidence.

Background

Since the late 1980s, organic farming development in the European Union (EU) has been stimulated mainly by two factors related to strong consumer demand and policy support. The first factor is the EU Regulation 2092/91 (now replaced by EC Regulation 834/2007 and EC Regulation 889/2008 and updates), which is the EU-wide legal basis for organic farming. The second factor is the area payments in the framework of EU rural development programs (EC Regulations 2078/92 and 1257/1999).

Organic action plans provide a framework for integrating policies and measures in order to encourage organic sector development. Thus action plans serve as a strategic instrument for governments to achieve policy goals, particularly when multiple policy areas (such as agriculture, environment, and trade) and different levels of policy formulation are to be integrated. Action plans can avoid contradictory policies whilst also ensuring that the different measures are complementary.

Furthermore, action plans allow specific bottlenecks to be better addressed as well as enabling broad stakeholder involvement in policy formulation. They also provide the opportunity to establish forums to develop a strategic vision of the organic movement.

Finally we can say that organic action plans formulated by governmental administrations can encourage politicians to implement action to develop the organic sector.

Framework

Whereas in the 1990s there were only few countries with an organic action plan (Denmark and Sweden), in the 2000s in many countries, in particular most EU countries, action plans were launched. In December 2008 there were 27 organic action plans being implemented in

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[2] Otto Schmid, Research Institute of Organic Agriculture FiBL, Ackerstrasse, CH-5070 Frick, Internet www.fibl.org
[3] Dr. Helga Willer, Research Institute of Organic Agriculture FiBL, Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

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Europe: 17 at national level and 10 at regional level (Gonzalvez 2009). New organic action plans were approved in 2009 in Croatia at national and at regional level (Dalmatia). In other countries after the implementation and finalization of the first and second organic action plan, no new one has been approved. In other countries, for instance Portugal, action plans were formulated but never implemented. The same has happened in some regions like Galicia in Spain. The European Action plan for organic farming published in 2004 (EC 2004) is formally still in force, it remains unclear if a prolongation is foreseen.

For this article, the table with existing information compiled by the European funded ORGAP Project (www.orgap.org, see Gonzálvez, 2009), was updated with the support of experts and the IFOAM EU Group (www.ifoam-eu.org). This was followed by a short e-mail survey sent to selected IFOAM-EU members. To complete the information an internet search was conducted. The summarized results are presented in Table 30.

The number of organic action plans has slightly decreased from the last review at the end of 2008. There were 27 organic action plans in Europe in place in 2008, and now there are 26. Mainly Eastern and accession countries have implemented organic action plans. Currently in Central and Northern Europe only a few new organic action plans have been worked out or updated. There is a tendency to let market forces and rural development schemes support organic farming—in many cases the Rural Development Programs have been used to formulate some sort of organic action plan. Organic action plans are increasing at the regional level in particular. In some countries, like England, organic action plans have achieved an increase in production and domestic consumption.

Final remarks

Although no prolongation of the EU organic action plan has been decided, national organic action plans are still an effective mechanism to develop organic food and farming by coordinating rural and general public policies. Particularly at national and regional level, organic action plans can complement several Rural Development Program measures, for example, by promoting domestic consumption of organic produce or by supporting organic farmers in marketing their produce.

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Table 30: Organic action plans in Europe 2010

Country	Name of Action Plan	Period /funds	Quantitative targets	Qualitative targets
Albania[1]	Albanian agricultural policy, includes an organic action plan and two forms of support	2007-2013		Contributions to cover 50 % certification costs & financial support for olive fly traps
Austria[2]	Action Plan Organic Agriculture (Aktionsprogramm Biologische Landwirtschaft)[3]	2011-2013	20 % share of organically cultivated land by 2013	no funds mentioned; goal is the same as before
Belgium – Flemish part	Flemish Action plan for organic farming 2008-2012 (Strategisch Plan Biologische Landbouw 2008-2012)[4]	2008-2012	No quantitative targets	No new information
Bosnia and Herzegovina	Currently no Organic Action plan in place			
Bulgaria	National Plan for Development of Organic Farming in Bulgaria 2007-2013[5]	2007-2013	8 % organic land area by 2013	
Croatia - Dalmatia region (completed August 2009)[6]	Action Plan for Development of Organic Agriculture and Food Production in Dalmatia (Akcijski plan za razvoj ekološke poljoprivrede i proizvodnje hrane u Dalmaciji)	2009-2013 (funding to be defined)	5 % organic land area by 201 50% of the organic inspection and certification costs of Dalmatian organic producers covered from 2010	Development of regional market for organic products. Information and promotional campaign including internet site; Designing of standards for eco-shops, eco-restaurants, eco holiday farms and/or eco-hotels using national eco-tourism logo Sales of organic products to public kitchens in towns & municipalities
Czech Republic[7]	Czech Republic Action Plan for the Development of organic agriculture[8]	2010-2015	15% of total agricultural land; 20% of arable land within organically managed land; 3% of totally processed food; 60% of organic prod-	stable, in a long-time well-performing and competitive market; significant growth of organic production; effective

[1] Information provided by E. Leksinaj, Tirana University, Tirana, Albania
[2] Information provided by Thomas Fertl, BioAustria, Linz, Austria,
[3] lebensmittel.lebensministerium.at/filemanager/download/15083/
[4] http://lv.vlaanderen.be/nlapps/docs/default.asp?fid=92
[5] http://www.mzh.government.bg/Articles/661/Files/NOFAP_FINAL_en%5B1%5D633523253955781250.pdf
[6] Information provided by Ranko Tadic, Eko Liburnia, Rijeka, Croatia
[7] Information provided K Dytrtová, Bioinstitut, Olomoucm Czech Republic, www.bioinstitut.cz
[8] The Czech action plan is available at www.agronavigator.cz/ekozem/attachments/AP_angl.pdf

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Country	Name of Action Plan	Period /funds	Quantitative targets	Qualitative targets
			ucts on the organic market; 20% yearly growth of organic food consumption	connection of farming, and processing
Cyprus[1]	No action plan in force			
Denmark[2]	At the moment, a new political plan for organic farming is being developed[3]			
Estonia[4]	Estonian Organic Farming Action Plan 2007-2013	2007-2013	120'000 ha organic land 2000 organic farms 3% domestic organic products (from total food market)	All measures in 6 topics (production; processing; marketing; training, advise & info; research; legislation & certification) , with submeasures
Finland[5]	National organic strategy	2007-2015	6 % of organic in shops, 10 % in export, annual growth 15 % in private professional kitchens.	
France	Organic agriculture until 2012: New measures to triple the organic surface[6] (AB : Horizon 2012: De nouvelles measures pour tripler les surfaces)	2008-2012	6 % organic land by 2012 20 % organic products in government canteens	
Germany	Federal Organic Farming Scheme[7] (Bundesprogamm Ökologischer Landbau)	Phase 2: 2008-2015	20 % organic land area, no target year	
Greece[8]	Currently no organic action plan in force			

[1] Information provided by Glykerios Glykeriou, e-mail glykerios@greennetwork.com.cy. Green Network Trading Ltd. 4C Asfaleias, Lakatamia,POBox 12070, 2340 Lefkosia, Cyprus

[2] Information provided by Kirsten Lund Jensen, Landbrug & Fødevarer, Copenhagen, Denmark, www.lf.dk/Oekologi.aspx

[3] In Denmark, there is currently no action plan in force, but the organic sector is supported through numerous government measures such as direct payments in the framework of the European Union's rural development programs, research funding, and the promotion of the government organic seal. At the moment, a new political plan for organic farming is being developed. The government aims to at least double the organic agricultural area within the next 10 years. The increase in production also needs to be driven by a corresponding increase in demand. Therefore the new plan is expected to continue the strategy of using both demand and supply side measures.

[4] Information provided by Merit Mikk, Estonian Organic Farming Foundation, Tartu, Estonia

[5] Elisa Niemi, Finnish Organic Association http://www.luomu-liitto.fi

[6] The French action plan is available on http://agriculture.gouv.fr/agriculture-biologique-horizon

[7] http://www.bundesprogramm.de

[8] The information was provided by staff of DIO, Athens, Greece, www.dionet.gr

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Country	Name of Action Plan	Period /funds	Quantitative targets	Qualitative targets
Iceland	Currently no organic action plan in force			
Ireland	Organic Farming Action Plan 2008-2012[1]	2008-2012	5 % organic land area by 2012	
Italy	Italian National Action Plan for OA & organic products (Piano d'Azione nazionale per l'AB e i Prodotti Biologici)[2].	2005 with follow-up measures in next years	No quantitative target	
Latvia	Organic Action plan development programme by the Latvian Organic Agriculture Association	2007-2013		
Liechtenstein	Currently no organic action plan in force			
Lithuania[3]	No follow up organic action plan in place	2006	(Previous action plan: 5 % total area under organic production)	
Luxemburg	Currently no organic action plan in force, but under discussion			
Macedonia, FYROM	Currently no organic action plan in force			
Malta[4]	Currently no organic action plan in force			
Moldova	Agricultural and Food Sector Development Strategy[5]	2006-2015	Doubling of organic production & tripling certified farmed area	
Montenegro	No information available			
Netherlands	Policy document on organic agriculture. (Beleidsnota biologischeland-bouwketen 2008 – 2011. Biologisch in verbinding, perspectief op groei)[6]	2008-2011 49.2 Mio € Previous plans: 2005-2007 and 2001-2004	10 % Annual growth of in consumer spending 5 % Annual growth of organic land area, 10 % of research funds for policy support research allocated to OF	

[1] http://iofga.org/wp-content/uploads/OrganicFarmingActionPlan.pdf
[2] http://www.inea.it/statigeneralibio/normativa/Piano_Azione_nazionale.pdf
[3] Contact: Gerda Abraityte, Sector of Organic Products, The center of Agricultural Information and Rural Business, LT-53361 Akademija,Kaunas district, Lithuania: see also paper by Gerda Abraityte on http://www.pesticidi.net/pdf/Organic_market_in_Lithuania.pdf
[4] Information provided by the Mediterranean Organic Network MOAN, c/o IAM Bari, Bari, Italy
[5] http://www.worldbank.org/eca/pubs/envint/Volume%20II/English/Review%20MOL-final.pdf
[6] http://library.wur.nl/WebQuery/biola/lang/1862044

Willer, H. and Kilcher, L. (Eds.) (2011):
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Country	Name of Action Plan	Period /funds	Quantitative targets	Qualitative targets
Norway[1]	Action plan to achieve 15 % organic by 2020 Handlingsplan for å nå målet om 15 pst. økologisk produksjonog forbruk i 2020Økonomisk, agronomisk – økologisk[2]	2010-2020	15 % by 2020	
Poland [3]	Polish Action plan for organic farming Plan Działań dla Żywności Ekologicznej i Rolnictwa w Polscena lata 2007 – 2013 [4]	2007-2013, no specific funds	100% increase of organic farms, share of organic farms in total number of farms on EU level - 3%	No qualitative targets
Portugal[5]	(Draft) National Action Plan for the Development of Organic Agriculture (still not implemented)	2004-2007 Total funding predicted was 20 Million €	- increase organic surface from 3.2% to 7% - increase share organic farmers from 0.25% to 1%	- increase share of organic products in the market - increase number and diversity of organic crops - reduce the costs and end prices of products - increase the number of companies operating in the sector
Russian Federation	No information available			
Serbia	National Action Plan for the Development of Organic Farming [6]	2011-2014	50'000 ha by 2014	
Slovak Republic	Action Plan for Organic Agriculture[7]	2011-2013 (Previous 2006-2010)	5 % of land area for agriculture 30 % of certified organic products (domestic market	
Slovenia	Development of organic farming in Slovenia (Načrt dolgoročnega razvoja ekološkega kmetijstva Plan of Long-Term	2005-2015	20 % organic land area 10 % of organic consumption produced nationally, 10 % market share 15 % organic farms Tripling of organic tourist	

[1] Information provided by Gerald Altena, Debio, Bjørkelangen, Norweay, www.debio.no

[2] http://www.regjeringen.no/upload/LMD/Vedlegg/Brosjyrer_veiledere_rapporter/Handlingsplan_okologisk_200109.pdf

[3] Information provided by Dorota Metera, BIOEKSPERT Sp. z o.o., Warszawa , Poland, www.bioekspert.waw.pl/

[4] www.minrol.gov.pl/pol/content/download/20815/109351/file/Plan_dzia%C5%82a%C5%84_dla_RE_2007-2013.pdf

[5] Contact: Irina Maia, Interbio. Interprofesional Association of organic agriculture, interbio.designetico.org)

[6] http://www.minpolj.gov.rs/download/Organic%20Agriculture%20in%20Serbia1.pdf

[7] http://www.mpsr.sk/en/index.php?start&language=en&navID=27

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Country	Name of Action Plan	Period /funds	Quantitative targets	Qualitative targets
	v Sloveniji		farms	
Spain[1]	Integral Action Plan for Organic Agriculture 2007-2010 (Plan Integral de Actuaciones para el Fomento de la AE)[2]	Previous 2007-2010 35.8 million €	No quantitative target	Some actions p to 2011 as theaction pland started late in 2007
Spain – Andalusia[3]	II Andalusian Action Plan for Organic Farming (II Plan Andaluz de AE)[4]	2007-2013 384.1 Million Previous 2002-2006	No quantitative target	No quantitative targets
Spain – Asturias [5]	II Organic Farming Action Plan (Plan estratégico de Agricultura Ecológica)	2010-2013 24 Million € (Previous : 2007-2009; 14.7 million €)	No quantitative target (5.8 Million in 2011)	Not defined, the plan will be launched in 2011
Spain Castilla-La Mancha[6]	Action Plan of Organic Farming (Plan estratégico de la Agricultura Ecológica 2007 - 2011[7])	2007-2011 29.1 million €	No quantitative target	
Spain – Catalonia [8]	Action plan for organic food and farming (Plan de acción de alimentación y agricultura ecológicas[9])	2008-2012 36.8 million €	30% increase of organic area by 2012 50 % increase of organic consumption	No qualitative targets

[1] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[2] http://www.mapa.es/es/alimentacion/pags/ecologica/plan_integral.htm

[3] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[4] http://www.juntadeandalucia.es/agriculturaypesca/portal/export/sites/default/comun/galerias/galeriaDescargas/cap/produccion-ecologica/libro_plan_ae.pdf

[5] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[6] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[7] http://www.jccm.es/cs/ContentServer/index/plan1212675892212pl/1193045270019.html?site=CastillaLaMancha

[8] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[9] http://www20.gencat.cat/portal/site/DAR/menuitem.eac543e46c6fe3edc9877a10b0c0e1a0/?vgnextoid=5deaef99d7708110VgnVCM1000008d0c1e0aRCRD&vgnextchannel=5deaef99d7708110VgnVCM1000008d0c1e0aRCRD&newLang=es_ES

Willer, H. and Kilcher, L. (Eds.) (2011):
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Country	Name of Action Plan	Period /funds	Quantitative targets	Qualitative targets
Spain – Madrid Community[1]	Rural Development Plan and Organic production (Plan de Desarrollo Rural[2])	2007-1013 4.9 million €	Doubling current surface arriving to 10000 ha	Re-directed to RDP
Spain – Extremadura [3]	Organic action Plan to support and to promote organic agrofood products (Plan estratégico de apoyo y fomento de productos agroalimentarios ecológicos[4])	2008-2013 3.1 million €	No quantitative target	Very low level on implementation
Spain –Galicia[5]	Development Plan for Organic Farming (Plan de Desenvolvemento da Agricultura Ecolóxica)	2008-2013 39.4 million €	No quantitative target	Not implemented by now
Spain – Basque Country[6]	Organic Farming Plan Plan de Agricultura Ecológica del País Vasco)	2009-2012 1.1 million €	No quantitative targets	
Sweden	Action plan Regeringens skrivelse 2005/06:88: Ekologisk produktion och konsumtion – Mål och inriktning till 2010 [7]	2006- 2010 No information about prolongation	20 % organic land area by 2010 25 % food in public canteens are organic	
Switzerland[8]	Currently no organic action plan in place			
Turkey	No organic action plan in place, but a organic sector proposal[9]		3 % of the total agricultural area to be organic in 2013	
Ukraine	No information available			
UK – England[10]	Defra 'Action Plan to Develop Organic Food and Farming Two Years On	Until 2010	70 % organic consumption produced nationally by 2010	Target achieved

[1] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[2] See www.mapa.es/desarrollo/pags/programacion/programas/Madrid/PDR_madrid_v323nov09.pdf

[3] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[4] See http://eci.juntaextremadura.net

[5] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[6] Information provided by Victor Gonzálvez, Sociedad Española de Agricultura Ecológica (SEAE). Camí del Port, S/N. Km 1. Edif ECA Pat Int 1, Apdo 397, 46470 Catarroja, Spain

[7] http://www.regeringen.se/content/1/c6/06/04/96/07b5265d.pdf

[8] Hans Ramseier, Bio Suisse, Basel, Switzerland, www.bio-suisse.ch

[9] organicconference.elkana.org.ge/files/conf/g/1.pdf and www.agr.hr/jcea/issues/jcea8-2/pdf/jcea82-12.pdf

[10] Prof. Dr. Lampkin, Organic Research Centre Elm Farm, Newbury, Berkshire RG20 0HR, UK, www.organicresearchcentre.com

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Country	Name of Action Plan	Period /funds	Quantitative targets	Qualitative targets
	The plan ended in 2007 and was not replaced.			
UK – Wales	Second Organic Action Plan for Wales 2005 – 2010[1].	2005-2010	10 -15 % organic land area by 2010	A new plan is under development
UK – Scotland	New Scottish Organic Action Plan.	2011-2017 Previous: prolonged from 2007	In discussion	
UK – Northern Ireland	Northern Ireland: Action Plan 2006.[2] Not replaced.	Previous 2006-2008	No quantitative target	

[1] http://www.organiccentrewales.org.uk/strategy-actionplans.php
[2] http://www.dardni.gov.uk/minutes-of-organic-action-plan-group-northern-ireland-meetings

Willer, H. and Kilcher, L. (Eds.) (2011):
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Switzerland: Country Report[1]

LUKAS KILCHER[2]

History

Switzerland is a pioneering country in organic farming and has remained so until today in several areas. Biodynamic agriculture in Switzerland has a history going back to the 1930s. The farmers' movement initiated by Hans Müller became the nucleus of the organic farming movement in the 1940s. There were already 500 to 1'000 organic farms in the 1960s and 1970s. In 1973 the Research Institute of Organic Agriculture (FiBL) was founded, which has since become one of the major organic farming research centres worldwide. In 1977 FiBL organized the 1st International Scientific Conference "Towards Sustainable Agriculture" of the International Federation of Organic Agriculture Movements (IFOAM). In 1980 Swiss organic farmers' associations founded the umbrella organisation Bio Suisse.

Production

Organic agriculture has undergone a dynamic development in Switzerland over the last 20 years. During the boom years between 1990 and 2003, the number of organic farms increased from 800 to 6'281. After these years of rapid expansion, the number of organic farms is tending towards a slight decrease; from 2003 to 2009, the number of organic farms decreased to slightly less than 6'000. Nevertheless, the area of agricultural land being farmed according to organic standards has remained more or less stable since 2007. By 2009 it had reached 120'000 hectares (including alpine grazing areas) according to Bio Suisse, constituting 10.8 percent of the agricultural area of 1.06 million hectares.

Market

The Swiss organic market continued its long running trend for significant growth without any backlash from the economic crisis. According to data from Bio Suisse, the turnover has increased from 1.29 billion Swiss Francs in 2007 to 1.5 billion in 2009. Since 1999 (654 million Swiss Francs), the organic market has, on average, grown more than 10 percent annually. The growth was seven percent from 2008 to 2009.

Together with Denmark, Austria, and Liechtenstein, Switzerland belongs to the countries with the largest number of consumers purchasing organic products—in 2009 5.2 percent of total food and beverage sales were organic (2008: 4.9 percent). The growth of the share of organic products in the market underlines the increasing interest of consumers for organic food.

Per capita, Swiss consumers purchased over 200 Swiss Francs worth of organic products in 2009. Seventy-three percent of the organic products were sold by the two leading food chains. Coop with 764 million Swiss Francs (49.4 percent share of the total Swiss organic market) and Migros with 356 million Swiss Francs (23.6 percent market share). Direct

[1] This chapter is a summary of the Switzerland country report of the following manual: Lukas Kilcher, Helga Willer, Beate Huber, Claudia Frieden, Res Schmutz, Otto Schmid (2011): The Organic Market in Europe: 3rd edition, expected for Spring 2011, SIPPO, Zürich and FiBL, Frick

[2] Lukas Kilcher, Head of Communications, Research Institute of Organic Agriculture FiBL, Ackerstrasse, 5070 Frick, Switzerland, www.fibl.org

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
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marketing (on farm shops, street markets, etc.) again performed with a strong growth of 9.6 percent compared to the previous year: in 2009, 80 million Swiss Francs where achieved with direct marketing, which constitutes a share of 5.2 percent of the total Swiss organic market. Relatively new is the entering of organic products through discount-supermarkets with a low price strategy. However, the share of the discounters is still modest (2.6 percent of the total Swiss organic market).

Fresh organic products such as eggs, bread, and vegetables are the leading part of the organic turnover. All organic product groups were growing steadily in previous years. Especially significant is the growth in meat and fish as well as convenience products. A detailed look at the retail sector shows that the market shares of organic products are continuously increasing. This is remarkable, as the sales prices for many organic products decreased in the last years. That means that in spite of the price-pressure a higher turnover was generated especially with fresh products. Details of the organic growth per product group are shown in Table 31.

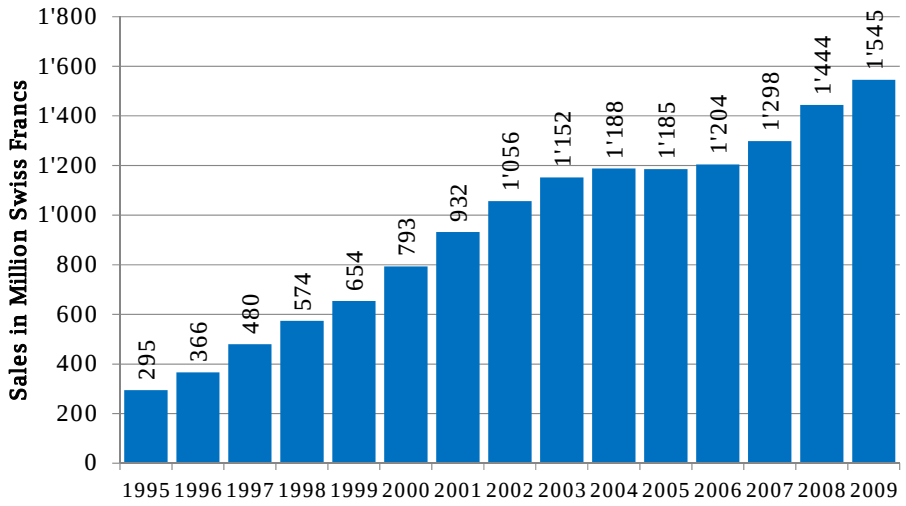

Figure 30:Switzerland: Development of the organic market 1995-2009

Source: Bio Suisse 2010

Natural factors limit the options for Swiss production and restrict domestic supply. Ever more imports are flowing into Switzerland due to the high level of demand. The import share differs in size depending on the product group. Cross-border trade in organic products, imports of organically produced food and beverages into Switzerland are constantly rising due to the strong surge in demand. This is especially true for:

- durum wheat, bread and fodder cereals, soya, rice;y
- citrus fruits, tropical fruits both fresh and processed (dried fruyits, juices, etc.);
- coffee, cocoa, tea, spices, herbs and many other products that can't be produced in Switzerland for climatic reasons;
- vegetables and fruits in the counter-season.

Willer, H. and Kilcher, L. (Eds.) (2011):
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Table 31: Switzerland: Sales of organic products, market shares and growth per product group 2009

	Turnover Mio Swiss Francs	Market Share (%)	Growth 2008 to 2009 (increase in %)
Total (excluding specialized shops, direct marketing and discounters)	1108.9	5.2	+.5.21
Fresh products, total	728.4	6.5	+4.9
Packed products, total	380.5	3.7	+5.7
Milk products	167.0	8.6	+0.5
Bread	141.1	16.0	+4.4
Vegetables	134.5	10.7	+3.0
Fruits	89.7	7.0	+4.6
Convenience products	87.2	7.6	+8.3
Meat	82.1	1.9	+16.8
Fish	23.7	6.0	+34.6
Eggs	43.9	17.2	+11.0

Source: BioSuisse 2010

Key institutions/organizations

The Swiss organic sector is shaped by many private initiatives under the governmental supervision of the Federal Office of Agriculture (FOAG). Ninety to ninety-five percent of Swiss organic farmers belong to the umbrella organization **Bio Suisse**, the association of Swiss organic farming movements, founded in 1981. Bio Suisse set out the first standards for organic cultivation and established the Bud label trademark. Nowadays the Bud label is the most widely known organic label amongst consumers in Switzerland.

The **Swiss Demeter Association** is the organization of the biodynamic farmers. Demeter standards have the same requirements as Bio Suisse and in some respects go even further, such as the use of biodynamic preparations (www.demeter.net).

Investments of Swiss trade partners in organic market development is a key success factor of the sector. The **supermarket chains** Coop and Migros launched their organic programs. While Coop Naturaplan program is using the Bio Suisse label, Migros created their own organic label.

Switzerland is one of the pioneering countries of organic farming **research.** In the beginning, research was carried out by organic farming pioneers and private institutions such as the Goetheanum, Möschberg Centre, and the Research Institute of Organic Agriculture FiBL. In the 1990s Agroscope, the Swiss federal agricultural research stations, became involved in organic research topics as well. Today, the government funds research on organic farming both at FiBL and the state institutes with about 7.5 million euros per year. FiBL is one of the largest and most well-known competence centers for organic agriculture and sustainability in the world. It is a private trust and has been active in organic farming research and dissemination since 1973 (www.fibl.org).

[1] Overall market growth for all marketing channels was 7 percent in 2009 (Bio Suisse 2010).

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In Switzerland the main organic **certification bodies** are bio.inspecta and Bio Test Agro. For organic processing and import operators, the main certifiers are: bio.inspecta, IMO (Institute for Market Ecology), OIC (Inter-Cantonal Organism of Certification) and Procert Safety AG. A regularly updated list of the Swiss certification bodies is available at www.blw.admin.ch/themen/00013/00085/00092/index.html?lang=en

Legislation

Swiss organic products must comply with the requirements set out in the Swiss Organic Farming Ordinance (SR 910.18 and SR 910.181), which came into force in 1998. It lays down the basic requirements that a product must fulfill in order to be designated organic. The Swiss Organic Farming Ordinance is applicable to unprocessed and processed agricultural crop, animal breeding and animal products and feed material. The Ordinance on Organic Farming is not applied to aquaculture. For these products, the Swiss Federal Office for Agriculture does not provide individual import authorizations. This is a major difference to the EU regulation, which includes aquaculture since July 2010. However, the Swiss Organic Farming Ordinance is equivalent with the EU regulation.

Where products are labeled as organic, however, they must conform to the relevant provisions of the Organic Farming Ordinance. In Switzerland at present there is no government label for organic products, but there are various private labeling schemes.

Previous to the Swiss Organic Farming Ordinance coming into force, the standards that were applied to the production and marketing of organic products were primarily those set by Bio Suisse. Producers and traders that have been certified as conforming to the Bio Suisse Standards may identify their products using the Bud label after signing a contract with Bio Suisse. The Bud label is very common on the Swiss market and over 90 percent of all Swiss organic farmers are members of Bio Suisse.

Outlook

The excellent sales figures from the last years lead in many cases to supply bottlenecks. And there is no sign of a decreased growth rate of the Swiss organic market. There were not enough organic eggs, for example. Organic cereals are chronically scarce. Many fruits, vegetables, potatoes, berries, herbs, rapeseed-oil, and pork meat were not readily available on the market and organic sales could have been considerably higher with improved availability of these products. The organic market needs more organic farmers, especially when considering the future growth. Bio Suisse communicated that "a couple hundred new organic farms are needed." Bio Suisse therefore launched, with the support of FiBL, an initiative to promote organic farming amongst conventional farmers in order to motivate them to conversion. An important tool for this initiative is improved market coordination and promotion of products that are particularly scarce.

Links/Further reading

http://www.organic-world.net/switzerland.html#c760

Lukas Kilcher, Helga Willer, Beate Huber, Claudia Frieden, Res Schmutz, Otto Schmid (2011): The Organic Market in Europe: 3rd edition, expected for Spring 2011, SIPPO, Zürich and FiBL, Frick

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Ukraine: Country Report

NATALIE PROKOPCHUK[1] AND TOBIAS EISENRING[2]

Introduction

The rapid and sustained growth of the international organic trade represents a good opportunity for Ukraine to improve the economic situation of the population in the rural areas and develop the organic sector in Ukraine. During the last years the potential for organic products from Ukraine has not only awakened international buyers, but also stimulated domestic market growth. Ukraine with its 46 million citizens has considerable potential for organic production, processing, trade, and consumption. Currently the assortment of organic products is still very poor. Traders are therefore prompted to import organic products. Ukraine produces mainly organic raw materials for export and the domestic market.

Production Statistics

Currently no official statistics on organic farming exist, and it is currently not possible to provide a complete picture based on certifier information. Available data are based on a mix of estimates, certifiers, and company data.

The following organic products are certified in Ukraine: cereals/grain crops, leguminous crops, oil crops, vegetables, watermelons, melons, pumpkins, fruits, berries, grapes, essential oil plants, meat, milk, mushrooms, nuts, and honey. Processed products that are certified include: grains, flakes, jams, syrups, juices, oil, flour, and canned vegetables.

Organic stakeholders in Ukraine

The Ukrainian organic movement is represented by a number of stakeholders: the only Ukrainian certification body "Organic Standard," the association of organic production stakeholders "BIOLan Ukraine," the Organic Federation of Ukraine, the association of producers of organic products "Pure Flora," the textile supplier "Organic Era," the information center "Green Dossier" as well as other organisations. Organic producers, processors, traders, and shops play an important role in pushing forward organic market growth in Ukraine. The majority of organic stakeholders actively participate in the working group on the organic law draft of the Ministry of Agricultural Policy of Ukraine.

Several international donors support the organic sector, including the Swiss State Secretariat of Economic Affairs SECO (see box for project description) and the Swiss Agency for Development and Cooperation (SDC). To promote knowledge transfer and awareness, the above mentioned donors organise trainings, seminars, conferences, round tables, press conferences, press tours, fairs of organic products, promotion campaigns, among other events The organic sector in Ukraine is furthermore supported by various international donors from Canada (CIDA), Germany (GTZ) and Netherlands (Ministry of Agriculture and Environment). Multinational donors such as the United Nations Environment Programme

[1] Natalie Prokopchuk, Swiss-Ukrainian Project "Organic Certification and Market Development in Ukraine," Research Institute of Organic Agriculture FiBL 16, Nezalezhnosti Boulevard, Kyiv 07400, Ukraine, e-mail natalie.prokopchuk@fibl.org, www.fibl.org
[2] Tobias Eisenring, Research Institute of Organic Agriculture FiBL, Ackerstrasse, 5070 Frick, Switzerland, e-mail tobais.eisenring@fibl.org, www.fibl.org

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(UNEP) and the International Finance Cooperation (IFC) have announced their interest to support organic production in the country.

Policy dialogue and legal framework

Despite considerable work of organic stakeholders, the organic law in Ukraine has not yet been approved by the parliament.

In October 2010, the Ministry of Agricultural Policy of Ukraine announced the support of organic production development as one of the priority areas of the Ukrainian agri-industrial sector for attracting international technical assistance.

The Ukrainian government and central state authorities are now waiting for the organic law to come into force to regulate and control the organic sector in Ukraine. Some Ukrainian regional and district administrations promote organic production and organic producers; some of them have approved regional programs for the development of organic agriculture.

Organic certification and standards in Ukraine

Food quality certification in Ukraine is under the control of state companies, they are accredited by the National Accreditation Agency of Ukraine. There are 17 private certification bodies[1] working in Ukraine, one of them is Ukrainian owned (the certification body Organic Standard), the others are foreign.

The most popular standard among organic operators in Ukraine is the European Council Regulation (EC) 834/2007. It is used for export access and also for the domestic market. Also important for organic production certification in Ukraine are the private Bio Suisse standards, the Japanese Agricultural Standards (JAS), the US National Organic Program (NOP) and the BIOLan Standards. The BIOLan Standards is the private standard of organic farming and labelling of the association of the organic production stakeholders "BIOLan Ukraine." It is mostly used by organic producers and processors for marketing organic products domestically.

Domestic market

There is a growing interest and demand for organic products, demonstrated for instance by the fact that in 2010 a leading Ukrainian organic processor announced a hundred percent growth of their organic product sales compared with 2009.

Nevertheless, not all producers sell their products on the organic export and/or domestic market. The reasons are related to the lack of quality and that some producers think that once products are certified organic, the quality is not crucial for selling on the market. Furthermore, it is a fact that there is a lack of well-trained marketing specialists and organic agriculture consultants, and that companies are struggling with the implementation of experts' advice.

Ukrainian organic products available on the shelves of stores are for instance: grains/cereals, flakes, jams, syrups, juice, dried fruits, pork, milk, honey, and oils. A lot of

[1] Certification bodies working in Ukraine are: Organic Standard (headquartered in Ukraine), Institute for Marketecology (IMO, Switzerland), ETKO (Turkey), Control Union (Netherlands), Lacon (Germany), ABCert (Germany), EcoCert (France), BCS Oko-Garantie (Germany), Austria Bio Garantie (Austria), ICEA (Italy), Ceres (Germany), SuoleSalute (Italy), Biokontroll (Hungary), SGS (Switzerland), Hungaria Oko Garancia (Hungary), Ekogwarancja PTRE (Moldova), Biocert Malopolska (Romania).

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organic products are imported to Ukraine: baby food, tea, coffee, sugar, spices, fruits, vegetables, pasta, chocolates, oils, cosmetics, wines, and beer among other products.

The main distribution channels of organic products in Ukraine as of 2010 are small specialized shops in big cities like Kyiv, Lviv, Donetsk, Kirovograd, Dnipropetrovsk, Ivano-Frankivsk, and Kolomyia. The number of cities where organic products are available is increasing. Internet shops that need minimum investment are increasingly playing an important role in meeting demand. Supermarket chains are also in the position to start playing a more active role in the organic trade.

A lot of organic producers work closely with partners from Switzerland, Germany, the Netherlands or Poland in production, trade or investment issues.

There are not enough processing and storage facilities, or wholesale structures that would be interested in organic products.

Export

A lot of Ukrainian organic producers are export-oriented. The main export market for Ukraine is the European Union. Ukrainian organic products are also exported to the U.S., Canada, and Japan. A major challenge in 2010 was the quota system on cereals implemented by Ukrainian government.

Research

There is currently almost no research on organic farming in Ukraine, even though some researchers are now becoming interested in the topic. There is a need for foreign scientific work and research to be adapted to Ukrainian conditions (for instance organic production, varieties, and permitted inputs).

Education and capacity building

Agrarian colleges and institutes follow the traditional system of agricultural education. However, some pioneers like the Illintsi Agrarian State College have included organic modules in their curricula. The biggest Ukrainian agrarian university – the National University of Life and Environmental Sciences of Ukraine – has included some organic subjects into its program as well.

Competent consultants on organic production and processing are in demand in Ukraine. Further development of the organic sector in Ukraine depends on availability of well-trained people. Foreign experts consult some organic farms in Ukraine and provide know-how to organic stakeholders.

Study tours organised for Ukrainian organic stakeholders and producers by institutions in Switzerland, the Netherlands, Poland, Germany, among other countries are very important for the development of organic agriculture in Ukraine.

Needs of Ukrainian organic sector

There are a number of issues challenging the Ukrainian organic sector that need to be tackled. Some of these include:

- Protection of the term “organic”;
- Raising public awareness about organic via state info channels (state TV, radio, publishing, etc.);

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- Support for organic farmers (e.g., subsidies, access to credit, etc.);
- Consultancy on organic production and capacity building;
- Development of the domestic and export markets;
- Finalization of the work on the organic law in Ukraine;
- Locally adapted research;
- Adaption of international know-how for Ukrainian conditions;
- Investments into organic agriculture;
- Establishment of an organic action plan for Ukraine;
- More cooperation among organic stakeholders;
- Healthy competition among Ukrainian organic producers, processors, and retailers;
- Local internationally accredited and recognized laboratories;
- Elaboration of organic production technologies for crop production, animal husbandry, and others.

Conclusion

Ukraine has a strong potential to develop organic agriculture in the country using local forces and foreign donors' contributions and expertise. Both domestic and export markets have possibilities to get quality organic products for consumption from Ukraine.

FiBL-SECO project "Organic Certification and Market development in Ukraine"

Since 2006, the Research Institute of Organic Agriculture (FiBL, Switzerland) is managing the project "Organic Certification and Market Development in Ukraine," which is financed by the Swiss State Secretariat of Economic Affairs (SECO). The overall goal of the project is to contribute to the growth of the Ukrainian organic sector and its integration into the global market for organic food. The project has three components: certification services, market development, and policy dialogue. Due to permanent contacts with key organic stakeholders in Ukraine, FiBL is successfully bringing the organic network closer together. Several market related activities became joint organic events among stakeholders. Organic stakeholders are growing professionally, and during 2010 the organic movement in Ukraine moved forward considerably. FiBL facilitates better cooperation among organic stakeholders, organic operators, and business-oriented people in Ukraine and disseminates information from Ukraine and abroad.

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Organic Agriculture in the Mediterranean Region: Updates

Lina Al Bitar, Marie Reine Bteich, Patrizia Pugliese[1]

Structural aspects and trends

Organic statistics reported in this chapter were collected through the MOAN (Mediterranean Organic Agriculture Network) and refer to official data supplied by the Ministry of Agriculture of MOAN countries. Alternative sources were used instead for (i) Bosnia and Herzegovina (BiH), for which only data for Republika Srpska were officially communicated and for (ii) Cyprus, Greece, and Portugal, which have not yet joined MOAN.

The Mediterranean countries are hereinafter divided in sub-regional groups: European Mediterranean countries (EU Med), Candidate and Potential Candidate countries to the EU (CPC) and Southern and Eastern Mediterranean countries (SEM). Table 32 reports the organic land area (including with—"total area"—and without wild collection and pastures) and the number of organic operators in each country.

In 2009 in the Mediterranean region there were more than 6 million hectares organically managed by almost 150'000 operators, mostly located in the EU Med countries that, overall, account for 65 percent of the total organic land in the region.

Between 2008 and 2009, on the whole, the Mediterranean region experienced an important increase of total organic land area of 1.2 million hectares, accounting for about 21 percent. This growth was particularly most significant in the CPC countries with an increase of 113 percent, due—besides access to new and more complete data for some specific countries—to a significant boost observed in Turkey and FYROM (Former Yugoslav Republic of Macedonia), compared to the EU Med and SEM countries with 12 percent and 9 percent respectively. However, to get a clearer picture, data on total organic land, including wild collection, and data on organic agricultural land need to be analysed separately.

Spain (that has seen an important increase of about 300'000 hectares in the last year) followed by Italy and France in both cases and Tunisia and Turkey occupy mid-level positions. Morocco ranks fourth in the top ten list of total organic land area, due to a considerable share (about 600'000 hectares) of wild collection, while it does not appear in the top ten list of organic agricultural land where, instead, other Southern and Eastern Mediterranean countries (SEM), like Egypt and Syria are present.

[1] Mediterranean Agronomic Institute of Bari CIHEAM-MAIB, Via Ceglie 9, 70010 Valenzano, Italy.

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Table 32: Organic land area and organic operators in the Mediterranean countries 2009

		Organic agricultural area 2009 (ha)	Total organic area(a) 2009 (ha)	Number of organic operators 2009
EU Med. Countries	Cyprus (b)	3'816	4'076	732
	France	677'513	677'513	25'031
	Greece (c)	326'252	326'252	n.a.
	Italy	1'106'684	1'106'684	48'509
	Malta	26.24	26.24	12
	Portugal (d)	155'000	155'000	1700
	Slovenia	29'388	29'388	2.182
	Spain	1'333'105	1'602'871	27.627
	EU Med	**3'631'784**	**3'901'810**	**105'793**
Candidates & Potential candidates Countries	Albania	501	4'729	61
	BiH (b)	580	220'580	27
	Croatia (e)	14'194	14'194	817
	FYROM	1'438	206'331	511
	Montenegro	4'603	106'403	34
	Serbia(e)	2'489	2'876	457
	Turkey	325'831	501'640	36'172
	CPC	**349'636**	**1'056'753**	**38'079**
Southern and Eastern Med. Countries	Algeria	623	1'626	81
	Egypt	56'000	56'000	790
	Jordan (data 2008)	1'053	1'053	19
	Lebanon	3'305	9'444	302
	Morocco	3'800	622'300	200
	Palestinian Authority	1'000	1'000	500
	Syria	35'439	35'439	213
	Tunisia	167'400	335'900	1'911
	SEM	**268'619**	**1'062'762**	**4'016**
Total Med		**4'250'039**	**6'021'325**	**147'888**

Includes wild collection areas, permanent pastures and forests when present; [(b)] Source: FiBL-IFOAM survey; [(c)] Source: Eurostat Database; [(d)] Source: Ministry of Agriculture, personal communication; [(e)] No official data are available on wild collection and forests; BiH: Bosnia and Herzegovina; FYROM: Former Yugoslav Republic of Macedonia.

Editors' note: Some of the data provided by MOAN differ from those collected in the FiBL/IFOAM survey.

Opportunities and challenges of the new EU import rules: Highlights from the 5th MOAN annual meeting

Interesting opportunities but also important challenges may arise from the new EU import rules (EC No. 1235/2008) for EU and non-EU Mediterranean countries. The topic was widely discussed with the contribution of international experts by MOAN country repre-

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sentatives in the framework of the 5th annual meeting held in Tunisia in June 2010. The full report of the meeting can be downloaded from the MOAN website (http://moan.iamb.it). Following are some of the main recommendations formulated by participants.

1. Equivalent control bodies' (CB) and control agents' (CA) list and inclusion in the "equivalent Third Countries" list are considered complementary tools and processes for the development of the national organic sectors in SEM countries.

2. For SEM countries still without national regulations (and action plans) for organic food and farming, an equivalent CB/CA list may represent an important intermediate step for the development of national organic systems. Such countries should not consider equivalent CBs/CAs list a "fast and easy" tool to seize export opportunities on EU markets and pursue a development path for the organic sector by exclusively relying on it.

3. Investments of time and resources in capacity building and development of organic national regulations (and systems) are crucial for a balanced growth of organic agriculture in SEM countries. Working along these lines, with a long-term vision for the sector, produces important advantages in terms of:

- upper political level attention drawn to the sector over time;
- improved communication and transparency of national organic sector;
- establishment of a national identity in the field of organic agriculture, with multiple beneficial effects also on: relations with national and international organic operators, the development of domestic markets, and access opportunities to the sector for various stakeholders, including smallholders.

Investigating organic research in the Mediterranean: an outline

Research in organic farming within the Mediterranean region has important potentialities and good prospects despite the many limitations that still hamper its development.

To further investigate these aspects, the Mediterranean Agronomic Institute of Bari (CIHEAM-MAIB) launched a survey in September 2009 to collect information on organic research in the Mediterranean, in the framework of the project "Promotion of domestic and international demand for organic products – InterBio," financed by the Italian Ministry of Agricultural, Food and Forestry Policies (MiPAAF).

A survey questionnaire was circulated through MOAN country representatives, in collaboration with IFOAM-ABM in non-MOAN countries and SINAB (Sistema d'Informazione Nazionale sull'Agricoltura Biologica) in Italy. The questionnaire consisted of two parts investigating both the national policies for research in organic agriculture and the different institutions involved.

The study covered twenty-three Mediterranean countries. It shed light on the state of research in organic agriculture and produced a directory of institutions and projects. The full document will be downloadable in February 2011 from the websites of InterBio (www.interbio.it) and MOAN (http://moan.iamb.it/).

Key strengths are identified in the high qualification of human resources engaged in organic research, the availability of infrastructure in support of research, and the adequate transfer of results. The weaknesses are multiple and require serious commitment to overcome

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them. Only a few specialized centers in organic research exist and research institutions still devote limited space to organic research. In most countries priorities are not officially identified for organic research and there are no central bodies to coordinate activities.

Among the opportunities that could be exploited, it is worth mentioning the worldwide growing interest for organic agriculture as a tool for sustainable agriculture, the recent inclusion of the Mediterranean diet in the list of UNESCO Intangible Cultural Heritage of Humanity. Equally important is researchers' awareness of the need for North/South cooperation and coordination to promote and develop the Mediterranean organic sector, considering that one of the main threats to the development and progress of organic agriculture research in the region is the lack of communication and coordination between the different actors.

In conclusion, in order to build up a more efficient organic agriculture research system, joint efforts should be concentrated to boost networking and cooperation to exchange knowledge and experience and to better serve conditions specific to the Mediterranean.

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Latin America and the Caribbean

Map 5: Organic agriculture in the countries of Latin America and the Caribbean 2009

Compiled by FiBL and IFOAM 2011; based on information from the private organic sector, certifiers, governments, and RUTA, the Regional Unit for Technical Assistance for Sustainable Rural Development in Central America.
For detailed data sources see annex, page 233.

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Organic Farming in Latin America and the Caribbean

SALVADOR V. GARIBAY,[1] ROBERTO UGAS,[2] AND PATRICIA FLORES ESCUDERO[3]

Increase in organic land

Organic agricultural land increased from about 8.1 million hectares to about 8.6 million hectares from 2008 to 2009, representing 1.4 percent of the total agricultural land area for Latin America. The increase in organic land is partly explained by the fact that, even in times of financial crisis, organic agriculture is an alternative for many producers. There has been a major increase in organic land in Argentina (of more than 0.3 million hectares, mainly grazing land for sheep). Growth in organic land area was also reported for several South American countries (Chile, Peru) and Central American countries (Dominican Republic, Guatemala, Honduras).

In addition to organic agricultural land, 4'500 hectares of aquaculture and 8.5 million hectares of wild collection were reported.

The leading countries in terms of organic agricultural land (without wild collection/aquaculture/forest areas) in Latin America are Argentina, Brazil, and Uruguay.

The countries with the highest percentages of organic agricultural land are the Falkland Islands (Las Malvinas), French Guyana (which belongs to France), and the Dominican Republic.

Mexico has the largest number of organic farms, followed by Peru and the Dominican Republic. Whereas in Mexico, Central America, and Andean countries the average farm size is small (e.g., in Mexico only 2.8 hectares), the size tends to be far larger in many South American countries, particularly those belonging to the Mercosur trade block.[4]

More than half of the agricultural land for which land use details are available is grassland.[5] Eight percent of this land is in permanent crops such as bananas, cocoa, and apples.

Organic agricultural production in Latin America is not increasing equally in all countries, nor are growth rates showing sustained growth in all countries. Among the main reasons for this, it is worth noting the following:

- Other certification standards, such as those of the Rain Forest Alliance or bird-friendly and fair trade standards, compete with organic standards. Some of these standards permit the use of synthetic inputs. For the farmers, this means fewer changes in production than converting to organic farming. Also, organic premium prices are not always higher than those of fair trade or "sustainable" products.

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[3] Patricia Flores Escudero, IFOAM Latin American Office Coordinator, Argentina

[4] Mercosul or Mercosur (Portuguese: Mercado Comum do Sul, Spanish: Mercado Común del Sur, English: Southern Common Market) is a Regional Trade Agreement (RTA) among Argentina, Brazil, Paraguay and Uruguay founded in 1991 by the Treaty of Asunción, which was later amended and updated by the 1994 Treaty of Ouro Preto (Source: Wikipedia, en.wikipedia.org/wiki/Mercosur; Accessed January 18, 2010.

[5] For Brazil and Bolivia, no land use data have been made available.

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- Climate change effects are increasing in the Caribbean region. In countries such as Cuba, Haiti, Jamaica, Colombia, Trinidad, and Tobago, hurricanes, flooding and new pests have destroyed many crops.
- Pest and diseases are affecting the crops and for many, solutions have not yet been found. For example, the Monilia Pod Rot (*Moniliophthora roreri*) is a serious fungal disease that affects cacao. Its range includes north-western South America, (including Ecuador, Colombia, and Peru), and southern Central America, (from Nicaragua to Panama, including Costa Rica). The Asian citrus psyllid (*Diaphorina citri*) causes a devastating bacterial disease called Huanglongbing, or citrus greening. This disease has caused enormous damage to organic citrus production in Cuba and Brazil and has already caused damage in Central America and Mexico.
- The prices that farmers receive do not always cover their entire production cost. Farmers get disappointed about the price conditions offered by the buyers and in turn abandon organic production.
- The quality of third party certification is not uniform among different certification bodies. In many countries it can be seen, for example, that requirements on biodiversity vary considerably and, in some cases, monocultures may be certified as organic.
- To access organic markets, farmers need to organize internal control systems and improve their cooperation in associations. Their ability to do so is hindered, however, since there is a lack of training and support.

Organic markets still mainly export oriented

The majority of organic products from Latin American countries are exported to Europe, North America, and Japan. Popular goods are especially those that cannot be produced in these regions, as well as off-season products. In the past years, imports of fair trade products have increased, and in many Latin American countries products are produced with both organic and fair trade labels. The development of robust local markets is still a major challenge, without which the sustainability of organic production cannot be achieved. In this process, Participatory Guarantee Systems (PGS) may play an important role in promoting the development of local markets. In many Latin America countries there are successful examples of PGS (see article by Joelle Katto, page 82). However, the developments of local markets in Latin America are influenced by other factors as well, such as a lack of sector coordination (e.g., not articulated in many countries), lack of coordination between sustainable movements (e.g., consumer groups, biodiversity), low visibility of the organic sector especially among consumers, disinterest of the national governments on promoting the development of national organic markets, confusion of labeling organic products (e.g., natural products labeled as organic) and certification systems.

In countries such as Costa Rica, Honduras, Nicaragua, Colombia, and Peru export projects are stimulated by international traders, foreign investments, governments, and cooperation agencies. These projects are focusing mostly on a few commodities such as coffee, cacao, tropical fruits, and processed food such as juices, sugar cane, bee honey, nuts, and some spices. Organic export projects tend to be large-scale and technologically advanced and the investors benefit from relationships with buying markets in their country of origin. Such projects are usually beyond the financial means of local companies. In spite of the wave of foreign investments, by far the largest portion of organic goods exported from Latin America and the Caribbean are produced or collected by groups of smallholders, who are organized in value chains of varying complexity and efficiency. The strength of the farmers'

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organizations (e.g., association, cooperative, marketing group) is a key component in many success stories across the continent. In these cases, groups that were organized to meet the internal control system requirement of third party certifiers have evolved into more powerful social structures. These groups become active in related areas like the management of local natural resources, administration, organization of improvements of infrastructure, and even advocacy at local, regional or national levels.

Fresh fruits and vegetables: Many Latin American countries have been selling their fruit harvest to Europe and the United States. Brazil sells apples and grapes. Chile has a thriving kiwi export business and also focuses on the export of soft fruits like raspberries and strawberries. Mexico, Colombia, Honduras, and the Dominican Republic sell bananas, pineapples, mangoes, and other tropical fruits. Argentina trades apples, pears, and citrus fruits. Mexico markets apples, citrus fruits, and avocados on the world market. Argentina, Brazil, and Chile are strong vegetable exporters, both fresh and dried. In addition, Costa Rica and other Central American countries sell smaller quantities of fresh vegetables to external markets.

Bananas: The most important supply countries for bananas are Ecuador, the Dominican Republic, Peru, Colombia, and Brazil. Other suppliers include Costa Rica, Honduras, Mexico, and Nicaragua. A recent success story in the export of organic bananas is northern Peru, where smallholders managing an average area of one hectare each have organized to produce high quality fruit, which they export through local brokers or multinational companies. (The desert climate of northern Peru has the advantage of being almost free from the serious diseases prevalent in most humid tropical regions).

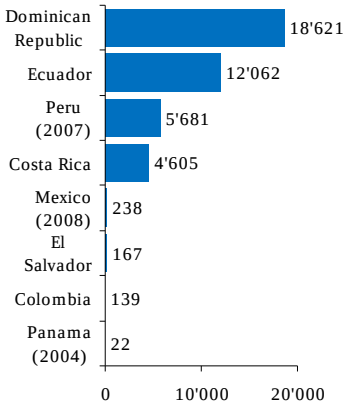

Figure 31: Latin America and Caribbean: Organic banana area in 2009

Includes in-conversion area for some countries. Data on the organic banana area were not available for all Latin American/Caribbean countries.
Source: FiBL/IFOAM Survey, based on data from government bodies and the private organic sector. For detailed data sources see annex.

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Coffee: According to the FiBL/IFOAM survey, Mexico is the country with the largest organic coffee area worldwide, supplying the world's biggest supermarkets and coffee shops. Despite the volume of production, most of the coffee in Mexico is harvested by small indigenous farmers. According to various sources, Guatemala and other Central American countries have significant levels of coffee production with very similar characteristics. Coffee production is primarily defined by ecological forest management systems, creating a valuable alternative to the deforestation process that is taking place in the region.

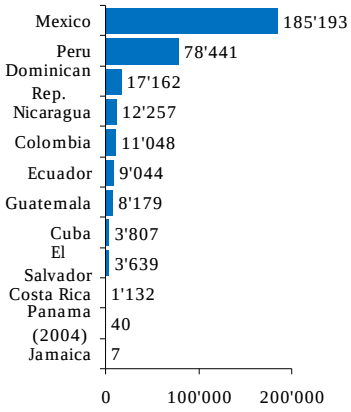

Figure 32: Latin America and Caribbean: Organic coffee area 2009

Includes in-conversion area for some countries. Data on the organic coffee area were not available for all Latin American/Caribbean countries.
Source: FiBL/IFOAM Survey, based on data from government bodies and the private organic sector. For detailed data sources see annex.

Pineapple: Since ethylene for the induction of pineapple flowering became allowed according the EU regulation on organic farming as well as the U.S. National Organic Program (NOP), the importance of organic pineapple has been growing in many Latin American countries. Limiting factors to production are the availability of organic pineapples and low quality. The market for fair trade pineapple juice shows that development has been slow due to a lack of good quality products.

Nuts: The most important organic nut in Latin America is the Brazil nut or Para nut, produced in Bolivia, Brazil, and Peru. The certification of large areas is necessary for the collection of these nuts in the Amazon region, and in fact an important percentage of the total land certified as organic in these countries is used for this purpose.

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Cocoa: Cocoa is a very important source of income for small farmers throughout Central America and the tropical areas of South America. Different projects involving organic and fair trade cocoa have started up, (including in Honduras and Nicaragua). Mexico, Nicaragua, Costa Rica, and Bolivia have added value to their cocoa by producing organic chocolate for the local market. Ecuador produces high quality organic chocolates (Pacari, Kallari, Kaoka, etc.). Seventy-five percent of the cacao production is used to produce "chocolates finos y de aroma." And it is basically relying on indigenous communities and family farming. As is the case with coffee, the production and export of organic cocoa is increasing at a rapid pace in Colombia, Peru, and Bolivia, as part of the efforts to provide an alternative to illegal coca leaf production.

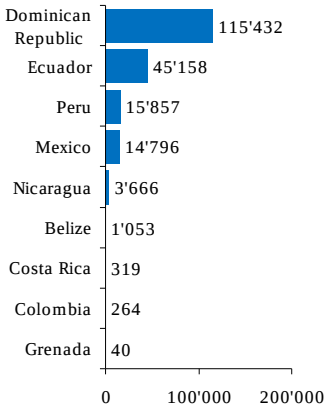

Figure 33: Latin America and Caribbean: Organic cocoa area 2009

Includes in-conversion area for some countries. Data on the organic cocoa are, including Bolivia, which is a major producer, were not available for all Latin American/Caribbean countries.
Source: FiBL/IFOAM Survey, based on data from government bodies and the private organic sector. For detailed data sources see annex.

Wines and spirits: Argentina and Chile are major producers of organic wines, often also biodynamic. The market for organic spirits in Latin America is also taking shape. There are marketing development initiatives for traditional spirits from the region such as *tequila*, *mezcal* (Mexico) and *rum* (Cuba) for the local and export markets. Peru produces organic certified *pisco*, the traditional local brandy distilled from grape juice, and in Brazil organic *cachaza* (made from sugar cane) is already available. In many cases, the certification of these spirits goes along with denominations of origin or geographical indications, as is the case of *tequila* in Mexico and *pisco* in Peru.

Herbs and spices: Oregano (from various species in the genera *Origanum*, *Lippia* and others) is the most important herb in terms of production and exports, mostly from Mexico, Argentina, and Peru. Other organic herbs that can be found in the markets of the European Union, the USA, and Japan are musk rose (from Chile) and yerba mate (from Argentina, Paraguay, Uruguay, and Brazil). Organic spices exported include cardamom (from Central America) and chili pepper (from Peru, Mexico, and Colombia).

Grains and cereals: Paraguay is a big organic soybean producer, together with Argentina and Brazil, which produce and export organic corn and wheat. Andean grains like quinoa and amaranth are important organic exports for Bolivia and Peru. Organic grain farmers in several southern countries are facing the problem of increasing cultivation of genetically modified soy and corn.

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Sugar: Brazil, Paraguay, Ecuador Argentina, Colombia, and Cuba are the most important organic sugar producers in the region. Small farmers in cooperatives own or manage small sugar mills. In Brazil, there is a big company producing sugar with high quality technologies and social standards on tens of thousands of hectares.

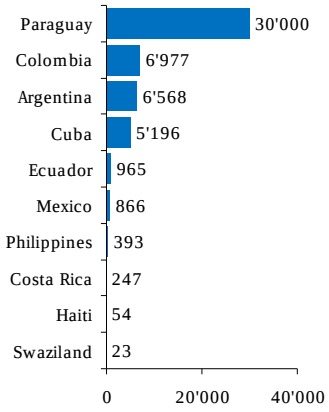

Figure 34: Latin America and Caribbean: Organic sugarcane area 2009

Includes in-conversion area for some countries. Data on the organic sugarcane area were not available for all Latin American/Caribbean countries.
Source: FiBL/IFOAM Survey, based on data from government bodies and the private organic sector. For detailed data sources see annex.

Meats: While Argentina is a large beef exporter in the region, it also has a strong domestic market for organic meat. Uruguay and Brazil are also significant producers of organic meat; Brazilian companies are even buying processing plants in Argentina to expand their influence. Countries such as Mexico and Nicaragua have projects for producing organic meat, mainly for the national market. One big constraint keeping organic meat production in Latin America from moving forward is that the main consumers (in Europe and the US) ask only for the best pieces (i.e., the sirloin tenderloin and pistol cuts from the hindquarter). The rest of the meat has to be sold on the national market, mostly as conventional.

Nutraceuticals, functional food and medicinal plants: Development and exports of these products, abundant in the region, have been slowed by the newly introduced EU regulation. Products already present in world markets include: *maca* (from Peru), *guaraná* (from Brazil), stevia (from Paraguay), *sacha inchi* (from Peru), *uña de gato* (from Peru and Bolivia), and *Aloe vera* (from Mexico), among many others.

Organic guarantee systems

Argentina and Costa Rica have a Third Country status with the European Union; all other Latin American producers need to be certified by an accredited certification agency in order to enter the EU market. However, American or European companies certify a large part of the export production in Latin America in any case, as buyers often require the certification. Certification organizations such as The Organic Crop Improvement Association (OCIA) and Farm Verified Organic (FVO) from USA; and Naturland, BCS Oeko-Garantie, Control Union, and the Institute for Market Ecology are very active in the region. Others are Ecocert, Bioagricert, and Ceres. With the increase in the number of functional national regulations in several countries, most of these certification agencies have established national offices in these countries and applied to be included on a national register of certification bodies.

Almost every Spanish and Portuguese speaking country has a local certification body. Some national certification bodies are very well developed, such as Argencert, Letis and Organización Internacional Agropecuaria, (OIA, Argentina), Instituto Biodinamico (Brazil), Bolicert (Bolivia), and Biolatina (Peru and others). Other certification agencies include Ecológica

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(from Costa Rica), Bio Nica (from Nicaragua), Biotropico (from Colombia), Maya Cert (from Guatemala), and CertiMex (from Mexico). Uruguay has Urucert and Sociedad de Consumidores de Productos Biológicos (SCPB). Biolatina is the only regional certification body, with a central office in Peru and management structures in other countries. Argentina and Brazil are the countries with the largest number of local certification bodies by far.

In recent years, some countries have created national legislations governing organic production, including Costa Rica, Mexico, Uruguay, Chile, Paraguay, Peru, Colombia, and El Salvador. Bolivia has issued a decree regulating organic production. Argentina has a national law since 1992. Brazil is one of the youngest countries to pass laws and regulations for organic agriculture; a breakthrough was achieved after quite a long and participatory process of nation-wide discussions, in which the local organic movement was particularly active. Most countries in Latin America now have national laws and regulations and have started implementing them, in most cases with competent authorities in the plant protection sector. Organic certification bodies are generally required to have local offices, and national registers of certification bodies, operators, and/or inspectors have been initiated. In countries like Brazil and Colombia, there are national logos for organic products. Most of these countries have applied for inclusion in the EU's Third Country list, but the approval process is slow. In some cases lack of inclusion is preventing further developments at the national level, since some authorities are concerned that changes may affect their processes in the EU.

Latin America is changing rules regarding third party certification. Many farmers are no longer content depending on the private certification agencies in order to say that they are producing organically. Various examples of Participatory Guarantee Systems (PGS) can be found on all parts of the continent. The regulation in Brazil accepts PGS, and other countries, including Peru, Mexico, and Uruguay, are developing similar systems. PGS is essential for the development of local markets and to promote better linkages between the various institutions and groups involved in the organic sector (see article by Joelle Katto on PGS, page 82). In some countries, however, these systems are not allowed and require compulsory third party certification for the marketing of organic products. There is a popular perception that third party certification based on ISO-65 criteria is not necessarily relevant for producers in the region, given their socio-economic status; therefore, alternative methods need to be further developed and promoted.

Governmental support

In recognition of the growing importance of the organic sector to Latin America's agricultural economy, governmental institutions have now begun to take steps towards increasing their involvement, and governments are beginning to play a central role in the promotion of organic agriculture. There are various types of support in Latin American countries, from the promotion of organic agriculture to market access support (through official export agencies). Some countries provide financial support through different governmental programs. An important process occurring now in many Latin America countries is that organic laws are being established in order to set standards regarding the regulation and promotion of the organic sector in the national context. It should be noted that most countries in the region started developing the regulatory sector related to organic agriculture as a way to bring more formal procedures into the system and facilitate exports. Therefore, civil society is urging for other policy instruments that may allow for improvements in essential areas like credit, research, extension, and formalization of rural property. At the same time, since

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farmers' organizations are key in most of the region, it is necessary to promote regulations that could assist in the strengthening of cooperatives and farmers' associations.

Examples of governmental support

In 2010, a special project of the Andean Community[1]—Agricultura Familiar Agroecologica Campesina de la Comunidad Andina (AFAC)—with AECID support (Spanish cooperation), was implemented with the aim to foster organic agriculture for organic smallholders, not only as a strategy for poverty alleviation but also to enhance food security and biodiversity conservation. Among the several activities implemented by the General Secretariat of the Andean Community such as open calls for productive projects with the agroecological approach, a special document was commissioned to a group of consultants articulated as GALCI, the Latin America and Caribbean group of IFOAM. This document has the aim to introduce the current context of organic agriculture in the Andean countries, highlighting successful stories of smallholders, while making recommendations for a better sub regional integration and policies to develop organic agriculture with smallholders. This is a major governmental initiative of the Andean countries working jointly with the organic movement. It is expected that the document will be used as a guide at the policy-making level to develop the organic sector focused on smallholders (e.g., for more inclusive and national adapted organic regulations, research, technical assistance, and data information).

This kind of governmental support has been given also in some other countries such as Argentina. The Dirección Nacional de Agroindustria (DNA), of the Agroindustry and Markets Sub Secretary of the SAGPyA (Ministry of Agriculture) is implementing PRODAO—Proyecto de Desarrollo de la Agricultura Organica Argentina (Project for the development of organic agriculture in Argentina)—with the aim to develop the organic sector with emphasis on research activities and added value strategies

At the governmental level with IICA's[2] cooperation, although not exclusively organic, PROCISUR (Programa Cooperativo para el Desarrollo Tecnológico Agroalimentario y Agroindustrial del Cono Sur) has been also implementing some activities to support and develop the organic sector through the governmental research centres of Argentina, Bolivia, Brazil, Chile, Paraguay, and Uruguay. Some activities carried out through the Organic Platform have been an on-line database, trainings, information exchange, and improved communication tools.

Information about the current situation about organic farming in Chile and in Costa Rica and government support schemes in these countries is available in the country reports by Pilar Eguillor Recabarren on Chile (page 191) and by Roberto Azofeifa on Costa Rica (page 194).

Education, extension, and research

Many universities, agricultural schools and advisory services in Latin America provide training, advisory, and research services on-farm and on-station. The Brazilian Asociacion Biodinamica for example provides on-farm research and training. Agruco and Agrecol in Bolivia

[1] Andean Communty, Comunidad Andina in Spanish, is a trade bloc comprising the South American countries of Bolivia, Colombia, Ecuador and Peru. The trade bloc was called the Andean Pact until 1996 and came into existence with the signing of the Cartagena Agreement in 1969. Its headquarters are located in Lima, Peru.

[2] IICA, Instituto Interamericano de Cooperacion para la Agricultura, The Inter-American Institute for Cooperation on Agriculture in English is a specialized agency of the Inter-American System, and its purposes are to encourage and support the efforts of its Member States to achieve agricultural development and well-being for rural populations.

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have excelled at agricultural extension work over the years, leading to a strong support for food security and farmer knowledge, especially in the Andean region. In Colombia, capacity building and training in organic agriculture has been carried out mainly by NGOs and also by farmers' associations, education centers, and agro-ecological schools. Some agricultural universities carry agroecology and organic production courses and projects, like La Molina National Agrarian University in Peru, Las Villas or the Instituto Nacional de Ciencias Agrícolas (INCA) in Cuba, and Chapingo in Mexico. The Catholic University of Argentina started a degree program on Organic Company Management, and the University of Anahuac in Puebla, Mexico launched a post degree program in Business Development in Organic Products.

The Producers and Researchers Organic Meeting in Latin America and the Caribbean have already established a platform for the organic sector. The last meeting was a big success organized by ANPE (National Association of Organic Producers) in Lima Peru 2010. The next meeting will be carried out in Colombia focusing on the topic of economic and environmental sustainability of organic farming in Latin America. It is expected to have over 500 participants. Parallel to the meeting, the Organic Producers Fair of Latin America and the Caribbean will be carried out, expecting to have about 250 exhibitors.

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Related tables

- Table 40: Organic agricultural land: The top ten countries per region 2009
- Table 42: Share of organic agricultural land: The top ten countries per region 2009
- Table 43: Growth of the organic agricultural land by region 1999-2009
- Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009
- Table 45: All organic land use types by region and country 2009
- Table 46: Organic producers and other operator types by country 2009
- Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

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Chile: Country Report

Pilar Eguillor Recabarren[1]

Organic agriculture in Chile has been developing since the 1980s. However, because the conventional fresh fruit and vegetable export sector is well developed and well positioned in the international market, the production of organic products has not yet been of interest by the big producers of the conventional sector who have not seen the need to convert to organic agriculture. Nevertheless, in the last decade, the organic area and the number of organic producers have been continuously increasing, albeit slowly. Also, the development of the official rules such as the Organic Law N° 20089 and the Chilean Official Organic Agricultural Standards have moved the development of the sector forward.

Certification and Labeling

The official authority in Chile regarding organic agriculture is the Livestock and Agricultural Service (SAG), an agency of the Ministry of Agriculture. This office has already registered four certification agenciesthat can work in the country including the Institute for Marketecology Chile S.A., BCS ÖKO Garantie, ARGENCERT, and CERES. The producers who are certified by one of the four approved certification bodies are allowed to use the official seal or logo.

Also, the authority has already registered two groups of small producers: "Sociedad Comercializadora Tierra Viva" and "Red de Productores Orgánicos Décima Región." These groups of small producers are allowed to have their own certification system if they fulfill the Chilean standards (controlled by the official authority) and can sell their products directly to consumers. They can use the official logo for advertising in their market, but they are not allowed to put it on products or sell their products to intermediaries or supermarkets, nor are they allowed to export products.

Figure 35: Chile's official logo for organic products (domestic market only)

Production

Today, the total organic land area in Chile is 175'760 hectares. Of this area, 14'268 hectares are cultivated land, of which 4'082 hectares are for tree fruit such as olives (1'456 hectares), apples (1'302 hectares), avocados (738 hectares), kiwi (350 hectares), among others. Furthermore, there are 5'183 hectares of organic berries such as strawberries (3'396 hectares) and blueberries (1'478 hectares). In Chile, organic wild collection is very important and 92'235 hectares have been certified for wild collection of a broad variety of species, for instance rose hips, berries and medicinal/aromatic plants. Livestock production is in early stage of development and in the last agricultural season, 63'062

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hectares of natural pasture were certified in the southern region of the country for the production of organic livestock.

The total certified organic area in Chile increased from 30'443 hectares to 175'760 hectares from 2008 to 2009 (a 477 percent increase). From this total, the wild collection area represents the biggest increase (446 percent). The agricultural land grew by 51 percent.

Producers and other operators

There are approximately 529 organic farmers in the country, mainly concentrated in the central part of Chile. Among them we can find small, medium, and big growers that produce mainly for the export market. The other types of operators are 75 processors and 58 export companies.

Also, in the country there are many private organizations and NGOs, that represent the different groups of interest, such as Agrupacion de Agricultura Orgánica de Chile (AAOCH), Bio Bio Orgánico A.G., Orgánicos del Centro Sur A.G., Red de Productores Orgánicos Región de los Ríos A.G., Red de Productores Orgánicos Región de Los Lagos, and Asociación de Agricultores Orgánicos de Chile "Tierra Viva" A.G., Red de Agricultores Orgánicos de Indap, and Asociación de Consumidores CONALMAS among others.

Domestic market

Although there are no official statistics regarding the volume of the domestic organic market in Chile, the authority informed that in 2008-2009, about 20 percent of the organic production was sold in the domestic market. The main products sold in this market are a large variety of fresh fruits and vegetables, but also organic olive and avocado oil, wine made with organic grapes, herbal tea, spices, honey, jams, quinoa, and cosmetics among other things.

In last several years, there has been an explosive growth of small businesses all over the country (stores, farmers' markets, fairs, specialty stores, etc.) that sell a great variety of both fresh and processed organic products. Recently, two farmers' markets were established in the capital city, Santiago: the EcoFeria de La Reina and Mercado Orgánico, which sell organic products all year around. Also, big supermarkets such as Jumbo, Lider, Tottus, and Unimarc are increasing sales of organic products, especially, but not only, fresh fruits and vegetables.

Export market

The Chilean authority informed that in 2008/2009, approximately 80 percent of the organic production of the country was exported.

For fresh products, the main export product was apples (50 percent), followed by blueberries (25 percent), kiwis (11.7 percent), and avocados (5.4 percent). Of the total volume exported, 55 percent went to Europe and 44 percent to North America.

Chile is an important producer and exporter of organic processed products. Despite the lack of accurate statistics, the authority informed that in the last season (2008/2009), the country exported 60'353 liters of olive oil (45'740 liters to United States, 12'685 liters to Mexico, and 1'928 liters to Canada) and 4'447'781 liters of wine made with organic grapes (90 percent to Europe, 7 percent to North America and 1.5 percent to Asia).

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In the cosmetics sector, the production and export of Rose hip oil is very important, with 8'020 liters exported.

Policy support

The Chilean Ministry of Agriculture is working with the private sector on the development of the organic sector through the National Commission of Organic Agriculture, headed by the Minister of Agriculture and the Agrarian Policies and Studies Bureau (ODEPA), as a Technical Secretary that coordinates the work. In 2009, this Commission produced the first Organic National Action Plan 2010-2020, which has already been presented to the new Ministry authorities.

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Costa Rica: Country Report

Roberto Azofeifa[1]

The Ministry of Agriculture and Livestock recognizes that organic production in Costa Rica is developing positively thanks to considerable support from the public sector as well as their dynamic private sector. There is considerable information and knowledge available in Costa Rica as well as a national legislation provides a clear framework for production and trade. There is also considerable international and domestic demand for organic products. These factors contribute to the organic sector's healthy development now and in the future.

At the same time, the Costa Rican organic production needs to overcome barriers and gaps, so that organic agriculture can gain more acceptance among producers and market actors. The main barriers for the organic sector development in Costa Rica are (i) lack of information from the producers about alternative pest and disease management, (ii) high cost of certification, especially for farmers who produce for the domestic market, (iii) weak domestic market, (iv) weak partnerships among organic producers, and therefore (v) lack of consistency and continuity in the product range, as well as (vi) insufficient product quality and (vii) lack of competitive prices for products.

Area and producers

According to statistics from the Ministry of Agriculture and Livestock there were 3'000 organic producers in the country on 8'000 hectares. Of these, about 30 percent produce organic bananas, 30 percent produce cocoa, and the remaining percentage produces a number of crops, the main crop being coffee.

Most of the producers are small farmers organized in farmers' associations, cooperatives, and other types of organizations. In terms of area, the main organic products are bananas (4'294 hectares), pineapples (1'319 hectares), coffee (1'132 hectares), and oranges (615 hectares).

Most organic producers are members of the Costa Rican Organic Agriculture Movement (Movimiento de Agricultura Orgánica Costarricense - MAOCO). The members of this public-private association are producer organizations, NGOs, and public institutions. Its objective is to support the organic sector and stakeholders in the organic chain. Information about MAOCO is available on www.agriculturaorganica.org.

Certifying agencies

In the country, there are four certification agencies, which are registered at the authority in charge, the Organic Agriculture Accreditation and Registration Department at the Ministry of Agriculture and Livestock, Costa Rica.

- Ecologica: Authorized to certify products for export to the European Union, USA, and the domestic market, website www.eco-logica.com;

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- BCS-Öko-Garantie: Authorized to certify products for export to the European Union and the domestic market, www.bcs-oeko.com;
- Control Unión: Authorized to certify products for the European Union and the domestic market, website www.cuperu.com;
- Mayacert S.A.: Authorized to certify products for export to the European Union, USA, Japan, Korea, and other countries.

Processors

According to statistics from the Accreditation and Registration Department of the Ministry of Agriculture and Livestock, 43 processors are registered, of which 42 percent are coffee processors.

Domestic market

Organic products for the domestic market are sold at both local farmers markets where consumers buy their products directly from the organic producers (local farmers' markets) and at major supermarket chains.

Mainly local products are sold such as fresh vegetables and some processed products such as coffee, sugar, chocolate, and jam. Imported products are marketed in smaller quantities.

According to information provided by the Costa Rican Organic Agriculture Movement MAOCO, the domestic market for organic products is two million US dollars annually.

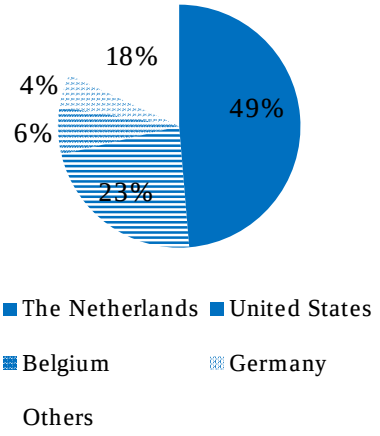

Figure 36: Costa Rica: Exports by destination 2009 (total export value: 26 million US dollars)

Source: Promocer

Export

Large amounts of the organic production is exported to developed countries such as the United States, Canada, Australia, Japan, and the European Union. According to data from the Ministry of Foreign Trade in 2009 more than 54'000 metric tons of certified products were exported. The economic value was more than 26 million US dollars.

In the European Union the main market is Holland, with slightly more than 50 percent of all Costa Rican organic exports going there.

The most important organic products exported to the European Union in 2009 were pineapples (42.3 percent),[1] bananas (28.6 percent), oranges (22.6 percent), sugar cane (5.1 percent), and cocoa (1.4 percent). Other important markets for organic products from Costa Rica are Italy, the UK, Switzerland, Germany, Spain, and France.

[1] Percentage expressed in terms of metric tons.

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Legislation and institutional support

Organic production in Costa Rica has government support through several laws and regulations. The most important ones are:

- Organic Law of the Environment, N°7554, November 1995
- Regulation on Organic Agriculture, N°29782, September 2001
- Law on the Fostering of Sustainable Agricultural Production, N°8408, April 2004
- Law on Development Promotion and fostering of organic activity, N°8591, June 2007.
- National Policy for the Agri-food sector and Rural Development in Costa Rica 2010-2021.
- Third country list of the European Union.

Government support

Organic production in Costa Rica receives support from governmental institutions and international organizations in the field of teaching and research. The most important institutions are:

- Ministry of Agriculture and Livestock: Technical assistance, training, and economic incentives;
- Ministry of Foreign Trade: Participation in international trade fairs, business rounds, trade missions;
- National Universities and Public Institutes related to the agricultural sector: Research and training;
- International organizations: Research and training.

Outlook

In 2010, with the technical support of international cooperation organizations based in the country as well as various government agencies and private organic sector representatives, the Ministry of Agriculture and Livestock developed an integrated plan of action for promoting organic production in the next four years.

Through the plan, important goals in three thematic priority areas were established: research and transfer of agricultural technology, promotion and marketing, and a detailed assessment of the state of organic production.

Research and technology transfer

Research and technology transfer are under the leadership of the Program of Research and Transfer of Organic Agricultural Technology (a public-private program), in which various governmental institutions conducting research are involved. Furthermore, international agencies, farmers' organizations, and the Ministry of Agriculture and Livestock.

Its overall objective is to facilitate the research and transfer processes, focusing on technical options to promote organic agricultural production for the domestic and for international markets.

The main goals regarding research and technology transfer are:

- To develop a platform for information on results of research in organic production in the country, which will be available for extensionists and producer organizations;

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- To carry out an assessment of the research needs from all stakeholders of the organic chain in the country;
- To develop a training program based on producers' needs and oriented towards the implementation of technical options to resolve the main constraints affecting organic production;
- To carry out an outreach program of experience based on the results of technical options valid under on-farm management conditions.

Promotion and marketing

To develop promotion and marketing, the Ministry of Foreign Trade, international cooperation agencies as well as the Ministry of Agriculture and Livestock are involved. Its overall objective is to promote the development of the national and international markets for organic products of Costa Rica.

The main goals are the following:

- To develop a strategy for the promotion and marketing in 2011 to strengthen the image of organic production in the national and international market, both on the part of consumers and producers;
- To develop a marketing program in 2011 that permits in the medium term an increase in demand and production of organic products;
- To implement a promotion program for organic certification, which includes (i) promotion of alternative certification systems such as participatory guarantee systems for domestic markets, (ii) capacity building of producers, technicians and consumers as well as (iii) economic incentives.

State of organic production

This area will be carried out by the Ministry of Agriculture and Livestock. The objective is to have an updated database on the state of organic production in the country, which will enhance the decision-making on public aid and private for the promotion of organic production. The main goal is to have a detailed characterization of organic production at the national level by the end of the year 2011.

Links

- www.mag.go.cr: Homepage of the Ministry of Agriculture and Livestock
- www.protecnet.go.cr/agricultura_organica: Homepage of the Organic Agriculture Accreditation and Registration Department at the Ministry of Agriculture and Livestock, Costa Rica. Information on organic agriculture, including statistics

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North America

Map 6: Organic agriculture in the Canada and the US 2009

Source: Canadian Organic Growers (COG) und United States Department of Agriculture (USDA).
For Canada: Conversion area included.
For detailed data sources see annex, page 233.

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North American Overview[1]

BARBARA FITCH HAUMANN[2]

Key developments

A significant achievement on the North American front has already occurred in 2011 with the adoption of trade codes by the United States for a list of organic products. As of January 1, 2011, the United States began tracking a select number of organic imports and exports. Canada has been tracking organic imports since 2007, but does not track organic exports.

The new US trade codes include 20 import and 23 export codes. The organic import codes have been published in the Harmonized Tariff Schedule (HTS) of the United States on the US International Trade Commission's website, while the organic export codes have been incorporated into Schedule B of the US Census Bureau.

Canada began tracking organic imports via harmonized trade codes at the beginning of 2007. Originally starting with 41 Harmonized System (HS) codes[3] for organic imports, Canada now tracks 65 different organic product imports.

Meanwhile, the United States and Canada are each in the midst of equivalency talks with the European Union. Organic equivalency arrangements with the European Union and each of the two North American countries would be a significant achievement in efforts to open access and trade between North America and Europe.

In early May 2010, the Organic Trade Association (OTA) formed a US-EU Equivalence Task Force whose mandate is to monitor, analyze and discuss emerging issues from organic equivalency discussions between the two trading partners, and to provide input to the US Foreign Agricultural Service and the Office of the US Trade Representative giving the industry's perspective on these negotiations and market potential.

On the North American front, representatives from the Canada Organic Office and the US National Organic Program have met and each has completed a full peer review of the other, as required by the terms of the US-Canada Determination of Equivalency, in order to monitor and evaluate how the US-Canada organic equivalence arrangement is being applied.

In other news, the US Department of Agriculture's (USDA's) National Organic Program (NOP) now offers a searchable database of all operations certified by USDA-accredited certifiers in 2009. The list of nearly 32'000 entries includes foreign operations and is searchable by keywords, names of operations, certifying agents, certificate numbers, primary and sec-

[1] The Canadian information was sourced from Matthew Holmes, Executive Director of the Canada Organic Trade Association (COTA), www.ota.com/otacanada.html, and Anne Macey, Canadian Organic Growers, www.cog.ca

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[3] The Harmonized Commodity Description and Coding System (HS) of tariff nomenclature is an internationally standardized system of names and numbers for classifying traded products developed and maintained by the World Customs Organization (WCO)

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ondary scopes of certification, countries, states, and products produced. The database may also be downloaded as an Excel file.

On the Canadian front, the Canada Organic Trade Association (COTA) in March 2010 announced a partnership with the Government of Canada to develop a long-term international marketing strategy to expand Canada's organic sector, committing approximately 300'000 Canadian dollars in matching funds to COTA's international activities.

The Government of Canada also announced a major investment in organic research in September 2010, committing 6.5 million Canadian dollars[1] in government funding, with a 2.2 million US dollar industry contribution. The resulting "Organic Science Cluster" includes ten sub-projects, including 30 research activities conducted by more than 50 researchers plus 30 collaborators in approximately 45 research institutions across the country. It will conduct research and trials in areas such as phosphorus use efficiency in organic crop production, energy-efficient organic greenhouse production, low-till production without herbicides, and development of effective systems for management of organic agricultural crops. The Organic Science Cluster is coordinated by the Organic Agriculture Centre of Canada (OACC), with administrative support from the Organic Federation of Canada.

Production

The latest acreage statistics for the United States are available only through 2008. The official number for 2008 comes from USDA's Economic Research Service (ERS), which counted 12'941 certified organic farming operations representing a total of 4.8 million acres (1.9 million hectares). Adoption of organic production is still low in comparison to all US agricultural land: about 0.7 percent of all US cropland and about 0.5 percent of all US pasture and rangeland in 2008 (for details see chapter on the United States by Barbara Haumann).

In Canada, preliminary 2009 statistics show an increase of 201 certified farms in 2009 over 2008, bringing total operations to 3'914, which cultivate 1'718'468 acres in production (695,463 hectares) and 519'474 acres of land (210'231 hectares) for wild-harvest and pastures (For details see chapter on Canada by Matthew Holmes and Anne Macey).

Also considered part of North America, the island of Bermuda has no certified organic acreage although it does have 50 acres or less in organic production. The leading producer of organically grown fruits, vegetables, and livestock is Wadson's Farm in Southampton, Bermuda. There are also a few small farms on the island using organic practices.

Greenland and the Territorial Collectivity of Saint-Pierre and Miquelon off the east coast of Canada near Newfoundland are also considered part of North America. There is no data available on organic production in any of these regions.

Organic product sales

US sales of organic products continued to grow during 2009 despite the distressed state of the economy, according to the *Organic Trade Association's 2010 Organic Industry Survey*. In fact, organic product sales in 2009 grew by 5.3 percent overall, to reach 26.6 billion US

[1] 1 Canadian dollar = 0.63046 Euros, average exchange rate 2008; source: www.oanda.com/lang/de/currency/average

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dollars.[1] Of that figure, 24.8 billion US dollars represented organic food or 3.7 percent of the food market. The remaining 1.8 billion were sales of organic non-foods.

On the Canadian front, Agriculture and Agri-Food Canada in 2010 released a new report on the Canadian organic sector's trade data and retail sales. Analyzing the 2008 sales of organic foods, the report concludes that the total Canadian organic market is now worth 2 billion Canadian dollars[2] annually.

Meanwhile, projections for 2010 and beyond indicate higher growth rates for organic sales in North America.

Advocacy efforts

In both the United States and Canada, the organic sector has been quite active in advocacy work on the governmental level as well as in efforts to educate consumers on what organic means.

In the United States, OTA in early January 2010 opened its Washington, D.C., office only steps from the Capitol and congressional office buildings. It also ramped up its presence and activities in the national front by hiring a Legislative and Advocacy Manager. In April 2010, OTA held its most successful Policy Conference and Hill Visit Days ever, offering organic constituents a focused look at current policymaking, the latest news from the Administration, a chance to celebrate the many organic milestones of 2010, and face-to-face meetings with members of Congress and their staffs. In 2011, it will be moving to larger quarters in D.C.

It also stepped up consumer education via its consumer website, www.OrganicItsWorthIt.org.

In Canada, the organic sector held its first National Organic Week in mid-October, the brainchild of COTA and Canadian Organic Growers (COG). This effort involved over 250 regional and retailer partners, and included in-store promotions, legislative receptions, film screenings, community harvest meals, open lectures and field trial tours at organic farms, an organic Oktoberfest weekend, and fine dining experiences at restaurants and historic hotels across the country.

In time for National Organic Week, COTA also coordinated a special report section in the national *Globe and Mail* newspaper as part of its consumer education campaign associated with the www.OrganicBiologique.ca website.

Standards issues

One of the milestones on the organic standards front in the United States during 2010 was USDA's adoption of the final pasture rule, which went into effect in mid-June. The access to pasture rule requires that organic ruminants receive proper feed, access to fresh air and sunshine, and well-managed living conditions. The final rule provides certainty to consumers that organic livestock operations are pasture-based systems, where animals are not confined, and are actively grazing on pasture during the grazing season. The minimum

[1] 1 US Dollars was 0.71895Euros in 2009, and 0.75464 in 2010 Average exchange rated according to www.oanda.com

[2] 1 Canadian dollar = 0.63046 Euros, average exchange rate 2008; source: www.oanda.com/lang/de/currency/average

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number of grazing days must be at least 120 days, with weather and other factors making the season's dates variable.

Meanwhile, with growing consumer confusion over which personal care products on store shelves are "organic," OTA announced it is seeking mandatory federal regulation of organic labeling claims on personal care products sold in the United States. Urging NOP to develop and adopt an organic personal care standard, OTA noted this will take significant time and resources. OTA has suggested that a "new" organic personal care standard could incorporate the best of existing private standards as well as the existing NOP organic standard to which some products have been certified.

In Canada, draft standards for organic aquaculture were formally published for public consultation. The first standards technical committee met in Ottawa in October 2010 to begin responding to the large number of public comments received, focusing on concerns related to transition periods, feed, antibiotics use, buffer zones, water and environmental impact, wild species interactions, and stocking rates. The technical committee is made up of producers of marine plants, finned fish and shellfish, as well as representatives from national organic associations, retailer associations, consumer groups, government, and researchers. Eventually, the organic aquaculture standards may be brought under the regulatory system via Canada's Organic Products Regulations of 2009.

Other issues

During 2010, organic agriculture and products in both Canada and the United States faced increasing challenges from stepped up efforts to allow more GE crops, specifically genetically engineered GE alfalfa and GE sugar beets.

Discussions on co-existence between organically grown and genetically engineered crops have escalated, with concern that under current USDA policy, the organic sector bears the burdens created with inadvertent contamination of organic products from the cultivation of GE crops.

In an article published in *Choices,* a peer-reviewed magazine of food, farm and resource issues from the Agricultural & Applied Economics Association, senior economist Catherine Greene and administrator Katherine Smith of USDA's Economic Research expressed their views on problems regarding the co-existence of organic and genetically engineered crops.

According to Greene and Smith, "The potential for GE crop production to impose costs on organic production, via accidental pollination and other mechanisms, underscores the problem of co-existence between GE and organic crops." Their review found evidence that consumers do not want GE-contaminated crops, and thus interventions such as physical distancing and product segregation are necessary to maintain organic integrity.

"Further, at present, the costs required to support the co-existence of all markets is borne disproportionately by producers and consumers of organic food in the United States," they wrote.

In Canada, there has been considerable discussion at the political level on the issue of the impact of GE on organic and other non-GE agriculture and markets. Early in 2010, a private-member's bill was proposed in the House of Commons. Bill C-474 would require an economic impact analysis of Canadian export markets before the commercial release of any new GE seed varieties. The bill received majority approval, overruling the government, at

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two readings and was referred to the House Standing Committee on Agriculture and Agri-Food for further analysis and witness testimony before a final vote.

Looking forward

Thus, looking forward, the organic sector in North America continues to face the challenges imposed by trying to co-exist with GE crops, as well as consumer confusion over what organic actually means as opposed to the "natural" label or plethora of other eco-labels on the market. These are issues that organic industry groups in both Canada and the United States will be addressing during 2011.

In North America, the organic industry will continue to play an active role in advocating for organic agriculture on the national government levels, and for educating consumers and others on the many benefits offered by this important segment of agriculture.

Further reading

1) Harmonized Tariff Schedule (HTS) of the United States, US International Trade Commission (www.usitc.gov).
2) Schedule B of the US Census Bureau (http://www.census.gov/foreign-trade/schedules/b/index.html).
3) US Department of Agriculture's National Organic Program's searchable database of all operations certified by USDA-accredited certifiers in 2009 (http://apps.ams.usda.gov/nop/).
4) Data Sets: Organic Production, US Department of Agriculture's Economic Research Service (http://www.ers.usda.gov/data/organic/)
5) 2008 Organic Production Survey, conducted as a follow-on to the 2007 Census of Agriculture, USDA's National Agricultural Statistics Service (NASS).
6) Canadian source of production data.
7) The Organic Trade Association's 2010 Organic Industry Survey, Organic Trade Association, April 2010.
8) Catherine Greene and Katherine Smith, "Can Genetically Engineered and Organic Crops Coexist?" Choices Magazine, 2010.

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Related tables

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United States: Country Report

BARBARA FITCH HAUMANN[1]

Organic agriculture and products made great strides during 2009 and 2010. In 2009-2010, the US Congress and US Department of Agriculture (USDA) doubled the budget and staff of the National Organic Program (NOP). In addition, USDA began to move beyond NOP to all USDA agencies for comprehensive inclusion of organic agriculture. With growing attention for including organic across agencies within USDA, the organic sector saw gains in conservation programs and data collection.

NOP is now an independent program area within USDA's Agricultural Marketing Service, and Miles McEvoy, a leader within the organic movement, is its first Deputy Administrator. Meanwhile, top USDA officials Secretary Tom Vilsack and Deputy Secretary Kathleen Merrigan have shown support for a strong NOP.

One late win in 2010 for the organic sector was the December approval by the US Congress of the Healthy, Hunger-Free Kids Act, which President Obama signed into law on Dec. 13. This act includes the Organic Pilot Program sought by the Organic Trade Association (OTA) that will provide 10 million US dollars in funding, subject to appropriations sign-off, for schools to incorporate organic offerings in their school food programs. In addition, it includes $50 million in mandatory funding for the farm-to-school program.

In addition, just before the closing of its 2010 session, Congress passed the FDA Food Safety Modernization Act that will help tighten US food safety oversight while also including provisions to protect organic farmers and producers from costly duplicative or conflicting requirements. This critically needed legislation will provide greater consumer protection from food-borne illness, and is crafted to protect organic producers from duplicative traceback and record-keeping systems, or any requirements that would violate National Organic Standards.

Meanwhile, the mid-term US elections in November 2010 changed the balance of power for the new Congress, which took office in January 2011. These results are expected to usher in a changed political landscape that could affect how organic agriculture and products are addressed in US government policy. Changes of control in the House of Representatives will bring shifts to agricultural committees, while budget and fiscal pressures will impact the shaping of the 2012 Farm Bill.

Organic market

US sales of organic products continued to grow during 2009, according to the *Organic Trade Association's (*OTA) *2010 Organic Industry Survey*. Organic product sales in 2009 grew by 5.3 percent overall, to reach 26.6 billion US dollars. Of that figure, 24.8 billion US dollars represented organic food. The remaining 1.8 billion US dollars were sales of organic non-foods.

Total US food sales grew by only 1.6 percent in 2009, while organic food sales grew by 5.1 percent. Meanwhile, organic non-food sales grew by 9.1 percent, as opposed to total non-food sales, which showed 1 percent negative sales growth.

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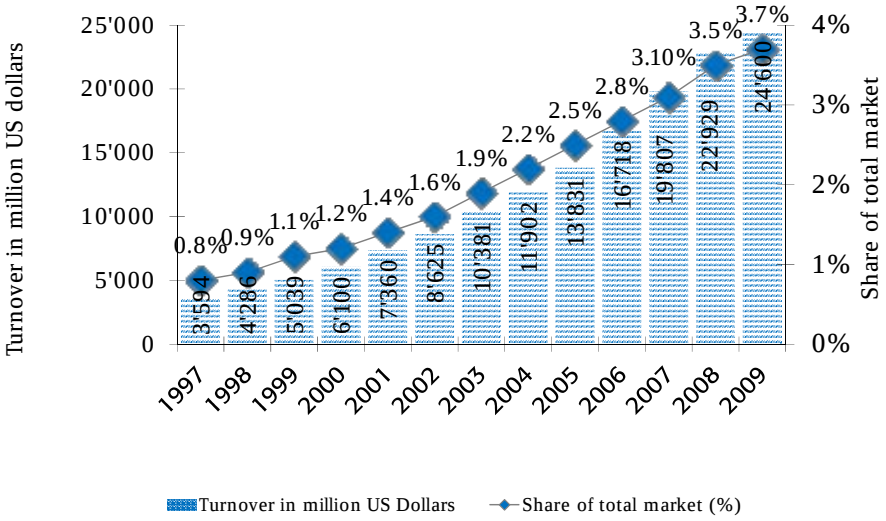

Figure 37: United States: Development of the market for organic food

Source: Organic Trade Association

Experiencing the most growth, organic fruits and vegetables, representing 38 percent of total organic food sales, reached nearly $9.5 billion in sales in 2009, up 11.4 percent from 2008 sales. Most notably, organic fruits and vegetables now represent about 11 percent of all US fruit and vegetable sales. Since the approval of the final National Organic Program rule published in 2000, organic food sales have grown from 6.1 billion to 24.8 billion US dollars in 2009, jumping from 1.2 percent of all US food sales to 3.7 percent.

The mass market channel had the lion's share of organic food sales in 2009, with 54 percent of organic sold through mainstream grocers, club stores and retailers. Natural retailers were next, with 38 percent of total organic food sales. Although still representing a small percentage of sales, farmers' markets, co-ops and CSA (community-supported agriculture) operations gained a lot of interest as consumers increasingly looked for locally and regionally produced organic foods.

In the organic non-food sector, organic supplements led, with 634 million US dollars in sales, representing 35 percent of total organic non-food sales. Organic supplement sales were 12 percent higher than in 2008. Organic fiber (linen and clothing) totaled 521 million in US dollars in sales, up 10.4 percent, while personal care products, at 459 million US dollars, were up 3.7 percent from 2008 sales.

Meanwhile, projections for 2010 and beyond indicate higher growth rates for organic sales. According to the *Organic Trade Association's 2010 Organic Industry Survey,* overall average annual growth for organic food sales was projected to grow to at least seven percent, from five percent in 2009. In fact, sales in October showed eight percent growth, and indicators predicted the growth rate could hit 10 percent by the end of 2010.

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Organic production

Operators

Organic production may be expanding even faster. In 2009, USDA-accredited groups certified 32'000 producers and handlers worldwide to the US organic standard, up 19 percent from 2007. The number of US certified producers and handlers increased from approximately 16'000 to 18'000 during this period, while certified operations outside the United States increased from approximately 11'000 to 14'000.

California has the largest number of certified organic operations in the United States—over 3'700 certified producers and handlers in 2009—and dominates the US organic fruit and vegetable market.

Of the organic farms, 10'903 were certified to NOP, and 3'637 were exempt from certification. The survey collected 2008 data from operators of farms that were either USDA-certified organic, were making the transition to organic production, or were exempt from certification because their annual sales totaled less than 5'000 US dollars.

Nearly 20 percent of the nation's certified and exempt organic farms were in California (2'714 farms). Wisconsin, with 1'222 farms, was second. Other states placing in the top ten were Washington (887 farms), New York (827 farms), Oregon (657 farms), Pennsylvania (586 farms), Minnesota (550 farms), Ohio (547 farms), Iowa (518 farms), and Vermont (467 farms).

Organic agricultural land

Overall, the latest information concerning US organic production is through 2008. Officially, certified organic acreage in the United States reached more than 1.94 million hectares in 2008, according to USDA's Economic Research Service (ERS). US total organic cropland reached 1.07 million hectares in 2008, while land devoted to organic pasture totaled 0.87 million hectares. ERS data are based on certified organic operations as reported by USDA-accredited certification agencies.[1]

In 2008, California led with the most certified organic cropland, with over 175'000 hectares, largely for fruit and vegetable production. Other states with the most certified organic cropland include Wisconsin, North Dakota, Minnesota and Montana. Forty-five states also had some certified organic rangeland and pasture in 2008; of those, 13 states had more than 40'000 hectares each, reflecting the growth in the US organic dairy sector between 2005 and 2008.

Growth

These statistics reflected a rise in the number of farms as well as the acreage farmed organically from 2007 data. In 2007, there were 11'367 certified organic farming operations, representing a total of 1.74 million hectares. Certified organic cropland acreage between 2002 and 2008 averaged 15 percent annual growth.

[1] Meanwhile, the 2008 Organic Production Survey conducted as a follow-on to the 2007 Census of Agriculture counted 14,540 organic farms and ranches in the United States, according to figures released by USDA's National Agricultural Statistics Service (NASS).* Represented were a total of 4.1 million acres, of which 1.6 million acres were harvested cropland and 1.8 million acres were pasture or rangeland. The remaining acres were not in active production. More information is available at http://www.nass.usda.gov/Newsroom/2010/02_03_2010.asp
*This survey is similar to the Farm Structure Survey in European countries.

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Share of total agricultural land

However, the 1.9 million hectares of agricultural land only represents about 0.7 percent of all US cropland, while certified organic pasture only represented 0.5 percent of all US pasture in 2008. Overall, certified organic cropland and pasture accounted for about 0.6 percent of US total farmland in 2008.

Economic aspects

The survey also found that organic farms had average annual sales of 217'675 US dollars, compared with 134'807 US dollars for US farms overall. Meanwhile, average production expenditures were higher for organic farms, at 171'978, than for all farms nationwide, at 109'359 US dollars. Thus, despite higher costs, organic farms showed an average profit of 45'697 US dollars, versus 25'448 US dollars for non-organic farms.

In mid-December 2010, USDA indicated that while the organic dairy industry had faced hard times during 2009, this segment experienced a solid rebound in 2010. In fact, the agency proclaimed, 2010 organic milk sales had generally exceeded the expectations of organic dairy processors.

Table 33: Trends in US organic agricultural production

	Organic Farms	All Other Farms
Gross Sales	**$217'675**	**$134'807**
Production Expenses	**$171'978**	**$109'359**
Operating Profit	**$45'697**	**$25'448**

Source: 2008 Organic Production Survey conducted as a follow-on to the 2007 Census of Agriculture, US Department of Agriculture's National Agricultural Statistics Service.

Consumer trends

In spite of the sluggish economic recovery in 2010, US families continue to buy more organic products than ever before and from a wider variety of categories, according to findings from the latest consumer study jointly sponsored by OTA and *KIWI* Magazine. In fact, 41 percent of parents report they are buying more organic foods in 2010 than a year ago, up significantly from 31 percent reporting organic purchases in 2009, according to the *US Families' Organic Attitudes & Beliefs 2010* tracking study.

The survey, conducted between August 11 and 27, 2010, also found that parents buy organic because they see organic products are generally healthier, address their concern about the effects of pesticides, hormones and antibiotics on children, or provide a means to avoid highly processed foods and/or artificial ingredients.

Although perceived price disparity between conventional and organic products remains a barrier to purchase for some families, the study revealed significant opportunities for marketers of organic products to educate consumers on the value of these products, and of the significant differences between organic, conventional and unregulated "natural" products. Demographically, consumers' education level appears to be more significant than income level in predicting organic purchase behaviors.

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US labeling win

Related to consumer concerns, the US Court of Appeals for the Sixth Circuit at the end of September 2010 ruled in favor of OTA and organic interests in a landmark case that would have prevented consumers in the state of Ohio from knowing whether dairy products on grocery shelves were produced without synthetic growth hormones.

The court's decision upholds consumers' rights to receive truthful information about organic production practices on the labels of their milk and other dairy products. Additionally, it recognizes the rights of organic dairy farmers and processors to communicate truthfully with consumers regarding federally regulated organic production practices under the USDA Organic seal. As a result, consumers continue to see truthful information on organic product labels in Ohio and across the United States.

Expanding production and supply

Further growth for US organic agriculture is one of the goals targeted by the National Organic Action Plan (NOAP) report (www.nationalorganiccoalition.org) released during 2010.

Culminating a five-year effort that engaged diverse US stakeholders in envisioning the future of organic and in building strategies for realizing a collective vision, NOAP calls for the creation of an expanded organic policy agenda for the next decade and beyond to reflect the broad social, environmental, and health values of the organic movement and the associated benefits that organic food systems afford society. The goal: to establish organic as the foundation for food and agricultural production systems across the United States.

NOAP's specific recommendations concerning expanding organic production call for:

- Doubling the amount of organic products and the number of farms, acreage, public lands, and animals under organic management every five years through 2020.
- Expanding local organic seed production capacities, with a benchmark of meeting 50 percent of all local organic seed needs by 2020.
- Increasing local organic production and processing by 50 percent by 2020, by increasing the infrastructure of organic regional food systems with government financial assistance.
- Increasing organic supplies to ensure the commercial availability of all agriculture-based organic ingredients contained in processed foods by 2014, including minor ingredients, seeds, and livestock feed.

Outlook

Looking ahead, the US organic industry realizes more work is needed to educate consumers about competing unregulated eco-labels and the benefits of organic agriculture. For instance, studies show that only half of US consumers trust the organic seal, and most wrongly attribute the benefits of organic to unregulated natural products.

As a result, OTA's Board has voted to devote resources to initiate an industry-wide effort to seek a nationwide Research and Promotion Program order for organic. Such orders are industry-funded generic research and marketing programs designed to increase domestic and/or international demand for the industry's agricultural commodities. Currently, there are 18 such orders in place in the United States. OTA is offering to facilitate decision-

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making and to take the lead administratively to submit an application to USDA's Agricultural Marketing Service for the order.

The key now for the organic sector is to help consumers understand that they can look to organic products in the marketplace to minimize their exposure to toxic and persistent pesticides, and avoid foods containing controversial dyes or produced using antibiotics.

As a result, OTA, in partnership with the public relations firm Haberman, in late 2010 launched an online pay-per-click campaign targeting consumers seeking timely information on topical food-related issues. Ads are appearing on Google and Facebook, and in proximity to online news stories from the nation's top daily papers such as *The New York Times* and *Washington Post*. Ads then drive traffic to the **Organic. It's Worth It.** consumer website, where specific pages address key issues, encourage newsletter sign-ups and direct consumers to find organic products via OTA's member directory. By "Connecting the Dots" between topical food-related issues and the benefits of organic products and production, OTA will introduce hundreds of thousands of new consumers to organic as a worth-it solution.

Further reading

Healthy, Hunger-Free Kids Act (http://www.gpo.gov/fdsys/pkg/BILLS-111s3307enr/pdf/BILLS-111s3307enr.pdf).

Organic Trade Association's 2010 Organic Industry Survey, April 2010.

US Department of Agriculture's Economic Research Service (ERS). Organic Production Data (www.ers.usda.gov/data/organic).

US Department of Agriculture's National Agricultural Statistics Service (NASS), four-page fact sheet on the findings of the 2008 Organic Production Survey (http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Fact_Sheets/organics.pdf). The entire publication is posted at http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Organics/index.asp.

The President's Cancer Panel report (http://deainfo.nci.nih.gov/advisory/pcp/pcp08-09rpt/PCP_Report_08-09_508.pdf).

Maryse F. Bouchard et al., Attention-Deficit/Hyperactivity Disorder and Urinary Metabolites of Organophosphate Pesticides, Pediatrics, published online May 17, 2010 (http://pediatrics.aappublications.org/cgi/content/abstract/peds.2009-3058v1?maxtoshow=&hits=10&RESULTFORMAT=&fulltext=Bouchard+%2B+ADHD&searchid=1&FIRSTINDEX=0&sortspec=relevance&resourcetype=HWCIT).

Organic Trade Association's consumer website, Organic.It'sWorthIt.org (www.organicitsworthit.org).

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Canada: Country Report

Matthew Holmes[1] and Anne Macey[2]

The year 2010 was a milestone year in the coming-of-age of Canada's organic sector. The first full year of government regulation since the implementation of Canada's Organic Products Regulations (OPR) in June 2009 brought with it market growth, increases in national consumer marketing and education, the capacity development of the domestic sector, and a more coordinated approach to Canadian organic exports. However, the sector also continues to face significant challenges: consumer confusion and competing claims in the marketplace, compromised trade due to the proliferation of genetic engineering, and the need to establish lasting infrastructure in the sector to ensure the organic standards continue to be maintained, new entrants are encouraged, and that the organic sector can speak effectively to government and consumers.

Organic Market

Agriculture and Agri-Food Canada released a report in 2010 on the organic market. The report found organic grocery products represented 6.8 percent of all grocery products scanned, with a total value of 443.2 million Canadian dollars[3] (1.8 percent of the value of all grocery products). Analyzing the 2008 sales of organic foods, the report concludes that the total Canadian organic market is now worth 2 billion Canadian dollars annually: doubling in only two years the 1 billion market figure presented by the Organic Agriculture Centre of Canada (OACC) in "Retail Sales of Certified Organic Food Products in Canada in 2006" (Macey, 2006).

The organic grocery product category with the greatest sales

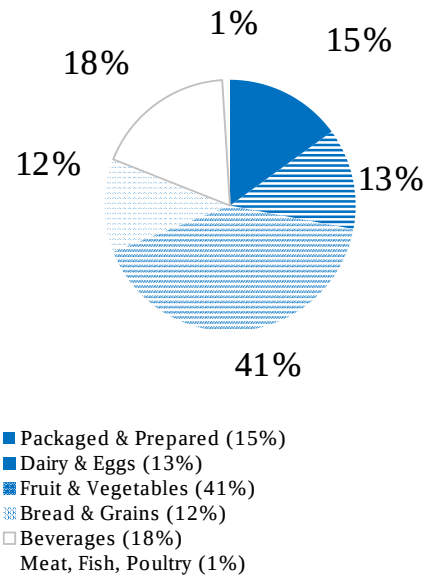

Figure 38: Canada: Distribution of retail sales by product 2009

Source: Agriculture and Agri-Food Canada 2010

[1] Matthew Holmes, Canada Organic Trade Association (COTA), PO Box 6364, Sackville, NB E4L 1G6, www.ota-canada.ca

[2] Anne Macey provided the statistics and analysis for this article.
Anne Macey, Canadian Organic Growers (COG), www.cog.ca

[3] 1 Canadian dollar = 0.63046 Euros, average exchange rate 2008; source: www.oanda.com/lang/de/currency/average

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in 2008 was soy beverages, at 47.3 million Canadian dollars, followed by milk (37.2 million) and yoghurt (35.4 million). Baby food, soup, and frozen vegetables saw the largest category growth in sales.

Of products inventoried, 38 percent were identified as grown, packaged or processed domestically. Less than 29 percent of products came from the United States, while the remainder were from other countries or did not make country of origin claims.

Agriculture Canada's new study includes traditional retail sales consisting of 925.8 million Canadian dollars, direct-to-consumer sales at 400 million, and specialty outlets at 712 million.

In 2007, Canada established Harmonized System (HS) codes to track 41 organic commodity imports. Based on this limited data set, between 2007 and 2009, the imported value in vegetables, tubers, and pulses has increased by over 60 percent, while fruit and nuts have increased by 43 percent. In 2008 and 2009, the organic commodity list was expanded to track an additional 25 categories. Of these, coffee and tea saw remarkable growth from 2008 to the first half of 2010, in some cases doubling their value in the market in one year.

Organic production

Preliminary 2009 statistics show 695'463 hectares in production and 210'231 hectares of land for wild harvest and pasture. Provinces with the most farmland are Saskatchewan with 399'269 hectares, followed by Ontario with 46'772 hectares and Manitoba with 41'962 hectares.

In Canada, 2009 saw an increase of 201 certified farms over 2008, bringing total operations to 3'914 (excluding farms in transition). Modest growth in producers was reported for several provinces, including British Columbia, Saskatchewan, and New Brunswick, while there were significant increases in Alberta where certified producer numbers increased by 23 percent from 2008. Nova Scotia saw a sudden decline in its numbers of certified operators, as the region's largest certifier took on the new accreditation requirements under the federal system and many market-scale farms chose not to renew (early 2010 numbers suggest a number have returned to certification however). Nationally, the number of producers increased by 5.4 percent overall.

Canada had a significant amount of organic grain in field crop production in 2009, with 102'434 hectares (253'121 acres) in wheat durum, 44'539 hectares (110'059 acres) in oats, and 27'767 hectares (68'614 acres) in barley. Flax, lentils, peas, and soybeans combined for 62'225 hectares. There is 488'638 hectares in forages, pastures and green manure. Vegetables production is done on 1'262 hectares (3'121 acres) followed by small fruit/berries at 1'136 hectares (2'806 acres) and tree fruit 891 hectares (2'201 acres).

The significant growth in the organic dairy sector has continued, mirroring the market demand for organic milk and dairy. In recent years, the largest increase year-to-year was 25 percent from 2006/2007 to 2007/2008 With 2009/2010 showing a 8.5 percent increase from the previous year, with 206 producers in total. Although impressive growth, the numbers only represent 1 percent of total Canadian milk production. Quebec produces the most organic milk, representing 39 percent of the overall volume and 48 percent of dairy producers, followed by Ontario (29 percent, with 38 percent of producers) and British Columbia (21 percent, with 7 percent of producers), while new entrants are emerging in Alberta (8

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percent of production by 4 percent of producers) and Manitoba (2 percent of production and producers).

Table 34: Organic farming in Canada by province 2009

Province	Farms	% of all farms	% change compared with 2008	Farms in transition	Processors*	Handlers **
British Columbia	475	0.024	0.067	87	124	65
Alberta	319	0.0065	0.23	2	62	8
Saskatchewan	1123	0.025	0.08	4	73	23
Manitoba	168	?	-0.096	5	24	15
Ontario	716	0.0125	5.3	8	216	43
Quebec	956	0.0312	2.25	111	278	219
New Brunswick	56	0.02	0.077		17	1
Nova Scotia	47	0.012	-0.23		14	3
Prince Edward Island	48	0.028	-0.058		4	3
Newfoundland	2	0.36	-		2	0
Yukon	4				1	0
Totals	3914	0.017	0.054	217	815	380

*includes food manufacturers & seed cleaners
**Handlers (includes packers, brokers & retailer)
Source: Survey of the Canadian Organic Growers

The number of certified processors and handlers appears to have changed little from 2008, when they jumped significantly from earlier in the decade.

Highlight

The Canada Organic Trade Association (COTA) and Canadian Organic Growers (COG) partnered with other regional and provincial organic groups in Canada to launch National Organic Week, October 9-16 (Canadian Thanksgiving to World Food Day) to celebrate the sector and increase consumer awareness of the new regulatory system and "Canada Organic" logo. The national events involved more than 250 regional and retailer partners, who organized in-store promotions, community harvest, fine restaurant meals, and organic farm tours. A dedicated website was established, www.OrganicWeek.ca, to provide consumers with information on organic agriculture and Organic Week activities. Canada's Minister of Agriculture, the Honorable Gerry Ritz, M.P. launched the week by announcing increased government funding for COTA's Canadian organic export program.

Two highlights of Canada's Organic Week were Parliament Day and a six-page Special Report on Organic in the national *Globe and Mail* newspaper. On Parliament Day, 35 organic leaders met in small groups with the individual Members of Parliament who make up the House Committee on Agriculture, and with staff from both Agriculture and Agri-Food Canada and the Canada Organic Office. That evening, COTA and COG hosted an all-organic reception on Parliament Hill that was very well attended by Members of Parliament, Senators, their staff, and senior bureaucrats. *The Globe and Mail* Special Report included elite athletes and olympians discussing their reasons for choosing organic, descriptions of the

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organic sector's growth, the new regulations, research on the environmental benefits of organic, and insight into organic farming practices. The digital edition is available at www.ota-canada.ca.

Research

The Government of Canada committed an unprecedented 6.5 million Canadian dollars[1] to organic research in September 2010, with industry also contributing an additional 2.2 million Canadian dollars to the "Organic Science Cluster". This innovative collective research model includes ten sub-projects, with 30 research activities conducted by more than 50 researchers and 30 collaborators in approximately 45 research institutions across the country. It is conducting research and trials in areas such as phosphorus use efficiency in organic crop production, energy-efficient organic greenhouse production, low-till production without herbicides, and development of effective systems for management of organic agricultural crops. The Organic Science Cluster is coordinated by the Organic Agriculture Centre of Canada (www.organicagcentre.ca), with administrative support from the Organic Federation of Canada.

The Organic Science Cluster will run until March of 2013, with activities in nine provinces, and engage all major agriculture universities. It will help support growth in the organic sector by strengthening the knowledge base of Canada's organic industry and the quality and quantity of products produced, while promoting aspects of organic production of benefit to all producers, whether organic or not.

In the realm of consumer health, a study published in the journal *Pediatrics* (June 2010) linked the exposure to organophosphate pesticides with neurological development problems, including attention-deficit/hyperactivity disorder. The data was taken from the National Health and Nutrition Examination Survey and led by Dr. Maryse Bouchard, a researcher in the Department of Environmental and Occupational Health at the University of Montreal. It analyzed the urinary concentrations of pesticide metabolites in 1'139 children that ranged in age from 8 to 15 and concluded that children with high levels of pesticide residue are much more likely to be diagnosed with ADHD. Dr. Bouchard drew the conclusion from her research that parents should "buy organic as much as possible."

Challenges

Genetic engineering

Coming out of the 2009 *Triffid* flax contamination, the issue of genetic engineering has been prominent in Canada during 2010. Specifically, there has been considerable discussion at the political level on the issue of the impact of GE on organic and other non-GE agriculture and export markets. Early in 2010, a private-member's bill was introduced in the House of Commons; Bill C-474 proposed to require an economic impact analysis of Canadian export markets before the commercial release of any new GE seed varieties. The bill was referred to the House Standing Committee on Agriculture and Agri-Food for further analysis and witness testimony before a final vote, and COTA's Matthew Holmes gave testimony in support of the bill. However, in November, the government succeeded in ending further discussion at committee, denying a number of scheduled witnesses, including representatives of COG and the National Farmers Union, from voicing support for the bill before the

[1] 1 Canadian dollar = 0.63046 Euros, average exchange rate 2008; source: www.oanda.com/lang/de/currency/average

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committee. A special debate of five hours has been granted the bill before the entire House in early 2011—the most this issue has ever received at the national level in Canada.

"Natural" claims

Agriculture and Agri-Food Canada's industry advisory group, the Organic Value Chain Roundtable, in 2009 identified products labeled as "natural" as a significant threat to the continued growth of organic sales and as a "green-washing" term that threatened to confuse consumers on the meaning of "organic." COTA has taken on the role of defining the threat and developing a strategy to address the problem.

Research suggests consumers perceive both "natural" and "organic" products as healthier food choices that are nutritionally and environmentally superior to products grown and processed using conventional methods. Consumers are often not aware that the "natural" label is not backed by standards or requirements. Data indicates the market situation worsened when the global economic recession began in late 2008. Earlier, having seen organic sales soar, many food manufacturers launched organic product lines for the first time. With the increase in organic processing, demand for relatively scarce organic ingredients surged. Prices rose with the tight supply situation, just when the recession caused consumers to reduce spending—many of them choosing "natural" products instead, and some manufacturers taking advantage of this misconception.

Domestic sector maintenance and infrastructure

One of the significant challenges facing the Canadian organic sector is how it will continue to maintain and update the Canadian organic standards, as these are still reviewed annually and controlled by representatives of Canadian organic farmers, processors, consumer groups and other stakeholders. This is a costly endeavor, as is the establishment of the official Standards Interpretation Committee (which advises the national program administrator and accreditor, the Canada Organic Office of the Canadian Food Inspection Agency). Both the maintenance of the standards and their official interpretation are priorities for the Organic Federation of Canada, which is working to build understanding within government for long-term, coordinated funding of these necessary supports to Canadian organic agriculture.

Expanding production and supply

In mid-2010, draft standards for organic aquaculture were formally published for public consultation. The first standards technical committee met in Ottawa in October 2010 to begin responding to the large number of public comments received, focusing on concerns related to transition periods, feed, antibiotics use, buffer zones, water and environmental impact, wild species interactions, and stocking rates. The technical committee is made up of producers of marine plants, finned fish and shellfish, as well as representatives from national organic associations, retailer associations, consumer groups, government, and researchers. Eventually, the organic aquaculture standards could be brought under the regulatory system via Canada's Organic Products Regulations of 2009.

COTA in March 2010 announced a partnership with the Government of Canada to develop a long-term international marketing strategy to expand Canada's organic sector through targeted export growth. The federal government has committed approximately 300'000 Canadian dollars in matching funds to COTA's international activities, including branding

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and marketing initiatives, trade missions, and strategic promotion of Canadian organic products at international trade events.

Outlook

In 2010, Canada's regulation was still being implemented in the marketplace, as was the 2009 Equivalency Arrangement between the US and Canada. Both countries conducted full peer reviews in 2010, and issued new communications to the sector to assist in compliance to the terms of the arrangement. Additionally, Canada and the EU in 2010 sent officials to conduct full vertical assessments of each others' regimes (from producers through to the regulator) and are in the final stages of their negotiations on equivalency.

As the Canadian organic sector looks forward, a number of projects have been initiated for 2011 and beyond. These include a national extension support strategy for organic farmers, in which COG is playing a lead national role. Also, through the Organic Value Chain Roundtable, national and regional groups are working with government to investigate a possible national consumer-oriented education and marketing campaign to inform them of Canada's new organic system and encourage market growth. Finally, a working group made up of members of COG, COTA, and OACC is working with others to develop the first comprehensive statistical picture of the Canadian organic sector, including production, sales, trade, consumer attitudes, and purchasing habits.

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Oceania

Map 7: Organic agriculture in the countries of Oceania 2009

Compiled by FiBL and IFOAM 2011; based on information from the private organic sector, certifiers, and governments.
For detailed data sources see annex, page 233.

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For Oceania no regional overview was available.

Related tables

- Table 40: Organic agricultural land: The top ten countries per region 2009
- Table 42: Share of organic agricultural land: The top ten countries per region 2009
- Table 43: Growth of the organic agricultural land by region 1999-2009
- Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009
- Table 45: All organic land use types by region and country 2009
- Table 46: Organic producers and other operator types by country 2009
- Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

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Organic Farming in Australia

ELS WYNEN[1], ALEXANDRA MITCHELL[2], AND PAUL KRISTIANSEN[3]

Size of the industry

In the early 1990s, the area under organic management was estimated to be 150'000 hectares for 1990 (Hassall and Associates 1995). In 2009 it had grown to 12'001'724 hectares (Mitchell *et al*. 2010), based on figures from Australian Quarantine Inspection Service (AQIS). This represents 2.9 percent of the total agricultural area of 417.3 million hectares in Australia in 2008 (FAO 2010), for which 2'129 producers were certified. The area under organic management increased slightly from 2007 (from 11'988'044 hectares) and there has been a considerable increase in producers (from 1'776, which is nearly a 20 percent increase over two years).[4]

If the estimate of the proportion of the total certified area under extensive grazing management of 97 percent in 2005[5] (Wynen 2007) is still valid for 2009, the total of 12.0 million hectares in 2009 would mean that close to 360,000 hectares was in non-pastoral areas, approximately 0.6 percent of the total conventional area for those industries.[6] The pastoral area is used for extensive livestock production. Products grown on the more intensively farmed areas have always been very important in organic production in Australia, accounting for at least half of the total value of the organic sector. An analysis of data for the whole industry about the situation in 2000-2001 showed that only 38 percent of the total farm-gate value of 89 million Australian Dollars[7] (including organically grown products sold on the conventional market) was received for beef and sheep products (mainly produced on pastoral land), with around one quarter each for grains and horticulture (Wynen 2003). That is, the broadacre (grains, oilseeds) and horticultural sector accounted for more than half of the total value of the organic production in that year.[8] In 2009, the estimated value of beef and sheep enterprises was only 21 percent of the total farm-gate value (see section 3).

Standards and Certification

Up until recently, certification to Australia's National Standard for Organic and Biodynamic Products (adopted in 1991) was required only for products exported as organic from Australia. Those exports were certified by one of the certification bodies that were accredited by

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[4] Data for 2007 and 2009 include figures for Organic Growers Australia, excluded for 2007 in the previous report.

[5] Thanks to the National Association for Sustainable Agriculture, Australia (www.nasaa.com.au) and the Biological Farmers of Australia (www.bfa.com.au) for providing data.

[6] The total for wheat and other crops, mixed broadacre, and dairy for 2003/2004 was 60 million hectares. It does not include the horticultural sector.

[7] Late November 2010, the Australian dollar was close to parity with the US dollar.

[8] Several surveys have been conducted since 2003. However, as results of surveys can be considerably more questionable than an analysis of the whole population – calculations the make-up of the industry in terms of income from different enterprises are based on 2003 data. For some details of the surveys, see Section 3.

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AQIS. These certifiers each operate their own standards, using the National Standard as their base level for compliance. Details are rather similar to those described in earlier versions of this chapter (see Wynen 2009).

In October 2009, the Australian Standard for Organic and Biodynamic Products was adopted and published by Standards Australia (AS6000). Although not legally mandatory, this standard can assist Australia's regulatory authorities, such as the Australian Competition and Consumer Commission, in using existing regulatory laws (such as the Trade Practices Act), to ensure the integrity of products that are sold as organic or biodynamic in Australia. These standards can also be used to ascertain the integrity of imported organic products. Rather than a mandated or self-regulatory system, this is a co-regulatory system—a system where the organic sector and the government work together.

Now that the Australian Standard has been published, industry and AQIS are working towards a situation where one standard can be used for the domestic and export market. Not doing so would mean a doubling of cost for maintaining two sets of standards, one set by the certifiers (National Standard) and one by stakeholders of the whole of the industry (Australian Standard). In the interim, the certification agencies and AQIS have agreed to maintain use of the current National Standard.

Market

Farm-gate values for organic products in the early 2000s were estimated to be 89 million Australian Dollars (Wynen 2003).[1]

Table 35: Australia: Values of organic production in (2000-2010)

	Year	Farm-gate			Retail
		Total	Beef as share of total (%)	Fruit, vegetables and grain as share of total (%)	Total
		(Mill ASD)			(Mill ASD)
Wynen (2003)	2000/1	89	36	51	106.5
Halpin (2004)	2003	140	40.9	49.5	
Kristiansen et al. (2008)	2007	231.5	13.7	57.7	623
Mitchell et al. (2010)	2009	223.2	15.4	58.2	947

Between 2002 and 2010, three surveys were carried out. The last one (Mitchell *et al.* 2010) estimated a farm-gate value for 2009 at 223.2 million Australian Dollars,[2] with 34.5 million Australian Dollars for beef.[3] All four studies are summarized in Table 35, which shows a growth (or stabilization) of farm-gate value over time, but considerable variation in beef value as percentage of total farm gate value in the later years. An industry survey on only beef value reached an estimate of 60 million Australian dollars as farm gate value for 2005 (Wynen 2006). Fruits, vegetables, and grain made up around half of the total organic sales.

[1] Based on data of over 80 percent of the population, and including organic produce sold as conventional in 2000/2001.
[2] 1 Australian Dollar = 0.56599 Euros in 2009; average annual exchange rare 2009; Source: http://www.oanda.com/lang/de/currency/average
[3] Wynen (2003) and Halpin (2004) included organic produce sold as organic and conventional. The two later studies exclude produce sold in the conventional market.

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It is not clear whether such differences are real changes in the market, or whether they are due to varying sampling methods, for example estimates based on data from total population by Wynen (2003) and on extrapolations of survey-results by Halpin (2004), Kristiansen and Smithson (2008), and Mitchell *et al*. (2009).[1] Variations in weather over the years—with severe drought conditions in large areas of eastern Australia over the last five years—would most certainly also have influenced the relative results.

Domestic market

The retail value of organic produce sold in Australia has also grown considerably over time. Wynen (2003) estimated the value for 2000/2001 to be 106.5 million Australian Dollars.[2] Kristiansen and Smithson's (2008) estimates reached a value of 623 million Australian Dollars in 2007, and Mitchell *et al.* (2010), estimating the value by surveying retailers, recorded a value of 947 million Australian Dollars in 2009. As with the 2007 figures, this includes the value of organic produce sold both on the organic and conventional market (around one third in 2000/2001).

Policy

There is increased recognition of the contribution of organic food in maintaining and improving the health of the population, with many school programs now including significant funding for school garden programs. Many state and commonwealth education and health departments are showing an increase in co-funding of such initiatives. However, such a recognition cannot be reported for the farming sector.

The use of genetically modified crops in Australia remains a highly controversial issue. It is state-based legislation that determines the use of GM technology in plantings. There has been an extension of the Tasmanian moratorium, banning the use of GM technology in crop plantings, and other states have restricted use of plantings for scientific purposes only. In some states in Australia (New South Wales and Victoria) the first large-scale plantings of GM crops for food production have taken place in 2010.

Research and extension

The Australian organic industry is represented by the peak body, the Organic Federation of Australia (OFA).[3] The OFA was established in 1997 with the primary aim of working with all parts of the organic industry, business, and government to develop the organic sector in Australian agriculture. Membership of OFA includes primary producers, manufacturers and processers, wholesalers and retailers, consumers, certifiers, regional organizations, and education and research providers. In early 2010, the OFA set up the Environmental Research and Educational Trust to attract increased funding for organic agriculture, to help Australian farmers to produce high quality organic food and to develop Australia's marketing system for organic produce.

This is a timely action from the OFA as the Rural Industry Research and Development Corporation, which was mainly responsible for funding of research in organic agriculture over

[1] Halpin (2004) achieved a response rate of 26.3 percent, Kristiansen and Smithson (2008) 25.4 percent, and Mitchell *et al.* (2009) 16.4 percent.

[2] This was a very rough estimate, converting farm sales to retail prices, and assuming that little processing had taken place (which would have increased the value), and that exports exceeded imports (which would have reduced the value).

[3] See www.ofa.org.au for further information about the Organic Federation of Australia (OFA).

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the last decade (approximately 270'000 Australian Dollars annually), seems set to reallocate its funding to other areas.

The State Government of Victoria has invested 1.08 million Australian Dollars from 2008 to 2011 to develop the organic industry in that state. This is the first time a government in Australia has committed serious funds for industry development in this country. The investment was provided after an Action Plan for industry development was identified by the Victorian Organic Industry Committee (VOICe). Key projects undertaken include: industry data collection to identify the value of the organic industry in Victoria, supply chain development, conversion to organic, communication and marketing, and partnership development.

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The Pacific Islands

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Recent important developments

The year 2010 marked a milestone for the Pacific Region as the International Organic Accreditation Service (www.ioas.org) has assessed the Pacific Organic Standard (POS) and found it, after some corrective actions, to be equivalent to the standards requirements of the European Union regulations EC 834(2007) and EC 889(2008). This means that, according to the IOAS, the Pacific Organic Standard is suitable for use by conformity assessment bodies in the Pacific region as a standard for the certification of operators who may wish to export products to the European Union.

The Pacific Organic Standard is not yet in use for certification as the Organic Guarantee System is under development but the IOAS assessment is seen as a significant step for Pacific producers towards achieving market access for their products.

Also in 2010, the first Participatory Guarantee System (PGS) in the Pacific region became operational in New Caledonia. The PGS uses the Pacific Organic Standard as its production standard. The PGS "BioCaledonia" was developed in a joint project by the public institution the Chamber of Agriculture and "Arborfruits," a fruit farmers association. Producers and consumers were involved in working groups to define the PGS scheme and the certification process. Official institutions have also recognized this system as it includes an external controller. BioCaledonia applied to the Pacific Organic and Ethical Community (POETCom) and since they met all requirements they were granted a license to use the Organic Pasifika PGS logo.

The Government of the Solomon Islands became the first Pacific Government to endorse a national organic policy in 2009. The purpose of this policy document is to outline the benefits of producing and consuming organic products. It provides a guideline on how the Solomon Islands Government should capitalize on opportunities, address challenges and constraints and develop promotion strategies for organic agriculture for the betterment of the Solomon Islands and its people.

The policy development process included an opportunity for members of the organic movement across the entire region through the Pacific Organic and Ethical Trade Community (POETCom) to provide input and the policy aligns well with the overall goals and objectives of the POETCom regional strategic plan. It is hoped other Governments will follow suit.

History

Organic agriculture is not a new concept in the Pacific, it is very much the traditional farming system that Pacific forefathers practiced sustainably for centuries. Today, current farming practices in many communities are still based on 'age-old' systems that are free from the residues of agrichemicals and where environmental integrity remains largely intact. However, the motives for organic farming have changed. In the past, farming was predominant-

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ly for subsistence living, but in the cash driven societies that we live in today, there is now a need from overseas markets to ensure that products being labeled and sold as organic produce meet international standards. Though third party certification began in the Pacific in the late 1980s, it has been slow to develop.

The organic movement in the Pacific recognized one of the major challenges facing Pacific Island organic producers is the high cost of certification, auditing, and compliance involved in meeting importing country organic standards and/or international standards. In order to address this issue, two projects commencing in 2007 have been undertaken, funded by the International Fund for Agricultural Development and implemented by the International Federation of Organic Agriculture Movements (IFOAM) 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 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 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 will be responsible for implementing the 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 provide high level political support and advocacy.

The first Pacific Organic Standard was officially launched by the Chair of the PHLOG and Prime Minster 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 Regional Organic Task Force 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 which will remain housed in the Secretariat of the Pacific Community is currently in the process of developing its governance and management structure.

Key actors

Developments in organic agriculture are being spearheaded by the Pacific High Level Organics Group, the Secretariat of the Pacific Community, the Pacific Organic and Ethical Trade Community and members—lead organic organizations/NGOs in each Pacific Island country including:

- BioCaledonia, New Caledonia
- Bio Fenua, French Polynesia
- Farm Support Organisation, Vanuatu
- Fiji Organic Association, Fiji
- Kastom Gaden Association, Solomon Islands
- Niue Organic Farmers Association
- Pacific Spices, Papua New Guinea
- Titikaveka Growers Association, Cook Islands

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- 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 organic agriculture 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.

Production

Currently 26'000 hectares are under organic management in the region, constituting 1.4 percent of the agricultural land. Samoa is the country with the most organic agricultural land (almost 10'000 hectares), followed by Vanuatu.

Table 36: Pacific Islands: Organic agricultural land and share of total agricultural land 2009

Country	Organic agr. land	Share of total agr. land
Cook Islands	4	0.1%
Fiji	100	0.0%
Niue	159	3.2%
Papua New Guinea	3'321	0.3%
Samoa	9'714	7.9%
Solomon Islands	3'628	4.3%
Vanuatu	8'996	4.8%
Total	25'921	1.4%

Source: FiBL/IFOAM Survey 2011; for detailed data sources see annex

Market &trade

Most of the organically certified products from the region are for export. The following is a summary table listing the main crops which are currently organically certified and exported from the Pacific region.

Table 37: Pacific Islands: Main crops

Products	Countries
Vanilla & other spices & nuts	Fiji, Vanuatu, Niue
Cocoa	Vanuatu, Samoa, Papua New Guinea, Vanuatu
Virgin Coconut Oil	Samoa, Fiji, Solomon Islands
Nonu /noni (Morinda Citrifolia)	Cook Islands, Samoa, Fiji, Niue
Taro	Cook Islands
Papaya (pawpaw)	Cook Islands, Fiji
Bananas	Fiji, Papua New Guinea, Samoa
Coffee	Papua New Guinea
Beef	Vanuatu

Source: Women in Business 2010

The main international markets for the listed products are Australia and New Zealand representing the main destination for the export of organic products due to the proximity.

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Japan is a growing market and other markets include North American and the European Union.

There is growing interest and activity in the area of fair trade programmes and certification and efforts are being made by Pacific Organic and Ethical Trade Community to link organic producers into these systems as a way of adding further value to products and ensuring maximum benefits to the farmers.

Domestic Markets

Generally the domestic markets for organic certified products are not very developed and in some cases are non-existent. Organic products are commonly sold as conventional without premium price. Some initiatives are on-going or are in the pipeline to promote the awareness of the consumers about organic products. Interesting opportunities are now being explored within the tourist structures of several countries that are facing a growth in the presence of tourists (e.g., Fiji, Cooks and Samoa) focusing on development of Pacific cuisine and linking small holder organic farmers directly with tourist and hospitality providers.

Legislation

While there is no regional policy for organic agriculture, the Secretariat of the Pacific Community developed a specific policy brief in 2009 to assist governments and others in the region develop relevant policy. The policy brief focuses on how organic agriculture can assist in meeting regional challenges and outlines seven initial policy recommendations.

Increasingly organic agriculture is gaining mention and recognition in national policy and planning documents and the Solomon Islands Government has developed the first Cabinet endorsed national organic agriculture policy in the region.

Government and international support

The Secretariat of the Pacific Community as a regional intergovernmental organization continues to provide support for coordination of the Pacific Organic and Ethical Trade Community (POETcom) and where possible to national level activities such as supporting the formation of a coordinating committee in Vanuatu for the organic movement. There has, however, been international development support in the last 12 months, which has slowed the institutional development required to support implementing the Pacific Organic Standard. The Food and Agriculture Organization (FAO) has agreed to support the development of an appropriate governance structure for POETCom and the organic guarantee system for the Pacific Organic Standard and proposals for further support are under development, which will move this forward.

OXFAM New Zealand and the Canada Fund have also provided assistance to national level organizations through Women in Business Development to establish internal control systems and prepare for organic certification.

Outlook

While the implementation of the Pacific Organic Standard has been slow due to resource constraints, momentum of the movement remains strong across the region and the outlook for the development of organics in the region is positive. Interest in organic products from the region appears to be growing with key challenges remaining around building production to meet projected demands. Establishment of the Organic Guarantee System and POETCom governance structure within the Secretariat of the Pacific Community will facili-

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tate implementation of the Pacific Organic Standard which will ultimately improve access to organic certification for small holder farmers in the region and also provide a common standard for joint marketing and promotion.

Links/Further reading

- Secretariat of the Pacific Community www.spc.int
- Pacific Organic Standard www.spc.int/lrd/lrd/New_LRD_Publications.htm

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Achievements Made and Challenges Ahead

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Creating Power Through Statistical Evidence: The Organic Alternative

Markus Arbenz[1]

The world is challenged and in need of alternatives. Positioning organic agriculture not just as a certified standard, but as a tool to implement development strategies, creates opportunities for all involved: it can secure the sustainable livelihood of people in rural areas, help the organic world expand and give policy makers success stories to work with.

From alternative agriculture ...

Organic agriculture started almost a century ago when outstanding personalities such as Rudolf Steiner, Eve Balfour, Albert Howard, Jerome Rodale and Masanobu Fukuoka in Europe, America and Asia independently published alternative visions of how agriculture could look in the future. These scientists, philosophers and farmers were united by the conviction that nature should guide us, while defining how we design our agricultural strategies. "Better for the environment and better for people", particularly the ones that produce from the fields, was their credo.

... to reliability from field to plate

Only half a century later, the organic community realized that the consumers could be their strongest allies. A holistic way of farming evolved into a holistic view of value chains. Consumer demand has turned out to be the driving force behind the development of organic in the past few decades. As a consequence, organic stakeholders have developed a strong focus on organizing the organic sector. Organic actors have become very engaged in complying with standards and regulations and have provided a high degree of reliability. Hence, organic has come to be seen as synonymous with its certification standards and its labels. Organic is now well-known to people everywhere. It has gained an excellent reputation worldwide, and millions of people trust that organic products are better for the environment.

The organic movement emerged against the backdrop of rapidly advancing globalization, which has augmented global challenges. Food security is still an unfulfilled dream for more than 15 percent of the global population, most of them living in rural areas in Africa and South Asia. The world keeps losing biodiversity, and the effects of climate change are beginning to be felt. Recent problems reveal that the industrialization of agriculture and overreliance on chemical inputs are ill-oriented strategies that destroy ecosystems. Diversity and complexity, and working with and not against nature are the cornerstones of

Supporters of the IFOAM Declaration of Living Change

Bashkar Save, India
Frances Moore Lappé, United States
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the organic movement's holistic thinking. Impacts can be showcased and some of the world's most creative minds are allies of the organic community.
However, organic agriculture has so far rarely managed to be part of a broad-based vision for international organizations, governments or donor agencies in addressing global issues. Other concepts and standards, for example Integrated Pest Management (IPM), Fair Trade, Conservation Agriculture, 4C, Sustainable Agriculture Network or Second Green Revolution, are getting more support from policy setters and development organizations.

Time for "organic policies"

The revolutionary thoughts of the pioneers set the stage for the development of organic value chains, and now it is time to take the next step: reforming national and international policies to advance organic agriculture. The IFOAM Inspiration for Living Change Declaration, which was publicly affirmed by a dozen laureates of the Alternative Nobel Prize, the World Food Prize and the One World Organic Lifetime Achievement Award, outlines the imperative of reform.[1] The world has to become more sustainable, and correctly applied organic practices are part of the recipe for this strategy.

Leading the organic movement

IFOAM has three campaigns advocating for organic solutions: the "People before Commodities" campaign focuses on Food Security, "Powered by Nature" on Biodiversity, and "Not just Carbon" on Climate Change. All these campaigns see eco-intensification as the common strategy to develop the agriculture of the 21st century. Eco-intensification means optimizing the agriculture system's performance through the intensification of ecological knowledge, ecological practices and ecological functions, rather than through the intensification of finance, chemicals, energy and waste.

Besides the aforementioned declaration and campaigns, IFOAM initiated a new tool to lead the organic movement: the so-called "camps", which are workshops to build participatory strategies for stakeholders. One "Climate Camp" already took place in Rome with the support of the European Union and Hivos. Camps on fair trade, nanotechnology, food sovereignty or aid effectiveness will also be pursued, as soon as donors and stewards for those hot topics can be identified. Another element that leads the organic movement towards the facilitation of development is the best practice standard, decided upon by the IFOAM membership in July 2010 as part of the Organic Guarantee System. IFOAM, with the "International Association of Partnership (IAP)", is showing a way to position organic as a development model for the sustainability of rural livelihoods in poor and rich countries.

Statistical evidence is invaluable

For think-tanking and strategy development, the organic movement takes its power from the field in order to be heard in current debates. The evidence this book provides is therefore invaluable – 37.2 million hectares of organic agricultural land (and an additional 41.9 million hectares of further areas), 1.8 million organic certified farmers and 54.9 billion US dollars organic sales: this is a unique power. Yet, we can be more inclusive. At the moment, (maybe due to feasibility questions, or maybe due to the perception of organic as merely compliance with organic regulations and standards), we limit our figures to certified organic agriculture only. However, our strategy and policy suggestions would be better heard if we integrated all activities of people practicing organic agriculture, including for those for whom certification does not provide added value.

[1] The IFOAM Declaration of Living Change and video statements can be downloaded at www.ifoam.org.

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Annex

FiBL/IFOAM Survey:

Tables and Information on Data Sources

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Organic agricultural land, share of total agricultural land and number of producers

Table 38: Organic agricultural land, share of total agricultural land and number of producers

Country	Data year	Agr. land (ha)	Share	Producers
Afghanistan	2009	63	0.00%	264
Albania	2009	500	0.4%	50
Algeria	2009	622	0.00%	49
Andorra	2009	2	0.01%	-
Angola	2009	2'486	0.00%	No data
Argentina	2009	4'397'851	3.31%	1'894
Armenia	2009	600	0.03%	31
Australia	2009	12'001'724	2.88%	2'129
Austria	2009	518'757	18.50%	21'000
Azerbaijan	2009	20'339	0.43%	288
Bangladesh	2009	1'162	0.01%	2
Belarus (Wild collection only)	2009	No data	0.00%	No data
Belgium	2009	41'459	3.02%	997
Belize	2009	1'177	0.77%	863
Benin	2009	872	0.03%	1'343
Bhutan (Wild collection only)	2009	No data	0.00%	No data
Bolivia	2006	41'004	0.11%	11'743
Bosnia and Herzegovina	2009	580	0.03%	27
Brazil	2007	1'765'793	0.67%	7'250
Bulgaria	2009	12'320	0.40%	379
Burkina Faso	2009	14'693	0.12%	27'748
Burundi	2009	350	0.02%	23
Cambodia	2009	10'725	0.20%	8'841
Cameroon	2009	292	0.00%	126
Canada	2009	703'678	1.04%	4'128
Chad (Wild collection only)	2009	No data	0.00%	No data
Channel Islands	2008	430	5.73%	No data
Chile	2009	82'327	0.52%	529
China	2008	1'853'000	0.34%	No data
Colombia	June 2010	42'235	0.10%	5'704
Comoros	2009	1'330	0.89%	1'514
Congo, Democratic Republic of	2009	6'667	0.03%	1'117
Cook Islands	2009	4	0.12%	12
Costa Rica	2009	8'058	0.45%	3'000
Côte d'Ivoire	2009	17'443	0.09%	265
Croatia	2009	14'194	1.10%	817
Cuba	2008	14'314	0.22%	2'467
Cyprus	2009	3'816	2.61%	732
Czech Republic	2009	398'407	9.38%	2'665
Denmark	2009	156'433	5.88%	2'694
Dominican Republic	2009	161'098	8.28%	23'371
Ecuador	2009	69'358	0.93%	13'930
Egypt	2009	56'000	1.58%	790
El Salvador	2008/2009	6'736	0.43%	2'000

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Table 38: Organic agricultural land, share of total agricultural land and number of producers

Country	Data year	Agr. land (ha)	Share	Producers
Estonia	2009	95'167	10.49%	1'277
Ethiopia	2009	122'727	0.36%	101'577
Falkland Islands (Malvinas)	2009	395'935	35.68%	8
Faroe Islands	2009	12	0.40%	-
Fiji	2005	100	0.02%	No data
Finland	2009	166'171	7.25%	4'087
France	2009	677'513	2.46%	16'446
French Guiana (France)	2009	2'651	11.68%	18
Georgia	2009	1'208	0.05%	1'044
Germany	2009	947'115	5.59%	21'047
Ghana	2009	29'140	0.19%	9'691
Greece	2009	326'252	3.94%	23'665
Grenada	2009	40	0.34%	-
Guadeloupe (France)	2009	83	0.21%	26
Guatemala	2009	13'300	0.32%	3'059
Guyana	2009	4'249	0.25%	74
Haiti	2009	54	0.00%	40
Honduras	2009	11'801	0.37%	1'113
Hungary	2009	140'292	3.32%	1'617
Iceland	2009	6'661	0.44%	28
India	2009/2010	1'180'000	0.66%	677'257[1]
Indonesia	2009	52'133	0.11%	9'981
Iran	2009	18'353	0.04%	700
Ireland	2009	47'864	1.16%	1'328
Israel	Oct 2008-Sept 2009	6'969	1.38%	393
Italy	2009	1'106'684	8.68%	43'029
Jamaica	2009	542	0.12%	80
Japan	2009	8'817	0.23%	3'815
Jordan	2009	1'053	0.11%	16
Kazakhstan	2009	134'862	0.06%	8
Kenya	2009	4'227	0.02%	2'188
Korea, Republic of	2009	13'343	0.74%	9'403
Kyrgyzstan	2009	11'415	0.11%	1'020
Lao People's Democratic Republic	2009	4'878	0.22%	2'178
Latvia	2009	160'175	9.03%	4'016
Lebanon	2009	3'332	0.49%	267
Lesotho	2009	330	0.01%	2
Liechtenstein	2009	1'005	26.87%	32
Lithuania	2009	129'055	4.87%	2'652
Luxembourg	2009	3'614	2.76%	77
Macedonia, The Former Yugoslav Republic	2009	1'489	0.14%	99
Madagascar	2009	14'069	0.03%	4'289
Malawi	2009	994	0.02%	9'003
Malaysia	2009	1'582	0.02%	24
Mali	2009	21'681	0.05%	9'986

[1] Includes collectors (India has 3.4 million hectares of wild collection).

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Table 38: Organic agricultural land, share of total agricultural land and number of producers

Country	Data year	Agr. land (ha)	Share	Producers
Malta	2009	26	0.25%	12
Martinique (France)	2009	141	0.50%	27
Mauritius	2009	6	0.01%	-
Mexico	2008	332'485	2.42%	128'862
Moldova	2009	32'105	1.29%	166
Montenegro	2009	4'603	0.90%	29
Morocco	2009	3'800	0.01%	No data
Mozambique	2009	1'556	0.00%	395
Myanmar	2009	555	0.00%	6
Namibia	2009	124	0.00%	796[1]
Nepal	2009	8'059	0.19%	1'470
Netherlands	2009	51'911	2.69%	1'413
New Zealand	2009	124'463	1.09%	1'000
Nicaragua	2009	33'621	0.65%	10'060
Niger	2009	355	0.00%	-
Nigeria	2009	8'202	0.01%	519
Niue	2006	159	3.18%	61
Norway	2009	56'737	5.48%	2'851
Occupied Palestinian Territory	2009	1'000	0.27%	500
Oman	2009	39	0.00%	4
Pakistan	2009	20'321	0.08%	1'045
Panama	2004	5'244	0.24%	7
Papua New Guinea	2009	3'321	0.30%	4'559
Paraguay	2007	51'190	0.25%	11'401
Peru	2009	186'314	0.87%	54'904
Philippines	2009	52'546	0.45%	3'051
Poland	2009	367'062	2.37%	17'092
Portugal	2009	209'090	6.02%	1'902
Réunion (France)	2009	188	0.47%	50
Romania	2009	168'288	1.22%	3'078
Russian Federation	2009	78'449	0.04%	40
Rwanda	2009	3'697	0.18%	536
Samoa	2009	9'714	7.9%	353
Sao Tome and Principe	2009	3'591	6.53%	1'791
Saudi Arabia	2009	46'635	0.03%	63
Senegal	2009	25'351	0.28%	21'662
Serbia	2009	8'661	0.17%	2'969
Sierra Leone	2009	72'472	1.75%	22'515
Slovakia	2009	145'490	7.51%	363
Slovenia	2009	29'388	6.01%	2'096
Solomon Islands	2006	3'628	4.32%	352
South Africa	2009	59'562	0.06%	689
Spain	2009	1'330'774	5.35%	25'291
Sri Lanka	2009	21'156	0.80%	687
Sudan	2009	77'798	0.06%	1'003

[1] Includes 792 collectors (Namibia has 3 million hectares of wild collection areas).

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Table 38: Organic agricultural land, share of total agricultural land and number of producers

Country	Data year	Agr. land (ha)	Share	Producers
Suriname	2009	8	0.01%	-
Swaziland	2009	46	0.00%	2
Sweden	2009	391'524	12.56%	4'816
Switzerland	2009	114'050	10.78%	5'943
Syria	2009	35'439	0.25%	204
Taiwan	2009	2'962	0.35%	1'277
Tajikistan	2009	70	0.00%	39
Tanzania, United Republic of	2008	72'188	0.21%	85'366
Thailand	2009	29'597	0.15%	5'358
Timor-Leste	2009	24'997	6.67%	71
Togo	2009	1'789	0.05%	6'657
Tunisia	2009	167'302	1.69%	1'792
Turkey	2009	325'831	1.29%	35'565
Uganda	2009/2010	226'954	1.74%	187'893
Ukraine	2009	271'315	0.66%	121
United Arab Emirates	2009	373	0.07%	8
United Kingdom	2009	721'726	4.47%	5'156
United States of America	2008	1'948'946	0.60%	12'941
Uruguay	2006	930'965	6.26%	630
Uzbekistan	2009	324	0.00%	5
Vanuatu	2006	8'996	4.81%	No data
Venezuela, Bolivarian Republic of	2009	337	0.00%	4
Viet Nam	2009	14'012	0.14%	2'002
Zambia	2009	7'310	0.03%	10'055
Zimbabwe	2009	421	0.00%	230
Total		37'232'127	0.85%	1'809'121

Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

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Organic agricultural land by country 2009, sorted by area

Table 39: Organic agricultural land by country 2009, sorted by area

Country	Agr. land (ha)
Australia	12'001'724
Argentina	4'397'851
United States of America	1'948'946
China	1'853'000
Brazil	1'765'793
Spain	1'330'774
India	1'180'000
Italy	1'106'684
Germany	947'115
Uruguay	930'965
United Kingdom	721'726
Canada	703'678
France	677'513
Austria	518'757
Czech Republic	398'407
Falkland Islands (Malvinas)	395'935
Sweden	391'524
Poland	367'062
Mexico	332'485
Greece	326'252
Turkey	325'831
Ukraine	271'315
Uganda	226'954
Portugal	209'090
Peru	186'314
Romania	168'288
Tunisia	167'302
Finland	166'171
Dominican Republic	161'098
Latvia	160'175
Denmark	156'433
Slovakia	145'490
Hungary	140'292
Kazakhstan	134'862
Lithuania	129'055
New Zealand	124'463
Ethiopia	122'727

Table 39: Organic agricultural land by country 2009, sorted by area

Country	Agr. land (ha)
Switzerland	114'050
Estonia	95'167
Chile	82'327
Russian Federation	78'449
Sudan	77'798
Sierra Leone	72'472
Tanzania, United Republic of	72'188
Ecuador	69'358
South Africa	59'562
Norway	56'737
Egypt	56'000
Philippines	52'546
Indonesia	52'133
Netherlands	51'911
Paraguay	51'190
Ireland	47'864
Saudi Arabia	46'635
Colombia	42'235
Belgium	41'459
Bolivia	41'004
Syria	35'439
Nicaragua	33'621
Moldova	32'105
Thailand	29'597
Slovenia	29'388
Ghana	29'140
Senegal	25'351
Timor-Leste	24'997
Mali	21'681
Sri Lanka	21'156
Azerbaijan	20'339
Pakistan	20'321
Iran, Islamic Republic of	18'353
Côte d'Ivoire	17'443
Burkina Faso	14'693
Cuba	14'314
Croatia	14'194
Madagascar	14'069

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Table 39: Organic agricultural land by country 2009, sorted by area

Country	Agr. land (ha)
Viet Nam	14'012
Korea, Republic of	13'343
Guatemala	13'300
Bulgaria	12'320
Honduras	11'801
Kyrgyzstan	11'415
Cambodia	10'725
Samoa	9'714
Vanuatu	8'996
Japan	8'817
Serbia	8'661
Nigeria	8'202
Nepal	8'059
Costa Rica	8'058
Zambia	7'310
Israel	6'969
El Salvador	6'736
Congo, Democratic Republic of	6'667
Iceland	6'661
Panama	5'244
Lao People's Democratic Republic	4'878
Montenegro	4'603
Guyana	4'249
Kenya	4'227
Cyprus	3'816
Morocco	3'800
Rwanda	3'697
Solomon Islands	3'628
Luxembourg	3'614
Sao Tome and Principe	3'591
Lebanon	3'332
Papua New Guinea	3'321
Taiwan	2'962
French Guiana (France)	2'651
Angola	2'486
Togo	1'789
Malaysia	1'582
Mozambique	1'556
Macedonia, FYROM	1'489
Comoros	1'330
Georgia	1'208
Belize	1'177
Bangladesh	1'162
Jordan	1'053
Liechtenstein	1'005
Occupied Palestinian Territory	1'000
Malawi	994
Benin	872
Algeria	622
Armenia	600
Bosnia and Herzegovina	580

Table 39: Organic agricultural land by country 2009, sorted by area

Country	Agr. land (ha)
Myanmar	555
Jamaica	542
Albania	500
Channel Islands	430
Zimbabwe	421
United Arab Emirates	373
Niger	355
Burundi	350
Venezuela, Bolivarian Republic of	337
Lesotho	330
Uzbekistan	324
Cameroon	292
Réunion (France)	188
Niue	159
Martinique (France)	141
Namibia	124
Fiji	100
Guadeloupe (France)	83
Tajikistan	70
Afghanistan	63
Haiti	54
Swaziland	46
Grenada	40
Oman	39
Malta	26
Faroe Islands	12
Suriname	8
Mauritius	6
Cook Islands	4
Andorra	2

Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

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Organic agricultural land: The top ten countries per region 2009

Table 40: Organic agricultural land: The top ten countries per region 2009

Region	Country	Agr. land (ha)
Africa	Uganda	226'954
	Tunisia	167'302
	Ethiopia	122'727
	Sudan	77'798
	Sierra Leone	72'472
	Tanzania, United Republic of	72'188
	South Africa	59'562
	Egypt	56'000
	Ghana	29'140
	Senegal	25'351
Asia	China	1'853'000
	India	1'180'000
	Kazakhstan	134'862
	Philippines	52'546
	Indonesia	52'133
	Saudi Arabia	46'635
	Syrian Arab Republic	35'439
	Thailand	29'597
	Timor-Leste	24'997
	Sri Lanka	21'156
Europe	Spain	1'330'774
	Italy	1'106'684
	Germany	947'115
	United Kingdom	721'726
	France	677'513
	Austria	518'757
	Czech Republic	398'407
	Sweden	391'524
	Poland	367'062
	Greece	326'252
Latin America	Argentina	4'397'851
	Brazil	1'765'793
	Uruguay	930'965
	Falkland Islands (Malvinas)	395'935
	Mexico	332'485
	Peru	186'314
	Dominican Republic	161'098
	Chile	82'327
	Ecuador	69'358
	Paraguay	51'190
Oceania	Australia	12'001'724
	New Zealand	124'463
	Samoa	9'714
	Vanuatu	8'996
	Solomon Islands	3'628
	Papua New Guinea	3'321
	Niue	159
	Fiji	100

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Table 40: Organic agricultural land: The top ten countries per region 2009

Region	Country	Agr. land (ha)
	Cook Islands	4
Northern America	United States of America	1'948'946
	Canada	703'678

Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

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Share of organic agricultural land by country 2009, sorted by percentage of agricultural land

Table 41: Shares of organic agricultural land by country 2009, sorted

Country	Share of total agr. land
Falkland Islands (Malvinas)	35.68%
Liechtenstein	26.87%
Austria	18.50%
Sweden	12.56%
French Guiana (France)	11.68%
Switzerland	10.78%
Estonia	10.49%
Czech Republic	9.38%
Latvia	9.03%
Italy	8.68%
Dominican Republic	8.28%
Samoa	7.9%
Slovakia	7.51%
Finland	7.25%
Timor-Leste	6.67%
Sao Tome and Principe	6.53%
Uruguay	6.26%
Portugal	6.02%
Slovenia	6.01%
Denmark	5.88%
Channel Islands	5.73%
Germany	5.59%
Norway	5.48%
Spain	5.35%
Lithuania	4.87%
Vanuatu	4.81%
United Kingdom	4.47%
Solomon Islands	4.32%
Greece	3.94%
Hungary	3.32%
Argentina	3.31%
Niue	3.18%
Belgium	3.02%
Australia	2.88%
Luxembourg	2.76%
Netherlands	2.69%
Cyprus	2.61%
France	2.46%
Mexico	2.42%
Poland	2.37%
Sierra Leone	1.75%
Uganda	1.74%
Tunisia	1.69%
Egypt	1.58%
Israel	1.38%
Turkey	1.29%
Moldova	1.29%

Table 41: Shares of organic agricultural land by country 2009, sorted

Country	Share of total agr. land
Romania	1.22%
Ireland	1.16%
Croatia	1.10%
New Zealand	1.09%
Canada	1.04%
Ecuador	0.93%
Montenegro	0.90%
Comoros	0.89%
Peru	0.87%
Sri Lanka	0.80%
Belize	0.77%
Korea, Republic of	0.74%
Brazil	0.67%
Ukraine	0.66%
India	0.66%
Nicaragua	0.65%
United States of America	0.60%
Chile	0.52%
Martinique (France)	0.50%
Lebanon	0.49%
Réunion (France)	0.47%
Costa Rica	0.45%
Philippines	0.45%
Iceland	0.44%
El Salvador	0.43%
Azerbaijan	0.43%
Bulgaria	0.40%
Faroe Islands	0.40%
Albania	0.40%
Ethiopia	0.36%
Taiwan	0.35%
Grenada	0.34%
China	0.34%
Guatemala	0.32%
Papua New Guinea	0.30%
Senegal	0.28%
Occupied Palestinian Territory	0.27%
Syria	0.25%
Malta	0.25%
Guyana	0.25%
Paraguay	0.25%
Panama	0.24%
Japan	0.23%
Lao People's Democratic Republic	0.22%
Cuba	0.22%
Guadeloupe (France)	0.21%
Tanzania	0.21%
Cambodia	0.20%
Nepal	0.19%
Ghana	0.19%
Rwanda	0.18%

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Table 41: Shares of organic agricultural land by country 2009, sorted

Country	Share of total agr. land
Serbia	0.17%
Thailand	0.15%
Viet Nam	0.14%
Macedonia, FYR	0.14%
Burkina Faso	0.12%
Jamaica	0.12%
Cook Islands	0.12%
Bolivia	0.11%
Indonesia	0.11%
Jordan	0.11%
Kyrgyzstan	0.11%
Colombia	0.10%
Côte d'Ivoire	0.09%
Pakistan	0.08%
United Arab Emirates	0.07%
Kazakhstan	0.06%
South Africa	0.06%
Sudan	0.06%
Mali	0.05%
Togo	0.05%
Georgia	0.05%
Iran	0.04%
Russian Federation	0.04%
Madagascar	0.03%
Armenia	0.03%
Zambia	0.03%
Congo, Democratic Republic of	0.03%
Bosnia and Herzegovina	0.03%
Saudi Arabia	0.03%
Benin	0.03%
Fiji	0.02%
Malaysia	0.02%
Malawi	0.02%
Burundi	0.02%
Kenya	0.02%
Lesotho	0.01%
Morocco	0.01%
Bangladesh	0.01%
Suriname	0.01%
Nigeria	0.01%
Andorra	0.01%
Mauritius	0.01%
Myanmar	0.005%
Angola	0.004%
Swaziland	0.004%
Mozambique	0.003%
Cameroon	0.003%
Haiti	0.003%
Zimbabwe	0.003%
Oman	0.002%

Table 41: Shares of organic agricultural land by country 2009, sorted

Country	Share of total agr. land
Venezuela	0.002%
Algeria	0.002%
Tajikistan	0.001%
Uzbekistan	0.001%
Niger	0.001%
Namibia	0.000%
Afghanistan	0.000%
Belarus (Wild collection only)	
Bhutan (Wild Collection only)	
Chad (Wild collection only)	

Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

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Percentage of organic agricultural land: The top ten countries per region 2009

Table 42: Share of organic agricultural land: The top ten countries per region 2009

Region	Country	Share of total agr.land
Africa	Sao Tome and Principe	6.53%
	Sierra Leone	1.75%
	Uganda	1.74%
	Tunisia	1.69%
	Egypt	1.58%
	Comoros	0.89%
	Réunion (France)	0.47%
	Ethiopia	0.36%
	Senegal	0.28%
	Tanzania, United Republic of	0.21%
Asia	Timor-Leste	6.67%
	Israel	1.38%
	Sri Lanka	0.80%
	Korea, Republic of	0.74%
	India	0.66%
	Lebanon	0.49%
	Philippines	0.45%
	Azerbaijan	0.43%
	Taiwan	0.35%
	China	0.34%
Europe	Liechtenstein	26.87%
	Austria	18.50%
	Sweden	12.56%
	Switzerland	10.78%
	Estonia	10.49%
	Czech Republic	9.38%
	Latvia	9.03%
	Italy	8.68%
	Slovakia	7.51%
	Finland	7.25%
Latin America	Falkland Islands (Malvinas)	35.68%
	French Guiana (France)	11.68%
	Dominican Republic	8.28%
	Uruguay	6.26%
	Argentina	3.31%
	Mexico	2.42%
	Ecuador	0.93%
	Peru	0.87%

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Table 42: Share of organic agricultural land: The top ten countries per region 2009

Region	Country	Share of total agr.land
	Belize	0.77%
	Brazil	0.67%
Oceania	Samoa	14.72%
	Vanuatu	4.81%
	Solomon Islands	4.32%
	Niue	3.18%
	Australia	2.88%
	New Zealand	1.09%
	Papua New Guinea	0.30%
	Cook Islands	0.12%
	Fiji	0.02%
Northern America	Canada	1.04%
	United States of America	0.60%

Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

Growth of the organic agricultural land by region 1999-2009

The figures communicated in this table may differ from data communicated previously as for a number of countries data revisions have been received and included-

Table 43: Growth of the organic agricultural land by region 1999-2009

Region	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
	In Million hectares									
Africa	0.05	0.23	0.32	0.36	0.52	0.49	0.69	0.86	0.86	1.03
Asia	0.06	0.42	0.42	0.50	3.78	2.68	3.00	2.89	3.35	3.58
Europe	4.50	5.43	5.80	6.13	6.35	6.76	7.27	7.76	8.27	9.26
Latin America	3.92	4.77	5.75	5.96	5.22	5.06	4.95	6.41	8.07	8.56
Northern America	1.06	1.28	1.26	1.41	1.72	2.22	1.79	2.29	2.58	2.65
Oceania	5.31	5.31	6.25	11.30	12.18	11.81	12.43	12.07	12.11	12.15
Total	14.90	17.44	19.81	25.65	29.76	29.01	30.13	32.31	35.23	37.23

Source: FiBL/IFOAM/SOEL Surveys 2000-2011

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Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009

Compiled in the framework of the surveys by FiBL, IFOAM and SOEL. For detailed data sources of the 2009 data see annex, for the sources of earlier surveys see www.organic-world.net/statistics.html.

Important note: A direct year-to-year comparison is not always possible for many countries, as the data sources may have changed over the years or data access becomes better.

Not for all countries 2009 data were available, for data year see Table 38.
The figures published here may differ from data published in previously, due to data revisions.
Note: Belarus, Bhutan, and Chad have wild collection areas that are not listed in this table.

Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009

		2009		2008		2007	
Region	**Country**	**Agr. land (ha)**	**Share**	**Agr. land (ha)**	**Share**	**Agr.land (ha)**	**Share**
Africa	Algeria	622	0.00%	1'042	0.00%	1'550	0.00%
	Angola	2'486	0.00%		.		0.00%
	Benin	872	0.03%	1'030	0.03%	1'488	0.04%
	Burkina Faso	14'693	0.12%	16'424	0.13%	7'267	0.06%
	Burundi	350	0.02%	350	0.02%		.
	Cameroon	292	0.00%	370	0.00%	336	0.00%
	Chad		0.00%		0.00%		0.00%
	Comoros	1'330	0.89%	1'059	0.71%		.
	Congo, Dem. Rep.	6'667	0.03%	7'852	0.03%	6'068	0.03%
	Côte d'Ivoire	17'443	0.09%	2'938	0.01%	943	0.00%
	Egypt	56'000	1.58%	40'000	1.13%	19'206	0.54%
	Ethiopia	122'727	0.36%	99'944	0.29%	140'305	0.40%
	Gambia		0.00%		0.00%	86	0.01%
	Ghana	29'140	0.19%	26'657	0.17%	24'449	0.16%
	Guinea-Bissau		.	5'600	0.34%	5'600	0.34%
	Kenya	4'227	0.02%	5'159	0.02%	4'636	0.02%
	Lesotho	330	0.01%	355	0.02%		.
	Madagascar	14'069	0.03%	19'914	0.05%	9'456	0.02%
	Malawi	994	0.02%	819	0.01%	325	0.01%
	Mali	21'681	0.05%	9'107	0.02%	3'402	0.01%
	Mauritius	6	0.01%		0.00%		0.00%
	Morocco	3'800	0.01%	3'450	0.01%	3'590	0.01%
	Mozambique	1'556	0.00%	2'810	0.01%	728	0.00%

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Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009

		2009		2008		2007	
Region	**Country**	**Agr. land (ha)**	**Share**	**Agr. land (ha)**	**Share**	**Agr.land (ha)**	**Share**
	Namibia	124	0.00%	410	0.00%	80	0.00%
	Niger	355	0.00%	355	0.00%	131	0.00%
	Nigeria	8'202	0.01%	3'073	0.00%	3'154	0.00%
	Réunion (France)	188	0.47%	203	0.51%		.
	Rwanda	3'697	0.18%	3'508	0.17%	512	0.03%
	Sao Tome & Principe	3'591	6.53%	2'859	5.20%	2'862	5.02%
	Senegal	25'351	0.28%	25'992	0.28%	1'589	0.02%
	Sierra Leone	72'472	1.75%	960	0.02%		.
	Somalia		0.00%	274	0.00%		0.00%
	South Africa	59'562	0.06%	43'882	0.04%	50'012	0.05%
	Sudan	77'798	0.06%	65'188	0.05%	56'324	0.04%
	Swaziland	46	0.00%	18	0.00%	3	0.00%
	Tanzania	72'188	0.21%	72'188	0.21%	62'180	0.18%
	Togo	1'789	0.05%	2'977	0.08%	2'545	0.07%
	Tunisia	167'302	1.69%	174'725	1.77%	154'793	1.58%
	Uganda	226'954	1.74%	212'304	1.63%	296'203	2.31%
	Zambia	7'310	0.03%	3'602	0.02%	2'530	0.01%
	Zimbabwe	421	0.00%	266	0.00%		.
Africa total		*1'026'632*	*0.10%*	*857'662*	*0.09%*	*862'351*	*0.08%*
Asia	Afghani-stan	63	0.00%	42	0.00%	22	0.00%
	Armenia	600	0.03%	600	0.03%	336	0.02%
	Azerbaijan	20'339	0.43%	21'240	0.45%	21'240	0.45%
	Bangla-desh	1'162	0.01%	526	0.01%		0.00%
	Bhutan		0.00%	59	0.01%	59	0.01%
	Cambodia	10'725	0.20%	8'810	0.16%	4'320	0.08%
	China	1'853'000	0.34%	1'853'000	0.34%	1'553'000	0.28%
	Georgia	1'208	0.05%	251	0.01%	251	0.01%
	India	1'180'000	0.66%	1'018'470	0.57%	1'030'311	0.57%
	Indonesia	52'133	0.11%	42'087	0.09%	57'184	0.12%
	Iran	18'353	0.04%	11'745	0.02%	913	0.00%
	Israel	6'969	1.38%	5'693	1.13%	5'693	1.14%
	Japan	8'817	0.23%	9'092	0.23%	6'626	0.17%
	Jordan	1'053	0.11%	1'053	0.11%	1'047	0.11%
	Kazakhstan	134'862	0.06%	157'176	0.08%	2'393	0.00%
	Korea, Republic of	13'343	0.74%	12'033	0.67%	9'729	0.53%

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Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009

		2009		2008		2007	
Region	**Country**	**Agr. land (ha)**	**Share**	**Agr. land (ha)**	**Share**	**Agr.land (ha)**	**Share**
	Kyrgyzstan	11'415	0.11%	9'868	0.09%	15'148	0.14%
	Laos	4'878	0.22%	1'537	0.07%		.
	Lebanon	3'332	0.49%	2'180	0.32%	1'946	0.28%
	Malaysia	1'582	0.02%	1'582	0.02%	1'540	0.02%
	Myanmar	555	0.00%		.		.
	Nepal	8'059	0.19%	8'498	0.20%	8'194	0.19%
	Palestine	1'000	0.27%	1'001	0.27%	3'366	0.90%
	Oman	39	0.00%	34	0.00%		.
	Pakistan	20'321	0.08%	24'466	0.09%	25'001	0.09%
	Philippines	52'546	0.45%	15'795	0.13%	15'344	0.13%
	Saudi Arabia	46'635	0.03%	30'000	0.02%	22'215	0.01%
	Sri Lanka	21'156	0.80%	22'347	0.85%	17'000	0.72%
	Syria	35'439	0.25%	25'660	0.18%	28'461	0.20%
	Taiwan	2'962	0.35%	2'356	0.28%	2'013	0.24%
	Tajikistan	70	0.00%	70	0.00%		.
	Thailand	29'597	0.15%	22'235	0.11%	24'643	0.12%
	Timor-Leste	24'997	6.67%	26'101	6.96%	23'790	6.13%
	United Arab Emir-ates	373	0.07%	310	0.05%	5	0.00%
	Uzbekistan	324	0.00%	2'530	0.01%	1'854	0.01%
	Viet Nam	14'012	0.14%	12'622	0.13%	12'120	0.12%
Asia total		*3'581'918*	*0.25%*	*3'351'068*	*0.24%*	*2'895'763*	*0.20%*
Europe	Albania	500	0.04%	270	0.02%	77	0.01%
	Andorra	2	0.01%		.		.
	Austria	518'757	18.50%	491'825	17.44%	481'636	17.04%
	Belarus		0.00%		0.00%		0.00%
	Belgium	41'459	3.02%	35'721	2.60%	32'628	2.37%
	Bosnia & Herze-govina	580	0.03%	691	0.03%	691	0.03%
	Bulgaria	12'320	0.40%	16'663	0.55%	13'646	0.45%
	Channel Islands	430	5.73%	430	5.73%		.
	Croatia	14'194	1.10%	10'010	0.78%	7'561	0.63%
	Cyprus	3'816	2.61%	2'322	1.59%	2'322	1.59%
	Czech Republic	398'407	9.38%	341'632	8.04%	312'890	7.36%
	Denmark	156'433	5.88%	150'104	5.64%	142'857	5.37%
	Estonia	95'167	10.49%	87'346	9.63%	79'530	8.77%
	Faroe Islands	12	0.40%	12	0.40%	12	0.40%

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Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009

		2009		2008		2007	
Region	**Country**	**Agr. land (ha)**	**Share**	**Agr. land (ha)**	**Share**	**Agr.land (ha)**	**Share**
	Finland	166'171	7.25%	150'374	6.56%	148'760	6.49%
	France	677'513	2.47%	583'779	2.13%	557'133	2.02%
	Germany	947'115	5.59%	907'786	5.35%	865'336	5.10%
	Greece	326'252	3.94%	317'824	3.84%	279'895	3.38%
	Hungary	140'292	3.32%	122'816	2.90%	122'270	2.89%
	Iceland	6'661	0.44%	6'970	0.46%	6'229	0.27%
	Ireland	47'864	1.16%	44'751	1.08%	41'122	0.99%
	Italy	1'106'684	8.68%	1'002'414	7.87%	1'150'253	9.03%
	Latvia	160'175	9.03%	161'625	9.11%	150'505	8.48%
	Liechten-stein	1'005	26.87%	1'053	27.98%	1'048	28.01%
	Lithuania	129'055	4.87%	122'200	4.61%	120'418	4.55%
	Luxem-bourg	3'614	2.76%	3'535	2.70%	3'380	2.58%
	Macedonia, FYROM	1'489	0.14%	3'380	0.32%	1'333	0.12%
	Malta	26	0.25%	12	0.12%	12	0.12%
	Moldova	32'105	1.29%	11'695	0.47%	11'695	0.47%
	Montene-gro	4'603	0.90%	1'876	0.37%	25'051	4.87%
	Nether-lands	51'911	2.69%	50'434	2.61%	47'019	2.46%
	Norway	56'737	5.48%	52'248	5.05%	48'863	4.72%
	Poland	367'062	2.37%	313'944	2.03%	285'878	1.85%
	Portugal	209'090	6.02%	209'090	6.02%	229'717	6.61%
	Romania	168'288	1.22%	140'132	1.02%	131'401	0.96%
	Russian Federation	78'449	0.04%	46'962	0.02%	33'801	0.02%
	Serbia	8'661	0.17%	4'494	0.09%	830	0.02%
	Slovakia	145'490	7.51%	140'755	7.27%	117'906	6.09%
	Slovenia	29'388	6.01%	29'838	6.10%	29'322	6.00%
	Spain	1'330'774	5.35%	1'129'844	4.54%	804'884	3.23%
	Sweden	391'524	12.56%	336'439	10.79%	308'273	9.89%
	Switzer-land	114'050	10.78%	116'266	10.99%	116'641	11.00%
	Turkey	325'831	1.29%	109'387	0.43%	124'263	0.49%
	Ukraine	271'315	0.66%	269'984	0.65%	249'872	0.61%
	United Kingdom	721'726	4.47%	737'631	4.57%	682'196	4.23%
Europe total		*9'262'997*	*1.87%*	*8'266'563*	*1.67%*	*7'769'157*	*1.60%*
Latin America	Argentina	4'397'851	3.31%	4'007'026	3.02%	2'777'959	2.08%
	Belize	1'177	0.77%	852	0.56%	1'810	1.19%

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		2009		2008		2007	
Region	**Country**	**Agr. land (ha)**	**Share**	**Agr. land (ha)**	**Share**	**Agr.land (ha)**	**Share**
	Bolivia	41'004	0.11%	41'004	0.11%	41'004	0.11%
	Brazil	1'765'793	0.67%	1'765'793	0.67%	1'765'793	0.67%
	Chile	82'327	0.52%	13'774	0.09%	12'568	0.08%
	Colombia	42'235	0.10%	40'308	0.09%	38'587	0.09%
	Costa Rica	8'058	0.45%	8'004	0.44%	7'874	0.29%
	Cuba	14'314	0.22%	14'314	0.22%	14'314	0.22%
	Dominican Republic	161'098	8.28%	123'089	6.33%	123'089	6.33%
	Ecuador	69'358	0.93%	71'066	0.95%	49'196	0.66%
	El Salvador	6'736	0.43%	6'736	0.43%	7'478	0.48%
	Falkland s (Malvinas)	395'935	35.68%	414'474	36.88%		.
	French Guiana (France)	2'651	11.68%	2'385	10.51%		.
	Grenada	40	0.34%		.		.
	Guade-loupe (France)	83	0.21%	67	0.17%		.
	Guatemala	13'300	0.32%	7'285	0.17%	7'285	0.16%
	Guyana	4'249	0.25%	75	0.00%	109	0.01%
	Haiti	54	0.00%		.		.
	Honduras	11'801	0.37%	8'448	0.27%	8'178	0.26%
	Jamaica	542	0.12%	483	0.10%	437	0.09%
	Martinique (France)	141	0.50%	188	0.67%		.
	Mexico	332'485	2.42%	332'485	2.42%	393'461	2.86%
	Nicaragua	33'621	0.65%	70'972	1.38%	70'972	1.36%
	Panama	5'244	0.24%	5'244	0.24%	5'244	0.24%
	Paraguay	51'190	0.25%	51'190	0.25%	51'190	0.25%
	Peru	186'314	0.87%	146'438	0.68%	104'714	0.49%
	Suriname	8	0.01%	40	0.05%	40	0.05%
	Uruguay	930'965	6.26%	930'965	6.26%	930'965	6.34%
	Venezuela	337	0.00%	2'441	0.01%	2'441	0.01%
Latin America total		*8'558'910*	*1.37%*	*8'065'147*	*1.30%*	*6'414'709*	*1.03%*
Oceania	Australia	12'001'724	2.88%	11'988'044	2.87%	11'988'044	2.82%
	Cook Is-lands	4	0.12%		.		.
	Fiji	100	0.02%	100	0.02%	100	0.02%
	New Zea-land	124'463	1.09%	100'000	0.88%	63'883	0.52%
	Niue	159	3.18%	159	3.18%	159	2.27%

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Table 44: Development of the organic agricultural land and share of the agricultural land by region and country, 2007-2009

		2009		2008		2007	
Region	**Country**	**Agr. land (ha)**	**Share**	**Agr. land (ha)**	**Share**	**Agr.land (ha)**	**Share**
	Papua New Guinea	3'321	0.30%	2'497	0.22%	2'497	0.24%
	Samoa	9'714	14.72%	7'243	10.97%	7'243	10.97%
	Solomon Islands	3'628	4.32%	3'628	4.32%	3'628	4.32%
	Vanuatu	8'996	4.81%	8'996	4.81%	8'996	6.12%
Oceania total		*12'152'108*	*2.82%*	*12'110'667*	*2.81%*	*12'074'550*	*2.75%*
Northern America	Canada	703'678	1.04%	628'556	0.93%	556'273	0.82%
	USA	1'948'946	0.60%	1'948'946	0.60%	1'736'084	0.54%
Northern America total		*2'652'624*	*0.68%*	*2'577'502*	*0.66%*	*2'292'357*	*0.59%*
Total		37'232'127	0.85%	35'225'786	0.81%	32'308'886	0.73%

Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

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All organic land use types by region and country 2009

Table 45: All organic land use types by region and country 2009

Region	Country	Agr. land	Aqua-cul-ture	Forest	Grazing areas on non agr. land	Wild collection and beekeep-ing	Total
Africa	Algeria	622				1'004	1'626
	Angola	2'486					2'486
	Benin	872				147	1'018
	Burkina Faso	14'693				134'468	149'160
	Burundi	350					350
	Cameroon	292				6'000'000	6'000'292
	Chad					2'000	2'000
	Comoros	1'330					1'330
	Congo, Dem. Rep.	6'667					6'667
	Côte d'Ivoire	17'443					17'443
	Egypt	56'000					56'000
	Ethiopia	122'727				2'489	125'216
	Ghana	29'140				21'584	50'724
	Kenya	4'227				129'417	133'644
	Lesotho	330					330
	Madagascar	14'069				72'498	86'567
	Malawi	994		185		872	2'051
	Mali	21'681				218	21'898
	Mauritius	6					6
	Morocco	3'800				618'460	622'260
	Mozambique	1'556				62'800	64'356
	Namibia	124				3'000'000	3'000'124
	Niger	355					355
	Nigeria	8'202					8'202
	Réunion (France)	188					188
	Rwanda	3'697					3'697
	Sao Tome and Principe	3'591					3'591
	Senegal	25'351					25'351
	Sierra Leone	72'472					72'472
	South Africa	59'562				146'638	206'200
	Sudan	77'798					77'798
	Swaziland	46					46
	Tanzania	72'188					72'188
	Togo	1'789				20	1'809
	Tunisia	167'302				168'595	335'897
	Uganda	226'954				158'328	385'282

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Table 45: All organic land use types by region and country 2009

Region	Country	Agr. land	Aqua-cul-ture	Forest	Grazing areas on non agr. land	Wild collection and beekeep-ing	Total
	Zambia	7'310				5'910'000	5'917'310
	Zimbabwe	421				20	441
Africa total		*1'026'632*		*185*		*16'429'557*	*17'456'374*
Asia	Afghanistan	63					63
	Armenia	600				500	1'100
	Azerbaijan	20'339		94		372	20'805
	Bangladesh	1'162	7'717				8'879
	Bhutan					19'419	19'419
	Cambodia	10'725					10'725
	China	1'853'000	415'000			759'000	3'027'000
	Georgia	1'208				2'618	3'826
	India	1'180'000				3'360'000	4'540'000
	Indonesia	52'133	94			32'675	84'902
	Iran	18'353				17'000	35'353
	Israel	6'969					6'969
	Japan	8'817					8'817
	Jordan	1'053					1'053
	Kazakhstan	134'862					134'862
	Korea,South	13'343					13'343
	Kyrgyzstan	11'415					11'415
	Laos	4'878					4'878
	Lebanon	3'332			6'000	111	9'444
	Malaysia	1'582					1'582
	Myanmar	555					555
	Nepal	8'059				24'422	32'481
	Palestine	1'000					1'000
	Oman	39					39
	Pakistan	20'321					20'321
	Philippines	52'546					52'546
	Saudi Arabia	46'635					46'635
	Sri Lanka	21'156					21'156
	Syria	35'439					35'439
	Taiwan	2'962					2'962
	Tajikistan	70					70
	Thailand	29'597					29'597
	Timor-Leste	24'997					24'997
	United Arab Emirates	373					373
	Uzbekistan	324				8'220	8'544

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Table 45: All organic land use types by region and country 2009

Region	Country	Agr. land	Aqua-cul-ture	Forest	Grazing areas on non agr. land	Wild collection and beekeep-ing	Total
	Viet Nam	14'012	6'041			450	20'503
Asia Total		*3'581'918*	*428'852*	*94*	*6'000*	*4'224'787*	*8'241'652*
Europe	Albania	500				534'241	534'741
	Andorra	2					2
	Austria	518'757					518'757
	Belarus					310	310
	Belgium	41'459					41'459
	Bosnia and Herzegovina	580				220'000	220'580
	Bulgaria	12'320				170'000	182'320
	Channel Islands	430					430
	Croatia	14'194					14'194
	Cyprus	3'816			261		4'076
	Czech Republic	398'407					398'407
	Denmark	156'433					156'433
	Estonia	95'167			7'599	35'658	138'425
	Faroe Islands	12			241		253
	Finland	166'171				7'801'256	7'967'427
	France	677'513					677'513
	Germany	947'115					947'115
	Greece	326'252					326'252
	Hungary	140'292					140'292
	Iceland	6'661				212'546	219'207
	Ireland	47'864					47'864
	Italy	1'106'684					1'106'684
	Latvia	160'175					160'175
	Liechtenstein	1'005					1'005
	Lithuania	129'055					129'055
	Luxembourg	3'614					3'614
	Macedonia, FYR	1'489			4'839	198'628	204'956
	Malta	26					26
	Moldova	32'105				2'080	34'185
	Montenegro	4'603				101'800	106'403
	Netherlands	51'911					51'911
	Norway	56'737					56'737
	Poland	367'062					367'062
	Portugal	209'090		3'372			212'462

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Table 45: All organic land use types by region and country 2009

Region	Country	Agr. land	Aqua-cul-ture	Forest	Grazing areas on non agr. land	Wild collection and beekeep-ing	Total
	Romania	168'288				81'064	249'352
	Russia	78'449		980	1'200	2'156'650	2'237'279
	Serbia	8'661				220'961	229'622
	Slovakia	145'490					145'490
	Slovenia	29'388					29'388
	Spain	1'330'774				272'096	1'602'870
	Sweden	391'524					391'524
	Switzerland	114'050			6'121		120'171
	Turkey	325'831				175'810	501'641
	Ukraine	271'315					271'315
	UK	721'726					721'726
Europe total		*9'259'934*		*4'352*	*20'261*	*12'183'100*	*21'467'647*
Latin America	Argentina	4'397'851				719'108	5'116'959
	Belize	1'177					1'177
	Bolivia	41'004				1'028'556	1'069'560
	Brazil	1'765'793				6'182'180	7'947'973
	Chile	82'327		1'198		92'235	175'760
	Colombia	42'235				6'855	49'090
	Costa Rica	8'058					8'058
	Cuba	14'314					14'314
	Dominican Rep.	161'098					161'098
	Ecuador	69'358	4'527			12'261	86'145
	El Salvador	6'736					6'736
	Falkland s (Malvinas)	395'935					395'935
	French Gui-ana (France)	2'651					2'651
	Grenada	40					40
	Guadeloupe (France)	83					83
	Guatemala	13'300					13'300
	Guyana	4'249				59'930	64'179
	Haiti	54					54
	Honduras	11'801	5				11'806
	Jamaica	542				0	542
	Martinique (France)	141					141
	Mexico	332'485				83'663	416'148
	Nicaragua	33'621				11'463	45'084

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Table 45: All organic land use types by region and country 2009

Region	Country	Agr. land	Aqua-cul-ture	Forest	Grazing areas on non agr. land	Wild collection and beekeep-ing	Total
	Panama	5'244					5'244
	Paraguay	51'190					51'190
	Peru	186'314				259'234	445'548
	Suriname	8					8
	Uruguay	930'965				2'300	933'265
	Venezuela	337					337
Latin America total		*8'558'910*	*4'532*	*1'198*		*8'457'786*	*17'022'426*
Oceania	Australia	12'001'724					12'001'724
	Cook Islands	4					4
	Fiji	100				50	150
	New Zealand	124'463					124'463
	Niue	159					159
	Papua New Guinea	3'321					3'321
	Samoa	9'714					9'714
	Solomon Islands	3'628					3'628
	Vanuatu	8'996					8'996
Oceania total		*12'152'108*				*50*	*12'152'158*
North-ern America	Canada	703'678				210'231	913'909
	USA	1'948'946					1'948'946
Northern America total		*2'652'624*				*210'231*	*2'862'855*
Total		***37'232'127***	***433'384***	***5'829***	***26'261***	***41'505'511***	***79'203'112***

Blank cells: No data available.
Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

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Organic producers and other operator types by country 2009

Please note that this a first attempt to compile a global overview not only of producers but also other organic operator types. We hope that it 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 are missing or are incomplete, and only the number of producers is available.

To find precise figures on the number organic producers remains also difficult, as some countries/certifiers report only the numbers of companies, projects (listed here as "producers") or grower groups, which may each comprise a number of producers. The figures presented here are therefore not complete in many cases.

Table 46: Organic producers and other operator types by country 2009

Country	Producers	Processors	Exporters	Importers
Afghanistan	264			
Albania	50	14	11	
Algeria	49			
Andorra				
Argentina	1'894			
Armenia	31	7		
Australia	2'129			
Austria	21'000			
Azerbaijan	288	28		
Bangladesh	2			
Belgium	997	627		61
Belize	863			
Benin	1'343			
Bolivia	11'743			
Bosnia and Herzegovina	27	27		
Brazil	7'250			
Bulgaria	379	14		
Burkina Faso	27'748	30	30	
Burundi	23			
Cambodia	8'841			
Cameroon	126	4		
Canada	3'914	815		
Chad				
Chile	529	75	58	
China				
Colombia	5'704			
Comoros	1'514	4	4	
Congo, Democratic Republic of	1'117			
Cook Islands	12			

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Table 46: Organic producers and other operator types by country 2009

Country	Producers	Processors	Exporters	Importers
Costa Rica	3'000	43		
Côte d'Ivoire	265	15	5	
Croatia	817	95	3	55
Cuba	2'467			
Cyprus	732	53		
Czech Republic	2'665	282		37
Denmark	2'694	534		
Dominican Republic	23'371	27	21	4
Ecuador	13'930	735		
Egypt	790			
El Salvador	2'000			
Estonia	1'277	39		
Ethiopia	101'578	22		
Falkland Islands (Malvinas)	8			
Faroe Islands				
Finland	4'087	275		22
France	16'446	8'585		172
French Guiana (France)	18			
Georgia	1'044			
Germany	21'047	11'118		1'053
Ghana	9'691	13	5	
Greece	23'665	1'541		11
Grenada				
Guadeloupe (France)	26	2		
Guatemala	3'059	23	92	
Guyana	74			
Haiti	40			
Honduras	1'113	28	25	1
Hungary	1'617	253		5
Iceland	28	21		
India	677'257	299	233	
Indonesia	9'981	155	2	
Iran, Islamic Republic of	700			
Ireland	1'328	180	1	14
Israel	393		39	
Italy	43'029	5'218		262
Jamaica	80			
Japan	3'815	1'047		154
Jordan	16	4		
Kazakhstan	8			
Kenya	2'188			

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Table 46: Organic producers and other operator types by country 2009

Country	Producers	Processors	Exporters	Importers
Korea, Republic of	9'403			
Kyrgyzstan	1'020	7	1	
Lao People's Democratic Republic	2'178			
Latvia	4'016	17		0
Lebanon	267	36	5	5
Lesotho	2			
Liechtenstein	32	2		
Lithuania	2'652	56		
Luxembourg	77	43		3
Macedonia, FYR	99	18		
Madagascar	4'289			
Malawi	9'003			
Malaysia	24	11		
Mali	9'986	16	11	
Malta	12	1		
Martinique (France)	27	4		
Mauritius				
Mexico	128'862			
Moldova	166	1	4	
Montenegro	29	5		
Mozambique	395	2		
Myanmar	6			
Namibia	796[1]	4		
Nepal	1'470			
Netherlands	1'413	1'343		248
New Zealand	1'000			
Nicaragua	10'060	30		
Niger				
Nigeria	519			
Niue	61			
Norway	2'851	598		47
Occupied Palestinian Territory	500			
Oman	4			
Pakistan	1'045	54		
Panama	7			
Papua New Guinea	4'559			1
Paraguay	11'401			
Peru	54'904			
Philippines	3'051	33	17	1

[1] Includes 792 collectors (Namibia has 3 million hectares of wild collection areas).

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Table 46: Organic producers and other operator types by country 2009

Country	Producers	Processors	Exporters	Importers
Poland	17'092	229		12
Portugal	1'902			
Réunion (France)	50	6		
Romania	3'078	70		16
Russian Federation	40	12	7	12
Rwanda	536			
Samoa	353	8		
Sao Tome and Principe	1'791			
Saudi Arabia	63			
Senegal	21'662	4	4	
Serbia	2'969	22	1	7
Sierra Leone	22'515	3		
Singapore		1		
Slovakia	363	52		7
Slovenia	2'096	86		
Solomon Islands	352			
South Africa	689	98	31	
Spain	25'291	2'465		93
Sri Lanka	687	208	9	
Sudan	1'003	4	4	
Suriname				
Swaziland	2			
Sweden	4'816	710		213
Switzerland	5'943			
Syria	204	9		
Taiwan	1'277			
Tajikistan	39			
Tanzania, United Republic of	85'366			
Thailand	5'358			
Timor-Leste	71	50		
Togo	6'657			
Tunisia	1'792			
Turkey	35'565	130	104	33
Uganda	187'893			
Ukraine	121	32	18	
United Arab Emirates	8	10	6	
United Kingdom	5'156	2'260		94
United States of America	12'941			
Uruguay	630			
Uzbekistan	5	5	5	
Venezuela, Bolivarian Republic of	4	3	3	

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Table 46: Organic producers and other operator types by country 2009

Country	Producers	Processors	Exporters	Importers
Viet Nam	2'002			
Zambia	10'055			
Zimbabwe	230			

Blank cells: No data available.
Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

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Table: Land use and key crop groups in organic agriculture worldwide in the regions 2009

For more details (crops, conversion status, please see password area at www.organic-world.net > Password area).

Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

Region	Land use type	Main crop group	Organic agr. land (ha)
Africa	Agricultural land and crops, no details	Agricultural land and crops, no details	348'969
	Agricultural land and crops, no details total		348'969
	Arable crops	Arable crops, no details	6'561
		Medicinal and aromatic plants	6'707
		Oilseeds	66'506
		Plants harvested green	182
		Protein crops	24
		Root crops	575
		Seeds and seedlings	24
		Sugarcane	23
		Textile crops	31'051
		Tobacco	137
		Vegetables	3'869
	Arable crops total		121'162
	Cropland, no details	Cropland, no details	24'459
	Cropland, no details total		24'459
	Other agricultural land	Fallow land, crop rotation	10'652
		Other agricultural land, other	186
		Unutilised land	43'567
	Other agricultural land total		54'404
	Permanent crops	Berries	114
		Citrus fruit	7'205
		Cocoa	65'497
		Coconut	1'309
		Coffee	154'433
		Flowers and ornamental plants, permanent	6
		Fruit, no details	4'325
		Fruit, temperate	1'020
		Fruit, tropical and subtropical	17'330
		Grapes	1'651
		Gum arabic	6'800
		Medicinal and aromatic plants, permanent	10'736
		Nuts	16'460
		Olives	117'232
		Other permanent crops	29'464
		Permanent crops, no details	960
		Tea/mate	16'970
	Permanent crops total		451'510
	Permanent grassland/grazing areas total		26'128

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Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

Region	Land use type	Main crop group	Organic agr. land (ha)
Asia	Agricultural land and crops, no details	Agricultural land and crops, no details	1'491'973
	Agricultural land and crops, no details total		1'491'973
	Arable crops	Arable crops, no details	22'661
		Arable crops, other	6
		Cereals	83'498
		Medicinal and aromatic plants	20'955
		Mushrooms	3
		Oilseeds	31'950
		Plants harvested green	2'993
		Protein crops	111
		Root crops	323
		Seeds and seedlings	73
		Strawberries	8
		Sugarcane	393
		Textile crops	27'706
		Vegetables	11'203
	Arable crops total		201'884
	Cropland, no details	Cropland, no details	1'105'254
	Cropland, no details total		1'105'254
	Other agricultural land	Home gardens	32
		Unutilised land	14
	Other agricultural land total		46
	Permanent crops	Berries	8
		Citrus fruit	250
		Cocoa	2'386
		Coconut	27'685
		Coffee	60'163
		Flowers and ornamental plants, permanent	43
		Fruit, no details	1'289
		Fruit, temperate	4'861
		Fruit, tropical and subtropical	27'066
		Fruit/nuts/berries, no details	1'175
		Grapes	2'424
		Gum arabic	49
		Medicinal and aromatic plants, permanent	1'042
		Nuts	13'716
		Olives	3'580
		Other permanent crops	4'686
		Permanent crops, no details	86
		Tea/mate	31'365
	Permanent crops total		181'874
	Permanent grassland total		600'887

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Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

Region	Land use type	Main crop group	Organic agr. land (ha)
Europe	Agricultural land and crops, no details	Agricultural land and crops, no details	129'851
	Agricultural land and crops, no details total		129'851
	Arable crops	Arable crops, no details	10'210
		Arable crops, other	59'224
		Cereals	1'740'381
		Flowers and ornamental plants	209
		Hops	208
		Industrial crops	11'178
		Medicinal and aromatic plants	32'498
		Mushrooms	48
		Oilseeds	153'106
		Plants harvested green	1'394'466
		Protein crops	162'069
		Root crops	38'851
		Seeds and seedlings	187
		Strawberries	2'790
		Sugarcane	
		Textile crops	10'324
		Tobacco	25
		Vegetables	103'350
	Arable crops total		3'719'125
	Cropland, no details	Cropland, no details	-89'323 (correction value for land with double use
	Cropland, no details total		-89'323
	Other agricultural land	Fallow land, crop rotation	264'503
		Other agricultural land, no details	2'143
		Unutilised land	47'353
	Other agricultural land total		313'999
	Permanent crops	Berries	19'809
		Citrus fruit	39'924
		Flowers and ornamental plants, permanent	10
		Fruit, no details	113
		Fruit, temperate	71'177
		Fruit, tropical and subtropical	15'919
		Fruit/nuts/berries, no details	10'135
		Grapes	167'338
		Medicinal and aromatic plants, permanent	896
		Nurseries	461
		Nuts	160'096
		Olives	366'415
		Other permanent crops	76'798
		Permanent crops, no details	81'174
		Tea/mate	269
	Permanent crops total		1'010'534
	Permanent grassland	Pastures and meadows	2'059'785
		Permanent grassland, extensive fruit	14'400

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Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

Region	Land use type	Main crop group	Organic agr. land (ha)
		Permanent grassland, no details	1'695'745
		Permanent grassland, other	266
		Rough Grazing	405'551
	Permanent grassland total		4'175'747
Latin America	Agricultural land and crops, no details	Agricultural land and crops, no details	2'369'394
	Agricultural land and crops, no details total		2'369'394
	Arable crops	Arable crops, other	20
		Cereals	34'471
		Flowers and ornamental plants	8
		Industrial crops	12'044
		Medicinal and aromatic plants	6'133
		Oilseeds	24'760
		Plants harvested green	23
		Protein crops	2'479
		Root crops	754
		Seeds and seedlings	10
		Strawberries	251
		Sugarcane	50'872
		Textile crops	657
		Tobacco	35
		Vegetables	38'548
	Arable crops total		171'066
	Cropland, no details	Cropland, no details	5'401
	Cropland, no details total		5'401
	Other agricultural land	Fallow land, crop rotation	457
		Other agricultural land, no details	30
		Unutilised land	4'540
	Other agricultural land total		5'027
	Permanent crops	Berries	5'522
		Citrus fruit	11'626
		Cocoa	196'586
		Coconut	14'228
		Coffee	329'949
		Flowers and ornamental plants, permanent	16
		Fruit, no details	1'336
		Fruit, temperate	4'967
		Fruit, tropical and subtropical	97'684
		Fruit/nuts/berries, no details	1'000
		Grapes	6'525
		Medicinal and aromatic plants, permanent	2'093
		Nurseries	14
		Nuts	365
		Olives	6'616
		Other permanent crops	31'084
		Tea/mate	6'093
	Permanent crops total		715'702
	Permanent grassland	Pastures and meadows	6'113

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Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

Region	Land use type	Main crop group	Organic agr. land (ha)
		Permanent grassland, no details	3'963'799
		Rough Grazing	1'322'409
	Permanent grassland total		5'292'321
Northern America	Agricultural land and crops, no details	Agricultural land and crops, no details	12'321
	Agricultural land and crops, no details total		12'321
	Arable crops	Cereals	574'611
		Flowers and ornamental plants	106
		Medicinal and aromatic plants	5'489
		Mushrooms	55
		Oilseeds	169'385
		Plants harvested green	445'489
		Protein crops	39'409
		Root crops	3'942
		Textile crops	7'393
		Vegetables	65'264
	Arable crops total		1'311'143
	Cropland, no details	Cropland, no details	97'561
	Cropland, no details total		97'561
	Other agricultural land	Fallow land, crop rotation	23'338
	Other agricultural land total		23'338
	Permanent crops	Berries	4'434
		Citrus fruit	5'692
		Fruit, temperate	8'023
		Fruit, tropical and subtropical	3'595
		Fruit/nuts/berries, no details	8'401
		Grapes	11'577
		Nurseries	596
		Nuts	9'533
		Other permanent crops	12'683
		Permanent crops, no details	38
	Permanent crops total		64'572
	Permanent grassland	Pastures and meadows	100'101
		Permanent grassland, no details	874'354
		Rough Grazing	169'234
	Permanent grassland total		1'143'689
Oceania	Agricultural land and crops, no details	Agricultural land and crops, no details	384'250
	Agricultural land and crops, no details total		384'250
	Cropland, no details	Cropland, no details	6'661
	Cropland, no details total		6'661
	Other agricultural land	Other agricultural land	7'702
	Other agricultural land total		7'702
	Permanent crops	Coconut	100
		Coffee	824
		Fruit, temperate	974
		Fruit, tropical and subtropical	4
		Grapes	1'336
	Permanent crops total		*3'238*

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Table 47: Land use and key crop groups in organic agriculture worldwide in the regions 2009

Region	Land use type	Main crop group	Organic agr. land (ha)
	Permanent grassland total		*11'750'258*
Total			37'232'127

Source: FiBL/IFOAM Survey 2011, based on data from governments, data of the private sector and certifiers. For detailed data sources see annex.

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Data Providers and Data Sources

Compiled by Helga Willer, Hervé Bouagnimbeck and Maren Rohwedder

Afghanistan

Source

Certifier data. The number of producers is from 2008.

Albania

Source

The data were provided by the Mediterranean Organic Agriculture Network MOAN c/o C.I.H.E.A.M. To these data FiBL added the wild collection figures of one international certifier.

Contact

Dr. Marie Reine Bteich and Dr. Lina Al Bitar, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

Algeria

Source

Mediterranean Organic Agriculture Network MOAN c/o C.I.H.E.A.M; Bari; Italy. Compared with the previous year the figure is lower, probably due to the fact the wild collection areas had been included under agricultural land.

Contact

Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it

Andorra

Data for Andorra were available for the first time for this survey

Source

Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com

Contact

Vincent Morel, Area Manager - Africa, Ecocert, L'Isle Jourdain, France, www.ecocert.com;

Angola

Data on organic farming in Angola were provided for the first time.
Source: certifier data

Argentina

Source

Land user/operator/production data: SENASA, 2010 "Situación de la Producción Orgánica en la Argentina durante el año 2009". Buenos Aires. In addition, further data were provided by SENASA, www.senasa.gov.ar

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.

Note

Data on the area of individual crops and land use types were not available for 2008; hence the 2007 data were used for the crop/land use tables.

Australia

Source

Land area, number of producers, domestic market data from Mitchell et al. 2010*, based on figures from Australian Quarantine Inspection Service (AQIS), Canberra ACT 2601, Australia www.daffa.gov.au/aqis.
*Mitchell, A., Kristiansen, P., Bez , N. and Monk, A. (2010), Australian Organic Market Report 2010. Biological Farmers of Australia, Chermside.

Contact

Els Wynen, Ecolanduse Systems, Canberra ACT 2615, Australia, www.elspl.com.au.

Austria

Sources

Data source for land area, land use and farms: Lebensministerium: Gruener Bericht 2009. Lebensministerium, Wien, www.gruenerbericht.at

› The market data and trade data: ARGE Bioumsätze: Bio Austria, FiBL Austria and Agricultura: Bio-Umsatz in Österreich wuchs 2009 um 5%. WWW.OTS.AT OTS, Wien, http://www.ots.at/presseaussendung/OTS_20100426_OTS0124/bio-umsatz-in-oesterreich-wuchs-2009-um-5-bild#

Note

Since early 2010 Austria includes the alpine pastures on its organic statistics (also in retrospect). This explains why the 2009 figure for the land under organic management is considerably higher than communicated previously.

Contact

› Thomas Rech, Lebensministerium / Federal Ministry of Agriculture, Forestry, Environment and Water Management (AT), Vienna, Austria, www.lebensministerium.at

› Ralph Liebing, ORA ~ Organic Retailers Association, Vienna, Austria, www.o-r-a.org

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Azerbaijan

Source

GABA Ganja Agribusiness Association, Ganja, Azerbaijan, www.gaba.az

Contact

Data supplied by Vugar Mohumayev; GABA Ganja Agribusiness Association, Ganja, Azerbaijan; www.gaba.az

Bangladesh

Source

› Crop data: Hortex Foundation, Dhaka, Bangladesh and from one international certifier;
› Aquaculture data: provided by from one international certifier.

Contact

Dr. Debashish Chanda, Hortex Foundation, Dhaka - 1207, Bangladesh, www.hortex.org

Belarus

Data were provided for the first time by an international certifier (wild collection only).

Belgium

Source

› Land area: Eurostat (2010): Organic crops. Belgium. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data: Samborski V. & Van Bellegem L. (2010) De biologische landbouw in 2009, Departement Landbouw en Visserij, Brussels, http://lv.vlaanderen.be/nlapps/docs/default.asp?id=1630

Contact

Paul Verbke, 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
In addition to the BOPA survey the number of producers as communicated by one international certifier were added.

Contact

Maximiliano Ortega, Belize Organic Producers Organisation BOPA, Belmopan, Belize Benin

Sources

The land use data were compiled from data supplied by international certifiers that are active in the country. Furthermore data from Plateforme Nationale pour l'Innovation dans le Secteur Agricole au Benin (PNISA-Benin) were added.
The number of the producers was supplied by PNISA-Benin.
As the data sources are not the same as for the data provided previously a direct year-to-year comparison is not possible.

Contact

Laurent C. Glin, Plateforme Nationale pour l'Innovation dans le Secteur Agricole au Benin (PNISA-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

The data for the agricultural land, published in this volume, are from 2006 and they were provided by Nelson C. Ramos Santalla, Asociación de Organizaciones de Productores Ecológicos de Bolivia, PO Box 1872, La Paz, Bolivia, www.aopeb.org.
For 2008 new data were available from the competent authority in charge. However, these data did not make a distinction between the agricultural land and the wild collection areas, and FiBL could therefore not include the data into the land area/land use statistics. According Ing. Rubén Tintares of the Sistema Nacional de Control de Producción Ecológica (SNCPE), there were 1.78 million hectares of organic areas in 2008 (wild collection and agriculture).

Bosnia Herzegovina

Source

ECON, Sarajevo, Bosna i Hercegovina, www.econ.co.ba, based on the data of the certifiers.

Note

The source is not the same as for the data published previously. A direct year-to-year comaparison is therefore not possible.

Brazil

The data are from 2007, they were provided by: Ming Chao Liu, Organics Brazil, Curitiba Parana, 80210-350 Brazil, www.organicsbrasil.org.The data are based on information of the private certification agencies that are accredited according to international standards. The coverage of the data is about 95 percent. Please note: The data reported previously by FiBL, SOEL and IFOAM prior to 2007 only included the fully converted areas. The figure presented in this book includes the in-conversion area.
Source for market data: Ministry of Agrarian Development, quoted in Brazzil magazine, Jan 8, 2008.

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Bulgaria

Sources

› Land area: Eurostat (2010): Organic crop area. Last update January 1, 2011. The Eurostat homepage, Eurostat, Luxemburg

› Operators: Eurostat (2010): Number of registered organic operators. Last update January 5, 2011. The Eurostat homepage, Eurostat, Luxemburg

› Wild collection area from 2007, Provided by provided by : Stoilko Apostolov, FOA Bioselena, 4300 Karlovo, Bulgaria, www.bioselena.com. Only one of the six certifiers that are active in the country provided these data.

› Market data (from 2007) provided by: Survey by Bioselena, 4300 Karlovo, Bulgaria, www.bioselena.com.

Contact

› Stoilko Apostolov and Elisabeta Pandeva, Bioselena, 4300 Karlovo, Bulgaria, www.bioselena.com

Burkina Faso

Sources

The data were compiled by FiBL and IFOAM based on the data of the following international certifiers.

› Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com

› CERTISYS, B-1150 Bruxelles, Belgium, www.certisys.eu.

› LACON GmbH, Brünnlesweg 19, 77654 Offenburg, Germany, www.lacon-institut.com

Contact

› Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com

› Emmeline Foubert, CERTISYS, B-1150 Bruxelles, Belgium, www.certisys.eu.

› Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

Note

A direct year-to-year comparison is not possible, because for this survey data from more certifiers were available than previously.

Burundi

Source

Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Contact

Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Data revision

The data communicated for 2008 (see 2010 edition of 'The World of Organic Agriculture') were too high. The correct figure for 2008 is 350 hectares of agricultural land under organic management.

Cambodia

Source

Cambodian Organic Agriculture Association (COrAA), Khan Chamkar Morn, Phnom Penh, Cambodia, www.coraa.org; survey among the organic certifiers in the country

Contact

› Sar Sanphirom, former executive director of the Cambodian Organic Agriculture Association (COrAA), Khan Chamkar Morn, Phnom Penh, Cambodia, www.coraa.org.

› 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 IFOAM and FiBL based on the data of the following two international certifiers :

› Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

› Soil Association Certification Limited, Bristol, UK, www.soilassociation.org/certification

Contact

› Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

› Andrew Bayliss, Soil Association Certification Limited, Bristol, UK, www.soilassociation.org/certification

Note

A direct year-to-year comparison is not possible, because for this survey data from more certifiers were available than previously.

Canada

Source

Land and operators: Survey of the Canadian Organic Growers (COG), Ottawa, Ontario K1N 7Z2, Canada, www.cog.ca; based on information of the certifiers.

Market data: Report by Agriculture and Agri-Food Canada, quoted by Holmes and Macey (2011): Canada: Country Report. In: The World of Organic Agriculture 2011. IFOAM, Bonn and FiBL, Frick

Contact

Anne Macey, Canadian Organic Growers (COG), Ottawa, Ontario K1N 7Z2, Canada, www.cog.ca.

Chad

Source

Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Contact

Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Note
A direct year-to-year comparison is not possible, because for this survey data from only one certifier was available.

Chile
Source
› Certified areas, organic export volume and the number of producers/ smallholders: Servicio Agrícola y Ganadero (SAG), Av. Presidente Bulnes 140, Santiago, Chile, www.sag.gob.cl.
› Organic export value: Oficina de Estudios y Políticas Agrarias (see address above).
› The trade data and the number of producers/ smallholders cover about 95 percent of the total.
Contact
Pilar M. Eguillor Recabarren, Oficina de Estudios y Políticas Agrarias (ODEPA), Ministerio de Agricultura, Teatinos 40, Santiago, Chile, www.odepa.gob.cl.

Channel Islands
Data for the Channel Islands were available for the first time.
Source
FAOSTAT (2010): Resourcestat. Land. Download of September 17, 2010. Last update: September 9, 2010.
http://faostat.fao.org/site/377/DesktopDefault.aspx?PageID=377#ancor

China
Sources
The data are from 2008. The total organic land registered by the Certification and Accreditation Administration of the People's Republic of China (CNCA), the government authority in charge, is 2.7 million hectares, of these 0.756 million hectares of wild collection and 0.415 hectares of aquaculture. The estimate on the land managed by producers certified by foreign certifiers is 0.3 million hectares (included in the total land area communicated in this book).
The CNCA data were provided by Dr. Wang Maohua, Certification and Accreditation Administration of the People's Republic of China (CNCA), 100088, Haidian district, Beijing, China, www.cnca.gov.cn, who also provided
The total agricultural land communicated here includes a figure for the land used for organic tea production; this figure is from the Tea Research Institute in China: The data were provided by Joelle Katto, IFOAM, Bonn, Germany.
Market data:
Market data: Panyakul, Vitoon R. and Zejiang Zhou: OVERVIEW OF THE MARKET FOR ORGANIC FOOD PRODUCTS IN CHINA PRC. To be approved, version August 2010
Contact
Dr. Wang Maohua, Certification and Accreditation Administration of the People's Republic of China (CNCA), 100088, Haidian district, Beijing, China, www.cnca.gov.cn

Colombia
Source
Minagricultura - Ministro de Agricultura y Desarrollo Rural, Avenida Jiménez No. 7-65, Bogotá DC, República de Colombia, www.minagricultura.gov.co. The data refer to June 30, 2010 .
Contact
Carlos Andres Escobar Fernández, 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
Vincent Morel, Area Manager - Africa, Ecocert, L'Isle Jourdain, France

Congo, Democratic Republic of
Source
Certifier data.

Cook Islands
Data for the Cook Islands were supplied for the first time.
Source
Data from one international certifier . The data are probably not complete.

Costa Rica
Source
› Land area, operators, Agricultura y Ganadería, Servicio Fitosanitario del Estado Acreditación y Registro en Agricultura Orgánica ARAO: Costa Rica 2009.
› Domestic Market data: Costa Rican Organic Agriculture Movement MAOCO
› Trade data: PROMOCER (2010):Costa Rica: exportaciones de productos orgánicos según destino, PROMOCER, Costa Rica
Contact
Roberto Azofeifa, Ministerio de Agricultura y Ganadería, 10094-1000 San José, Costa Rica

Côte d'Ivoire
The data were compiled by FiBL and IFOAM based on the data of the following international certifiers.
Sources
› BCS Öko-Garantie GmBH, 90402 Nuremberg, Germany, www.bcs-oeko.com.
› Control Union, Zwolle, The Netherlands, www.controlunion.org

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

› Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.
› CERTISYS, B-1150 Bruxelles, Belgium, www.certisys.eu.

Contact

› Emmeline Foubert, CERTISYS, B-1150 Bruxelles, Belgium, www.certisys.eu.
› Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherlands, www.controlunion.org
› Tobias Fischer, BCS Öko-Garantie GmBH, 90402 Nuremberg, Germany, www.bcs-oeko.com.
› Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Note

A direct year-to-year comparison is not possible, because for this survey data from more certifiers were available than for the previous survey.

Croatia

Sources

The data were provided by Željko Herner, Ministry of Agriculture, Fisheries and Rural Development, Ulica grada Vukovara 78, 10 000 Zagreb, Croatia, www.mps.hr
Market data: Based on an estimate of Darko Znaor, Independent Consultant, 10000 Zagreb, Croatia

Contacts

› Željko Herner, Ministry of Agriculture, Fisheries and Rural Development, Ulica grada Vukovara 78, 10 000 Zagreb, Croatia, www.mps.hr
› Darko Znaor, Independent Consultant, 10000 Zagreb, Croatia and by Sonja Karoglan Todorović, Ecologica, 10000 Zagreb, Croatia, www.ecologica.hr

Cuba

Sources

› For all data apart from sugar: Ministry of Agriculture, Ciudad de La Habana 10600, Cuba, www.cubagob.cu/mapa.htm.
› Data source for the cultivation and production of sugar: Ministry of Sugar, Calle 23, # 171, e/N y O, Vedado, Ciudad de La Habana, Cuba, www.cubagob.cu/mapa.htm.

Note

A differentiation between full organic status and in conversion was not available. All data refer to 2008.

Contact

Lukas Kilcher, Research Institute of Organic Agriculture (FiBL), 5070 Frick, Switzerland, www.fibl.org.

Cyprus

Source

Ministry of Agriculture, Natural Resources and Environment, Louki Akrita, Avenue 1412 Nicosia, Republic of Cyprus, www.moa.gov.cy

Contact

Andreas Selearis, Ministry of Agriculture, Natural Resources and Environment, Louki Akrita, Avenue 1412 Nicosia, Republic of Cyprus, www.moa.gov.cy

Czech Republic

Sources

› Total organic land area Ministry for Agriculture, 11705 Prague 1, Czech Republic, www.mze.cz/en, available on http://eagri.cz/public/web/file/48172/statistika_zakladni_31_12_2009.pdf
› Land use details: Eurostat (2010): Organic crop area. Czech Republic. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data: Green Marketing, 66434 Moravské Knínice, Czech Republic, www.greenmarketing.cz.

Note

The figure on the organic land area communicated by Eurostat differs from that communicated by the Ministry of Agriculture of the Czech Republic.

Contact

› Karolina Dytrtova, Bioinstitut, Olomouc 77147, Czech Republic
› Tom Vaclavik, Green Marketing, Moravské Knínice, Czech Republic

Further information

For more information see www.organic-world.net/czech-republic.html.

Denmark

Sources

› Land area, land use: Eurostat (2010): Organic crop area. The Eurostat homepage. Last update: 11.10.2010
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Domestic sales: Source: Landbrug & Fødevarer. Based on data from statistics Denmark and Organic Denmark. P
› Exports and imports: Source: Statistics Denmark: External trade with organic products by imports and exports, commodities and time. Data provided by Ejvind Pedersen, Danish Agriculture & Food Council, Agro Food Park 15, 8200 Aarhus, Denmark

Contact

› Kirsten Lund Jensen, Landbrug & Fødevarer, Copenhagen, Denmark, http://www.lf.dk/Oekologi.aspx
› Ejvind Pedersen, Landbrug & Fødevarer, Copenhagen, Denmark, http://www.lf.dk/Oekologi.aspx

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Dominican Republic

Source

Secretaria de Estado de Agricultura, Oficina de Control Orgànico, Santa Domingo, Dominican Republic, www.agricultura.gob.do. The data do not include crops grown for the local market.

Contact

Josè A. Zapata G., Secretaria de Estado de Agricultura, Oficina de Control Orgànico, Santa Domingo, Dominican Republic, www.agricultura.gob.do.

Ecuador

Source

Land area, operators: , German Technical Cooperation, Eloy Alfaro y Amazonas, Edificio MAGAP, Piso 4., Quito, Ecuador, www.gtz.de

Export data: La Agencia Ecuatoriana de Aseguramiento de Calidad del Agro – Agrocalidad, Av. Amazonas y Eloy Alfaro, Edif. MAGAP, piso 9, Ecuador, www.agrocalidad.gov.ec.

The export data include not airway exports (for instance: shrimps), they cover about 80% of the total.

The data (except for export) are from 2010.

Contact

Johanna Flores and Sonia Lehmann, German Technical Cooperation, Eloy Alfaro y Amazonas, Edificio MAGAP, Piso 4., Quito, Ecuador, www.gtz.de

Egypt

Source

Mediterranean Organic Agriculture Network MOAN.

Contact

Dr. Lina Al Bitar and 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, 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

Contact

Manuel Ernesto Sosa Urrutia, Ministerio de Agricultura y Ganadería, , Santa Tecla, El Salvador

Estonia

Sources

› Land area and land use: Agricultural Board, Ministry of Agriculture, Republic of Estonia, http://www.pma.agri.ee/index.php?id=104&sub=128&sub2=296&sub3=297

› Market data provided by Merit Mikk, Estonian Organic Farming Foundation, Tartu, Estonia, Source: Estonian Institute of Economic Research.

› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg

Contact

Merit Mikk, Estonian Organic Farming Foundation, Tartu, Estonia

Note

The figure on the total organic agricultural land area differs from that provided by Eurostat as some of the grazing areas were not counted as agricultural land.

Ethiopia

Source

The data were compiled by FiBL and IFOAM and are based on the data of the following international certifiers.

› BCS Öko-Garantie GmbH, 90402 Nuremberg, Germany;

› CERES - Certification of Environmental Standards - GmbH, D-91230 Happung, Germany, www.ceres-cert.com

› Control Union Certifications, 8000 AD Zwolle, Netherlands, www.controlunion.com;

› Institute for Marketecology (IMO), 8570 Weinfelden, Switzerland, www.imo.ch;

Contact

› Gyorgyi Acs Feketene, Control Union Certifications, 8000 AD Zwolle, Netherlands, www.controlunion.com;

› Tobias Fischer, BCS Öko-Garantie GmbH, 90402 Nuremberg, Germany;

› Simone Groh, CERES - Certification of Environmental Standards - GmbH, D-91230 Happung, Germany, www.ceres-cert.com

› Peter Horner, Institute for Marketecology (IMO), 8570 Weinfelden, Switzerland, www.imo.ch;

Falkland Islands

Source

Department of Agriculture, Bypass Road, Stanley, Falkland Islands, www.agriculture.gov.fk.

Contact

Ian Campbell, Department of Agriculture, Bypass Road, Stanley, Falkland Islands, www.agriculture.gov.fk

Faroe Islands

Source

Vottunarstofan Tún ehf., Laugavegur 7, 101 Reykjavík, Iceland, www.tun.is.

Contact

Gunnar Gunnarsson, Vottunarstofan Tún ehf., Reykjavík, Iceland, www.tun.is.

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Fiji Islands
The data published in this volume had been received for the SOEL/FiBL survey in 2007 and no update has been available since.

Finland
Sources
› Land area and land use: Eurostat (2010): Organic crop area. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Data on wild collection provided by Evira, Helsinki, www.evira.fi/portal/en/
› Operator data: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market and trade data provided Organic Food Finland, based on AC Nielsen data, FIN-32200 Loimaa, www.organic-finland.com; see also www.organic-world.net/statistics-finland-market-data.html.

Contact
› Juha Kärkkäinen, Evira, Helsinki, Evira, Helsinki, www.evira.fi/portal/en/.
› Sampsa Heinonen, Organic Food Finland, FIN-32200 Loimaa, www.organic-finland.com; see also www.organic-world.net/statistics-finland-market-data.html.

France
Source
› Land area and land use: Eurostat (2010): Organic crop area. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Producers and processors: Agence BIO (2010), The Agence Bio homepage 93100 Montreuil sous Bois, France,. Available at http://www.agencebio.fr/pageEdito.asp?IDPAGE=120&n2=130
› Importers: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market and international trade: Agence BIO (2010), The Agence Bio homepage 93100 Montreuil sous Bois, France,. Available at http://www.agencebio.fr/pageEdito.asp?IDPAGE=120&n2=130

Contact
Natalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

French Guyana
Source
All data: Agence BIO (2010): The Agence Bio homepage 93100 Montreuil sous Bois, France,. Available at http://www.agencebio.fr/pageEdito.asp?IDPAGE=120&n2=130

Contact
Natalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

Gambia
Data for Gambia have not been supplied since 2007 by any of the certification bodies. IFOAM and FiBL therefore concluded that there is currently no certified organic production in the country. Any information on certified organic farming in Gambia should be sent to the IFOAM Africa coordinator, Hervé Bouagnimbeck, IFOAM, Bonn Germany, e-mail h.bouagnimbeck@ifoam.org.

Georgia
Source
Ellkana Survey among Caucascert Ltd, SGS, IMO

Contact
Elene Shatberashvili, Biological Farming Association Elkana, 16 Gazapkhuli street, 0177 Tbilisi, Georgia, www.elkana.org.ge.

Germany
Sources
› Total organic land area and operators: Ministry of Food, Agriculture and Consumer Protection BMELV, Bonn, Germany, Available at http://www.bmelv.de/cln_173/SharedDocs/Downloads/Landwirtschaft/OekologischerLandbau/Strukturdaten-2009.pdf?__blob=publicationFile
› Land use and production details: Agrarmarkt Informationsgesellschaft AMI, Bonn, Germany, www.markt-und-preis.de
› Market data: Land use and production details: Agrarmarkt Informationsgesellschaft AMI, Bonn, Germany, www.markt-und-preis.de;

Contact
Diana Schaack, AMI, Bonn, Germany, www.markt-und-preis.de

Ghana
Source
The data were compiled by FiBL and IFOAM based on the data of the following international certifiers.
› CERTISYS, Brussels, www.certisys.eu
› Control Union, Zwolle, The Netherlands www.controlunion.org
› Ecocert, L'Isle Jourdain, France, www.ecocert.com
› IMO, Weinfelden, Switzerland, www.imo.ch
› Soil Association Certification Limited, Bristol, UK, www.soilassociation.org/certification

Contact
› Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherlands
› Andrew Bayliss, Soil Association Certification Limited, Bristol, UKwww.soilassociation.org/certification
› Emmeline Foubert, CERTISYS, Brussels, Belgium
› Peter Horner, IMO, Weinfelden, Switzerland

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IFOAM, Bonn, & FiBL, Frick

› Vincent Morel, Ecocert, L'Isle Jourdain, France, www.ecocert.com

Note

A direct year-to-year comparison is not possible, because data from more certifiers were available than previously.

Greece

Sources

› Land area: Eurostat (2010): Organic crop area. The Eurostat homepage. Last update: 11.10.2010.

› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg

› Market data: Manginas, Stamos and George Karanis (2008): Greece. In: Osch, Susanne and Burkhard Schaer (eds) (2008): Specialized Organic Retail Report 2008. Organic Retailers Association, Vienna.

Grenada

Data were provided for the first time by one international certifier.

Guadeloupe

Source

All data: Agence BIO (2010), The Agence Bio homepage 93100 Montreuil sous Bois, France,. Available at http://www.agencebio.fr/pageEdito.asp?IDPAGE=120&n2=130

Contact

Natalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

Guinea Bissau

No new data were available for 2009, and it was confirmed by the international certifier, who had certified here in the past, that the activities had ceased.

Guatemala

Source

Department of Organic Agriculture, Ministerio de Agricultura, Ganaderia y Alimentación (MAGA), Ciudad de Guatemala, Guatemala C.A. 01013, http://www2.maga.gob.gt

Contact

Alvaro Ramos, Ciudad de Guatemala MAGA, Guatemala

Guyana

Source

Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Contact

Vincent Morel, Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Haiti

Source

Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Contact

Vincent Morel, Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Hungary

Sources

› Land area: Eurostat (2010): Organic crop area. The Eurostat homepage. Last update: 11.10.2010

› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg

› Market and trade data: Survey of Biokorsar, Budapest, Hungary

Contact

› Lea Bauer, Biokontroll Hungária, 1027 Budapest, Hungary, www.biokontroll.hu.

› Dóra Kovács, Hungária Öko Garancia Kft., 1033 Budapest, Hungary, www.okogarancia.hu

› Ferenc Frühwald, Biokorsar, Budapest, Hungary

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.

India

Source

Agricultural and Processed Food Products Export Development (APEDA) Ministry of Commerce & Industry, Govt of India, New Delhi - 110 016, India, www.apeda.com.

Market data: Research and Markets (2010): Organic Food Market in India 2010. The Research and Markets homepage, April 2010. Available at http://www.researchandmarkets.com/product/b4b727/organic_food_market_in_india_2010, Accessed October 22, 2010

Contact

Dr. P.V.S.M. Gouri, Agricultural and Processed Food Products Export Development (APEDA), New Delhi, India, www.apeda.com

Indonesia

Sources

Source for most data is a survey of the Indonesian Organic Alliance, Bangor, Indonesia (www.organicindonesia.org) among the certifiers active in the country. In addition, data that two international certifiers provided to FiBL were included.

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Note on the number of producers
The international certifiers did not include the number of all farmers involved in the projects certified by them. It can therefore be assumed that the number of producers is higher, whereas the land area should be complete.

Contact
Lidya Ariesusanty, Indonesia Organic Alliance, Indonesia, www.organicindonesia.org

Revision of earlier data
The vegetable area (and thus also the total area data as of end of 2008) for Indonesia, communicated in the 2010 edition of *The World of Organic Agriculture* was too high; it should read 93 hectares. The total organic agricultural area was 35'141 hectares.

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

Contact
Data provided by Hossein Mahmoudi, Environmental Sciences Research Institute, Shahid Beheshti University ESRI.

Ireland

Source
› Land area and land use: Department of Agriculture Fisheries and Food, Dublin, Ireland; Data provided by Eddie Mc Auliffe, Organic Unit, Department of Agriculture Fisheries and Food Johnstown Castle Estate, Wexford
› Operators: Eurostat (2010): Number of registered organic operators. Last update January 5, 2011. The Eurostat homepage, Eurostat, Luxemburg
› Market data: Bord Bia, Dublin, Ireland, based on Data of Kantar

Contact
› Eddie McAuliffe, Department of Agriculture Fisheries and Food, Johnstown Castle Estate, Co. Wexford, Ireland www.agriculture.gov.ie.
› Rosaleen O'Shaughnessy, 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.

Contact
Pnina Oren Shnidor, Head Standardization and Accreditation Department Ministry of Agriculture and Rural Development, Plant Protection and Inspection Services (PPIS), Israel

Note
The data cover the period October 2008 until September 2009 and only the products exported to the European Union.

Italy

Sources
› Land area/land use data: Sistema d'Informazione nazionale sull'agricoltura biologica SINAB, Rome, Italy, www.sinab.it
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data: AssoBio, provided by Roberto Pinton, written communication of August 12, 2010

Revision of data on the domestic market
The total for the domestic market data in Italy has been revised.

Year	2005	2006	2007	2008	2009
Turnover (Mio. Euro)	1'050	1'130	1'270	1'370	1'500

Source: AssoBio, provided by Roberto Pinton

Contact
› Marta Romeo, SINAB, Rome, Rome, Italy, www.sinab.it
› Roberto Punton, Pinton Organic Consulting, Padova

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 primary production, export and import data
Ministry of Agriculture, Forestry and Fisheries (MAFF), Tokyo 100 - 8950, Japan, www.maff.go.jp/e/index.html. The data on production volumes and import volumes refer to the period April 2008 till March 2009, the land use data to April 1, 2009 and the number of operators to March 31, 2009.

Source for domestic market data
Estimates by Masaya Koriyama, IFOAM Japan.

Contact
› Satoko Miyoshi, Organic Communication Initiative, Tokyo, Japan, www.oci2010.org. (for production data)
› Masaya Koriyama, IFOAM Japan, www.ifoam-japan.net

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Jordan

Source

Mediterranean Organic Agriculture Network MOAN c/o C.I.H.E.A.M; Bari; Italy. The data are from 2008.

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.

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

› Jackeline Mekkes, Louis Bolk Institute, Driebergen. More information is available at at www.organiccenter.kz.

Revision of data communicated previously

The data (as of 2008) communicated in the 2010 edition of *The World of Organic Agriculture* were revised. The total for 2008 should read: 157'176.2 hectares.At that time data from three certifiers had been available. (For the 2009 data only from two certifiers).

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.

Contact

Jack Juma, Kenya Organic Movement (KOAN), Nairobi, Kenya, www.koan.co.ke.

Korea

Source

› Land use, operator and market data: National Agricultural Products Quality Management Service, www.naqs.go.kr/english/. Import data are from 2008.

› Import data: Korea Food & Drug Administration 2009, provided by Jennifer Chang

Contact

Jennifer Chang, 2011 IFOAM OWC Korea Organizing Committee

Kyrgyzstan

Source

› Agricultural Commodity and Service Cooperative ACSC, Jamasheva 14B, Jalalabat, 720907, Kyrgyzstan, www.organicfarming.kg

› To the data provided by ACSC the data of one international certifier were added by FiBL

Contact

Shaknoza Kurbanalieva, Helvetas Programme Office in the Kyrgyz Republic:43/1 Grajdanskaya St., 720022, Bishkek, Kyrgyzstan, e-mail program@helvetas.kg, www.helvetas.kg

Latvia

Source

› Land area: Eurostat (2010): Organic crop area. The Eurostat homepage. Last update: 11.10.2010.

› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg

Laos

Source

› Department of Agriculture (DOA), PO BOX 811, Vientiane, Laos with additions from, Helvetas Laos

› PROFIL Project - Promotion of Organic Farming and Marketing in Lao PDR, Vientiane Capital, Lao PDR, www.laosorganic.com.

Contact

› Thavisith Bounyasouk, Department of Agriculture (DOA), PO BOX 811, Vientiane, Laos

› Agung Nugroho, Helvetas Laos – PROFIL Project - Promotion of Organic Farming and Marketing in Lao PDR, PO Box 6367, Phonesavanh Neua Village, Sisattanak District, Vientiane Capital, Lao PDR, www.laosorganic.com.

Lebanon

Source

The data were compiled by FiBL, based on the data of three certifiers

› ICEA, Bologna, Italy, www.icea.info

› IMCERT Lebanon, Beirut, Lebanon, lnx.imcert.it

› LibanCert SAL, Beirut, Lebanon, www.libancert.com

Contact

› IMCERT Lebanon, Beirut, Lebanon, lnx.imcert.it

› LibanCert SAL, Beirut, Lebanon, www.libancert.com

› Milena Belli, ICEA, Bologna, Italy, www.icea.info

Note

Whereas the 2008 data, published in *The World of Organic Agriculture* were provided by the Mediterranean Organic Agriculture Network (MOAN), maintained by IAM Bari, the 2009 data were compiled by FiBL. The data sources should be the same though.

Lesotho

Source

Certifier data

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Liechtenstein

Source

Ministry of Environmental Affairs, Land Use Planning, Agriculture and Forestry, 9490 Vaduz, Liechtenstein,

Contact

Data were provided by: Klaus Büchel, Institute of Agriculture and Environment, 9493 Mauren, Liechtenstein, www.kba.li.

Note

The data on land are based on figures from the Ministry of Agriculture and from calculations of an organic consultancy agency. Harvests are estimated. The data on the number of animals was estimated on the base of data from the Ministry of Agriculture on livestock units. Empirically most of the organic products are sold in Liechtenstein and Switzerland.

Revision

New information was made available for the total agricultural area in the country and the percentage of organic agricultural land in Liechtenstein was revised.

Table: Liechtenstein: Development of the land under organic agricultural management and share of total agricultural land 2005-2009

	2005	2006	2007	2008	2009
Hectares	1'040	1'027	1'048	1'053	1'005
Share of agr. land	27.7%	27.0%	28.0%	28.0%	26.9%

Lithuania

Source

› Land area: Eurostat (2010): Organic crop area. The Eurostat homepage. Last update: 11.10.2010.

› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg

Luxembourg

Source

› Land area and operator data: Administration des Services Techniques de l'Agriculture ASTA, Luxembourg, data provided Monique Faber, Luxemburg, E-Mail of September 24, 2010

› Market data : Biogros Estomate, 13 Parc d'Activité Syrdall, L-5365 Munsbach, www.biogros.lu/de/home/

Contact

› Monique Faber, 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/de/home/

Macedonia, The former Yugoslav Republic

Source

PROBIO, Skopje, Macedonia, www.probio.com.mk, based on ertifier data

Contact

Gordana Pecelj, PROBIO, Skopje, Macedonia, www.probio.com.mk.

Madagascar

Source

› Australian Certified Organic ACO, Chermside, Australia, www.aco.net.au

› Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com

› ICEA Foreign Office, 40121 Bologna, Italy, www.icea.info

› LACON GmbH, Brünnlesweg 19, 77654 Offenburg, Germany; Contact; Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

Contact

› Milena Belli, ICEA Foreign Office, 40121 Bologna, Italy, www.icea.info

› Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com

› Akiko Nicholls, Australian Certified Organic ACO, Chermside, Australia

› Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

Malawi

Source

Malawi Organic Growers Association (MOGA), PO BOX 20288, LILONGWE, Malawi and data from two international certifiers.

Malaysia

Source

Organic Alliance Malaysia, Penang, Malaysia, www.organicmalaysia.com.my.

Contact

Data provided by Ong Kung Wai, Humus Consultancy, Penang, Malaysia

Mali

Sources

The data were compiled by FiBL and IFOAM based on the data of the following international certifiers.

› CERTISYS, Walhain, Belgium, www.certisys.be

› Control Union, Zwolle, The Netherlands, www.controlunion.org; Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com

› ICEA Foreign Office, 40121 Bologna, Italy, www.icea.info

› LACON GmbH, Brünnlesweg 19, 77654 Offenburg, Germany; Contact; Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Contact

› Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherland
› Milena Belli, ICEA Foreign Office, 40121 Bologna, Italy, www.icea.info
› Emmeline Foubert, CERTISYS, Walhain, Belgium, www.certisys.be
› Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com
› Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

The data are more complete than the data communicated in the 2010 edition of *The World of Organic Agriculture*; a direct year-to-year comparison is therefore not possible.

Malta

Source

Mediterranean Organic Agriculture Network MOAN, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it.

Contact

Dr. Lina Al Bitar and Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it.

Martinique (France)

Source

All data: Agence BIO (2010), The Agence Bio homepage 93100 Montreuil sous Bois, France,. Available at http://www.agencebio.fr/pageEdito.asp?IDPAGE=120&n2=130

Contact

Natalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

Mauritius

The data were provided by one international certifier.

Note

As the data source has changed, a direct year-to-year comparison is not possible.

Data revision

The figures communicated previously did not refer to certified organic areas and has therefore been removed from the database.

Mexico

Source

Universidad Autónoma Chapingo, own data (based on data of the certifiers).

Note

The share of the organically managed land of the total land was calculated on the basis of data provided by the Universidad Autónoma Chapingo; they are not the same as the FAO data.

Contact

Rita Schwentesius, Autónoma Chapingo

Moldova

Source

Ekoconnect, Dresden, Germany, www.ekoconnect.org and Iurie Senic, Ministry of Agriculture and Food Industry of the Republic of Moldova MAIA, Chisinau, Moldova, http://www.maia.gov.md.

Contact

Bernhard Jansen and Antonina Omelciuc, Ekoconnect, Dresden, Germany www.ekoconnect.org

Mongolia

No new data were received from Mongolia.

Montenegro

Source

› Land area/operators: Ministry of Agriculture, Forestry and Water Management, Podgorica, Montenegro.
› Market data: "Production Of Organic Food", Nikšic, Montenegro.

Contact

› Radana Damjanović, Ministry of Agriculture, Forestry and Water Management, Podgorica, Montenegro.
› Jovo Radulovic, NGO "Production Of Organic Food", Nikšic, Montenegro.

Morocco

Source

Mediterranean Organic Agriculture Network MOAN, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it.

Contact

Dr. Lina Al Bitar and Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it.

Mozambique

Sources

Data were provided by two international certifiers. As data were available from more certifiers (compared to last survey) a direct-year to year comparison is not possible.

Data revision

The figure for the land under organic agricultural management provided in the 2010 edition of *The World of Organic Agriculture* was too high. According to the revised figure, 2810 hectares were organically managed, constituting 0.01 percent of the country's agricultural land.

Myanmar

For the first time data were available for Myanmar. They were provided by one international certifier.

Namibia

Source

To the data provided by the Namibian Organic Association, PO Box 1504, Okahandja, Namibia,

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

the figures from one international certifier were added.

Contact
Manjo Smith, Namibian Organic Association (NOA), PO Box 1504, Okahandja, Namibia

Nepal

Source
Data are based on the information provided by different certified operators in Nepal. The survey was carried out by Maheswar Ghimire, Kathmandu, Nepal. Source for the wild collection data is the Asia Network for Sustainable Agriculture and Bioresources ANSAB, Kathmandu, Nepal, www.ansab.org.

Note
For the figure on the area under coffee it should be noted that on these areas also mixed cropping of spices is taking place.

Contact
Maheswar Ghimire, Kathmandu, Nepal

Netherlands

Sources
› Total land under organic agricultural management: Biologica (2010): Bio monitor 2009. Cijfers & trends. Biologica, Utrecht
› Land use details/crops: Eurostat (2010): Organic crop area. Netherlands. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Trade data (from 2007): Source: Bakker, J and Bunte, F. (2009) Biologische internationale handel. WUR, Wageningen. Provided by Marian Blom, Biologica, Utrecht, The Netherlands
› Operators: Biologica (2010): Bio monitor 2009. Cijfers & trends. Biologica, Utrecht

New Zealand

Source
Organics Aotearoa New Zealand OANZ, Wellington, New Zealand, www.oanz.org.nz; Published in Cooper, Mark, et. al. (2010): New Zealand Organic Report 2010. Organics Aotearoa New Zealand.

Contact
Seager Mason, BioGro New Zealand Inc., Wellington 6141, New Zealand, www.bio-gro.co.nz.

Nicaragua

Source
Ministerio Agropecuario y Forestal MAGFOR, Managua. Nicaragua, www.magfor.gob.ni,

Contact
Mauricio Carcache Vega, MAGFOR, Manuagua, Nicargua

Niger

Data source: Certifier data.

Nigeria

Source
The data were compiled by FiBL and IFOAM based on the data of two international certifiers.

Note
The certifiers only partly communicated the number of producers, which is probably higher than the figure covered by this survey.

Niue

Source
Survey of Women in Business Development Inc, PO Box 6591 Apia, Samoa, www.womeninbusiness.ws, based on certifier data. The data are from 2006

Contact

Karen Mapusua, Women in Business Development Inc, PO Box 6591 Apia, Samoa, www.womeninbusiness.ws.

Norway

Sources
› Land area and land use: Eurostat (2010): Organic crop area Norway. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data: SLF, Olso, Norway, www.slf.dep.no

Contact
› Elin Røsnes, Norwegeian Agricultural Authority SLF, Olso, Norway, www.slf.dep.no

Oman

Source
Kassel University, Witzenhausen, Germany, www.uni-kassel.de/agrar/?language=en.

Contact
Prof. Dr. Andreas Bürkert, Kassel University, Witzenhausen, Germany, www.uni-kassel.de/agrar/?language=en.

Pakistan

Source
Data were provided by two international certifiers. Regarding the number of producers: One certifier only reported the number of production units (counted as "producers"), but not of all farms involved in the project. Therefore the number of producers is probably higher.

Palestine, Occupied Territories

Source
Mediterranean Organic Agriculture Network MOAN, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it.

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

Contact
Dr. Lina Al Bitar and Dr. Marie Reine Bteich, C.I.H.E.A.M. - Istituto Agronomico Mediterraneo di Bari, Italy, www.iamb.it.

Panama
The data are from 2004 (first published in '*The World of Organic Agriculture* 2006'). Official data are not available, experts from the country, have however, confirmed that the correct figure is in the area of 5000 hectares).

Papua New Guinea
Source
› Survey of Women in Business Development Inc, PO Box 6591 Apia, Samoa, www.womeninbusiness.ws, based on certifier data. The data refer to 2006.
› To these data recent data from one international certifier were added.
Contact
› Karen Mapusua, Women in Business Development Inc, PO Box 6591 Apia, Samoa, www.womeninbusiness.ws

Paraguay
Source
MAG/ALTERVIDA/IICA (March 2008): MAG/ALTERVIDA/IICAEstrategia Nacional para la Promoción de la Producción Orgánica. Provided by Genaro Coronel, SENVE; Paraguay, Available at www.mag.gov.py/ESTRATEGIA%20NACIONAL.pdf.
The data are from 2007.
Contact
Daniela Solis, Altervida, Asuncion, Paraguay www.altervida.org.py.

Peru
Source
› Subdirección de Producción Orgánica, Ministerio de Agricultura – SENASA. Lima, Perú
› Export data: PromPeru, San Isidro - Lima 27 Perú, www.promperu.gob.pe.
Contact
› Dr. Jorge Leonardo, Jave Nakayo, Director, Subdirección de Producción Orgánica, SENASA, Ministerio de Agricultura Lima, Perú.
› Karin Vicky Valverde Caldas, Especialista, Subdirección de Producción Orgánica, SENASA, Ministerio de Agricultura, Telephone 51-1-3133300 annex 1412, Lima, Perú.
› Javier Martinez, PromPeru, San Isidro - Lima 27 Perú, www.promperu.gob.pe.

Philippines
Source
The data were compiled by FiBL from a number of certifiers. The data are more complete than the data communicated in the 2010 edition of *The World of Organic Agriculture* . A direct year-to-year comparison is therefore not possible.
› Not all certifiers provided data on the number of producers, which therefore must be higher than communicated here.
Certifiers who provided data
› BCS, Nürnberg, Germany, www.bcs-oeko.de;
› Ceres, Happburg, Germany, www.ceres-cert.com;
› Control Union, Zwolle, The Netherlands, www.controlunion.org;
› Ecocert, L'Isle Jourdain, France, www.ecocert.com;
› IMO, Weinfelden, Switzerland, www.imo.ch
› Naturland, Gräfelfing, Germany, www.naturland.de;
› Organic Certification Center of the Philippines OCCP, Barangay Laging Handa, Quezon City, Philippines, www.occpphils.org.
Contact
› Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherlands, www.controlunion.org;
› Tobias Fischer, BCS, Nürnberg, Germany, www.bcs-oeko.de;
› Simone Groh, Ceres, Happburg, Germany, www.ceres-cert.com;
› Peter Horner, IMO, Weinfelden, Switzerland, www.imo.ch
› Lani Katimbang-Limpin, OCCP, Quezon City, Philippines, www.occpphils.org
› Vincent Morel, Area Manager, Ecocert, L'Isle Jourdain, France, www.ecocert.com;
› Friedrun Sachs, Naturland, Gräfelfing, Germany, www.naturland.de.

Poland
Source
› Land area and land use Eurostat (2010): Organic crop area. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data: Vaclavik Tom and Andrzej Szeremeta (2008): Poland. In: Osch, Susanne and Burkhard Schaer (eds) (2008): Specialized Organic Retail Report 2008. Organic Retailers Association, Vienna.
Contact
Andrzej Szeremeta, IFOAM EU Group, Brussels, www.ifoam-eu.org

Portugal
The data on the organic land area and operators are from 2008, the market data from 2006.
Source
› Land use and operators : Instituto Nacional de Estatística, I.P. (2009) Estatísticas Agrícolas 2009. Lisboa 2009

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

› Market data : Rankine, Torben (2008): Portugal. In: Osch, Susanne and Burkhard Schaer (eds) (2008): Specialized Organic Retail Report 2008. Organic Retailers Association, Vienna

Réunion

Source

All data: Agence BIO (2010), The Agence Bio homepage 93100 Montreuil sous Bois, France,. Available at http://www.agencebio.fr/pageEdito.asp?IDPAGE=120&n2=130

Contact

Natalie Rison, Agence Bio, Montreuil sous Bois, France, www.agencebio.fr

Romania

Sources:

› Organic area; land use: Eurostat (2010): Organic crop area. Romania. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage

› Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg

› Operators: Total and other; Eurostat, Number of organic registered operators 2008, Download of October 4, 2009. The Eurostat homepage at epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/data/database www.madr.ro/pages/page.php?self=01&sub=0107&tz=010710.

› Data on wild collection: Ministry of Agriculture MADR, Bucarest, Romania; http://www.madr.ro/pages/page.php?self=01&sub=0107&tz=010710.

Russia

Source

Survey among the certifiers active in the country, carried out by Eco-control Ltd., 141506 Solnechnogorsk, Russia, www.eco-control.ru

Contact

Dr. Andrey Khodus, Eco-control Ltd., 141506 Solnechnogorsk, Russia, www.eco-control.ru

Note

For this survey data from more international certifiers were included than previously. A direct year-to-year comparison is therefore not possible.

Rwanda

Source

Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Contact

Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Samoa

Source

Women in Business Development Inc, PO Box 6591 Apia, Samoa, www.womeninbusiness.ws.

Contact

Karen Mapusua, Women in Business Development Inc, PO Box 6591 Apia, Samoa, www.womeninbusiness.ws.

San Marino

For San Marino one processor had been reported previously, but it was not reported for the current surey.

Sao Tome and Prince

Source

Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Contact

Vincent Morel, Area Manager - Africa, Ecocert, BP 47, 32600 L'Isle Jourdain, France, www.ecocert.com.

Saudi Arabia

Source

Organic Unit at the Ministry of Agriculture of the Kingdom of Saudi Arabia P.O. Box 2730, 11461 Riyadh, Saudia Arabia

Contact

Dr. Marco Hartmann, Team Leader - Executive Project Manager, Organic Farming Project, Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH gtz/German Technical Cooperation IS, c/o Ministry of Agriculture of the Kingdom of Saudi Arabia P.O. Box 2730, 11461 Riyadh, Saudi Arabia, www.gtz.de and www.moa.gov.sa/organic

Senegal

Source

Data provided by/Source: Ibrahima Seck, Association Sénégalaise pour la Promotion de l'Agriculture Biologique ASPAB, BP. 412 Thiès, Sénégal., based on a survey among the organic operators.
To figures of three international certifiers were added to the data submitted by Ibrahima Seck. It should be noted that for some figures duplication may have occurred.
The data published here include the data from more certifiers than previously. A direct year-to-year comparison is therefore not possible.

Serbia

Source

GTZ FiBL Survey among the organic certifiers in the country.

Contact

› Emilija Stefanovic, GTZ, Novi Sad, Serbia
› Thomas Bernet, FiBL, Frick, Switzerland

Note

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

The data published here include the data from more certifiers than previously. A direct year-to-year comparison is therefore not possible.

Sierra Leone
Source: Data from two international certifiers.

Singapore
One international certifier reported one processor for this country.

Slovakia
Sources
› Land use/Crops: Eurostat (2010): Organic crop area. The Eurostat homepage. Last update: 11.10.2010
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data are from 2008, provided by Tom Vaclavic, Green Marketing, written communication of January 14, 2008

Slovenia
Sources
› Land use/Crops: Eurostat (2010): Organic crop area. The Eurostat homepage. Last update: 11.10.2010
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data: Source: Institute for Sustainable Development, Ljubljana, Slovenia; Contact Anamarija Slabe, Institute for Sustainable Development, Ljubljana

Solomon Islands
No new data were available. The 2006 data were provided by: Karen Mapusua, Women in Business Development Inc, PO Box 6591 Apia, Samoa, www.womeninbusiness.ws.

Somalia
Other than in the previous year, no data were reported from Somalia.

South Africa
Source
The data were compiled by FiBL and IFOAM based on the data of the following international certifiers.
› BCS, Nürnberg, Source, BCS
› Control Union, Zwolle, The Netherlands, www.controlunion.org
› Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com
› IMO, Weinfelden, Switzerland, www.imo.ch
› LACON GmbH, Brünnlesweg 19, 77654 Offenburg, Germany
› Soil Association Certification Limited, Bristol, UK, www.soilassociation.org/certification
Contact
› Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherland
› Andrew Bayliss, Soil Association Certification Limited, Bristol, UK
› Tobias Fischer, BCS, Nürnberg, Source, BCS
› Peter Horner, IMO, Weinfelden, Switzerland
› Vincent Morel, Area Manager - Africa, Ecocert, L'Isle Jourdain, France
› Fabienne Verzeletti, LACON GmbH, www.lacon-institut.com

Spain
Sources
› Land use, operators: Source: Ministerio de Medio Ambiente y Medio Rural y Marino MAPA (2010): Estadísticas de Agricultura Ecológica del 2009. Madrid, Spain, The MAPA homepage http://www.mapa.es/alimentacion/pags/ecologica/pdf/2009.pdf
› Market data Ministerio de Medio Ambiente, Medio Rural y Marino 2010: Valor y Volumen de los productos ecologicos de origen nacional en la industria agroalimentaria espanola, Madrid 2010
Note on the market data
It should be noted that the figure for the domestic market communicated in this volume is from a different source and a direct year to year comparison with the figures communicated earlier is not possible.
Contact
Gonzálvez Pérez, Spanish Society of Organic Agriculture SEAEm, Catarroja (Valencia), Spain, www.agroecologia.net

Sri Lanka
Source
The data were compiled by FiBL from two international certifiers. Only one of the certifiers provided new data on the number of producers (and the previous figure was not used as the number of companies had decreased). The number of producers must therefore be higher than communicated in this book.

Sudan
The data were supplied by several certifiers providing services in the country.

Suriname
Data source: Certifier data.

Swaziland
Data were provided by one international certifier.

Sweden
Sources

Willer, H. and Kilcher, L. (Eds.) (2011):
The World of Organic Agriculture. Statistics and Emerging Trends 2011.
IFOAM, Bonn, & FiBL, Frick

› Land area/land use: Eurostat (2010): Organic Corp Area. Sweden. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data: Source: Central Statistical Office SCB, Stockholm, Sweden

Contact
Katerina Wolf, KRAV, Uppsala

Switzerland

Sources
› Land area, land use data and producers data compiled by FiBL; based on the data of the certifiers. The figures differs slightly from the Bio Suisse figure of 121'000 hectares as some non-agricultural areas were deducted.
› Market data: Bio Suisse, Basel, Switzerland, www.biosuisse.ch/de/bioinzahlen.php.

Contact
Helga Willer, FiBL, Frick, Switzerland

Syria

Source
GCSAR - General Commission for Scientific Agricultural Research, 0096311 Damascus, Syria, www.organicsyria.com.

Note
The producer figure is not complete as these data were not available for one cotton farm with several thousands of hectares.

Contact
Dr. Souhail Makhoul, GCSAR - General Commission for Scientific Agricultural Research, 0096311 Damascus, Syria, www.organicsyria.com.

Taiwan

Source
Taiwan Organic Agriculture Information Centre. Statistics 1996-2009 at info.organic.org.tw/supergood/front/bin/ptlist.phtml?Category=104854

Tajikistan

Source
INDOCERT, Thottumugham P.O., Kerala, India, www.indocert.org.

Contact
M.P. Sajitha, INDOCERT, Thottumugham P.O., Kerala, India, www.indocert.org.

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. Figures from the previous survey were used, as no new data were available for this survey.

Contact
Noel C. Kwai, 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
For this survey more data were available than previously, a direct-year-to year comparison is therefore not possible.

Contact
Data provided by Vitoon Panyakul, Green Net, 10330 Bangkok, Thailand, www.greennet.or.th.

Timor-Leste

Source
The data are based on the information of one international certifier.

Togo

The data were compiled by FiBL and IFOAM based on the data of the following international certifiers.
› Ecocert, BO 47, 32600 L'Isle Jourdain, France, www.ecocert.com
› IMO, Weinfelden, Switzerland, www.imo.ch
› LACON GmbH, Brünnlesweg 19, 77654 Offenburg, Germany

Contact
› Peter Horner, IMO, Weinfelden, Switzerland
› Vincent Morel, Area Manager - Africa, Ecocert, L'Isle Jourdain, France
› Fabienne Verzeletti, LACON GmbH,
A direct-year-to-year comparison is not possible, as this survey is more complete.

Tunisia

Source
- Land area and production data: General Direction of Organic Agriculture, Tunis, Tunisia; provided at the Homepage of CTAB at http://www.ctab.nat.tn/ang/d_bio_ang.pdf
- Operator/producer data: Mediterrranian Organic Agriculture Netwoork MOAN/ Instituto Agronomico Mediterraneo Bari, Italy

Turkey

Source
› Ministry of Agriculture MARA, Ankara, Turkey, www.tarim.gov.tr.
› Market data
› Source for export data: Data source Ministry of Agriculture MARA, Akara, Turkey. Data provided by Erdal Süngü, Ministry of Agriculture MARA, E-Mail of October 8, 2010

Willer, H. and Kilcher, L. (Eds.) (2011):
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Contact
Erdal Süngü, Ministry of Agriculture and Rural Affairs MARA, 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 detail data exceeds the actual area surface cultivated for organic farming. Therefore a correction value was used in order to calculate the correct total.
Data on Organic domestic market value are roughly estimated.

Uganda
Source
National Organic Agricultural Movement of Uganda (NOGAMU), PO Box 70071, Clock Tower, Kampala, Uganda, www.nogamu.org.ug. Data source: Survey among organic operators in the country. The data refer to 2009/2010.
Contact
Charity Namuwoza, National Organic Agricultural Movement of Uganda (NOGAMU), PO Box 70071, Clock Tower, Kampala, Uganda, www.nogamu.org.ug

Ukraine
Source
Survey among the organic operators and certifiers in the country, carried out by the Organic Federation of Ukraine (OFU), Kiev, Ukraine www.organic.com.ua.
Contact
Eugene Milovanov, Organic Federation of Ukraine, Kiev, Ukraine www.organic.com.ua.

United Arab Emirates
Source
The data were compiled by FiBL and are based on certifier data.
› ICEA, Bologna, Italy, www.icea.info;
› Control Union, Zwolle, The Netherlands, www.controlunion.org;
› Ecocert, L'Isle Jourdain, France, www.ecocert.com.
Contact
› Milena Belli, ICEA, Bologna, Italy, www.icea.info;
› Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherlands, www.controlunion.org;
› Vincent Morel, Area Manager, Ecocert, L'Isle Jourdain, France, www.ecocert.com.

United Kingdom
Sources
› Land use agriculture: Eurostat (2010): Organic crop area. UK. Last Update: 23-07-2010. Extracted 28-07-2010. The Eurostat Homepage
› Operators: Eurostat (2010): Number of registered organic operators. Last update November 5, 2010. The Eurostat homepage, Eurostat, Luxemburg
› Market data: Soil Association 2010: Organic Market Report 2010. Bristol

Uruguay
Source
Ministerio de Ganadería, Agricultura y Pesca (MGAP), Montevideo, Uruguay, www.mgap.gub.uy.
Contact
Betty Mandl, Ministerio de Ganadería, Agricultura y Pesca (MGAP), Montevideo, Uruguay, www.mgap.gub.uy.

United States of America
Sources
› Land area and producers (from 2008): United States Department of Agriculture, Washington, USA, www.ers.usda.gov/briefing/organic/.
› Market data: Organic Trade Association 2010: Organic Industry Survey, Brattleboro VT 05301, USA, www.ota.com
Contact
› Catherine Greene, United States Department of Agriculture, Washington, USA, www.ers.usda.gov/briefing/organic/.
› Barbara Haumann, OTA, Brattleboro VT 05301, www.ota.com

Uzbekistan
Source
Certifier data, compiled by FiBL.

Vanuatu
Source
No new data were available. The 2006 data were provided by: Karen Mapusua, Women in Business Development Inc, PO Box 6591 Apia, Samoa, www.womeninbusiness.ws.

Venezuela
Source
The data were collected among two international certifiers. As the source has changed, a direct-year-to-year comparison is not possible.

Viet Nam
Source for area and crop data
Data on organic land and land use were collected by FiBL among the international certifers. The data include more certifiers than in previous years, a direct year-to-year comparison is therefore not possible.
› Ceres, Happburg, Germany, www.ceres-cert.com;
› Certisys, Walheim, Belgium; www.certisys.eu
› Control Union, Zwolle, The Netherlands, www.controlunion.org;
› Ecocert, L'Isle Jourdain, France, www.ecocert.com;

Willer, H. and Kilcher, L. (Eds.) (2011):
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IFOAM, Bonn, & FiBL, Frick

› Naturland, Gräfelfing, Germany, www.naturland.de;

Source for producer data

Survey of Agricultural Development Denmark-Asia (Vietnam), Hanoi, Vietnam

Contact

› Koen den Braber, ADDA - Agricultural Development Denmark-Asia (Vietnam), Hanoi, Vietnam.
› Simone Groh, Ceres, Happburg, Germany, www.ceres-cert.com;
› Emeline Foubert, Certisys, Walheim, Belgium; www.certisys.eu
› Gyorgyi Acs Feketene, Control Union, Zwolle, The Netherlands, www.controlunion.org;
› Vincent Morel, Ecocert, L'Isle Jourdain, France, www.ecocert.com;
› Friedrun Sachs, Naturland, Gräfelfing, Germany, www.naturland.de;

Zambia

Source

OPPAZ, Lusaka, Zambia
As the data source has changed, a direct-year to year comparison is not possible.

Contact

Munshimbwe Chitalu, OPPAZ, Lusaka, Zambia

Zimbabwe

Source

Ecocert Afrisco, Lynnwood, South Africa, www.afrisco.net

Contact

F Jacobs, Ecocert Afrisco, Lynnwood, South Africa, www.afrisco.net

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